

# Adopted by the Keweenaw County Board of Commissioners

February 15, 2017

THE KEWEENAW COUNTY BLUEPRINT FOR TOMORROW WAS PREPARED IN 2016 BY THE KEWEENAW COUNTY PLANNING COMMISSION WITH ASSISTANCE FROM THE WESTERN UPPER PENINSULA PLANNING AND DEVELOPMENT REGION AS WELL AS INPUT FROM ALLOUEZ, EAGLE HARBOR, GRANT, HOUGHTON, AND SHERMAN TOWNSHIPS, AHMEEK VILLAGE, KEWEENAW COUNTY BUILDING & GROUNDS, SHERIFF DEPARTMENT, ROAD COMMISSION, ECONOMIC DEVELOPMENT COMMITTEE, HOUGHTON COUNTY PLANNING COMMISSION AND MANY OTHERS. THE PLANNING COMMISSION PROUDLY PRESENTS THE UPDATED BLUE PRINT FOR TOMORROW.

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# SECTION 1: BACKGROUND INFORMATION

#### 1.1 INTRODUCTION

High quality of life, a clean environment and abundant natural beauty are the reasons people choose to live in, vacation in, and return to Keweenaw County. In order to protect Keweenaw County into the future, we must identify the County's strengths and weaknesses and provide

guidance for future growth while protecting the intrinsic qualities that make it a special place.

Section 1 documents and evaluates the existing conditions within the County and identifies issues and opportunities throughout the County. This section of the plan is followed by a Vision for Keweenaw County (Section 2) and Plan Implementation (Section 3).



Rock picking at High Rock Bay

#### 1.2 SETTING

In 1842, the Lake Superior Chippewa Indians (Ojibwa) ceded the Western Upper Peninsula to the United States Government with the Treaty of LaPointe. In 1843, a Land Office was established in Copper Harbor by the Secretary of War to issue mineral leases. Soon after, the first mineral rush in United States history began. This was the beginning of a rich copper mining history that built the foundation of the Keweenaw Peninsula. The Keweenaw County line was established in 1861 when the mainland and Isle Royale were split off from Houghton County by the Michigan legislature.

The copper boom was eventually complimented by a growing local timber industry. Soon the forest industry grew with the development of better transportation systems. Eventually larger timber companies took control of the region's forest resources, and markets expanded outside the region. Although the copper mining days dwindled and eventually ended in 1968, forest-based industry continued and much of the interior lands remain under timber company ownership today.

Today, the Town of Eagle River serves as the Keweenaw County seat, home to the County's administrative offices, court, and Office of the Sheriff. Five civil townships (Allouez, Eagle Harbor, Grant, Houghton, and Sherman) and the Village of Ahmeek make up the County. See Map 1. The Townships vary greatly in population, with Allouez the largest, having a population of 1,571

including the Village of Ahmeek, and Sherman the smallest with only 67 persons. Each maintains a Township Board, but due to limited resources, planning and zoning activities are carried out by the Keweenaw County Planning and Zoning Commission in all but Eagle Harbor Township. The Village of Ahmeek has its own council and relies on the County for zoning enforcement.



Keweenaw County Courthouse Eagle River

#### 1.3 COMMUNITY CHARACTER AND COMMUNITY LIFE

This section will look at the population and housing statistics and discuss the community attributes that give Keweenaw County its unique character. Population change is the primary component in tracking a community's past growth and predicting future trends. Population characteristics are directly related to the County's housing, educational, community, and recreational facility needs, and to future economic development. Fluctuations in the economy can greatly influence the population growth and characteristics of a community. Keweenaw County is made up of a diverse population, many with family roots in the region. Some have stayed, others have relocated. Of those whom have left, many are choosing to return and call Keweenaw County home.

#### POPULATION TRENDS

The first census enumeration of population in Keweenaw County was 1870. At that time a population of 4,205 was recorded within its seven townships (two more than exist today). In 1875, Isle Royale, originally part of Keweenaw County, was organized as a separate County but then disbanded in 1897. Portions of Isle Royale were annexed to Eagle Harbor and Houghton Townships. Gradual increases in population from 1870 to 1900 and a spike in growth between 1900 and 1910 (11.2 percent) lead to an all-time high of 7,156 residents. After 1910, a decline of approximately 1,000 residents per decade was recorded up until 1940, to reflect a 44.1 percent decline in

population. The decreasing population during this period has been attributed to the regional decline of the copper mining industry.

Between 1940 and 1950 the County experienced yet another loss of 27.1 percent of the population due to World War II emigration as men and women left for military service or to defense plants in urban industrial centers. From 1950 until 1990 the census enumerations continued to reflect further decline in the population, for a total loss of 41.7 percent during the latter half of the 20<sup>th</sup> century. The count of 1990 reflected an all-time low for population in Keweenaw County, 1,701 residents. The historic population fluctuations are documented in the following tables:

TABLE 1-1: POPULATION 1870-1890

Area	1870	1880	1890
Allouez Township	615	975	1,103
Clifton Township		247	
Copper Harbor Township	359	141	
Eagle Harbor Township	778	527	576
Grant Township	152	365	100
Houghton Township	1,325	1,004	189
Sherman Township	929	1,001	868
Keweenaw County	4,215	4,260	2,836
Isle Royale County		55	135

TABLE 1-2: POPULATION 1900 - 1990

Area	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
Ahmeek			892	624	475	360	265	238	210	148
Balance of Allouez Twp.	1,610	5,672	4,446	3,655	2,857	2,114	1,653	1,462	1298	1274
Eagle Harbor	1,346	193	65	83	114	72	84	199	113	82
Grant		448	76	53	51	58	71	68	118	104
Houghton	157	258	244	243	230	145	245	229	161	54
Sherman	104	585	599	418	277	171	99	68	39	39
Keweenaw County	3,217	7,156	6,322	5,076	4,004	2,920	2,417	2,264	1,939	1,701

Source: U.S. Bureau of Census

Since 2000, Keweenaw County continues to see a decline in population. Census 2010 figures show a population of 2,156 residents, a decline of 6.3 percent since 2000. However, the county saw a growth in population from 1990 to 2000. This was the first growth since the record population of 1910 and can be attributed to a strong local economy, the attraction of local retirees to the area and the establishment of the Keweenaw Youth Academy (Closed in 2004). Further growth can be anticipated in coming years as the County and region continue to be an attractive place to live, work, play, and retire.

TABLE 1-3: POPULATION 2000 - 2010

Area	2000 Census	2010	
		Census	% Change 2000-2010
Ahmeek Village( included in ALZ Twp.)	157	146	-7.0
Allouez Township	1,584	1,571	-0.82
Eagle Harbor Township	359	217	-39.6
Grant Township	172	219	+27.3
Houghton Township	126	82	-34.9
Sherman Township	60	67	+11.7
Keweenaw County	2,301	2,156	-6.3

Source: U.S. Bureau of Census

# POPULATION DISTRIBUTION

Keweenaw's population is centered in a number of communities throughout the County. Each Township enjoys population centers relative to available public facilities or natural attractions such as Lake Superior. Population centers in Keweenaw County include the towns of Allouez, Ahmeek, Mohawk and Fulton in Allouez Township; Eagle River in Houghton Township; Eagle Harbor in Eagle Harbor Township; Copper Harbor and Lac La Belle in Grant Township and Gay in Sherman Township. In recent years the attraction to waterfront property has meant growth in these areas, but new houses, often second homes, have not necessarily meant more residents. Areas that appear to be thriving population centers in the summer dissipate to a few diehard winter residents. Communities such as Allouez, Ahmeek, Mohawk, and Fulton are less affected by the seasonal out-migration of residents.

The townships themselves vary greatly in population. Allouez Township is the largest with 1,571 residents. This is 73 percent of the County's population. The population is a direct reflection of the settlement patterns of early copper days as the communities of Allouez, Ahmeek, Mohawk, and Fulton along Highway US 41 continue to be focal points of the Township and County. The smallest population is in Sherman Township, where there are only 67 residents, less than 4 percent of the County's population. The following table shows the complete population distribution in Keweenaw County:

TABLE 1-4: 2010 POPULATION DISTRIBUTION

Area	2010 Census	% of Total
Ahmeek Village	146	6.8
Allouez Township	1425	66.1
Eagle Harbor Township	217	10.1
Grant Township	219	10.1
Houghton Township	82	3.8
Sherman Township	67	3.1

# **HOUSING**

The 2010 Census paints a portrait of seasonal homeownership as the number of housing units in the County outnumbers residents. This statistic points to a growth in seasonal home construction. In Eagle Harbor Township there are 522 housing units, while the population is 217. Three-hundred and

seventy-eight (72%) of the housing units are considered seasonal in the Township. Grant Township has 499 units, 344 (69%) of which are seasonal. Similar patterns exist in Houghton and Sherman Townships with 81.2% and 70.4% of the units considered seasonal, respectively. Allouez Township has the most permanent year-round population with only 165 (21.7%) of its units considered seasonal.

Further examination of housing statistics reveals that of only 103 renter occupied units in the County, Allouez has the most with 79. Sherman and Houghton Townships both only have 2 renter occupied units. Of 2,327 housing units in Keweenaw County, only 4.2% are renter-occupied.

Over 40% of the housing stock in Keweenaw County was built before 1940 according to 2010 statistics. The highest concentration of older housing units is in Ahmeek Village. The newest housing stock is in Eagle Harbor Township. The following tables summarize the housing data:

**TABLE 1-5:** 2010 HOUSING STATISTICS

	Ahmeek Village	Allouez Township*	Eagle Harbor Township	Grant Township	Houghton Township	Sherman Township	County Total
Total units	119	1,012	522	499	282	152	2,467
% of Total	4.8	41.0	21.2	20.2	11.4	6.2	100
Occupied	73	689	124	117	46	37	1,013
Vacant	46	323	398	382	236	115	1,454
Seasonal	16	220	378	344	229	107	1,278
Owner Occupied	62	610	117	104	44	35	910
Renter Occupied	11	79	7	13	2	2	103
Average Size Owner Occupied Household	2.79	2.57	1.85	1.58	1.80	1.98	2.31
Average Size Renter Occupied Household	6.60	1.71	1.50	1.80	1.29	-	1.64
% Built Before 1940	63.8%	55.9%	30.2%	19.7%	45.4%	34.7%	40.5%

<sup>\*</sup>Includes Village of Ahmeek

TABLE 1-6: POPULATION GROWTH VS. HOUSING UNITS

Area	Pop 2000	Pop 2010	% Change	Housing Units 2000	Housing Units 2010	% Change
Ahmeek Village	157	146	-7	120	119	-0.8
Allouez Township*	1,584	1,571	-0.82	973	1,012	4
Eagle Harbor Township	359	217	-39.6	488	522	7
Grant Township	172	219	27.3	480	499	4
Houghton Township	126	82	-34.9	273	282	3.3
Sherman Township	60	67	11.7	113	152	34.5
County Total	2,301	2,156	-6.3	2,327	2,467	6

A household, as defined by the U.S. Census, includes all persons who occupy a housing unit; a single family, one person living alone, two families together, or any group of related or unrelated persons sharing living quarters. A family consists of a householder and one or more persons living in the same household who are related by birth, marriage or adoption. There are 1,013 households in the County, of which 614 are family households. Of the family households, there are 50 that are headed by a female with no husband present. Of the 399 single-person households, 152 are age 65 and over. Just over half of the households in each Township are family households. Sherman Township has the most single-person households, with 12 of 37 (68%) living alone.

