

TABLE OF CONTENTS

A. Community Description

1. The Community Recreation Plan

The purpose of this Community Recreation Plan is to guide the future development of recreational opportunities within the Village of Elk Rapids. The Plan will act as a general guide for the continuing enhancement of recreational amenities within the Village of Elk Rapids. The Plan provides a concise description of the Village's plans and policies for current and future recreational opportunities within the Village. This Plan will be incorporated by reference into the Village's Master Plan, and will form the basis for planning, funding, and implementing recreational capital improvements programs.

2. The Village of Elk Rapids

The Village of Elk Rapids occupies a 1.6 square mile area located Antrim County in the northwest region of Michigan's lower peninsula. The Township of Elk Rapids serves as the north and south boundaries of the Village. The west boundary coincides with the shores of Lake Michigan. The Village of Elk Rapids is bordered on the east by Elk Lake. The Elk River flows from the southeast to the northwest portion of the Village, dividing the Village and creating two peninsulas. The Village of Elk Rapids is located approximately 16 miles north of Traverse City and 22 miles from Bellaire, the Antrim County seat. See Figure A-1.

3. A Brief History of Elk Rapids

Situated where a beautiful chain of inland lakes flows into Grand Traverse Bay, the Village of Elk Rapids had its beginnings in the 1840s when surveyor Abram S. Wadsworth built a cabin and became the first permanent settler of the village. In the spring of 1852 he laid out the village of Stevens, which in 1858 became the town of Elk Rapids, the first town in Antrim County.

Soon others followed and, in 1860s, Moulton Crow constructed the first sawmill at the mouth of Elk River. Later, Wirt Dexter and Henry Noble bought the sawmill from Crow, and established the Dexter and Noble Company. The company's first order of business was lumbering, which flourished in the later part of the 1800s. Dexter and Noble also owned a flourmill, a company store, a chemical works, and the giant Elk Rapids Iron Company which stood along the banks of the Elk River. Dexter and Noble also built a huge dock extending into the Bay which was used by ships from all of the Great Lakes to take on shipments of lumber and pig iron.

In 1866 a courthouse was built on Ottawa Street and Elk Rapids served as the county seat until it was moved to the more centrally located Bellaire in 1879.

Once all the trees in the area were cut, the lumbering era began to fade and soon afterward Dexter and Noble closed the iron works. With its industrial base gone, Elk Rapids nearly became a ghost town during the first few decades of the 20th century. Tourism gradually became the major source of the village's economy and continued to grow during the 1950s, 1960s and 1970s.

The 1980s saw an increase in the permanent population as many people decided to move to the area and make it their year around home. School enrollment grew during this period and a new elementary school was constructed in nearby Williamsburg. In addition, existing elementary and middle schools were expanded to serve a growing enrollment

Once a tiny harbor serving just a few boats, the Edward C. Grace Memorial Harbor was expanded twice during the late 1980s and now provides a modern, 213-slip facility which is one of the largest on Grand Traverse Bay.

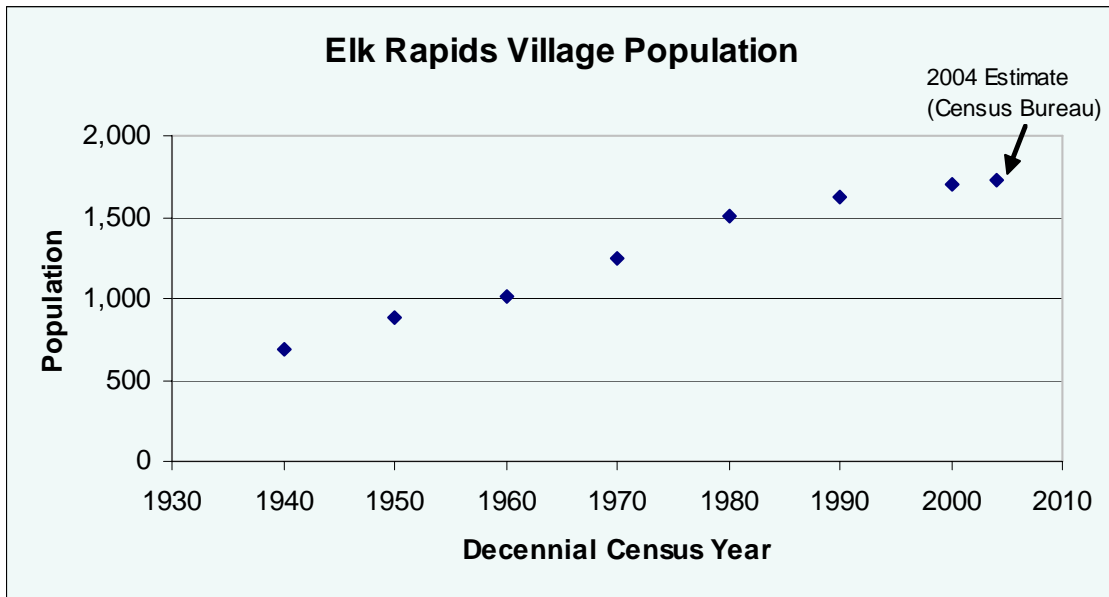
The Elk Rapids Township Hall, built in 1883, has undergone a complete restoration. The hall still serves as an activity center for the village and is one of only fourteen flat-floored opera houses remaining in the United States. One of the rare features found in this magnificent structure is its raked stage. Interior restoration work was completed in the spring of 1991.

4. Population Characteristics

The 2000 Decennial Census placed the population of Elk Rapids at 1,700. This represents a 4.6% increase over the 1990 Census. Table A-1 illustrates the slowing rate of growth in the Village:

Figure A-2 plots the growth of the population between the 1940 and 2000 Decennial Censuses.

Figure A-2



The largest rates of growth occurred during the decade between 1940 and 1950, while large growths occurred between 1960 and 1980. Since that time, however, growth has slowed to between 4% and 5% each decade. The U.S. Census Bureau projects the 2004 population of the Village at 1,728, representing an estimated 10-year growth rate of 4% between 2000 and 2010.

Table A-1 lists the detailed statistics that are plotted on Figure A-2.

Table A-1
Population Growth 1940 - 2000
Village of Elk Rapids, MI

2000 Decennial Census

Census	Elk Rapids Population	Increase	% Change	Census
1940	690			1940
		199	28.8%	
1950	889			1950
		126	14.2%	
1960	1,015			1960
		234	23.1%	
1970	1,249			1970
		255	20.4%	
1980	1,504			1980
		122	8.1%	
1990	1,626			1990
		74	4.6%	
2000	1,700			2000
		28	1.6%	
2004 (estimate)	1,728			2004 (estimate)

* - US Census Bureau and Northwest Michigan Council of Governments

It should be noted that the census tallies are taken on April 1, and does not count residents whose primary places of residence are not in the Village. Hence the figures, especially those from the more recent censuses, do not reflect the actual number of persons residing in the Village during the summer months. This situation is prevalent in the rest of Antrim County, and indeed, in the Grand Traverse Region as a whole.

The 2000 Census partially provides a glimpse of this situation by noting that 22.8% of the housing units in Elk Rapids were vacant at the time of the Census “for seasonal, recreational, or occasional use.” This fact emphasizes the importance of including, in planning for recreational facilities, the part-time Village residents who are NOT counted by the Census, and who reside in the Village during the times of the year when recreational facility use is at its peak.

The Northwest Michigan Council of Governments (NWMCOG) is currently updating its seasonal population model, which should shed more light on the region’s seasonal population situation.

Further statistics are available on Village residents who *are* counted by the Census. Table A-2 below lists the breakdown of population by age and gender:

Table A-2
Population Distribution by Age and Gender
Village of Elk Rapids, MI
2000 Decennial Census

Age	Male	Female	Total
Under 5 years	39	38	77
5 to 9 years	64	44	108
10 to 14 years	80	56	136
15 to 17 years	58	33	91
18 and 19 years	12	13	25
20 years	8	10	18
21 years	13	3	16
22 to 24 years	10	18	28
25 to 29 years	35	35	70
30 to 34 years	30	50	80
35 to 39 years	42	61	103
40 to 44 years	71	70	141
45 to 49 years	57	66	123
50 to 54 years	70	67	137
55 to 59 years	48	60	108
60 and 61 years	21	20	41
62 to 64 years	32	27	59
65 and 66 years	16	11	27
67 to 69 years	26	37	63
70 to 74 years	43	51	94
75 to 79 years	27	43	70
80 to 84 years	17	34	51
85 years and over	7	27	34
Total	826	874	1,700
Median Age	41.4	45.4	43.4
18 years and over	585	703	1,288
21 years and over	565	680	1,245
62 years and over	168	230	398
65 years and over	136	203	339

Data Source: US Census Bureau:
SF1 Dataset table MI00002 logical record no. 0295994

The overall median age of the Village residents is 43.4. This is slightly higher than the median age (41.4) of Antrim County.

The ethnic distribution of the Village residents is shown in Table A-3 below:

Table A-3
Population Distribution by Race
Village of Elk Rapids, MI
 2000 Decennial Census

	Number	Percent
One Race	1,687	99.2%
White	1,649	97.0%
Black or African American	5	0.3%
American Indian and Alaska Native	17	1.0%
Asian	2	0.1%
Native Hawaiian and Other Pacific Islander	4	0.2%
Some other race	10	0.6%
Two or more races	13	0.8%
Total:	1,700	100.0%

Source: US Census Bureau and NW Michigan Council of Gov'ts

5. Households and Household Income

According to the 2000 census, there were 760 households in the Village, with a median household income of \$31,382. This represented a 41.2% increase over the 1990 census. The incomes were distributed as shown in Table A-4:

Table A-4
Household Income
Village of Elk Rapids, MI
 2000 Decennial Census

	2000 Census		% Change	1990 Census	
	Households	%		Households	%
Less than \$10,000	69	9.1	-37.3	110	15.6
\$10,000 to \$14,999	66	8.7	-41.6	113	16.1
\$15,000 to \$24,999	158	20.8	-13.2	182	25.9
\$25,000 to \$34,999	124	16.3	30.5	95	13.5
\$35,000 to \$49,999	82	10.8	-19.6	102	14.5
\$50,000 to \$74,999	143	18.8	127	63	9
\$75,000 to \$99,999	69	9.1	115.6	32	4.6
\$100,000 to \$149,999	35	4.6	483.3	6	0.9
\$150,000 to \$199,999	9	1.2		not avail.	not avail.
\$200,000 or more	5	0.7		not avail.	not avail.
Total	760	100	8.1	703	100
Median HH income (\$)	31,382	(1999 dollars)	41.2	22,226	(1989 dollars)

Source: US Census Bureau and NW Michigan Council of Gov'ts

Table A-5
Households by Type

Village of Elk Rapids, MI
2000 Decennial Census

	2000 Census		1990-2000 % Change	1990 Census	
	Number	Percent		Number	Percent
Total Households	769	100	10	699	100
Family households (families)	484	62.9	6.8	453	64.8
With own children under 18 years	214	27.8	-0.9	364	30.9
Married-couple family	382	49.7	4.9	153	52.1
With own children under 18 years	142	18.5	-7.2	73	21.9
Female householder, no husband present	83	10.8	13.7	55	10.4
With own children under 18 years	58	7.5	5.5	246	7.9
Nonfamily households	285	37.1	15.9	212	35.2
Householder living alone	266	34.6	25.5	118	30.3
Householder 65 years and over	133	17.3	12.7	216	16.9
Households w/ individuals under 18 years	223	29.0	-0.4	224	32.0
Households w/ individuals over 65 years	255	33.2	9.4	233	33.3
Average household size	2.2	-	-5.4	2.33	-
Average family size	2.83	-	-1.7	2.88	-

Source: US Census Bureau and NW Michigan Council of Governments

Table A-5 lists the types of households in Elk Rapids. Almost 63% of households in Elk Rapids are family households, with almost 28% of the households with own children less than 18 years of age living with them. 10.8% of the households have female heads of household. However, comparison with the 1990 census reveals that there was a slight decrease in households with children, while there was a 9.4% increase in families with individuals over 65 years of age.