TABLE 1-7: HOUSEHOLDS BY TYPE

Household Type	Ahmeek Village	*Allouez Township	Eagle Harbor Township	Grant Township	Houghton Township	Sherman Township	County Total
Total	73	689	124	117	46	37	1,013
Family	38	426	74	67	26	21	614
Married- Couple	24	355	70	62	24	20	531
Female (No Husband)	9	44	3	2	0	1	50
Male (No Wife)	5	27	1	3	2	0	33
Non-Family	35	263	50	50	20	16	399
Living Alone	28	227	46	43	18	12	346
65 Years and Over Living Alone	9	96	23	20	9	4	152

<sup>\*</sup> Ahmeek is also included in Allouez Township

Source: U.S. Bureau of Census

# **COMMUNITY COMPOSITION**

The median age of Keweenaw County residents in 2010 was 50.6. This compares with a median age of 38.1 at the state level. Nearby Houghton County's median age is 33.1. Keweenaw's older age structure is most likely the result of out-migration of young adults for educational and job opportunities and older in-migration for retirement years. On the whole, the aging population of the County is following state and national trends resulting from a number of factors. Factors include increased life expectancies, aging "baby boomers," trends towards smaller families, and the choice to delay childbearing.

TABLE 1-8: MEDIAN AGE 1990-2010

Area	1990	2000	2010
Keweenaw County	46.4	44.9	50.6
Houghton County	31.7	34.0	33.1
Michigan	32.6	35.5	38.1
United States	32.9	35.3	36.9

Source: U.S. Bureau of Census

The highest median ages in Keweenaw County are found in Eagle Harbor and Houghton Townships, while Allouez and Ahmeek have the youngest population. The historical data for the 13-18 age category was skewed for the County and Houghton Township due to the Keweenaw Youth Academy which has since closed. The number was also mistakenly included in Houghton Township's count rather than Eagle Harbor Township where the Academy housing was located. This should be taken into consideration when examining County trends as student numbers fluctuated at the Academy. The following is the age breakdown of the 95 residents at the Academy at the time of the 2000 Census: 7 - 18 year olds, 18 – 17 year olds, 21 – 16 year olds, 27 – 15 year olds, 15 – 14 year olds, and 7 - 13 year olds.

Within the County male residents outnumber female residents 1,107 to 1,049. In most townships the male population is only slightly higher than the female population, with the exception of the Village of Ahmeek, where the female residents outnumber the male residents 75 to 71.

TABLE 1-9: 2010 POPULATION STATISTICS

Age Group	Ahmeek Village	Allouez* Township	Eagle Harbor Township	Grant Township	Houghton Township	Sherman Township	County
Under 5	5	89	3	3	0	3	98
5 to 9	5	109	1	3	0	1	114
10 to 14	9	104	0	6	1	1	112
15 to 19	11	92	2	5	2	1	102
20 to 24	10	64	0	4	2	4	74
25 to 34	13	142	7	12	2	3	167
35 to 44	18	156	10	19	4	4	193
44 to 54	22	257	30	40	8	13	348
55 to 59	12	127	17	28	13	9	194
60 to 64	14	127	47	30	21	11	236
65 to 74	19	181	66	45	24	12	328
75 to 84	5	99	29	18	3	5	154
85 & Over	3	23	5	6	2	0	36
Median Age	45.7	46.6	63.9	57.9	62.0	58.2	51.6
Male	71	792	112	120	47	36	1,107
Female	75	779	105	99	35	31	1,049

<sup>\*</sup>Includes Village of Ahmeek

TABLE 1-10: AGE GROUPS

		Keweena	Houghton	Michigan			
School Age	Total	Female	Male	Percent	County Percent	Percent	
5-11	163	78	85	7.6	8.1	9.3	
12-14	63	33	33	2.9	3.4	4.2	
15-17	61	29	32	2.8	3.3	4.4	
Working, Voting, & Retirement Age							
16+	1,809			83.9	81.6	79.2	
18+	1,771	865	906	82.1	79.4	77.3	
18-64	1,253	604	649	58.1	64.4	62.5	
65+	518	261	257	24.0	15.0	13.8	

School-age children (5-17) are the least influential of age groups in the County composing only 13 percent of the population, while the working age of 18-64 represents the largest portion of the

Source: U.S. Bureau of Census

population with 58.1 percent. The total percentage of school age children is less than in Houghton County and State. This is representative of the older composition of the community.

Retirement age (65+) persons make up 24 percent of Keweenaw County which is significantly higher than nearby Houghton County with 15 percent and Michigan with 13.8 percent. This percentage indicates that the County's population base is older than other areas of the state, a characteristic that may be partially attributed to the retirement community.

The Veteran status in Keweenaw County -- The civilian population 18 years and over is roughly 1,794. Of that 351 or almost 20% are veterans. This percent is over double of the state average.

The racial composition of Keweenaw County is primarily white. Of the total population 2,123 persons, over 99% are white while the next largest population is black or African American with 3 persons. Following is the detailed racial composition breakdown from the 2010 Census.

TABLE 1-11: RACIAL COMPOSITION OF THE COUNTY

	Ahmeek Village	Allouez Township*	Eagle Harbor Township	Grant Township	Houghton Township	Sherman Township	County
White	145	1,552	213	215	82	62	2,269
Black or African American	0	2	1	0	0	0	3
American Indian and Alaska Native	1	2	1	0	0	0	3
Asian Indian	0	0	0	0	0	0	0
Korean	0	0	0	0	0	0	0
Vietnamese	0	0	0	1	0	0	1
Some other race	0	0	0	0	0	1	1
Two or more races	0	15	2	4	0	4	25

<sup>\*</sup>Includes Ahmeek Village

Source: U.S. Bureau of Census

#### HIGHEST EDUCATIONAL ATTAINMENT

Residents of the County that are 25 and older numbered 1,706 in 2013. Of these 33.4% have only a high school diploma while an addition 15.5% also hold a bachelor's degree. The percent of residents having a high school diploma is higher than the state average of 30.4%, while the percent with a bachelor's degree is slightly lower than the state's average of 15.9%.

# PERSONAL INCOME

In 2012, Keweenaw County had a per capita income of \$25,296 ranking it 16<sup>th</sup> in the State. By comparison, the State average was \$25,547. The per cap in Houghton County was \$18,986 (ranking it 77<sup>th</sup> in the State). Total personal income in Keweenaw County includes the earnings (wages and salaries, other labor income, proprietor's income); dividends, interest, and rent; and transfer payments received by the residents of Keweenaw County. Source USA.com

Thirty-three persons in Keweenaw County receive Supplemental Security Income (SSI) assistance through the Social Security Administration in 2006. SSI guarantees a minimum level of income for needy aged, blind, or disabled individuals. Of the 33 persons, 3 were under 18, 8 over 64 and 13 received OASDI in addition to SSI.

In 2010, 429 Keweenaw County residents were below poverty levels. This was 20.3% of the County. This number compares to 22.3% in Houghton County. In 2013 the number lowered to 396 or 18.8% of the population. Houghton County numbers for 2013 were 23.7% of their population.

#### RETIREMENT INCOME

In 2008-2012 Keweenaw County ranks 7<sup>th</sup> statewide for the Michigan Median Household Income for population ages 65 or older at \$41,189. This is a strong increase from the 2006-2010 data with \$30,938 and a rank of 39. The 2013 population for 65 years and over was 29.8%. The statewide average was 15%. 2010 Census is showing 581 people in this same age category with 292 males and 289 females.

The downside, over 4.5% of the population is below the poverty level.

# POPULATION PROJECTIONS

Projections for population in Keweenaw County are from 1995. However, Census 2000 revealed that the population had grown to 2,301 and as of Census 2010 was 2,156 which is contrary to the declining population prediction in the following table:

TABLE 1-13: POPULATION PROJECTIONS SOURCE: SOM DMB, OFFICE OF THE DEMOGRAPHER, JAN 1996.

Year	1995	2000	2005	2010	2015	2020
<b>Projected Population</b>	2,000	1,900	1,800	1,800	1,700	1,700

As projections were based on the economic trends of a locality, fertility and mortality, they are very difficult to predict. It should be anticipated that the trend to relocate to rural communities such as Keweenaw County will continue, resulting in population increases contrary to the 1996 projections.



Main Street Eagle River

# **POPULATION DENSITY**

The population density of Keweenaw County is very low at 6.1 persons per square mile. The County enjoys a low population density due to the large expanses of forestland present throughout the County. Recording the smallest population densities are Sherman, Grant, and Houghton Townships with 1.0 and 1.7 persons per square mile respectively. The highest population density is in Allouez Township with 28.3 and is due to the concentration of communities that contribute to 72.9 percent of the County's population.

TABLE 1-14: POPULATION DENSITY

Area (Excluding Isle Royale)	Square Miles	2010 Census	Population per Square Mile
Allouez Township	55.5	1,571	28.3
Eagle Harbor Township	54.5	217	4.0
Grant Township	128.4	219	1.7
Houghton Township	48.2	82	1.7
Sherman Township	66.0	67	1.0
Keweenaw County	352.6	2,156	6.1

# **COMMUNITY ATTRIBUTES**

Keweenaw County has a character all its own. Beyond the people who call it home whether year-round or seasonal, there is a number of attributes that cannot be statistically analyzed. These attributes are factors that contribute to the quality of life in the County and can be traced to the area's long history of copper mining and forestry.

The settlement patterns that exist today can be tracked to the community's history as copper mining/processing locations, commercial fishing stations, and commercial or transportation centers. Allouez, Mohawk, Fulton, and Ahmeek Village are former mining locations, whereas the communities of Gay, Lac La Belle, Copper Harbor, Eagle Harbor, and Eagle River are found along the shores of Lake Superior and have histories of fishing, transportation, and commercial centers. The waterfront communities and lands in between have become the center for seasonal home development, retirees, and tourist activities.

The existing communities are only part of a much larger network of similar type settlements that once dotted the landscape. Communities that once flourished include Phoenix, Copper Falls, Clifton, Central, Delaware, Wyoming Location (Helltown), Bete Gris, Mandan, and Clark Mine. All but Bete Gris were located along the main corridor between Ahmeek Village and Copper Harbor.