Figure A-3 displays the distribution (number) of households, by census block, in the Village.

6. *Employment and Employment Trends*

Table A-6 shows the employment statistics for the Village of Elk Rapids, as compiled from the results of the 2000 Decennial Census. The table shows that 59% of the population over 16 years of age is in the labor force, while fewer than 41% are not. About 52% of the female population over 16 years of age is employed.

The same table shows comparable statistics for the 1990 census. It shows that there has been a 1.8% decrease in the number of employed people over 16 years of age, while there has been an 11.4% increase in the number of people (over 16 years) that are not in the labor force. A possible explanation is the increase in the number of retirees in the community over the past ten years.

The same comparison also indicates that there has been a 6.9% increase in the number of families where both parents are working.

7. *Disabilities*

The 2000 Census revealed that 17.5% of the respondents claimed some form of disability. Table A-7 shows the breakdown of the disabilities. Of those claiming one form of disability, Elk Rapids residents showed employment, sensory, mental, physical, and go-outside-home disabilities. Slightly under half of those who claimed disabilities also claimed more than one disability. Disabilities tended to be claimed more by residents aged 65 or older (37.1%), and more women than men claimed disabilities in those age groups.

The Village's 17.5% disability rate compares with Elk Rapids Township's 18.4% (this includes Village residents) disability rate and Antrim County's overall 21.2% rate. However, the Village's 31.7% disability rate among those aged 65 or older is the same as the overall County rate for those in the same age bracket.

8. *Households with Older and Younger Members*

In addition to serving the general population of the Village of Elk Rapids, a recreation plan should include provisions for serving households whose members are either very young or are senior citizens. The locations of such households may influence the number and location of various types of recreational facilities that cater to the needs of such households.

Figure A-4 shows the number, again by census blocks, of the households whose members include children under 18 years of age. Figure A-5 shows the number of households with members that are 65 years of age or older.

In both cases, the largest number of households is concentrated in the census block that includes high ground to the southwest quadrant of the Village. Elsewhere, older villagers tend to be concentrated along lakefronts, where many have come to retire. The trailer parks along the northeast corner of the village also have a relatively high concentration of seniors.

Table A-6 Employment Trends

Village of Elk Rapids, MI
2000 Decennial Census

	2000 Census		% Change	1990 Census	
	Number	Percent		Number	Percent
Population 16 years and over	1,317	100	3.2	1,276	100
In labor force	780	59.2	-1.8	794	62.2
Civilian labor force	778	59.1	-2	794	62.2
Employed	742	56.3	-0.3	744	58.3
Unemployed	36	2.7	-28	50	3.9
Percent of civilian labor force	4.6		-27	6.3	
Armed Forces	2	0.2	0	0	0
Not in labor force	537	40.8	11.4	482	37.8
Females 16 years and over	693	100	0.1	692	100
In labor force	377	54.4	2.2	369	53.3
Civilian labor force	377	54.4	2.2	369	53.3
Employed	362	52.2	4.6	346	50
Own children under 6 years	108	100	-21.2	137	100
All parents in family in labor force	77	71.3	6.9	72	52.6

Source: US Census Bureau and NW Michigan Council of Gov'ts

Table A-7

Types of Disability by Sex and Age for the Civilian Non-Institutionalized Population 5 Years and Older

Village of Elk Rapids, MI

2000 Decennial Census

	Total Elk Rapids	Males				Females			
		5 - 15 years	16 - 20 years	21 - 64 years	65 yrs & over	5 - 15 years	16 - 20 years	21 o 64 years	65 yrs & over
With one type of disability:	145	5	2	28	17	6	5	31	51
Sensory disability	25	0	0	4	3	0	0	0	18
Physical disability	36	0	0	3	10	0	0	4	19
Mental disability	29	5	0	2	4	6	0	4	8
Self-care disability	0	0	0	0	0	0	0	0	0
Go-outside-home disability	8	-	0	0	0	-	2	0	6
Employment Disability	47	-	2	19	-	-	3	23	-
With 2 or more types of disability:	137	0	2	39	28	0	0	36	32
Includes self-care disability	21	0	0	5	0	0	0	7	9
Does not include self-care disability:	116	0	2	34	28	0	0	29	23
Go-outside home and employment only	9	-	0	2	-	-	0	7	-
Other combination	56	-	2	32	-	-	0	22	-
No disability	1,329	163	52	361	93	122	32	382	124
Total *	1,611	168	56	428	138	128	37	449	207

Data Source: US Census Bureau, SF3 Dataset table MI00024 (long-form data compilation summary) logical record no. 0001126

* - Estimates based on Census long-form sample returns, may differ from SF1 (100% data sample) totals

Figure A-3

Village of Elk Rapids

Number of Households by Census Block

Base GIS Data:
Michigan Framework Data
Michigan CGI Census Blocks
Michigan GeoRef, NAD 83
Census Data from
US Census Bureau
MI00003 and MI00002
datasets (SF1)

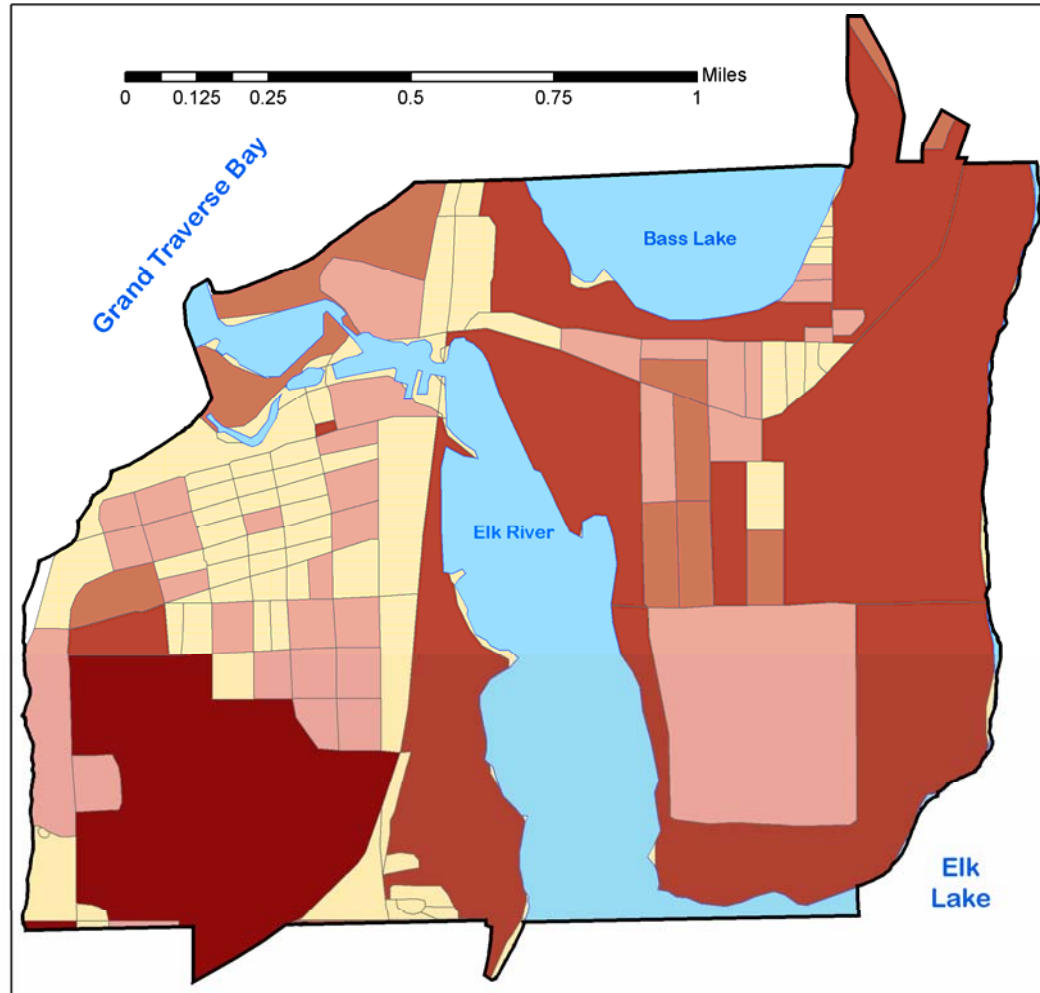
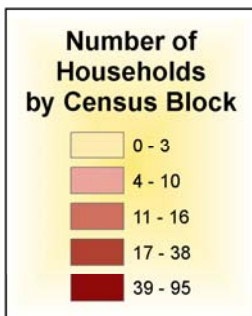


Figure A-4

Village of Elk Rapids

Households with individuals less than 18 years

Base GIS Data:
Michigan Framework Data
Michigan CGI Census Blocks

Michigan GeoRef, NAD 83

Census Data from
US Census Bureau
MI00003 and MI00002
datasets (SF1)