Each of Keweenaw County's towns has a personality all its own. From the resort town of Copper Harbor to the small lakeside community of Gay in Sherman Township, there are distinct differences in the character of each area. Following is a brief description of each of the Townships including their towns and the unique characteristics they contribute to Keweenaw County:

Allouez Township (Allouez, Mohawk, Fulton,



US 41 Phoenix

Village of Ahmeek) – Allouez Township is the "Gateway to Keweenaw County." The Township was once the center of mining activities and remains the center of population within Keweenaw County today. The small communities of Allouez, New Allouez, Ahmeek Village, Ahmeek Mine Location, Mohawk, and Fulton lie along US 41/M-26 and continue to exhibit characteristics that defined their roles during early mining days. New Allouez and Ahmeek Mine Location residential areas still display elements of their mining company architecture while Mohawk and Ahmeek Village continue

Village. The only school in the area is also located in Mohawk, serving as the alternative high school for the local school district and is used as a public space for many social events.

to be the center of business activity in the area. Post offices still operate in Mohawk and Ahmeek

The Township is blessed with a number of assets outside the core communities that differentiate it from the rest of Keweenaw County, the most visible attribute being the rugged forested escarpments that parallel Cliff Drive. Other unique assets include stretches of agricultural land mixed with the rural forested landscape and Five-Mile Point Road that provides access to the mouth of the Gratiot River and Lake Superior.

Eagle Harbor Township (Eagle Harbor) – Eagle Harbor Township is a residential community with over 73 percent of its 548 dwelling units occupied seasonally by vacationing families with their permanent residence elsewhere. Of its 217 permanent residents, most are retired, with six of every ten permanent households occupied by retired persons. The median age is among the highest in the State of Michigan. During the summer months, when many of the seasonal dwelling units are occupied, the Township's population is estimated to increase to nearly 800 people.

Located along fifteen miles of north-central Keweenaw's most spectacular Lake Superior shoreline, and extending south across the heavily forested Keweenaw ridge, the Township is blessed with many beautiful lakes, streams, beaches, and harbors. These natural assets, and the abundant recreational opportunities they offer, along with the many carefully preserved copper mining era historic sites, have for decades attracted summer vacationers. In recent years many have built retirement or seasonal homes in the Township. By percentage growth, it is the fastest growing Township in the County.

Almost all of the Township's nearly 55-square mile area is commercial forest, with settlements located along the Superior coastline and around the Township's inland lakes. Eagle Harbor, an historic mining and commercial fishing port, is the Township's largest community with an estimated 45 percent of the Township's permanent households and nearly 40% of the seasonal households located there. Other major settlements are located around Agate Harbor and Gratiot Lake, both being dominated by seasonal dwelling units.



M-26 Eagle Harbor

Grant Township (Copper Harbor and Lac La Belle) – Grant Township, at the tip of the Keweenaw Peninsula, encompasses approximately 70,000 acres of land and is home to two very distinct communities: Copper Harbor on the north shore and Lac La Belle on the south shore. The township includes approximately 40 miles of shoreline on Lake Superior and numerous inland lakes. It has a rich history beginning with Native Americans, followed by the copper boom of the 1840s and then the timber industry. Today it is known for its spectacular scenery, numerous recreational opportunities, and limited access to many thousands of acres of unspoiled wilderness.

Along the north shore, Copper Harbor is a resort community located on a natural harbor and enjoys approximately 121 year-round residents. Copper Harbor has a rich mining history, with the first mineral lease in the Keweenaw Peninsula issued there in 1843. Today it is an all-season destination for waterfalls, rock-hounding, hiking, biking, kayaking, canoeing, fishing, agate hunting, bird watching, berry picking, golfing, camping, snowmobiling, snowshoeing, cross country skiing, ATVing, fall color tours, and many other activities.

Grant Township is the home to year round extreme sports. Lac La Belle has Mt. Bohemia. Advertised as the longest runs in the Midwest, a vertical drop of 900 feet and numerous back country trails it is extreme skiing and endless adventure. Copper Harbor is home to year round land and water trails for human powered activities. The Copper Harbor Trail Club is a member of the International Mountain Bicycling Association and has gained the level of Silver Level Ride Center Status.

Visitors to Copper Harbor can venture into the fascinating history of Fort Wilkins State Park and lighthouse museum, explore a virgin white pine forest at Estivant Pines, and dive in underwater preserve areas to view sunken ships or drive Brockway Mountain to enjoy fabulous views. It also offers the shortest water route to Isle Royale National Park. The community offers a number of restaurants, stores, gift shops, motels, campgrounds, a post office, and other facilities, including a State of Michigan marina and safe harbor, catering to tourists and residents alike.

On the south shore, Lac La Belle (French for "beautiful lake") boasts many scenic views, fine fishing, and access to Bete Gris on Lake Superior. Originally established as a mining community in 1866 (Mendota Village), the town proved to be an excellent port for shipping copper and receiving supplies. This activity lead to a channel being dredged in the late 1860's to provide easier access to Lake Superior. A copper stamping mill/smelter was established to process copper for the entire district, remains of which can still be seen near Haven Falls. Today Lac La Belle is a quiet, residential community comprised of predominantly summer residents who enjoy the pleasures of berry picking, fishing, hunting, and hiking the surrounding wilderness. Visitors to the area will find the Mt. Bohemia Ski Hill offering extreme downhill, backwoods, and cross country skiing. At the shoreline a restaurant/bar and small store with gas pumps, as well as a privately owned marina. Lac La Belle is also home to a State of Michigan public access marina. Cabins are available to rent for all season tourists. The pristine "singing sands" of nearby Bete Gris are a favorite swimming beach with crystal clear water and a picturesque view of the historic Mendota Lighthouse.

Following the shoreline from Lac La Belle to Copper Harbor, the rugged coastline, including the beautiful Montreal Falls, offers wonderful opportunities for boaters, bikers, and kayakers. In between are vast stretches of undeveloped wilderness, including numerous areas of ecological, geologic, and historical significance. This includes nine miles of shoreline, owned by the State of Michigan..

The historic mining town of Delaware is located along US 41, 12 miles south of Copper Harbor. The Delaware Copper Mine dates from 1847-1887.

Houghton Township (Eagle River) – Within Houghton Township is the County Seat of Eagle River. The focus of population in Houghton Township, Eagle River is home to the County offices that are located in the historic courthouse and jail facility. The Houghton Township Hall in Eagle River also hosts the Keweenaw County Historical Society Museum of Eagle River and Cliff Mine. The town has a small year-round population but enjoys an influx of seasonal residents during summer months. With approximately three miles of shoreline, including a portion of Great Sand Bay, the Township makes the most of its location offering a public beach area, a lakeside hotel/restaurant, the Gitchee Gumee Bible Camp and many waterfront homes. Cutting through the township is the spectacular Eagle River with falls that drop prominently along M-26 in the Town of Eagle River.

The rich history of Houghton Township has left a landscape dotted with the intriguing former mining communities of Phoenix and Central along US 41. Today the Keweenaw County Historical Society continues to open historic mining home to the public for tours and some weekly rentals in Central. There are a few private residences and structures left including the Historic Central Church which holds an annual reunion the first weekend in August. Phoenix at the intersection of M-26 and US 41 boasts a convenience store and gas station, the Historic Phoenix Church and two taverns with rental cottages. It also affords a tremendous view of the Cliffs and is a favorite stop along the snowmobile trail system. The Township is a draw to tourists of all types and has much to offer in natural and historical assets, including access to many thousands of acres of Commercial Forest Act (CFA) land.

Sherman Township (Gay) - Sherman Township has the smallest population of the County and is primarily woodland with a majority of the lands falling under CFA designation. Timber harvesting is the primary industry, but recreation is a focus of the Township with ATVing, hunting, fishing, biking, hiking, berrypicking, snowmobiling, cross country skiing, dog sledding, and snowshoeing enjoyed throughout the area. In addition to forestland and stampsand, other assets included the Tobacco River, Thayers Lake, Traverse River, and beautiful Lake Superior shoreline. The shoreline is a focus of seasonal home development where residents enjoy the calmer, more protected side of the Keweenaw Peninsula.

The only town in the Township is the small historic mining community of Gay, which is the location of historic copper 'stamping'. The byproduct of the mining operation (stamp sand) is very prominently deposited along the shore of Lake Superior from the Tobacco River to Little Traverse

Bay. Though low in population, the town and the Gay Bar are popular year round destinations for the locals as well as the tourists.

Like other locations in Keweenaw County, the summer season brings new life to the community. With the addition of a park pavilion for the summertime residents and vacationers, Gay becomes a destination and gathering place. The friendly gatherings at the Gay Bazaar and the spectacle of the Gay 4<sup>th</sup> of July Parade are famous, but mostly the community is well known and enjoyed for its remoteness and relaxed lifestyle. Gay has municipal water including a fire protection system and sewer.

#### HISTORIC AND ARCHEOLOGICAL ASSETS

Among the existing towns and acres of forestland in the Keweenaw are numerous historic sites and remnants of once thriving mining locations. These sites tell the story of the Copper Country's rich history and also provide a variety of recreational and educational opportunities to residents and visitors alike. A number of the sites have been recognized by the State and Federal government, and others are promoted by the Keweenaw County Historical Society. Historic Sites identified in Keweenaw County as State and/or National Historic Register Sites include the following (See Map 2):

Central Mine -in the summer of 1854, John Swanson, an agent for the Cliff Mine, discovered heavy masses of native copper in the bottom of an ancient pit. Located several miles from the Cliff Mine, the pit had apparently been dug by prehistoric Indian miners. On November 15, 1854 the Central Mining Company was organized. The mine produced large quantities of copper, and until the 1890's, when the Kearsarge lode was discovered 15 miles away. Central Mine was the largest and most profitable mine in the area. The town of Central soon grew up around the mine, and the population reached about 1,200 at its peak. By July of 1898, the ore had been depleted, the mine closed and the town was soon abandoned. By 1905 the population had dropped to 100. This location does participate as a State Registered Historic Site.

Central Mine Historic District – an example of a former copper mining community, the district includes 20 of the original 130 structures. The Central Mine and the Central Mine Methodist Church

are highlights of the district. Ownership in Central is mixed, both private residences along with numerous buildings being owned and open for self-guided tours by the Keweenaw County Historical Society. This site is on both the State and National Register of Historic Places.

Central Mine Methodist Church- the church was once the civic center of the mining company



Central Mine Church

town. At its peak membership the church numbered over 300. Designed after religious architecture in Cornwell, England, it was a sanctuary for homesick miners. Descendants continue to hold annual services at the location. Ownership of the Church is by the Central Mine Methodist Church. This site is on both the State and National Register of Historic Places.

Copper Harbor Cemetery – One of the oldest cemeteries on the Keweenaw Peninsula, this is the final resting place of Copper Harbor's pioneer residents. The first burial was in 1853 and burials are still being conducted at the cemetery. Operation and ownership is Grant Twp. This is an official State Registered Site.

Copper Harbor Lighthouse – Established in 1848, the Copper Harbor Light Station served as an entrance beacon to Copper Harbor. It includes a restored 1848 light keeper's dwelling, 1866 lighthouse, 1933 steel light tower and interpretive trails. The complex can be reached by boat. This is an official State Registered Site. Operation and ownership is by the Michigan DNR, Fort Wilkins.

Eagle Harbor House: Erected as one of the first four structures in Eagle Harbor, the Eagle Harbor House is the only of these first structures that remains. Constructed on behalf of the Eagle Harbor Mining Company, most likely to provide suitable housing for visiting officials, the building became a destination for summer travelers and visitors to the area. This location does participate as a State Registered Historic Site. This house is under private ownership.

Eagle Harbor Light Station – In the mid-19<sup>th</sup> century when roads in the area were almost non-existent, the community of Eagle Harbor was a center for waterborne commerce, including incoming settlers and supplies and outgoing copper and logs. In 1851 the original lighthouse was commissioned to guide ships into and past the harbor. The original structure was replaced in 1871. In 1982 the Keweenaw County Historical Society became the 22<sup>nd</sup> 'keeper of the light' and it now serves as an interpretive site along with three other museums and maritime museum. The Society became owner of the buildings and property in 1999. This lighthouse is on the National Register of Historic Places and is still an active aid to navigation, the light maintained by the USCG Station Portage.

Eagle Harbor Schoolhouse (Rathbone School) – This one-room school has had an unusual career since classes were dismissed in 1872. Justus H. Rathbone who began teaching there in 1860 conceived the idea in the building for the Knights of Pythias, a secret fraternal organization which he founded in Washington D.C. in 1864. The Pythians dedicated themselves to the principles of 'friendship, charity, and benevolence.' In 1982 the property was deeded to the Keweenaw Historical Society who restored and converted it to an interpretive site. This site is on both the State and National Register of Historic Places.

Eagle River Cemetery (Evergreen Cemetery) – Is one of the oldest cemeteries in the Keweenaw and was already in use when the Town of Eagle River was platted in 1855. This is an official State Registered Site.

Eagle River Historic District – This district contains structures which date mostly from the mid-19<sup>th</sup> to early 20<sup>th</sup> century and are associated with Eagle River's early growth as a mining port and seat of County government. Eagle River is one of the oldest Euro-American settlements in the Keweenaw Peninsula. Four somewhat distinct areas representative of the town's functions: buildings along East Main Street date to the 1840's and 50's and are typically simple structures (hotels, stores, saloons and residences); the areas along West Lane developed after 1967 is primarily residential and non-uniform in appearance; the public and county square built in Georgian Revival Style; and an area with the remnants of early industrial enterprises. This is a National Registered Site.

Eagle River Lighthouse – Located on West Main Street, the lighthouse was built in 1855 and lit in 1858. During the height of the Copper Boom, it served as a beacon guiding ships into this busy port for copper mined from the nearby Cliff Mine. Decommissioned in 1908, it was sold into private ownership that same year. The lighthouse remains intact as an iconic centerpiece of this charming and historically significant town.

Eagle River Lower Bridge Eagle River is home to Keweenaw County's only two surviving metal truss bridges. This bridge is among the longest spanning pony truss span in Michigan, since only a fraction are 80 feet spans or longer. The bridge retains outstanding historic integrity, including builder plaque, original railings, and no noteworthy alterations to the truss. The concrete deck on the bridge has been replaced. The bridge has been closed to vehicular traffic. The walking bridge provides easy access to both sides of the river for residents and tourists alike. Local interest in maintaining the bridge is ongoing.

Eagle River Upper Bridge — Commonly known as the Old M-26 Bridge, the structure was erected in the heart of Eagle River in 1915 by the Wisconsin Bridge and Iron Company. The eighteen-foot-wide bridge consists of one hundred and five-foot-long main span and two flanking spans thirty-four feet long to the deck, creating a total length of one hundred and thirty-nine feet. The bridge was converted for non-motorized traffic in 1990 when the adjacent timber bridge opened. This is an official State Registered Site.

Fort Wilkins Historic Complex – This once active U.S. Army post, was built in 1844 (and abandoned just 2 years later) to keep the peace in Michigan's booming Copper Country. Briefly regarrisoned in the 1860's it now serves as a well preserved example of mid-19<sup>th</sup> century army life on the northern frontier. The site is now part of the Fort Wilkins State Park and includes 19 restored buildings, costumed interpreters, copper mining sites, camping, and picnicking. This site is on both the State and National Register of Historic Places.

Gay Smoke Stack – has long been a local aid to navigation for mariners on Lake Superior. Once the stack for the mill it now sits as a memorial to the hard working men and women of the community.

Gull Rock Light Station – located .5 mile west of Manitou Island in Grant Township, the station consists of an attached keeper's dwelling and light tower. Gull Rock was a threat to ships

attempting to pass between the tip of the Keweenaw and Manitou Island and the station was put into service in 1867. This is a National Registered Site.

Hunters Point – is owned by Grant Township and has been a special place to residents and visitors alike. The walk out to the point is a level, easy to navigate trail. It has two trails that circle the island. One trail parallels Lake Superior while the other is along the harbor. Either trail will entice you with the abundant wildflowers, lichen, mosses, cedars, hardwoods, and pines. Otters, martins, beavers, deer, squirrels, chipmunks, and other wildlife enjoy the area as well. Birders will enjoy the many songbirds that roost for the migration over Lake Superior. Warblers, woodpeckers, and water birds are seasonal visitors as well. The basalt geological formations at the tip are a true window to our rich past.

Holy Redeemer Church – Built in 1854 it is the oldest surviving church of the Roman Catholic diocese in northern Michigan. The bustling port of Eagle Harbor provided high attendance during the copper and shipping days of the 19<sup>th</sup> century. The church was renovated by diocese members and is now used for regular services during the summer months. This site is on both the State and National Register of Historic Places.

Keweenaw County Courthouse Complex – The Keweenaw County Courthouse, sheriff's residence, jail, and carriage house are located in Eagle River and continue to serve as the seat of County government. The courthouse was built in 1866. Prior to construction meetings were held at the Lake Superior Company's property and the attic of a local residence was used as the jail. This is a State Registered Site.

Keweenaw Mountain Lodge Complex – Located on 177 acres and consisting of a lodge/clubhouse convention center, and park grounds containing 23 cabins. , The nine hole golf course and pro shop are all a part of the complex which was built as part of the Federal Civil Works Administration. It opened in 1935 and features rustic log architecture appropriate to its wilderness setting. The project was significant as a planned effort to protect the environment while maximizing recreation possibilities. The complex is owned by Keweenaw County. This site is on both the State and National Register of Historic Places.

Manitou Island Light Station – consisting of the oldest iron skeletal light tower on the Great Lakes (along with Whitefish Point), the station includes a two-story keeper's dwelling. Originally built in 1850 the structure was replaced with the iron tower in 1861. This is a National Registered Site.

Phoenix Church – Built in 1858 to serve the Catholic residents of the community of Cliff, services continued until 1899 when it was dismantled and reassembled in Phoenix, where it was renamed "The Church of Assumption." The Keweenaw County Historical Society took over the property in 1985 and began extensive repair and restoration work. The church, now deconsecrated, is used for weddings and memorial services. Ownership and Operation is by the Keweenaw County Historical Society. This property is on the National Registry of Historic Places.

Sand Hills Light Station – Centered on a 47 acre wood site outside Eagle River, the station consists of five historic buildings, a breakwater and one contemporary pole barn. The light was the last traditionally attended light and is unique due to its functional design that has not been used at any other site on the Great Lakes or elsewhere in the United States. This property is in private ownership and is a National Registered Site.

Shipwrecks in Keweenaw County number ten on the Historic Registry all located within the waters of Isle Royale National Park. Other Shipwrecks are available to dive on in the waters around Keweenaw County. Some of the most popular are the John Jacob Astor, City of Bangor, Mesquite, Moreland, and Langham. A popular location is Saw Tooth Reef where the shipwrecks are too numerous to mention.

Three Stone Culverts/Bridges are also on the National Registry of Historic Places. Their locations are M-26 at Cedar Creek in Eagle Harbor Township, M-26 at Silver River near the west base of Brockway Mountain Drive in Eagle Harbor Township, and US 41 at Fanny Hooe Creek near Fort Wilkins State Park in Grant Township. All built by the Keweenaw County Road Commission as part of the Highway Bridges of Michigan in the 1920's and 1930's.

Additional sites that are part of the Keweenaw County but are not currently State or National Registered Sites include:

Bammert Blacksmith Shop – Formed in 1882 at the Cliff, the building was moved in 1901 to its current location. The shop was reopened as an interpretive site in spring of 2000 displaying original blacksmith tools.

Delaware Copper Mine – One of the earliest copper mines in the area, having operated from 1847 until 1887, approximately 8 million pounds of copper were extracted from the site. Opened in 1977 and preserved as when it closed its doors in 1887, the Delaware Copper Mine Tour is one of the area's longest established tourist attractions.

Douglas Houghton Memorial – Located in Eagle River- This memorial recognizes the first State geologist who drowned in a boating accident off of Eagle River. Owned by the Keweenaw Historical Society, this site has recently been restored to compensate for Mother Nature's winters. This is the home to a whispered time capsule, which restoration workers have not been able to locate.

Eagle Harbor Cemetery – Also known as Pine Grove Cemetery, founded in 1859 although burials were as early as 1850 (as per head stones). Approximately 5 acres of property was given by the Eagle Harbor Mining Company to the Township of Eagle Harbor for the community cemetery.

Estivant Pines – located outside Copper Harbor, these are the last stand of privately owned Virgin white pine in Michigan. The sanctuary features trees over 600 years old and 130 to 150 feet high. Unique rock outcroppings, steep hillsides, cliffs, and old upper mine workings dating back to the 1850's are near.

*Mandan (Ghost Town)* - Located off of US-41 south of Copper Harbor, this town once had a population of 300 in 1910. This location was the final stop for the Keweenaw Central railroad.

Another notable historic site is the *Mendota Lighthouse* – Privately owned and operational, now a private residence on Mendota Point at Bete Gris. The light has a working fourth order Fresnel lens with a signature of a .8 second white flash every 20 seconds. This lighthouse built in 1895

Keweenaw County is also dotted with locations of prehistoric mining activities. In order to protect prehistoric archeological sites and artifacts from exploitation, they are not specifically identified by this plan but should be recognized, researched and considered when decisions are made within the County.



#### WILDERNESS EXPERIENCE

Due to the long history of corporate ownership in the County, residents and visitors have long benefited from an "open door" policy to lands within the County. Timber companies have allowed people to use their lands for recreation for many years with little restriction. These policies have provided a frontier experience to many who have enjoyed hiking, boating, hunting, fishing, camping, biking, snowmobiling, cross-country skiing, and more on the lands and trails throughout the area. This legacy has been a primary contribution to quality of life in the Keweenaw.

# VISUAL LANDSCAPE

The visual landscape of the Keweenaw includes many stretches of tree lined roads, waterfront views, and other picturesque scenery. This landscape is as diverse as the County itself but contributions to the scenery include everything from trees, to water, to cottages, and historic mining homes. The landscapes, although diverse, flow together to form the Keweenaw. The County must be aware that the landscape can be altered permanently by architecture or other development not consistent with the character the area. The visual landscape affects the quality of life for all

residents and visitors alike.

Another visible contribution to the landscape is signage. Keweenaw County has rustic signage as a binding feature to sites throughout the County. The signs identify roads, rivers, scenic, and historic sites among other characteristics in the County. Maintained by the County Road Commission, this feature provides a local flair to otherwise common signage.

Other signage is typical of Michigan roadways, including traffic signage, Scenic Michigan signs, and business signage. The zoning ordinance



Typical Keweenaw County Road Commission Sign

regulates signage within Keweenaw County, the only exception being the state trunk line routes that are governed by the Michigan Department of Transportation. Signs are regulated based on the land use in a district, and billboards are not permitted under the existing Keweenaw County Zoning Ordinance.