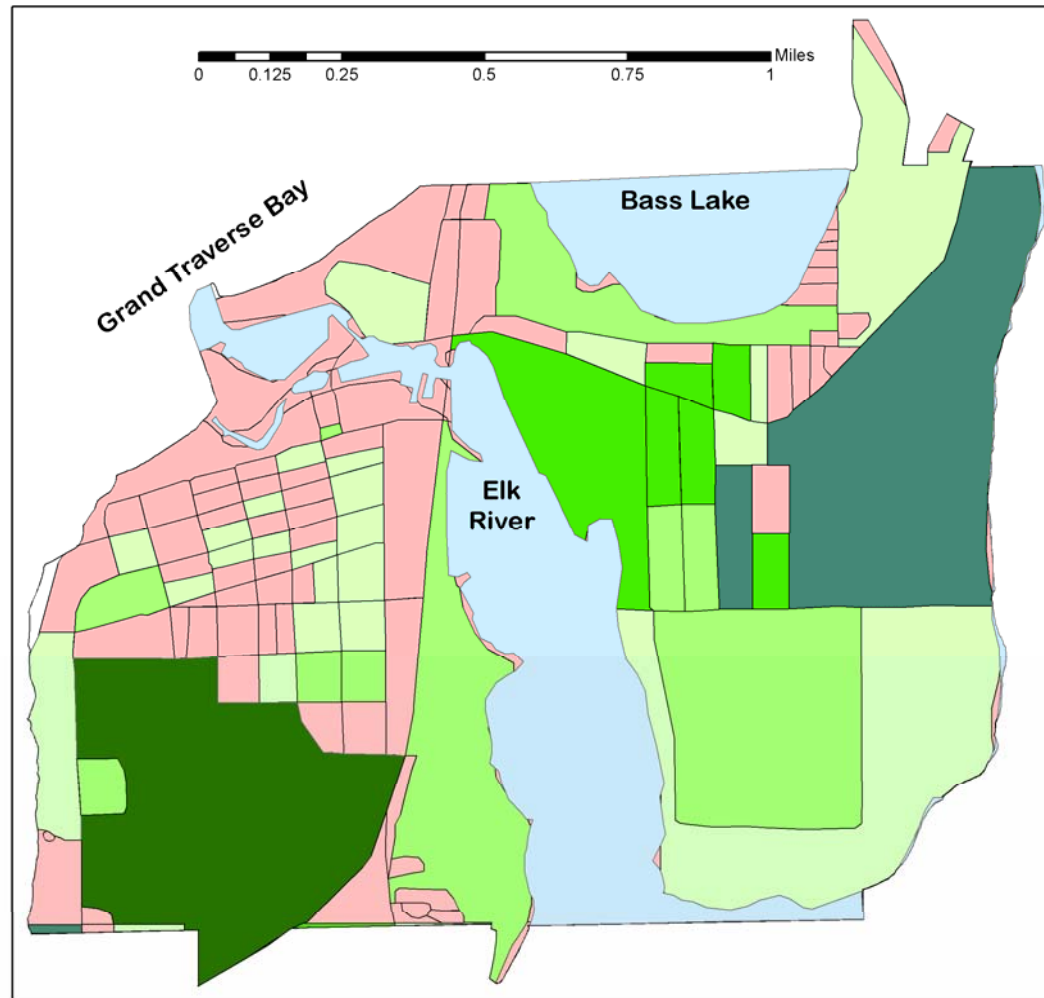
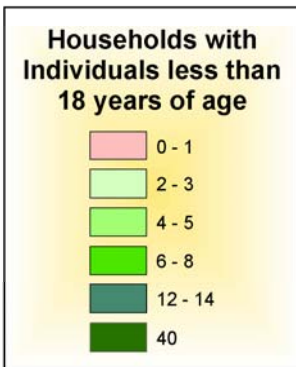


Figure A-5

Village of Elk Rapids
Households with
individuals 65
years or more
(by census block)

Base GIS Data:
Michigan Framework Data
Michigan CGI Census Blocks

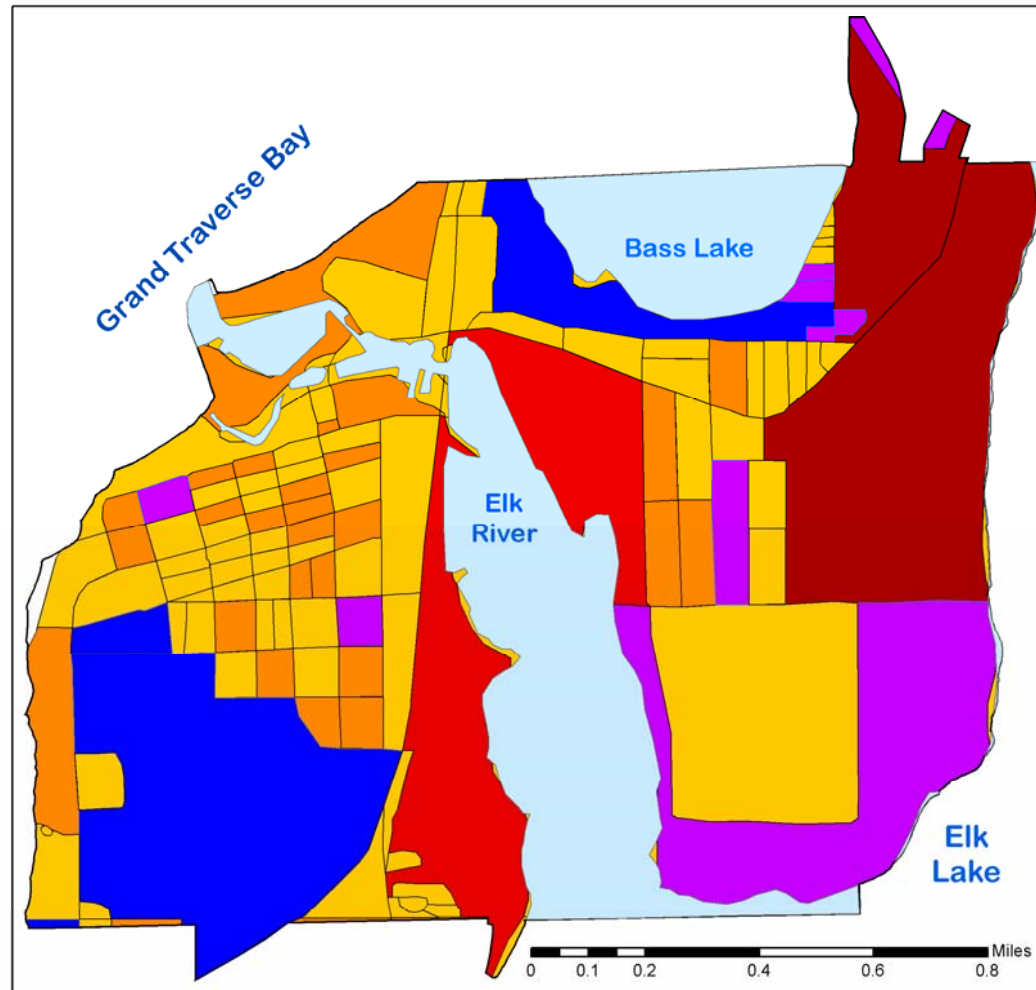
Michigan GeoRef, NAD 83

Census Data from
US Census Bureau
M100003 and M100002
datasets (SF1)



Households with
individuals 65 yrs
or more

-  0 - 1
-  2 - 4
-  5 - 7
-  10 - 11
-  15 - 16
-  19 - 23



9. Land Cover and Land Use in the Village of Elk Rapids

In 2004, the Antrim County Coordinator-Planner Office released the *Antrim County Land Use Atlas*, showing the land cover-land use information gleaned from the 1998 series of aerial photographs of the County. The geographic information system (GIS) database from that study indicates the following land cover/land use classifications and corresponding acreages in the Village of Elk Rapids:

Table A-8
Land Use/Land Cover Data
Village of Elk Rapids

(Using MIRIS Level 2 Classification System)

<u>Code</u>	<u>Land Use Type</u>	<u>Acreage</u>
11	Residential	527.4
12	Commercial, services, institutional	119.8
13	Industrial	77.6
14	Transportation, communication, utils.	3.6
19	Open land, other	90.3
21	Cropland	27.3
31	Grasses and forbes	82.1
32	Shrubs	45.7
41	Broadleaved forest	51.7
41	Coniferous forest	10.2
52	Lakes	223.1
72	Beaches and Riverbanks	9.8
Total		1,268.6

Source: GIS Data from *Antrim County Land Use Atlas*, 2004

Subtracting the lake acreage (223 acres) from the above total, 1,045.5 acres or 1.6 square miles of land are has been classified within the Village of Elk Rapids using the MIRIS 2000 Level 2 land use classification system adopted by the State of Michigan.

About 57% of the land area in the Village is residential, commercial, or industrial, with the balance being open space, forested, recreational, or cemetery.

Figure A-6 shows the distribution of the various classes of land cover and land use in the Village.

Figure A-6

**Land Use/
Land Cover
Map**

Village of Elk Rapids

Base GIS Data: Michigan Framework Data
Michigan GeoRef, NAD 83

Data Source: *Antrim County Land Use Atlas (2004)*
Based on 1998 MichCon Ortho Quadrangle Sheets
Published by Antrim County, Michigan



MIRIS Level 2 Classification

- Residential
- Commercial, Services, Instit.
- Industrial
- Transport, Communic., Util.
- Open Land, other
- Cropland
- Grasses & Forbs
- Shrubs
- Broadleaved Forest
- Coniferous Forest
- Lakes
- Beaches



10. Geology and Topography

The bedrock in the Village consists of Berea Sandstone, Bedford Shale and Ellsworth Shale. The surface geology of the Village is dominated by medium-textured glacial till, composed of non-sorted glacial debris, loam and silt loam texture with variable amounts of cobbles and boulders.

The surface geology of the Village was formed 10,000 to 12,000 years ago by glacial activity. Numerous advances and retreats by the glaciers resulted in the locally complex pattern of erosion and deposition. The drainage channels scoured by the glaciers resulted in depressions oriented linearly from the northwest to the southeast. Elk Rapids is dominated by medium-textured glacial till, composed of non-sorted glacial debris, dominantly loam and silt loam texture with variable amounts of cobbles and boulders. Along the lakes the geological composition is primarily Lacustrine sand and gravel. This type of sand and gravel typically occur as former beaches and near offshore deposits of the glacial Great Lakes.

The Village is located on two peninsulas bounded by Grand Traverse Bay, Elk River and Elk Lake. The topography of this area is flat to gently rolling and drains directly into Grand Traverse Bay, Elk Lake and Bass Lake, as shown in Figure A-7. The only major area of topographic relief is a slight escarpment where the topography elevates approximately 40 feet in the southern part of the west side of the Village. The contours on the topographic map were digitized from the USGS quadrangle sheets available in GIS format from the State of Michigan Center for Geographical Information.

11. Water Resources

a. Surface Water

One of the greatest attractions for the residents and visitors to Elk Rapids is the area's natural environment, most notably the surface water resources. The Elk River serves as the outlet for the Elk River Chain of Lakes Watershed, which covers approximately 503 square miles in the counties of Antrim, Charlevoix, Grand Traverse and Kalkaska. See Figure A-8. Except for the dams at Elk Rapids and Lake Bellaire, the Chain of Lakes is navigable by small craft

Within the Village there are 1.6 miles of Lake Michigan shoreline and nearly seven miles of frontage on inland lakes and rivers. These lakes, rivers and their associated streams and creeks offer scenic and recreational amenities to Village residents and visitors. Responses to the 2005 Master Plan Opinion Survey indicate that Village residents feel it is extremely important that the quality of these surface waters be protected from the negative impacts of development, such as pollution and loss of scenic views to open water.

Elk Lake and Bass Lake are part of an ongoing comprehensive lake monitoring program being conducted by the Tip of the Mitt Watershed Council. The results of the 1992, 1995, 2001 and 2004 monitoring are shown in Table A-9.

Figure A-7
Topographic Map
Village of Elk Rapids

Base GIS Data
Michigan Framework Data, Antrim County
and the US Geological Survey (USGS)

Michigan GeoRef, NAD 83

Contours digitized from 1:24,000 scale
USGS Topo Quad Files from
Center for Geographic Information
State of Michigan

Elevation Contours in Meters



Legend

- 5-m Contours
- 2.5-m Contours

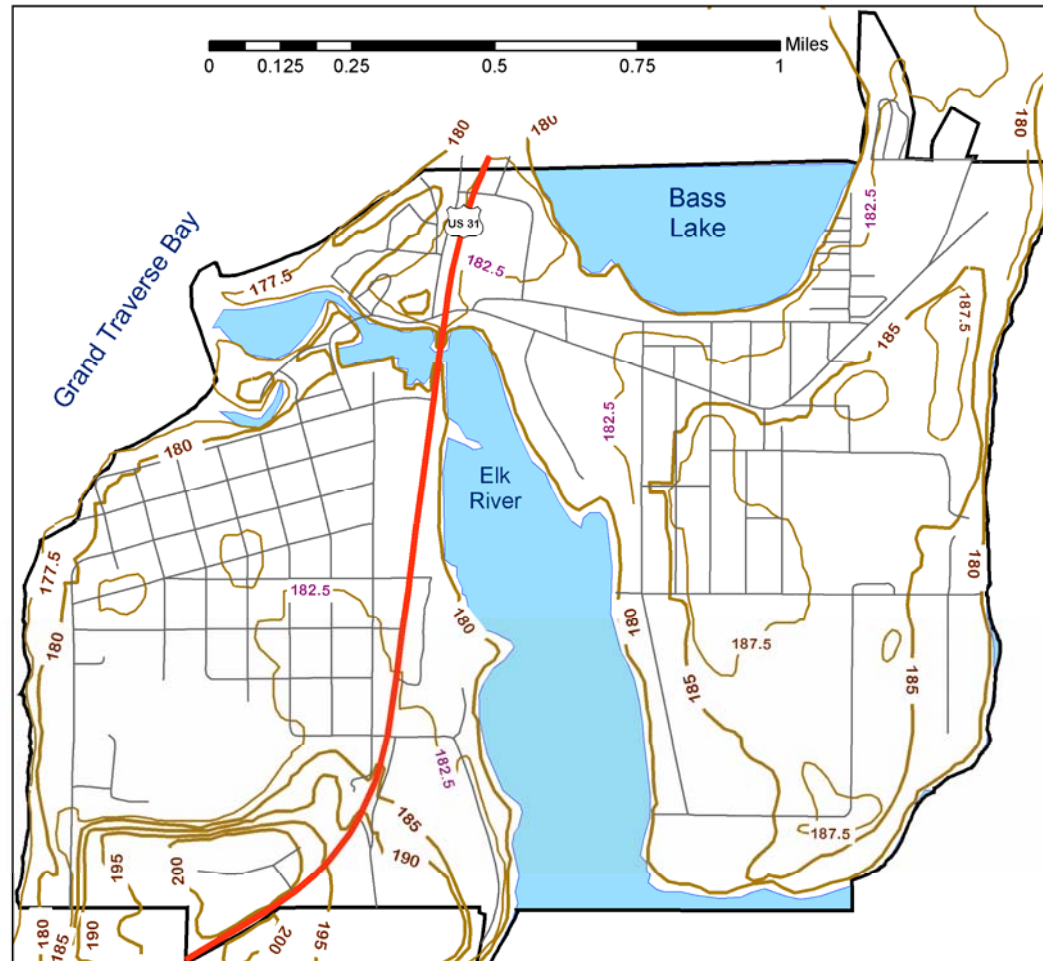


Figure A-8 Elk River - Chain of Lakes Watershed

Drainage Area:
502.6 Sq Mi

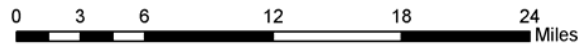
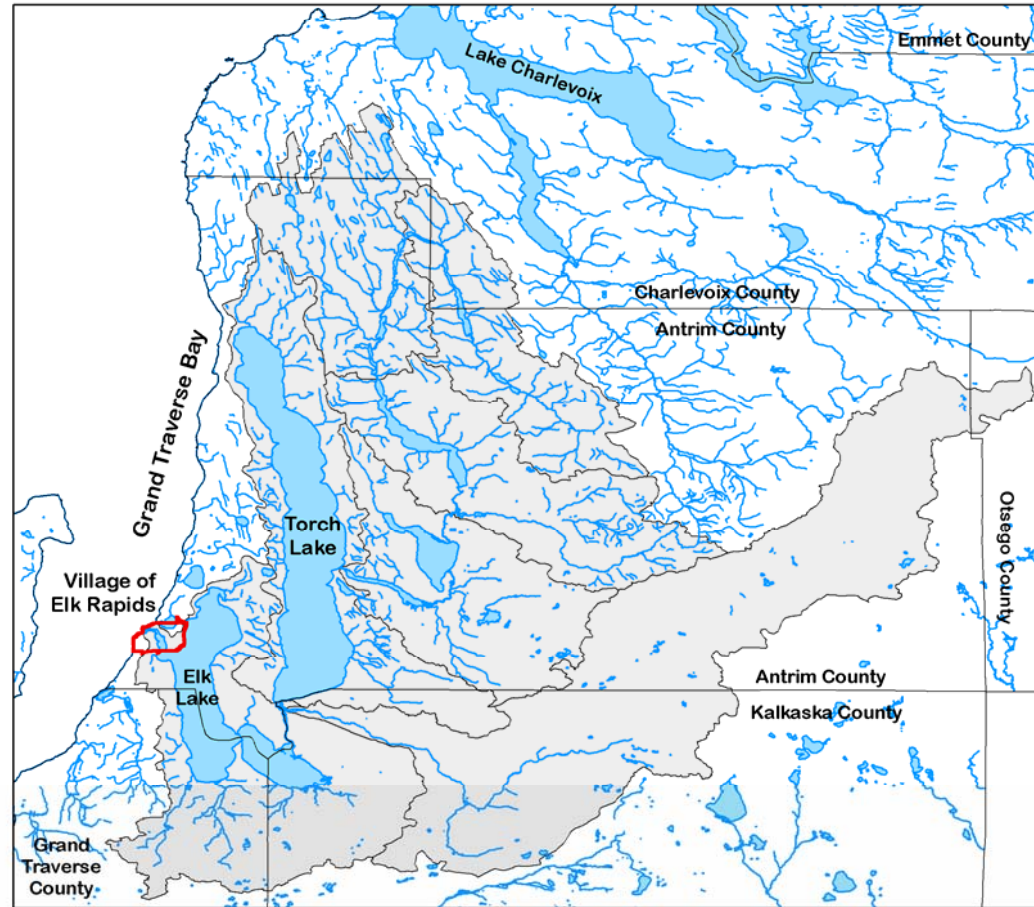
Village of Elk Rapids

Base GIS Data:
Michigan Framework Data
Michigan GeoRef, NAD 83



Legend

- C.O.L. Watershed
- Village of Elk Rapids



Scale: 1:400,000

Table A-9									
Elk Rapids Water Quality Monitoring Results									
	Surface Temp. (C)	Surface D.O. (mg/L)	pH	Total Phos. (mg/L)	Nitrate-Nitrogen (mg/L)	Total Nitrogen (mg/L)	Conductivity uhmo/cm ²	Chloride (mg/L)	Secchi Disc (ft)
Bass Lake									
5/ 7/1992	13.78	10.5	7.96	19.1	.042		310	33.6	9.0
4/16/1995	7.7	11.85	7.8	9.0	.081	.85	332	29.0	12.0
5/ 2/2001	17.52	9.5	8.6	12.8	.024	.81	337	27.5	8.0
4/22/2004	11.56	10.5	8.37	7.8	.038	.497	343	34.9	15.0
Elk Lake									
5/21/1992	14.04	10.34	7.87	12.6	.236		255	5.7	25.0
4/17/1995	4.09	12.9	7.6	6.0	.28	.45	263	7.0	25.0
5/17/2001	14.2	10.15	8.42	3.5	.28	.34	269	5.9	28.0
5/ 7/2004	6.82	12.9	8.26	3.3	.274	.412	293	8.8	21.0

Data Source: Tip of the Mitt Watershed Council – table and text excerpted from Draft Village Master Plan (2006)

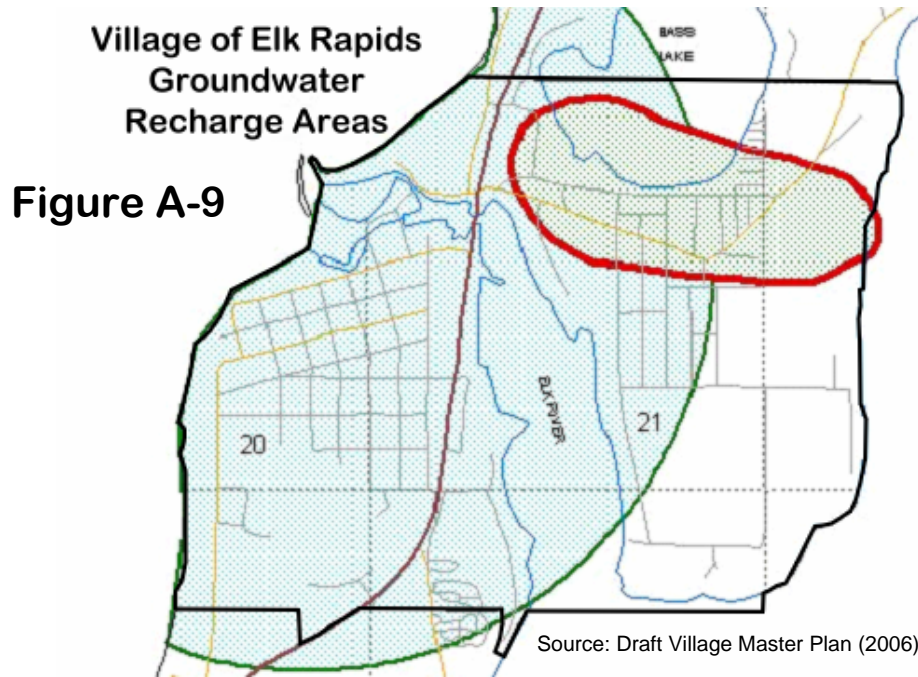
Low concentrations of nitrogen usually indicate good water quality. The recorded levels of nitrogen in both Bass and Elk Lakes are considered to be low. Conductivity and chloride are usually not water quality problems, but are valuable indicators of human influence on water quality. If conductivity levels steadily increase over a period of years, it is an indication that pollution is occurring (as shown in Table A-9, a slight increase is evident from 1991 to 2004). The extreme temperature differences shown in the table are due to the month in which the data collection. The phosphorous levels were noticeably higher in some years; however, the levels are still on the low end of the scale compared with most other inland lakes. The other differences seen in the data from 1991 to 2004 can be attributed to differences in timing, water temperature, and weather conditions. Chloride in local surface waters has a normal level of 4 milligrams per liter (mg/L), and due to the marine origin of the bedrock in northern Michigan, chloride is usually present in the groundwater at a rate of 12 mg/L. Slight increases in chloride can have subtle impacts on lake ecosystems, but most fish and large aquatic organisms are not affected until the levels reach 1000 mg/L. The Secchi Disc provides a simple valuable method to measure water clarity and assess water quality. A weighted disc, attached to an incrementally marked rope, is lowered into the water until it is no longer visible. The 1992, 1995, 2001, and 2004 monitoring results are shown in the table.