#### 1.4 LAND AND WATER RESOURCES

Natural features have a profound effect on a community's development. Physical features directly or indirectly encourage or restrain growth. Soils and geology, for example, can often affect the ability of a community to provide high quality water and wastewater services. The occurrence of

natural resources, such as timber or minerals, is also a factor in determining the establishment and growth or decline of communities.

Land and water resources are the foundation of Keweenaw County. Because natural features are interrelated and disturbance in



Marsh area below the Cliffs

one area can directly affect other areas, it is of utmost importance to protect our environment. Lands unsuitable for development or best suited for preservation because of their unique character can act as buffers against incompatible uses and provide areas for recreation. Furthermore, these sites function in their natural capacities as storm or melt water runoff reservoirs, wildlife habitat and natural drainage courses. It is important to recognize and understand the relationship between natural and manmade features and balance development with where, what and how much the land can support.

#### **PHYSIOGRAPHY**

Keweenaw County's topography varies dramatically from Lake Superior shoreline, marshes, and inland lakes to steep bedrock cliffs, rocky ridges, and dissected moraines. The elevation varies in the County from a low of 600 feet on the shores of Lake Superior to highs of 1200 to 1500 feet above sea level. This diverse landscape is the result of layers of ancient Precambrian rock being thrust upward to form the Keweenaw Fault and glaciation during the Pleistocene Epoch.

The bedrock geology of Keweenaw County is composed of five major stratigraphic units: the Portage Lake Volcanics, Copper Harbor Conglomerate, Jacobsville Sandstone, Nonesuch Formation, and Freda Sandstone. Map 3 shows the bedrock geology of the County. The most prominent of these units, Portage Lake Volcanics, forms the spine of the peninsula, Jacobsville Sandstone covers the southeast portions, Freda Sandstone composes the southwest corner of Allouez Township, and Copper Harbor Conglomerate forms the northern shore of Keweenaw County.

The Keweenaw Fault and Portage Lake Volcanics bedrock compose the rugged hills of the Copper Range including Rocky Ridge, The Cliffs, Mt. Lookout, Mt. Horace Greeley, Mt. Bohemia, Mt. Houghton, Bear Bluff, West Bluff (Brockway Mountain), and East Bluff. The "range" is characterized by bedrock escarpments on the southeast face with gentler slopes to the northwest. Within this bedrock composed of basalt and andesite lava flows, and interspersed with conglomerates, are cavities filled with copper. The copper deposits form the largest deposit of native copper in the world.



Esrey Park

East of the Copper Range is an area of Jacobsville Sandstone with ground moraine of reddish brown sandy loam till. Upland portions of the moraine are cut by perennial and intermittent streams while

lower portions are poorly drained. The till is generally less than 50 feet and thins as you go eastward on the peninsula.

North of the Copper Range is Copper Harbor Conglomerate and moraine that is bedrock controlled. The cobble and gravelly till deposits on the uplands of these areas are very thin or absent with stones, boulders, and outcroppings common. On the northernmost part of the peninsula there is a very thin soil with much exposed bedrock where gravel and cobbles are the norm.

The landscape of Keweenaw County has been greatly influenced by glacial retreat, differential erosion and deposition of materials. Because of these forces Keweenaw County enjoys a varying landscape of scenic and geologically intriguing cliffs, sandy beaches, cobblestone harbors, waterfalls, and sea stacks. Among the ancient bedrock are fossils of some of the earliest living plants, remnants of lava flows, and some of the oldest rocks in North America.

Soils of the County vary tremendously, with bedrock common. A detailed soil survey has been completed that allows for careful examination of lands within Keweenaw County. This soil survey is a tremendous tool for local government in determining the capacity of lands for development and to aid in land use decisions. The survey can help in determining suitability for different types of development by describing important soil properties such as flood hazard, natural drainage, depth to bedrock, depth to seasonal water table, permeability, shrinking and swelling potential, bearing capacity, and content of silt, sand and clay. Soil surveys also provide interpretations of limitations and suitability for foundations of structures, sanitary landfills, sewage lagoons and septic tank absorption fields, and more.

# **ECOSYSTEMS**

Ecosystems are natural units of the landscape that are composed of similar abiotic and biotic components. Keweenaw County is part of Upper Peninsula's ecoregion, Laurentian Mixed Forest Province which is part of the sub region (section) referred to as the Southern Superior Uplands Section. The Southern Superior Uplands Section's characteristics include landforms of linear ranges and glaciated plains; geology elements of till, igneous sediments, and granite; a wide variety of soils; natural vegetation consisting of Northern Hardwoods, Hemlock-Hardwood, and Pine-Oak forests; elevations ranging from 600 to 1,980 feet; and surface hydrology of numerous lakes, wetlands, and low-gradient streams.

Keweenaw County (including Isle Royale) is within the district (subsection) of Keweenaw and is distinguished by its lake-influenced climate, with long, cool growing seasons and heavy lake-effect snowfall. Volcanic bedrock forms steep, exposed bedrock ridges through the subsection. Within the subsection are three identified sub-subsections: Gay, Calumet, and Isle Royale. See Map 4.

Rare communities and unique sites within the County have enjoyed a measure of protection due to active conservation groups. The Nature Conservancy has secured a number of sites including:

Horseshoe Harbor and Mt. Lookout and has played a major role in assisting the Michigan DNR take ownership of over 6,000 acres along the south shore of Grant Township. The Michigan Nature Association has 14 preserves in the Keweenaw County. Houghton-Keweenaw Soil Conservation District and a number of smaller conservancies including Gratiot Lake Conservancy, Northwood's Conservancy, and Michigan Audubon Society are also playing a role in protecting unique lands from encroaching development.

#### SCENIC SITES AND VIEWSHEDS

Other attributes of Keweenaw County include tree-lined roadways and scenic viewsheds that define the visual landscape of the County. The scenic nature of the area is recognized with a designation of US 41 from the Portage Lake Lift Bridge to Copper Harbor as a National Scenic Byway and also a State of Michigan Scenic Heritage Route. A corridor management plan for the Copper Country Trail is maintained by the Copper Country Trail National Byway Committee and helps guide protection of resources along this route. Historically the section from Delaware to Copper Harbor is also protected by a 100-foot right of way and 150-foot scenic strip where building is not allowed and logging restrictions are in place along much of the route.



The roads in Keweenaw County are among its finest attributes. Scenic roadsides provide the rugged, wilderness atmosphere to many areas while also giving identity to coastal, resort areas and historic towns. In addition to the Copper Country Trail, other notable year-round scenic routes and their attributes are identified below:

Bete Gris Road: This short stretch of forested roadway from Lac La Belle provides access to the community of Bete Gris and its "singing sands" beach. It parallels the public Bete Gris beach end with a view of the Mendota lighthouse.

Brockway Mountain Drive - Copper Harbor to intersection with M-26 – Brockway Mountain Drive is an 8.8 mile road that winds up the side of West Bluff near Copper Harbor and ends along M-26 near

Eagle Harbor. The drivable route is easily the most accessible, high-elevation (720 feet above Lake Superior) viewpoint in the County, providing panoramic views of the area. It is the highest elevation from the drive between the Rockies and the Alleghenies. The road parallels the bluff line and is edged by a rock fence line for most of its length.



Brockway Mountain overlooking Copper Harbor

Unplowed, during the winter months, it is a favorite among snowmobilers. The Keweenaw County Road Commission recently acquired the land encompassing the Copper Harbor Overlook, and Eagle Harbor Township and a number of conservation partners have acquired the top of Brockway to protect important features of the drive for long term public access. In August of 2013 it was designated as a Coastal Wildlife Corridor. It also is an official Michigan Wildlife Viewing Area, and a National Scenic Side Trip Route.

Cliff Drive: Ahmeek to south of Phoenix – Cliff Drive is a unique stretch of highway, bordered with rugged, majestic cliffs to the west and forestland to the east. At its southern end is the undeveloped Seneca Lake, and along its length is only one residential home.

Eagle Harbor Cutoff: US 41 to Eagle Harbor – Traversing the County from US 41 between Central and Phoenix to Eagle Harbor, this route is a favorite among locals. It provides quick access to Eagle Harbor off of US-41 and is characterized by its forested roadsides and views of Lake Superior to the north.

Five Mile Point Road: Ahmeek to Eagle River – Five Mile Point Road travels north from the Village of Ahmeek and passes a variety of landscapes including residential, farm fields, and forestland before paralleling the Lake Superior Shore at its north end. Buffered views of the Lake can be seen along the north end. The route provides access to Five Mile Point, Seven Mile Point, the Mouth of the Gratiot River, and the Sand Hills Lighthouse.

Gay-Lake Linden Road – A main route to the small community of Gay from Lake Linden in Houghton County, this stretch of County Road is forested along its length. The remote character of the roadside gives the impression of uninterrupted forest before opening up to the town of Gay at its east end. There is scattered residential development along its length.

Gay-Lac La Belle Road (Gay to Lac La Belle)- Heading northeast from Gay this section of County road follows the southeastern shore of the County providing unobstructed views of Lake Superior from Betsy Bay to Point Isabelle. Due to its remote location, much of the landscape is undeveloped. Along the Lake Superior shore, seasonal homes are common. The route enters the community of

Lac La Belle and intersects with the Lac La Belle and Bete Gris Roads.

Lac La Belle Road (Delaware to Lac La Belle): Exiting US 41 near Delaware, this stretch of county road drops Southeast past Helltown down towards Lac La Belle. The roadsides are forested, with only a few logging roads exiting along its length. The elevation drop allows scattered views of Lake Superior and Bete Gris when heading southeast. It is the primary



route to Lac La Belle and Mt. Bohemia.

*M-26:* Phoenix to Copper Harbor – M-26 along the lake is an unmatched route for its Lake Superior views, access to the quaint towns of Eagle Harbor and Eagle River. It also is a draw to residential/seasonal home development. This stretch of roadway provides access to Great Sand Bay, Eagle Harbor, Agate Harbor and Copper Harbor at its north end. The drive is a favorite with its natural beauty, meandering character, and recreational opportunities.

Mohawk-Gay Road – Reaching from Gay to Mohawk this stretch of county road is primarily undeveloped. Forestland borders both sides of the route as it passes through miles and miles of undeveloped acreage scattered with residential development between Fulton and Gay.

*US 41:* Houghton County border through community of Mohawk - The entry to Keweenaw County, this section passes through the historic communities of Allouez, Ahmeek, and Mohawk. This is the first stretch of roadway tourists are introduced to when taking US 41. Historic residential architecture intermixed with modern day commercial development and open wilderness characterizes the route to the 'End of the Road' 2 miles past Copper Harbor.

Another notable route is the seasonal Mandan Road from Mandan off US 41 South of Copper Harbor winding around the tip of the Keweenaw to the beginning of US 41. This route is a commonly used gravel road and is a snowmobile trail in the winter. The road and adjacent trails provide access to the tip of the Keweenaw including Horse Shoe Harbor, Schlatter Lake, High Rock Bay, Keystone Bay, and others.