Overall, the water quality of the lakes within the limits of the Village appears to be good for the time being. However, evidence of the consequences increased human activity in the form of increased conductivity and chloride levels indicates that the Village must be vigilant in controlling all types of pollution, both point-source and non-point source, into the lakes. After all, it is the water resources of the region that define “Quality of Life” for visitors and most residents of the area.

b. Groundwater

The entire Village relies on groundwater for drinking water, either from the municipal wells for those served by the municipal water system or from individual wells where municipal water is not available. The 'Aquifer Vulnerability to Surface Contamination in Michigan' map, prepared by the Center for Remote Sensing and Department of Geography at Michigan State University, reveals that the Village is located in an area where the vulnerability of drinking water aquifers to surface contamination is high. This is because of the presence of highly permeable soils over highly sensitive drift lithology (layers of clay and permeable sands and gravels). Due to this aquifer vulnerability, wellhead protection measures have been put in place for the municipal water wells.

Lakes, creeks and wetlands are important for surface drainage, groundwater recharge and wildlife habitat. The well recharge areas for the two municipal wells in Elk Rapids are shown in Figure A-9. The municipal water well located near the Department of Public Works has a well-defined recharge area indicated by the oval-shaped segment in Figure A-9 encompassing mainly the Ames Street commercial corridor, the residential area to the south of Bass Lake, the southern end of Bass Lake and extending across part of the Elk Rapids Golf Course to Elk Lake. By comparison, the municipal water well located at the Veteran’s Memorial Park in close proximity to the shoreline of Grand Traverse Bay has a less-defined recharge area, indicated in Figure A-9 by a radius of approximately one mile encircling the well area. Alterations to the watershed features in these and other areas can contribute to flooding, poor water quality, and loss of valuable wildlife habitat.



12. Fish and Wildlife

Walleye, trout, northern pike, perch, bass, black crappie, muskellunge, whitefish, northern pike, and bluegill are species found in Bass Lake, Elk Lake, and the Elk River. Sixty-nine different species of fish have been identified in the Chain-of-Lakes Watershed by the Tip of the Mitt Watershed Council. The Elk River Chain of Lakes fishery management strategy includes stocking and periodic surveying of fish populations. The MDNR has planted over 500,000 brown trout and rainbow trout in Elk Lake and the Elk River since 1990. Additionally, brown trout, steelhead, and various species of salmon are found in Grand Traverse Bay. Many of the current recreational areas in the Village of Elk Rapids cater to recreational fishermen. Examples are the Dam Fishing Park and the Kids' Pond.

Habitat for populations of songbirds, waterfowl, shorebirds, muskrat, mink, and raccoon are provided by the wetlands and lakeshores within the Village. The predominant mammal species found in the Village of Elk Rapids are squirrel, grouse, rabbit, and deer.

13. Soils and Vegetation

Figure A-10 shows the distribution of soil types throughout the Village, as compiled by the US Natural Resource Conservation Service in 1978 in the *Soil Survey of Antrim County, Michigan*. The soil map shows *pre-development* soil conditions. Since the map was developed, some of the areas with wetland soils have since been dredged, filled, and built upon.

Deer Park Sand (DeC) is the most pervasive soil type in the Village. This soil type is well drained and typically located on gently sloping landforms.

The following is a brief description of the soil associations found in the Village. The general soil map for Antrim County shows 12 different associations found in the Village of Elk Rapids. While the soil association information presented in Figure 6-2 can be used as a general guide for management of large undeveloped tracts of land, it should not be used for development of specific sites.

Be - **Beaches**: Nearly level and gently sloping consisting of loose sandy and stony lake beaches and strands of sand extending inland.

CbA - **Charlevoix Sandy Loam**: Nearly level and gentle slopes up to 4%, somewhat poorly drained soils in upland depressions.

CdA - **Crosswell Sand**: Nearly level to gently sloping, moderately well drained lowland soils.

DeC - **Deer Park Sand**: Gently sloping to moderately steep slopes (up to 20%), excessively drained soils on ridges adjacent to Lake Michigan.

DrC - **Deer Park-Roscommon complex**: Gently sloping to moderately steep (0 to 20 percent slopes), excessively drained Deer Park soils on ridges, and nearly level poorly drained and very poorly drained Roscommon soils in swales between the ridges on the plains adjacent to Lake Michigan.

EaB - **East Lake Gravelly Loamy Sand**: Nearly level to gently sloping up to 6%, somewhat excessively drained soils in the form of terraces or ridgelike topography adjacent to level areas.

EmB - **Emmet -Moncalm Complex**: Gentle to moderate slopes of 3 to 12%, well drained and moderately well drained soils, generally located on tops of hills or mounds.

IoA - **Iosco Sand**: Nearly level to gently sloping, up to 4%, somewhat poorly drained soil in upland depressions.

KaB - Kalkaska Sand: Nearly level to gently sloping, up to 6%, somewhat excessively drained soil located on upland plains.

KsA - Kawkawlin Silt Loam: Nearly level to gentle slope up to 3%, somewhat poorly drained soil located in upland depressions.

Ps - Pickford Silty Clay Loam: Nearly level poorly drained soil, located in depressions and along waterways, subject to frequent flooding. Limitations: This soil association is classified as a wetland soil with severe septic and construction limitations.

Ro – Roscommon Mucky Sand: Nearly level, poorly drained and very poorly drained soil in lowlands, in depressions and adjacent to bogs and waterways, subject to frequent flooding.

Ta - Tawas Muck: Nearly level, poorly drained organic soils located in lowlands and subject to flooding. Limitations: This soil association is classified as a wetland soil (unless previously drained), with severe septic and construction limitations.

Te - Tawas-Ensley Complex: Nearly level, poorly drained soils located in swamps and drainage ways and subject to flooding.

Some high water table conditions do exist, especially in the lower areas of the Village. Approximately six percent of the total Village area consists of hydric (wetland) soil (unless previously drained).

Vegetation in the Elk Rapids area includes mixed hardwoods and conifer forest. Wetland areas are home to lowland cedar swamps, and marshlands. Figure A-6, the Land Cover/Land Use map, displays areas of forest and vegetation cover. Northern Michigan boasts excellent soil for fruit crops, which can be seen surrounding this area..

14. Transportation Systems

Major arterials within the community include U.S. 31, River Street, Ames, Cairn Highway and Bayshore Drive. Four major traffic bridges convey traffic over the Elk River and spillway.

The only public transportation system serving the Village of Elk Rapids is the Antrim County Transportation Agency (ACT), which provides dial-a-ride service to all residents of the County. There is a semi-scheduled morning run of the bus between Bellaire, the Antrim County seat, and Elk Rapids.

The Village of Elk Rapids serves as an ideal location to connect the existing trails that have been developed by the Top of Michigan Trails Council, which provides recreational trails through Charlevoix, Emmet and Cheboygan counties, and the Traverse Area Recreation Trail in the Grand Traverse region. These trails are very important as they provide safe areas for many recreational activities such as jogging and walking, biking, skateboarding and rollerblading.

Figure A-10

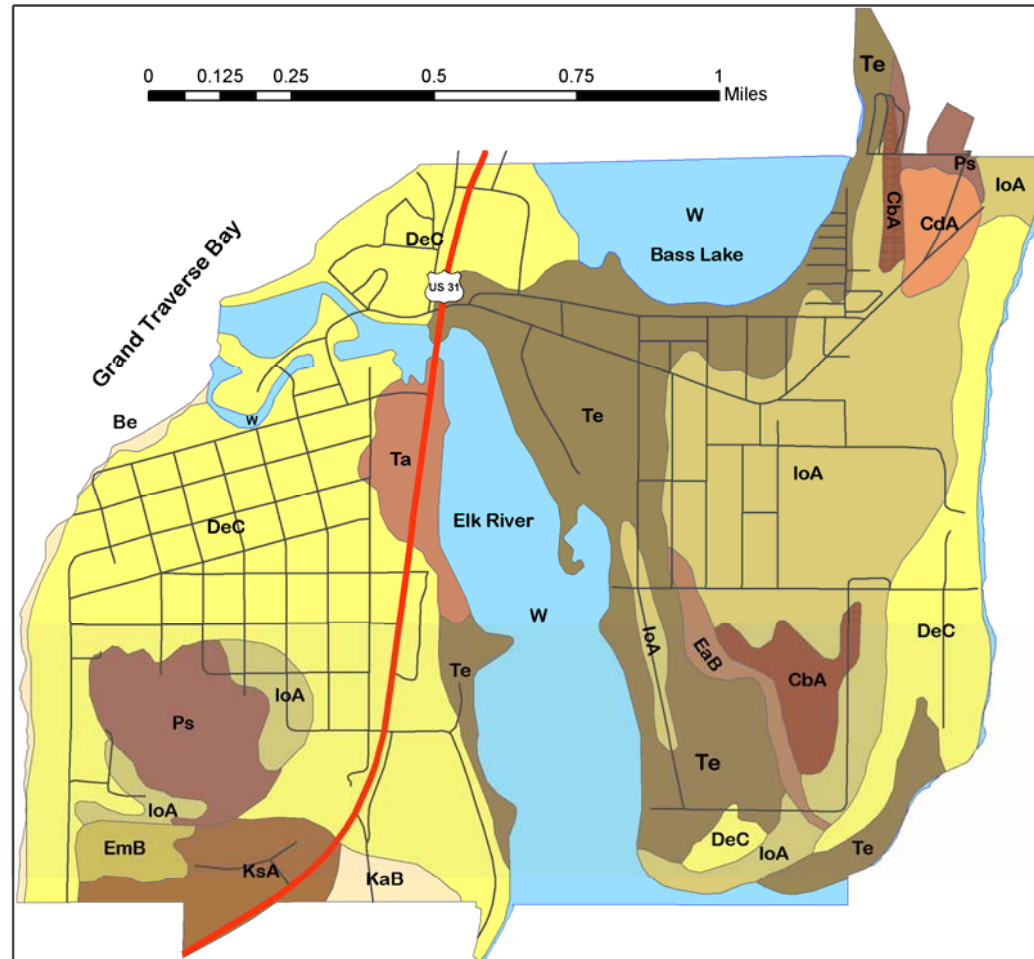
Soil Map
Village of Elk Rapids

Base GIS Data:
Michigan Framework Data
Michigan GeoRef, NAD 83
Soil Survey Data from
US Natural Resources Conservation Service:
Soil Survey of Antrim County, MI (1978)
and Dataset soilmu_a_mi009



Soil Types

- Be - Beaches
- CbA - Charlevoix Sandy Loam
- CdA - Crosswell Sand
- DeC - Deer Park Sand
- EaB - E. Lake Loamy Sand
- EmB - Emmet-Montcalm Cmplx
- IoA - Iosco Sand
- KaB - Kalkaska Sand
- KsA - Kawkawlin Silt Loam
- Ps - Pickford Silty Clay Loam
- Ta - Tawas Muck
- Te - Tawas-Ensley Complex
- W - Waterbody



15. Climate

The Village's climatic conditions are similar to those across northern lower Michigan: long cold winters and moderate warm summers. However, the proximity to Lake Michigan serves to moderate temperature extremes as compared to inland communities of northwestern Michigan. Temperatures typically drop to freezing in the fall several weeks later than areas further inland in Antrim County. First frost in the Village occurs as late as the middle or end of October along the shoreline. Consequently, climatological data from Traverse City, about 16 miles to the south along Grand Traverse Bay, is more representative of the climate of Elk Rapids.

The best narrative for the Traverse City area is available from the State Climatologist's Office, and spans the 30-year period 1950-1980. Precipitation and temperature data for that period are presented below in Tables A-10 and A-11. This narrative itself is presented in Table A-12.

Table A-10

PRECIPITATION SUMMARY FOR TRAVERSE CITY
FOR THE 30 YEAR PERIOD 1951-1980

DIVISION: NORTHWEST LOWER LAT.: 44d 44m TOWN: 27N SEC.: 13
COUNTY: GRAND TRAVERSE LONG.: 85d 35m RANGE: 11W ELEV.: 0623 ft

M O N T H	LIQUID EQUIVALENT (IN)			SNOWFALL (IN)			
	MEAN	MAXIMUM DAILY AMOUNT AND YEAR	MEAN # OF DAYS WITH AT LEAST .10 .25 .50	MEAN	MAXIMUM MONTHLY AMOUNT AND YEAR	MAXIMUM DAILY AMOUNT AND YEAR	MAXIMUM TOTAL DEPTH AND YEAR
JAN	1.86	1.40 1975	6 2 *	24.0	42.1 1971	10.0 1978	34 1979
FEB	1.41	0.88 1960	4 1 *	16.6	34.3 1967	11.0 1960	36 1959
MAR	1.78	1.57 1959	5 2 1	12.9	30.9 1959	13.1 1959	40 1959
APR	2.51	1.66 1952	6 3 2	2.8	8.8 1966	4.7 1979	7 1964+
MAY	2.48	1.64 1963	6 4 2	0.1	2.2 1954	2.0 1954	1 1961
JUN	3.15	3.50 1954	6 4 2	0.0	T 1953	T 1953	0
JUL	2.88	2.34 1952	5 3 2	0.0	0.0	0.0	0
AUG	2.93	2.54 1979	6 4 2	0.0	0.0	0.0	0
SEP	3.60	3.06 1970	7 4 2	0.0	T 1975+	T 1975+	0
OCT	2.59	1.96 1969	7 3 1	0.6	3.5 1976	2.8 1976	3 1962
NOV	2.51	1.72 1966	7 3 1	9.3	26.7 1951	10.1 1966	8 1966+
DEC	2.01	1.46 1971	6 2 1	20.3	39.9 1972	14.4 1972	24 1972
ANN	29.71	3.50 1954	71 35 16	86.6	42.1 1971	14.4 1972	40 1959

T=Trace, an unmeasurable amount +=On earlier dates *=Less than one half

Table A-11

TEMPERATURE (F) SUMMARY FOR TRAVERSE CITY
FOR THE 30 YEAR PERIOD 1951-1980

DIVISION: NORTHWEST LOWER TOWN: 27N
COUNTY: GRAND TRAVERSE RANGE: 11W
LATITUDE: 44d 44m SECTION: 13
LONGITUDE: 85d 35m ELEVATION: 0623ft

M O N T H	DAILY AVERAGES			DAILY EXTREMES			
	MAX	MIN	MEAN	HI	YEAR	LOW	YEAR
JAN	26.3	13.1	19.7	53	1975+	-21	1964
FEB	28.1	11.1	19.6	52	1976+	-37	1979
MAR	37.4	19.4	28.4	75	1968	-28	1962
APR	52.9	31.8	42.3	90	1970	1	1965
MAY	66.0	40.9	53.5	95	1978+	17	1966
JUN	76.2	51.2	63.7	101	1971	28	1965
JUL	80.7	56.9	68.8	100	1966	31	1965
AUG	78.5	56.2	67.3	100	1955	36	1968
SEP	69.7	49.0	59.3	96	1953+	28	1965+
OCT	58.5	39.8	49.1	88	1971	20	1965
NOV	43.6	30.1	36.8	74	1975+	2	1951+
DEC	31.6	19.5	25.5	64	1962	-26	1976
ANN	54.1	34.9	44.5	101	1971	-37	1979

**Table A-12
Climate of Traverse City**

Traverse City, located in north central Grand Traverse County of the Northwest Lower Climatic Division, is at the south end of the west arm of Grand Traverse Bay. The Old Mission Peninsula extends northward between the west arm and the east arm of Grand Traverse Bay about 15 miles, with the Bay itself opening into Lake Michigan about 30 miles north of Traverse City. The surrounding terrain is hilly and soils are predominantly sandy loam

The lake effect on Traverse City's climate is quite strong during much of the year. The lake effect increases cloudiness and snowfall during the fall and winter and also modifies temperatures, keeping them cooler during the late spring and early summer, and warmer during the late fall and early winter. In the late winter as ice builds up on Grand Traverse Bay and Lake Michigan, Traverse City is subjected to temperature variations which are more closely associated with interior locations. Cherry orchards are found on the Old Mission Peninsula and on many of the hillsides along the east shore of the east arm of Grand Traverse Bay where prevailing westerly winds and the cold lake water is most effective in modifying the climate. Diminished wind speeds or winds which do not traverse large unfrozen lakes often produce clearing skies and the colder temperatures expected at continental locations.

Because the day-to-day weather is controlled by the movement of pressure systems across the nation, this area seldom experiences prolonged periods of hot, humid weather in the summer or extreme cold during the winter. Long-term wind and humidity records are not available for this location, but these data should be similar to the following values which were observed at the National Weather Service Office in Houghton Lake. The prevailing wind is westerly, averaging 9 mph. The strongest one-minute wind speed, 40 mph, was recorded in June 1969 and January 1972. The average 1 P.M. relative humidity varies from 51% for May to 78% for December, and averages 63% annually.

Summers are dominated by moderately warm temperatures with a 1951-80 average of 9 days exceeding the 90 F mark. During the same period 5 days in 3 different years were 100 F or higher. The lake influence was reflected in the minimum temperatures; an average of 164 days was 32 F or lower, an average of 13 days was 0 F or lower, and no year stayed above 0 F. The highest average monthly maximum temperature of 87.3 F was recorded July 1955, and the lowest average monthly minimum temperature of -1.5 F was recorded February 1979. The following temperature extremes, based on the time period of this station's published record, are: maximum, 105 F, recorded July 7, 1936; minimum, -37 F, recorded February 17, 1979; warmest monthly mean, 75.3 F, recorded July 1955; and coldest monthly mean, 9.2 F, recorded February 1979.

Heating and cooling degree-day data are used as an index of the heating and cooling requirements for buildings which are proportional to the number of degree-days. Heating degree-days for a single day are obtained by subtracting the mean temperature from 65 F when the mean temperature is below 65 F. Cooling degree-days for a single day are obtained by subtracting 65 F from the mean temperature when the mean temperature is above 65 F. Each are then summed to yield monthly totals. The average heating degree-days for January was 1396 while October was 490. The average cooling degree-days for July was 157 while May was 20.

**Table A-12 (continued)
Climate of Traverse City**

Based on the 1951-80 period, the average date of the last freezing temperature in the spring was May 24, while the average date of the first freezing temperature in the fall was October 3. The freeze-free period, or growing season, averaged 132 days annually.

Precipitation was well distributed throughout the year with the crop season, April-September, receiving an average of 17.55 inches or 59% of the average annual total for the 1951-80 period. During this same period the average wettest month was September with 3.60 inches, while the average driest month was February with 1.41 inches. The following precipitation extremes, based on the time period of this station's published record, are: greatest published 24-hour total, 4.30 inches, recorded August 22-23, 1898; greatest monthly total, 10.78 inches, recorded May 1942; and least monthly total, 0.00 inches, recorded March 1889.

Summer precipitation comes mainly in the form of afternoon showers and thundershowers. Annually, thunderstorms will occur on an average of 31 days. Michigan is located on the northeast fringe of the Midwest tornado belt. The lower frequency of tornadoes occurring in Michigan may be, in part, the result of the colder water of Lake Michigan during the spring and early summer months, a prime period of tornado activity. During 1950-87, Michigan has averaged 15 tornadoes each year. During this same period, 4 tornadoes occurred within the county.

The 1950-51 through 1979-80 average seasonal snowfall was 87.0 inches. During this period, 112 days per season averaged 1 inch or more of snow on the ground, but varied greatly from season to season. The following snowfall extremes, based on the time period of this station's published record, are: greatest observation-day total, 14.4 inches, recorded December 16, 1972; greatest monthly total, 57.9 inches, recorded January 1982; greatest seasonal total, 136.9 inches, recorded during 1984-85; least seasonal total, 30.8 inches, recorded during 1936-37; and greatest snowdepth, 50 inches, recorded February 26, 1904.

Evaporation data from the Class "A" pan were not available for this station, but these data should be similar to those observed at Lake City. During 1960-80, the pan evaporation for May through October exceeded the average precipitation by 55%. Therefore, soil moisture replenishment during the fall and winter months plays an important role in the success of agriculture for this area. While drought occurs periodically, the Palmer Drought Index indicated drought conditions reached extreme severity only 2% of the time.

Station History of Traverse City

Observations began on November 20, 1872 and continued through January 1877. The station was re-established in January 1882. The earliest published records for this station are for January 1882. On June 1, 1896 the station was located at the GR & I Railroad Station. The exact locations of the above stations are unknown. On July 7, 1927 the station was moved to the Water Works Plant, 0.5 mi. NW of the post office (PO). On April 8, 1941 the station was moved to the Municipal Airport, 2.5 mi. SE of the PO. The station has been at this location to the present.

Source: Michigan State Climatologist's Office, Historical Climatological Summary Tables, Traverse City Station

16. *Environmental Issues*

The 2005 Master Plan Opinion Survey brought to the forefront many social, economic, and environmental issues that are dear to the respondents of the survey (51% response rate).