Scenic vistas in Keweenaw County include easily accessible and not so accessible look-out points. A few of the most notable high elevation points located along the spine of the peninsula include: Mt. Lookout, Mt. Houghton, Mt. Bohemia, Bare Bluff, East Bluff, and West Bluff (Brockway Mountain). Bare Bluff is protected by the Michigan Nature Association, and Mt. Lookout (Baldy) is protected by the Nature Conservancy. Brockway Mountain is



under the ownership of Eagle Harbor Township. Mt. Bohemia was developed in 2000 as an extreme ski resort with open runs and backcountry gladed downhill skiing.

# WATER FEATURES AND SHORELINE

Water features including lakes, rivers, and streams are a prime asset of the County and provide both domestic and commercial sources of water but also many recreational activities. The quality of life in Keweenaw County is dependent on the health and protection of water resources. Availability of

safe drinking water can influence the amount and location of development. Access to lakes and streams is a draw to outdoor enthusiasts, developers, and tourists alike.

Keweenaw County is surrounded on three sides by Lake Superior including 94 miles of shoreline. Ports along Lake Superior historically provided transportation routes but today serve as recreational outlets. Scattered along the shore are three State of Michigan marinas including Lac La Belle, Eagle Harbor, and Copper Harbor. Also a number of boat launches which provide access to the waters of Lake Superior. There



are a number of aids to navigation surrounding the peninsula including lighthouses at Eagle Harbor, Copper Harbor, Gull Rock, and Manitou Island. The Mendota light at Lac La Belle is under private ownership.

There are approximately 374 water bodies in the County including 11 lakes of 40 acres or greater. Notable inland lakes of Keweenaw County include Lake Fanny Hooe, Schlatter Lake, Lake Manganese, Hoar Lake, Breakfast Lake, Lake Addie, Deer Lake, Lake Medora, Lake Upson, Lake Eliza, Long Lake, Owl Lake, Copper Falls Lake, Lake Bailey, Gratiot Lake, Seneca Lake, Mud Lake, and Thayer Lake. The lakes within the County range from remote, undeveloped Schlatter Lake to highly developed Lake Medora and partially developed Lake Fanny Hooe, which is primarily surrounded by State of Michigan land.

Several large rivers and tributary streams dissect the landscape and have their mouths on Lake Superior, including the Montreal in Grant Township, Eagle River in Houghton Township, Gratiot in Allouez Township, and Tobacco River, Big Betsy, and Little Betsy in Sherman Township. The river systems can be both a physical hindrance and an attraction for home development.

The County has over 94 miles of shoreline not including Isle Royale. By Township, Grant has the most with approximately 44 miles (not including Manitou Island), Sherman has 7 miles, Eagle Harbor has 26 miles, Allouez has 14 miles, and Houghton the fewest with 3 miles. The shoreline varies from rocky, basaltic pebble beaches to rock escarpments to sand dunes and beaches. The shoreline areas are where interaction between people and water bodies takes place; including diverse uses such as recreation, residential, and business development. These areas are also characterized by environmental constraints which may be contradictory to the need or desire for development. Such factors as critical sand dunes, high risk erosion areas, and sensitive environmental areas may serve to restrict development in some areas.

The Michigan Department of Natural Resources has identified areas throughout Michigan where environmental factors are of particular importance. These include critical sand dunes,

environmental areas (none identified in Keweenaw County) and high-risk erosion areas. Map 5 shows the critical sand dunes and high risk erosion areas of Keweenaw County.

The Shorelands Protection and Management Act of 1970 (Act 245) identifies high-risk erosion areas as "an area of the shoreland determined...on the basis of studies and surveys to be subject to erosion." In order to prevent erosion from occurring in these areas, setbacks have been developed to insure that development takes place at a sufficient distance from the shoreline to minimize the possibility that erosion will occur. Both required and recommended setbacks have been developed. In Keweenaw County, high-risk erosion areas have been identified along segments of the shoreline in Allouez, Houghton, Eagle Harbor, and Grant Townships.

Critical sand dunes have been identified inland and along the north shore of Keweenaw County in Allouez, Houghton, and Eagle Harbor Townships. Michigan's sand dunes are a unique natural resource of global significance that collectively represents the largest assemblage of fresh water dunes in the world and supports numerous threatened and endangered species. The combination of

topographic relief, vegetation, and climatic conditions are a phenomenon unique to the State of Michigan. The sand dunes in Michigan are protected under Part 353, Sand Dune Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended. The act requires a permit for any of these activities, including contour changes, in areas identified as critical dunes. Uses are prohibited on slopes measuring greater than 33 percent without a variance, and structures are prohibited on the



first lake ward facing slope of a critical dune area. Keweenaw County does not have local regulations in place, so permitting is done through the DEQ in Lansing.

# WATERSHEDS

A watershed includes all the land and water area that drains into a particular lake or river with smaller watersheds part of larger watersheds. Keweenaw County is composed of seven watersheds ranging from 17 to 53 square miles named for rivers or creeks in the County. Watersheds in Keweenaw include Montreal River, Little Gratiot River, Eagle River, Gratiot River, Tobacco River, Traverse River, and Traprock River. See Map 5. The remainder of the County drains directly to Lake Superior by small creeks or ravines. Two watersheds, Trap Rock and Traverse are shared with Houghton County. It should be recognized that land use practices and decisions in one part of the County can affect water quality in downstream jurisdictions. Watersheds are a convenient way to address regional issues that do not follow jurisdictional boundaries.

## **WETLANDS**

Wetlands are areas of the landscape with shallow water or areas where water is visible part of the year. Some wetlands have saturated soils but water is not visible at the surface. They often have lush vegetation and wildlife. Wetlands can be identified by the presence of water (standing water or wet soils for at least part of the year) and the presence of plants that depend on wet conditions. Types of wetlands include marshes, bogs, fens, scrub-shrub wetlands, or forested wetlands. Wetlands are vital to the environment as they support wildlife, filter runoff, and store floodwaters. Wetlands are important to planning due to their potential limitations and influence on future development.

Wetland areas can be found in all Townships of Keweenaw County. Forested and scrub/shrub palustrine wetlands are the dominant wetland and are most prevalent in Sherman Township and around Lac La Belle. Other areas of palustrine and small areas of lacustrine wetlands are found throughout Keweenaw County. A riverine wetland is found near the Montreal River in Grant Township and is the only wetland of this type in the County. The National Wetlands Inventory (See Map 6) shows the palustrine, lacustrine, and riverine wetlands in the County.

Wetlands are regulated by the Michigan Department of Environmental Quality in Michigan under the Natural Resources and Environmental Protection Act (Act 451 of 1994), Part 303, Wetland Protection. Under the Act permits are required for activities including: filling or placing material in a wetland, dredging or removing soil from a wetland, draining water from a wetland, and constructing or maintaining a use or development in a wetland. Applicants must demonstrate in general avoidance of the wetland resources to the greatest extent possible and that an "unacceptable disruption to the aquatic resources will not result".

## MINERAL RESOURCES

While copper was historically the most important mineral resource in the County, its importance has diminished due to market demands and methods of recovery. Potential for copper and other mineral deposits exist and there is exploration underway. Highland Copper has recently (2014) conducted exploration. Currently mineral resource activities are limited to sand and gravel extraction. These resources are not of high value or a source of large employment but are crucial to construction and road building activities. Federal and State regulation regarding mining supersede local zoning.

## **CLIMATE**

Keweenaw County has a typical humid continental climate that is heavily influenced by Lake Superior. The County enjoys snowy winters and mild, warm summers. Average annual temperatures range between 15 degrees in the winter to 65 degrees Fahrenheit. Lake Superior has

a moderating effect on the temperatures when the cool water moderates the temperature extremes. Another effect of the lake is the formation of considerable cloudiness when cold air passes over the water in late fall and early winter. This effect causes considerable lake-effect snowfall that provides an average of 180 inches annually, with records over 300 inches. Annual precipitation averages 32.2 inches of which 61 percent occurs from April-September. Heaviest precipitation is in June and September.

Due to the moderate summer weather conditions and extreme winter snowfalls, the Keweenaw enjoys a wide range of seasons. These weather characteristics make the area an attractive place for summer cottages as well as a destination for winter recreation activities such as snowmobiling and skiing.

### VEGETATION/LAND COVER

The present vegetation of Keweenaw County is a result of the physical environment, post-Pleistocene species migration patterns and human alteration of lands and plant communities. Lands in Keweenaw County have been altered by human intervention such as harvesting and clearing for development. While the area of forest coverage has generally rebounded since the timber boom period of the last century, the Keweenaw does not have the same mixture of tree species that existed prior to settlement.

Today the area is dominated by northern hardwood forest occupy the better upland soils and which also occur in poorer quality on lighter soils. These stands include principally oak, sugar maple, elm, basswood, and yellow birch. Hemlock and white pine are often in the mixture. Areas of sandy plains mostly support pines. Spruce, balsam, cedar, and tamarack (larch), the swamp conifers, generally occupy the poorly drained sites, while extensive areas of aspen occur throughout, principally on burned-over lands. In general, the composition of the Keweenaw includes predominately deciduous covering the majority of the County with coniferous predominately found along coastal areas in Sherman, Grant, Eagle Harbor, and Houghton Townships. Map 7 shows the land cover of the County.

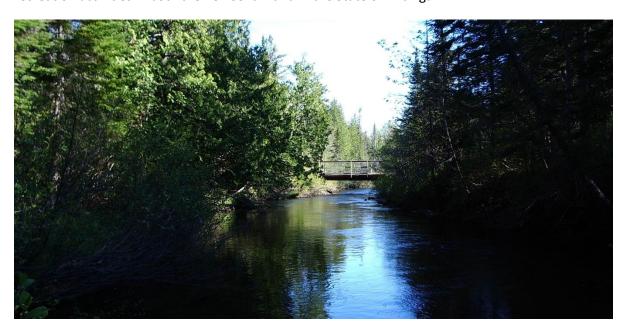


## WILDLIFE AND HABITAT

Fish and wildlife have always been considered an important part of the Lake Superior basin from earliest settlement times to the present. In the beginning they were a part of the food supply that helped ensure survival. However, they quickly took on the trappings of sporting (fishing and hunting) and economic commodity values, hence the emphasis on game fish and animals, and the intense management of a few selected species. Today, while there is a shift in vision and philosophy that recognizes the importance of biological diversity, there is still an emphasis on game species. Game management focuses on the protection and restoration of habitats. The goal is for healthy ecosystems. These ecosystems include habitats for viable populations of all creatures occurring in the wild.

In the Keweenaw, prevalent wildlife species include waterfowl (ducks and geese), upland birds (woodcock and grouse), big game (white-tail deer and black bear), small game (rabbit and squirrel), and fur bearers (muskrat, beaver, bobcat, fox, and coyote). Some fish species include: trout (lake, rainbow, steelhead and brook), salmon (Coho and chinook), whitefish, herring, walleye, and perch. Non-game species include loons, eagles, ospreys, timber wolves, moose, porcupines, martens, fishers, chipmunks, frogs, turtles, salamanders, and some snakes.

While it is difficult to measure the populations of all wild creatures, statistics do exist. These include some on water resources, wildlife habitats, and stocking activities which provide some foundation for an understanding of the supply of fishing and hunting opportunities. This is of considerable importance because these activities annually attract thousands of residents and non-residents, and has a significant impact on the local, regional, and state economies. Fishing and hunting are popular recreation activities in both the Keweenaw and in the State of Michigan.



#### 1.5 LAND USE

Keweenaw County's land use patterns are very closely tied to its natural resources, including minerals, timber, water, wildlife, and shoreline. As with many communities of Upper Michigan, natural harbors and river mouths along Lake Superior provided natural sites for the establishment of communities. Many of the historic communities thrived and continued after the mining days faded while others shrank or disappeared.

Today the communities of Allouez, Ahmeek, and Mohawk/Fulton compose the spine of the County while the anchor coastal communities of Gay, Lac La Belle, Copper Harbor, Eagle Harbor, and Eagle River surround the edges. The general land use pattern in Keweenaw County includes concentrations of residential, commercial, and industrial development in the communities of Allouez, Ahmeek, and Mohawk/Fulton, primarily residential and commercial development in the community of Copper Harbor, residential with a few commercial establishments in Eagle Harbor and Eagle River, and residential/seasonal homes in Lac La Belle, Gay, and waterfront areas in between. The interior of the County is dominated by privately owned forestland interspersed with a few residential homes and hunting camps.

### **OWNERSHIP PATTERNS**

An area's land development pattern is often influenced by its land ownership characteristics. In Keweenaw County, corporate and governmental land ownership has a particularly strong influence. Ownership of the County (excluding Isle Royale National Park) is dominated by two entities, the State of Michigan and GMO Threshold Timber Michigan, LLC. GMO owns an estimated 49 percent of the county. See Map 8.

The state of Michigan through the Michigan Natural Resources Trust Fund acquired over 6,000 acres of prime recreational land at the tip of the Keweenaw Peninsula from the former Lake Superior Land Company. With this purchase the state of Michigan owns over 10,000 acres of land that is being managed primarily for recreational and timber uses. The total ownership of property in exempt status, not including Isle Royale is 13% or 30.368 acres.

Overall, the majority of land in Keweenaw County is in private holdings. These holdings can be broken down into the following categories: forest industry, private corporations, private individual residential tracts, and private plats. See map 8.

The forest industry category probably has the fewest number of landowners, but they own and manage the largest number of acres, estimated to be over 165,000 acres. The forest products companies primarily manage their lands for investment or as industrial forests, for the production of industrial roundwood. Consequently, these properties are to be found on prime forestlands located through the interior part of the county away from the coast.

The land ownership categories represented by private organizations and private individuals include a wide range of parcel sizes, anywhere from 10 acres to multiple sections of land. Tax exempt organizations include The Michigan Nature Association, North Woods Conservancy, Michigan Audubon Society. Michigan Technological University a State Institution, and the Houghton Keweenaw Conservation District a Michigan Department of Agriculture extension. What distinguishes these ownerships from those of the forestry industry is the diversity of ownership objectives. Industrial wood is not the only objective for which ownership is maintained. Other objectives may include long-term investment, recreation, wildlife habitat conservation, wilderness experience, and/or landscape protection.

The remaining ownership category includes those owners of small tracts and lots in private plats. The ownership objective for these small tracts or platted lots usually, but not always, is for some type of residential home development. These structures can be seasonal or year-round in character, with the trend being toward year-round construction. This ownership category is found in all the small communities of the county, along the coast, and on inland lakes where there is developable shoreline property.

The Keweenaw County landscape is changing with ownership patterns. Forest lands within Keweenaw County have changed ownership a number of times. Long treasured free and open access allowed by timber companies in much of the Keweenaw has disappeared. Gates and earthen berms limit motorized access. Waterfront land is now blanketed with residential development and limited public access to the shore.

Among the change is a tremendous thrust towards land stewardship and public trust. Many exempt or not for profit agencies avoid any payment in lieu of taxes decreasing the revenue stream for the County. This is represented by the transfer of over 6,000 acres to the State from Lake Superior Land Company with the assistance of the Nature Conservancy. Conservancies themselves account for another 6,000 acres of tax exempt land within Keweenaw County. Keweenaw County was able to purchase the Mouth of the Gratiot River in Allouez Township. The preservation of these treasured sites for both their natural and intrinsic value comes with a price to the schools, municipal governments, and emergency services.

## FACTORS AFFECTING LAND USE

The decision process regarding land use can begin at any number of sources, a homebuyer, a developer, a land speculator, a business owner or a governmental unit. A homebuyer or potential business owner bases decisions on location, access, quality of surroundings, available public services, and personal satisfaction among other factors. The land developer makes decisions regarding the type and timing of development based on supply and demand for the good or service. The demand for goods and services is often beyond local control, but factors such as availability of

sites and adequacy of transportation or other infrastructure can be affected by local decisions. The land speculator makes decisions regarding selling or holding land based on potential profit.

Decisions made at these levels are generally oriented towards a person's or organization's self-interest and generally do not consider the effects on surrounding land uses, utilities, services, etc. These decisions that do not take in the overall pattern of a community can result in incompatible development. It is the responsibility of local units of government to consider the overall compatibility and appropriateness of various land uses. Various laws and regulations provide tools for governments to deal with land use issues.

In Keweenaw County waterfront properties have become highly desirable for vacation and retirement homes. The demand on these properties from people locally and from outside the area has raised the market price for lake frontage and has spurred development in these areas. The pattern of land development along the lake is similar to many waterfront areas with shoreline property. Because waterfront is limited, it is important to recognize the need to maintain areas for public access while it is available. It is also necessary to recognize that all lands are not suitable for development or development of certain types.

### LAND OWNERSHIP AND USE TRENDS

The majority of the timber land in Keweenaw County is held by GMO. The timber company policy is to manage the lands as working forests in order to provide a secure source of pulpwood and high quality saw logs to generate income from forest product sales to other forest industry customers. Large contiguous tracts of land with accessible transportation provide the most viable lands for timber harvesting. Forest properties are sold or traded as opportunities arise in order to maximize return on land holdings. Longyear Realty Corporation and Lake Superior Timberlands also have significant ownership.

Land use trends currently point towards further lakefront development on available lands and increased development pressure in and around waterfront communities such as Copper Harbor and Eagle Harbor. Pressure for development will include those of residential, resort, and commercial as the market demands. As indicated by development of Hunter's Point and areas surrounding Eagle Harbor, there is a demand for new residential areas, even non-waterfront. It is anticipated that these trends will continue well in to the future as people look to get away from larger cities and escape to the north woods.

Excluding Isle Royale there have been limited public lands in the County. In 2002, an additional 6,000 acres along the south shore of Grant Township was transferred to the State of Michigan with the assistance of the Nature Conservancy and widespread public support. This doubled the amount of public land in the County. Prior to 2002, the largest holdings were near Copper Harbor and included the area surrounding Fort Wilkins and Lake Fanny Hooe and miscellaneous parcels towards

the tip of Keweenaw County in Grant Township. Other public lands include small roadside parks and other community facilities.

A number of conservancies are active in the County including the Nature Conservancy, Michigan Audubon Society, Gratiot Lake and North Woods Conservancy, among others. The Michigan Nature Association has 29 properties throughout the County; the Nature Conservancy has preserves east of Copper Harbor at Horseshoe Harbor and Mt. Lookout, while the Audubon Society has 7 throughout the County - most notably the Estivant Pines (virgin white pine forest) and the 320 acre Brockway Mountain Sanctuary held by Eagle Harbor Township. The conservancies recognize and seek to preserve some of the unique natural characteristics of the County.

#### **CURRENT ZONING**

Two Zoning Ordinances are in existence in Keweenaw County.

In February of 2006 Eagle Harbor Township Board passed a resolution to establish township zoning. The ordinance for Eagle Harbor Township was most recently adopted at the December 13, 2013 meeting.

The original Zoning Ordinance of Keweenaw County was adopted August 12, 1975 and became effective September 10, 1975. The original ordinance was repealed by and replaced with the 2006 Ordinance. The County continues to use the 2006 format for the current Zoning Ordinance. The most recently adopted amendments were effective as of April 5, 2015. The zoning districts of the 1975 Ordinance remain the foundation of this Ordinance. The ordinance provides for a number of zoning districts including Agricultural District (AG), Timber Resource District (TR), Extraction District (ED), Conservation Environmental Protection District (CEP), Country Estate District (CE), Single-Family Residential District (R-1A, R-1B, R-1C), Two-Family and Multi-Family Residential District (R-2), Resort Residential District (RR-A, RR-B, RR-C), Resort Service District (RS-1, RS-2), Business District (B-1), Light Manufacturing District (M-1), General Manufacturing District (M-2), Planned Development District (an overlay district) (PDD), Floodplain District (an overlay district) (FP) and Wellhead/Groundwater Protection District (an overlay district) (W/GP). The Districts and other provisions of the Ordinance are based upon the Future Land Use Map and policies of this Keweenaw County "Blueprint for Tomorrow" Land Use Plan. See Map 9.

# **DEVELOPMENT TRENDS**

New residential construction trends in recent years tend to be larger homes or additions to existing structures catering to the seasonal/retirement homeowners. New development tends to focus on waterfront areas including Lake Superior, inland lakes and rivers, but large acreage homesteads are also common. An examination of building permits reveals the trend towards larger homes, garage additions and pole buildings. All of these patterns are having an impact on the County both visually, economically and through the consumption of additional lands.

Business developments tend to cater to the tourism market and include gift stores, restaurants, and other tourist-oriented facilities. Smaller in-home businesses have also begun to spring up due to access to market and the internet boom. The most significant new development in recent years has been the Mt. Bohemia Ski Resort near Lac La Belle. With the advanced ski hill they continue to grow with cabin construction to facilitate year round use. Mt. Bohemia caters to the all season tourism niche of the area.

Industry is starting to regain momentum in Allouez Township. The large amount of extraction land is in the process of converting to manufacturing within the zoning ordinance. This change will allow new business opportunities. With access to clean electricity, natural gas, and high-speed internet, there is potential to bring much needed full time employment to the Township. Consideration of tax breaks to new development is under consideration at the township meetings.

### 1.6 ECONOMIC DEVELOPMENT AND FISCAL BALANCE

Numerous factors contribute to the economic health of Keweenaw County, many of which extend far beyond its boundaries. The economic foundations of the Keweenaw began with its natural resources, specifically copper, timber, and fish. Today, the economy continues to be natural resource-based because of its many forests and lakes, and related recreational activities as well as timber harvesting.

### LABOR FORCE AND EMPLOYMENT CHARACTERISTICS

The source of employment and income for County residents vary greatly due to limited opportunities within the County. Although the attraction to the area is through the natural resources, many persons travel to nearby Houghton County for employment opportunities. In 2010 it was estimated that 65.8 percent of the workforce worked outside Keweenaw County. Personal income is from 49.7 percent earnings, 23.2 percent dividends, interest, and rent, while transfer payments account for 27.1 percent of income. Transfer payments include incomes from social security and retirement, often referred to as the "mail box economy". The "mail box economy" in the County has become a major contributor to the local economy as an increasing retiree and elderly community depends on local retail sale, services, finance, and insurance establishments.