The *April 2005 Survey Summary Report*, approved in late 2005 by the Village Planning Council, lists the following partial areas of strong consensus in environmental issues:

- Protect Lake water quality
- Protect Scenic views of the water
- Protect Ground water quality to preserve the quality of well water
- Protect Air quality
- Protect Safe biking along streets
- Very Important that Elk Rapids Work on new “image” policies to Preserve the scenic view areas in the Village
- Agreed or strongly agreed that Elk Rapids should work on new “environmental/growth management” policies to develop comprehensive protective measures for properties and waterways adjacent to construction sites during construction of any building
- Protect Noise control, especially in residential areas next to commercial areas
- Agreed or strongly agreed that Elk Rapids should work on new “image” policies to require all new development to hook up to Village sewer and water systems
- Protect Wetlands and natural areas
- Agreed or strongly agreed that Elk Rapids should work on new “image” policies to create a walking community by connecting and extending sidewalks throughout the east and west sides of the Village
- Agreed or strongly agreed that Elk Rapids should develop additional bicycle lanes on or adjacent to roads
- Protect the Informal lifestyle and slow pace of life
- Protect the Island library and Is. bridge
- Protect Strict traffic speed control on all streets in the Village
- Protect Ground water quality
- Protect Locally owned family business
- Protect Recreational opportunities in Village harbors and parks, such as tennis courts, playgrounds, etc
- Agreed or strongly agreed that Elk Rapids should work on new “environmental/growth” management policies to engage in joint efforts with surrounding counties and townships for developing zoning regulations that offer more protection to our shorelines
- Protect Recreational activities in Village harbors and parks, such as tennis courts, playgrounds, etc
- Very Important that the Village should work on new “image” policies to Preserve historic buildings
- Protect Tree-lined streets
- Agreed or strongly agreed that Elk Rapids should work on new “environmental/growth” policies to raise private funds to create bicycle and walking pathways around the Village (like those in the Charlevoix/Petosky area)
- Agreed or strongly agrees that Elk Rapids should develop additional combination bicycle paths and roller blade paths

The *Summary Report* continues:

Any planning, zoning, or operational issues that the community faces now or in the future should take these areas into consideration since each of them has very strong community support. For example, since it is very important that the lake water quality and the ground water quality be preserved, it is important to consider what the Village can do as it relates to sewer and water systems or how policies toward development should be modified or what new policies should be developed to protect our natural resources.

Respondents also clearly indicated their interest in protecting the positive qualities that they think the Village already has, and indicated which of those qualities should take priority. For example there is high agreement that the Village should “stick to its knitting;” and assure lake water quality, well water quality, air quality and the walking and biking safety. The respondents indicated that they place a high priority on preserving its most valuable natural assets, including the “scenic views of the water,” wetlands and natural areas, and the recreational opportunities afforded by our surroundings; preserving the quality and pace of life, illustrated by the emphasis on walking, biking, controlling noise and traffic speed, and preserving the community’s sense of history illustrated by the high priority they put on preserving historic buildings and tree-lined streets and locally owned family businesses ...

There are high levels of agreement in all of the areas above, and in this section, vision becomes clearer not only about what the priorities are but also about how the community wishes to tackle these key priorities.

For example, in order to preserve lake water quality, the community believes that Elk Rapids should work with the surrounding areas to preserve shorelines, that it should develop new policies and zoning regulation designed to protect shorelines, that it should work on new policies to require new development and existing homes and businesses to hook up to the Village sewer and water systems and protect wetlands and natural areas.

In order to preserve water quality, air quality and other quality of life, the community also believes that Elk Rapids should develop stricter blight ordinances, maintain the recycling center, and strictly enforce existing zoning regulations for new construction.

In order to preserve its scenic views the community believes that Elk Rapids should work on new policies to require underground utilities, that it should institute an architectural review process and institute architectural controls on new construction, develop area-wide zoning regulations for shorelines, and that it should insist that signs conform to existing regulations. The Village should continue to seriously support the garden areas in the community.

In order to preserve its recreational assets, the community believes that Elk Rapids should create a walking community by developing widespread walking opportunities, create a biking community by adding more bike paths along roads, combination bike and roller blade paths and working with surrounding areas to extend these paths all around Elk Rapids, connecting to surrounding areas. The first choice for funding these larger initiatives is to raise private funds to support them. The community believes that a priority should be to provide more playgrounds for children.

In order to preserve its lifestyle, the community believes that Elk Rapids should guard its history by preserving its historic home and structures, and first on the list are the Island house and the Island Bridge. The community also believes that Elk Rapids should work to develop new policies to preserve these assets.

The report then goes on to analyze areas where the respondents were happy with the status quo, and on issues that tend to divide the community. However, on general environmental issues

noted above, there was a strong consensus among the respondents. These issues will serve to guide the Village Parks & Recreation Commissions in their planning for recreational facilities that will meet the environmental expectations of the Village residents.

17. Zoning

The Village of Elk Rapids is a fully zoned community. The current zoning map is shown in Figure A-11. The Planning Commission sets the zoning districts, and the Village Zoning Administrator administers and enforces the zoning districts. Appeals against the Zoning Administrator's determinations can be made to the Village Zoning Board of Appeals.

The current Future Land Use Map is shown in Figure A-12. This is a representation of the ideal land use for the Village, as set forth in the Village Master Plan. The Land Use/Land Cover Map of Figure A-6 is a representation of the actual land use in the Village, as interpreted from 1998 digital orthophoto quadrangle sheets (aerial photographs).












The Village Planning Commission is currently updating its five-year Master Plan. In the process, major revisions are expected in the zoning map and the future land use map.

Figure A-11

Zoning Map
Village of
Elk Rapids, MI

Base GIS Data:
Michigan Framework Data
Land Information Access Association
Michigan GeoRef, NAD 83



Zoning Districts	
	B-1 Lo Impact Trans. Comm.
	B-2 Central Bus. District
	B-3 Community Commercial
	I-1 Light Industrial
	P Public Land
	R-1 Residential
	R-2 Residential
	R-3 Residential
	RM-H Hi-dens. Mult. Res.
	RM-L Lo-dens. Mult. Res.
	RM-MH Mobile Homes

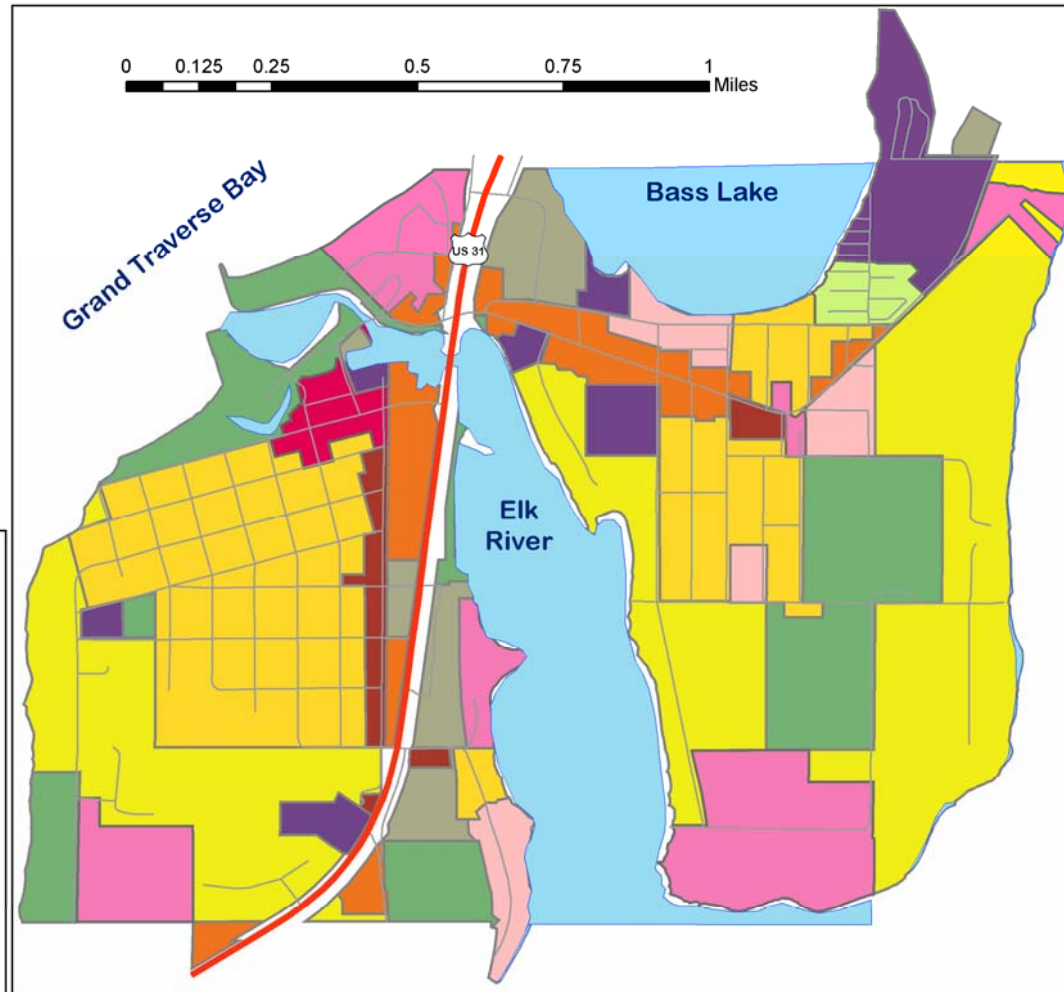


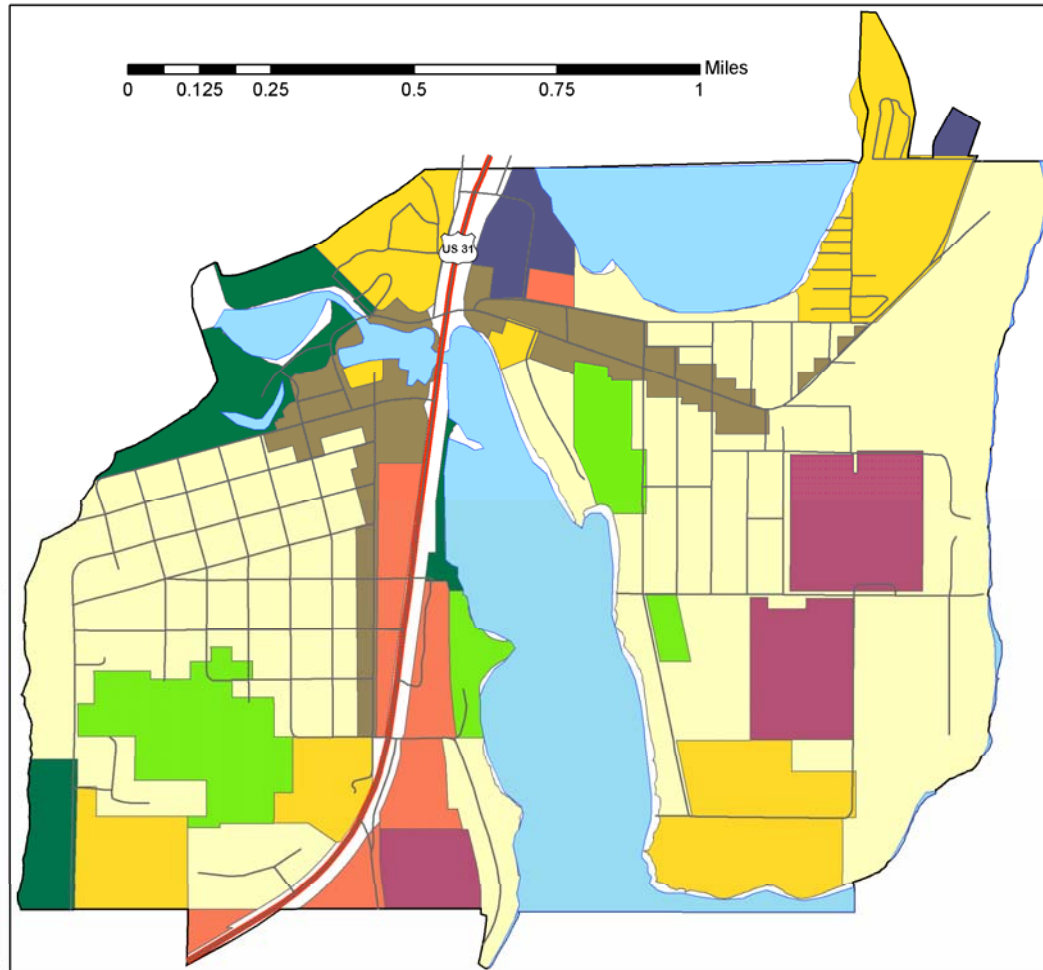
Figure A-12

Future Land Use Map Village of Elk Rapids, MI

Base GIS Data:
Michigan Framework Data
Land Information Access Association
Michigan GeoRef, NAD 83



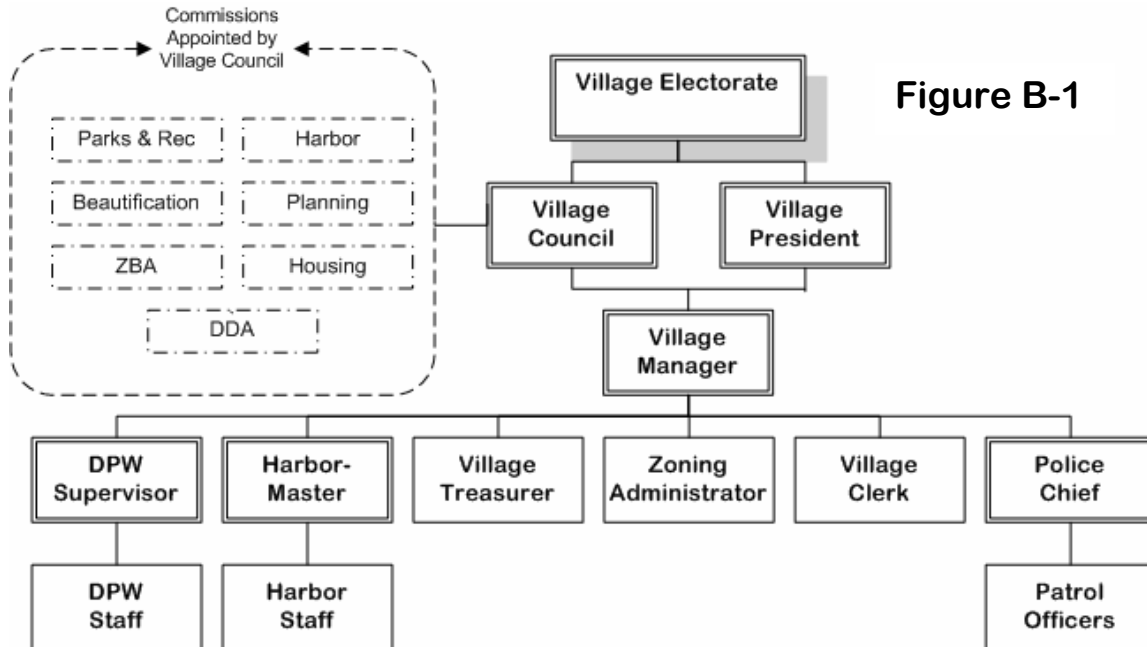
Legend	
	Conservation/Recreation
	Conservation/Residential
	General Business
	General Residential
	Light Industrial
	Mixed Residential
	Public Service
	Village Commercial



B. Administrative Structure

1. Village Management Structure

The Elk Rapids Village Council has ultimate authority over the development and management of recreational facilities within the Village. The organization of the Village is shown in Figure B-1.



2. Parks & Recreation Commission

This Parks and Recreation Commission serves in an advisory capacity regarding the development of parks and recreational programming within the Village of Elk Rapids. Its main concerns are parks, public access sites, seasonal recreational facilities, and recreational activities and events. The Village President appoints seven members with the consent of the Village Council. One Village Council member is also appointed by the Village President to sit on the Parks & Rec Commission. Current Commission members are Kathy Peterson, Gordon Stewart, Dave Lien, Jan DiGiovanni, and Howard Yamaguchi. Currently there are two (2) vacant positions on the Parks & Recreation Commission.

The Parks & Recreation Commission was established under Public Act 156 of 1917 in June of 1993 by Ordinance Number 223. The Parks & Recreation Commission consists of seven appointed members and one Village Council representative who meet on a monthly basis. The primary role of the Commission is to make recommendations to the Village Council regarding the development and maintenance of parks. The Commission also serves as a liaison between the Village Council and community members, and keeps an open line of communication with the County and neighboring townships in order to be informed about possible shared recreational opportunities in the area. A yearly parks and recreation budget is also recommended to the

Village Council by the Parks and Recreation Commission. The Village Council has final determination over the Parks and Recreation budget. See Appendix A for the Village Code.

3. *The Harbor Commission*

The Harbor Commission, under authority from the Village Council, plans, builds, operates, and maintains Edward C. Grace Memorial Harbor and the Elk River Upper Harbor. The Commission supervises the work of the Village Harbormaster who in turn supervises seasonal dockworkers at the public harbor facilities. It also reviews all village projects that may affect the streams, lakes, rivers, and shorelines within the village. The Harbor Commission makes recommendations to the Village Council regarding harbor operations and harbor projects. The Harbor Commission comprises 7 members who meet monthly. The Village President appoints the members with the consent of the Village Council. One Village Council member is also appointed by the village president to sit on the Harbor Commission.

The Harbor Commission is currently involved in formulating a Harbor Master Plan, a pre-design feasibility study that will guide the course of public waterfront facilities in Elk Rapids. The Harbor Commission is partnering with the Parks & Recreation Commission in compiling this Community Recreation Plan. The Recreation Plan's action plan items for water recreation and waterfront facilities have originated from the Harbor Commission's work in their Harbor Master Plan.

4. *Other Recreation-related Commissions*

The **Beautification Commission** works to improve the appearance of the Village by planning and implementing projects that add to the beauty of the public facilities. Their work can be seen in the brightly colored plantings of trees, flowers, and shrubs in the landscaped areas of Village lands, including waterfront facilities and parks. The Commission arranges for the maintenance of selected landscape elements throughout the village, and is assisted by a network of volunteers from the Elk Rapids Garden Club and others. The eight members of the Commission meet monthly, and regularly report to the Village Council on their activities.

The **Planning Commission** reviews all development activities in the Village of Elk Rapids, including any new recreation projects. Such projects are subject to the Village's Zoning Ordinances. The Planning Commission also updates the Village Master Plan every five years, and may opt to incorporate the Community Recreation Plan into the Master Plan by reference.

5. *Operation of Village Recreational Facilities*

The Elk Rapids Department of Public Works (PWD) currently maintains all park facilities while employees of the school district maintain school recreation sites. As such, the operational budget for the Village park facilities is part of the overall PWD budget. The local Garden Club also helps to maintain parks in the Village by providing volunteers that help with the upkeep of landscaping.

The Village Council has full authority over the affairs of the harbor facilities. These facilities include the Edward C. Grace Memorial Harbor and Elk River upper harbor. Edward C. Grace Memorial Harbor has 213 slips and a launch ramp. Elk River upper harbor has 30 slips and a launch ramp. The revenue generated from these 2 locations is used for operations, maintenance, future improvements, and expansions to waterfront properties owned and leased by the Village.

There is currently no Village parks director that oversees park operation. Previous Recreation Plans have brought up the possibility of establishing such a position, but as yet no action has been taken.

6. *Operational Budget*

The 2006-2007 fiscal year operational budgets for parks and recreational facilities in the Village of Elk Rapids for are as follows:

Item	2006/2007
Parks Maintenance (DPW)	\$182,585
Parks & Recreation Commission	\$5,850
Harbor Operation and Maintenance Enterprise	\$677,535
Harbor Capital	\$232,000
Harbor Construction	\$156,313
Harbor Bond	\$93,643

Budgets for the future are, in this period of extreme financial austerity, difficult to project. The Village continues to cut costs to balance its budget, and further across-the-board reductions in budget are anticipated for foreseeable future in all budget line items.

Currently, most of the funds for recreational activities under the purview of the Parks & Recreation Commission come from the Village general fund. Occasional donations from civic groups and private individuals for specific purposes are received and applied.

Operational funds for the Grace Memorial Harbor are generated in large part by the revenues from the rental of boat slips and other miscellaneous income.

The recent Elk Rapids Master Plan Opinion Survey commissioned by the Village Planning Commission indicated that there is strong public opposition to levying a millage to finance hi-cost public recreational facilities such as walking paths and bicycle trails. (There was, however, overwhelming support for raising **private** funds for such purposes.) Difficulty in raising public funds for acquiring and developing recreational facilities will move the Village of Elk Rapids to rely more and more on outside grant funding for these ends.

7. *Inter-Agency Relations*

Liaison between the Parks & Recreation Commission and the Village Council is maintained by the appointment by the Council of one of its members to the Parks & Recreation Commission. (This is the standard procedure for all of the appointed commissions.)

The Parks & Recreation Commission maintains regular liaison with related Village-appointed commissions by having representatives from Parks & Rec attend other Commissions' meetings to brief them on relevant issues and actions taken by the Parks & Rec. Similar visits to Parks & Rec meetings by members of other commissions take place with some regularity. Most recently, in the preparation of this Community Recreation Plan, members of the Parks & Recreation Commission and the Harbor Commission have attended each other's meetings to coordinate planning activities. Finally, in preparation of this Recreation Plan, the Village Planning Commission has been asked to comment on the various drafts as they become available.

The Parks & Recreation Commission also establishes contacts with other park-related public entities around Antrim County as needed for specific purposes. Most recently, Parks & Rec contacted and obtained information from the Helena Township Parks Committee about their structural designs for public rest rooms. Over the past two years, the Parks & Recreation Commission has participated with the Antrim County Parks & Recreation Commission in their planning process for the future of the Elk Rapids County Day Park.

The Parks & Recreation Commission meets as needed with community-based organizations such as the Elk Rapids School Board, the Chamber of Commerce, the Rotary Club, and the Lions Club to coordinate activities and exchange information.

The Village, Harbor Commission, and the Harbormaster works with regulatory agencies including the DEQ, Army Corps Of Engineers, and Antrim County Soil Erosion to obtain the necessary permits for future construction and maintenance at waterfront facilities in the Village.

8. *Rules and Regulations Governing the Use of Village Recreational Facilities*

Rules and regulations concerning the use of the various recreational facilities in the Village of Elk Rapids are governed by Village Ordinances.

The Village of Elk Rapids has an agreement with the DNR. The DNR has provided the village with rules and regulations to follow for harbor and waterfront operations. The Village Council, the Harbor Commission, and the Harbormaster are responsible for enforcing those rules and regulations. Rules and regulations that are not set by the DNR are recommended by the Harbor Commission to the Village Council. The Village council makes the final decision.

Section C – Planning Process to start here.