The largest industries based on earnings in Keweenaw County are services, federal civilian government, and state and local government. Services industry is the fastest growing, accounting for 24.2 percent of the county's income.

The civilian labor force in Keweenaw County was estimated to be 888 in 2010 according to the American Community Survey, with an unemployment rate averaging around four percent. Allouez Township has the majority of the County labor force with 691.

Business establishments in the County numbered 65 in 2012 according to the U.S. Census Bureau. A breakdown of employers by number of establishments by North American Industry Classification System (NAICS) in the year 2012 is as follows:

TABLE 1-15: EMPLOYERS IN KEWEENAW COUNTY BY NAICS CODE

Туре	Code	Number of Establishments		
Agriculture, forestry, fishing and hunting	11	2		
Mining, quarrying, and oil and gas				
extraction	21	2		
Construction	23	8		
Manufacturing	31	4		
Wholesale trade	42	2		
Retail trade	44	11		
Transportation and warehousing	48	6		
Finance and insurance	52	2		
Real estate and rental and leasing	53	1		
Administrative and support and waste				
management and remediation services	56	1		
Educational services	61	1		
Arts, entertainment, and recreation	71	1		
Accommodation and food services	72	19		
Other services (except public admin.)	81	3		

Source: U.S. Census Bureau 2012

The employment patterns and establishments in the county reveal the limited amounts of industrial opportunities. The economy is dominated by small business. The patterns also reveal the tourist oriented nature of the north end townships with almost half the establishments either accommodation and food service or retail trade. Countywide only two logger employers are listed locally with only a very small amount of timber processed locally. The bulk of the saw logs, veneer logs and pulpwood are processed elsewhere. This employment and industry pattern is expected to continue due to the County's distance to markets and existing character of the area.

In order to capitalize on the County's assets, the Copper Harbor Improvement Association works within Copper Harbor to make improvements to the downtown and promote the area through advertising and local events. The Keweenaw Chamber of Commerce and Keweenaw Convention and Visitors Bureau work in Houghton and Keweenaw Counties to promote the entire region to potential businesses and tourists.

The Keweenaw 2000 Economic Adjustment Strategy was prepared in 1997 and is still current. It identified a number of goal statements based on county residents' desires. The report recognized the assets of the area and the need to protect them in a tourist-based economy. These goal statements include:

- 1) Foster a sustainable economy that is in harmony with the County's natural resources.
- 2) Protect the uniqueness of the County's natural and cultural resources.
- 3) Seek a balance among the economic development interests of the county stakeholders.
- 4) Promote the development of a business community that can effectively serve the needs of visitors and residents in the four –season tourism economy of the County.
- 5) Seek out unserved market demand that complements the County's natural resources and its tourism-based economy.
- 6) Strengthen local government's ability to attract, encourage, and guide economic development activities through strong, consistent code and ordinance enforcement.
- 7) Support the development of community facilities which improve the quality of life of the residents and protect the environment.

### **ECONOMIC BASE**

Keweenaw County is dependent on tax revenues generated from lands within the County. Almost 1.4 million dollars in County operating revenues are generated between property taxes, commercial forest act payments, payment in lieu of taxes on State of Michigan lands, and swamp tax. These property taxes and PILT funds account for over 80% of the annual budget for the County.

The monetary values of lands differ within each township while the cost of providing services is higher in areas with more residential/commercial development. Eagle Harbor Township enjoys a large tax base because of the Township's waterfront development, while Sherman Township has a very small tax base primarily dependent on CFA payments. When reviewing the value of lands within the County, residential and commercial developments generate the most revenues.

Payment in Lieu of Taxes (PILT) funds are for the State Owned CFA lands. Exempt parcels, those tracts of land owned by government or non-profit organizations, do not provide any revenue to the County or Townships. It is these lands that provide the potential for recreational opportunities. See Map 10.

The number of taxable parcels in the County varies by Township. Whereas Allouez Township had 1,598 taxable parcels in the year 2016, Sherman only had 315. The following table (1-16) reveals the property tax breakdown by parcel within the County:

TABLE 1-16: TAXABLE PARCELS YEAR 2016

Category	Allouez Township	Eagle Harbor Township	Grant Township	Houghton Township	Sherman Township	County
Total Parcels	1598	1072	1243	317	315	4545
Total Assessable	1481	878	985	270	291	3905
Assessable Real	1440	860	937	263	285	3815
Assessable Personal	41	18	48	7	6	120
Agriculture	0	0	0	-	0	0
Commercial	41	17	68	4	1	131
Industrial	1	0	0	0	0	1
Residential	1395	842	833	253	284	3607
Timber Cutover	3	01	36	6	0	46
Exempt	117	194	258	47	24	640
CFA	67	73	126	72	86	424

Source: Keweenaw County Equalization

The difference between total parcels and assessable parcels is accounted for by the 640 exempt lands (conservancy, church, etc.)

By property tax value, Eagle Harbor Township accounts for 34% of Keweenaw County totals, Grant Township 30%, Allouez Township accounts for 25% of the County, Houghton Township - 8% and Sherman - 3%. Residential land accounts for the majority of the taxable property in the County including 3,628 parcels (72.5%) Although CFA lands include only 484 parcels (~10% of the total), these are the lands that make up the interior of the County and contribute to the attraction of residential development.

Land enrolled under the Commercial Forest Act is removed from the general property tax roll. The act applies only to forestland used for growing commercial forest crops on 40 contiguous acres or more. The landowner pays an annual reduced specific tax per acre to the township. The State of Michigan annually pays the county a specific amount per acre listed. Land listed under the Act must be open to public hunting, trapping and fishing, be managed for the continuous production of timber crops and not be used or obligated for commercial purposes other than the production of timber. CFA lands have provided a great level of protection to forestland in the Keweenaw, and balancing these lands with other types of development is important to the future.

The State Equalized Value (SEV) of property within Keweenaw County has grown significantly since 1990. The SEV equals the assessed value (determined by the local assessor which by law is 50% of the market value), unless a factor is applied. While every township has seen considerable growth over time, Eagle Harbor Township had significant growth between 2000 and 2010. The growth can be contributed to the increasing retirement/vacation/waterfront home market within Keweenaw County including



new construction and renovation. The following chart reflects SEV (real and personal property) change from 1990 through 2016.

**TABLE 1-17:** SEV GROWTH 1990 TO 2016

Area	1990 SEV	2000 SEV	2010 SEV	2016 SEV	% of County Total in 2016
Allouez	\$10,003,600	\$21,600,014	\$50,845,785.00	\$56,937,972.00	26%
Eagle Harbor	\$8,513,900	\$28,618,210	\$75,680,930.00	\$66,173,111.00	31%
Grant	\$9,795,900	\$24,605,392	\$56,417,376.00	\$69,869,094.00	32%
Houghton	\$2,082,300	\$6,181,943	\$15,753,847.00	\$14,423,515.00	7%
Sherman	\$1,372,300	\$3,288,534	\$6,943,131.00	\$7,638,206.00	4%
County	\$31,768,000	\$84,294,093	\$205,641,069.00	\$215,041,898.00	100%

### 1.7 PUBLIC FACILITIES, INFRASTRUCTURE AND SERVICES

Services and facilities provided by local governments are vital elements in a community's progress and well-being. Vital services provided by local government include police and fire protection, municipal water and wastewater systems, and solid waste disposal. Community facilities include government service buildings, maintenance and storage facilities. With growth comes increased demand on services and maintenance of facilities along with increased costs to provide additional coverage.

### **PUBLIC FACILITIES**

The County Building/Courthouse is located on 4<sup>th</sup> Street, Eagle River in Houghton Township. The building holds the administrative offices for the County including Clerk, Register of Deeds, Administration, Board of Commissioners, Tax Equalization, Treasurer, and also county judicial courts and offices. The facility was constructed in 1866 and is a state-registered historic site. Parking is available on adjacent roadsides in front of and near the courthouse.

## TOWNSHIP HALLS AND COMMUNITY BUILDINGS

All five Townships in the County have Township Halls that provide for various levels of community activities and services.

Allouez Township Hall is located in Mohawk – It houses Township offices, is handicapped accessible, and is used for public meetings. The Fire Department is attached. They also have the Community Center in New Allouez where many private and community activities such as graduation parties and wedding receptions are held.

Eagle Harbor Township Hall, Eagle Harbor - Holds the Township offices and has a gathering location for meetings. The fire department is located on the Eagle Harbor Road 1 mile south of town. A Community Building, the old school house, is also available for residents for small gatherings. All Eagle Harbor Township Buildings are handicapped accessible, and are used for a variety of public and community meetings.

Grant Township Hall, Copper Harbor – Houses the township offices as well as the visitor center and United States Post Office which are handicapped accessible. The building is used for variety of public meetings and community events. An Emergency Call Box and 24 hour outside access to public restrooms is provided. The Copper Harbor Fire Hall is located on the South East side of town near the transfer station.

Houghton Township Hall, Eagle River – Houses the Township offices and is used for weddings and other community activities. The second floor of the Hall is a museum operated by the Keweenaw County Historical Society with displays of Phoenix, Cliff Mine, and the Eagle River Fuse Factory.

Lac La Belle Fire Hall and Community Center received a face lift and addition in 2014. The new construction included remodeling of the truck floor, the addition of a commercial kitchen, and community hall.

Sherman Township Office and Hall, Gay – The old Doctors office houses Township offices. The Community Hall next door provides space for meeting and community activities. The Fire Department is also located in the same complex.

#### ROADS AND MAINTENANCE

Transportation within Keweenaw County is dependent on public and private road systems. State maintained paved highways in the County, some 60 miles, include U.S. Highway 41 and Michigan Highway 26 (M-26). US-41 begins just outside Copper Harbor and ends in the state of Florida. US-41 extends through the center of the county until it swings north to connect with the community of Copper Harbor. M-26 is located primarily along the north shore of the peninsula running from Copper Harbor to Eagle River where it turns inland and joins US-41 at Phoenix.

A second road system is the county road network. This system is composed of 102 miles of county primary roads and 72 miles of local roads. Examples are Mohawk-Fulton to Gay, Gay to Lac La Belle, and Lac La Belle to Delaware. The 72 miles of local roads provide access to coastline and inland lakes.

Much of the County does not have public road access. It is traversed by a network of private roads. These include two types of roads in forest company land ownership: primary haul roads and secondary haul roads. This system of roads, estimated at over 1,000 miles, provides important access throughout Keweenaw County.

Keweenaw County Road Commission is responsible for road maintenance. They work with local municipalities as well as the Michigan Department of Transportation when appropriate, to determine the maintenance schedule. The Village of Ahmeek, receives act 51 funds to the village streets and in turn contracts with the County Road Commission to provide service.

## WATER, SEWER AND SOLID WASTE

The drinking water supply for the majority of residents in Keweenaw County is provided by publicly licensed water systems. Individual wells serve the remainder of Keweenaw County's population.

The Michigan American Water Company with its wells in Houghton County provides water to Allouez Township. This includes the communities of Allouez, New Allouez, Ahmeek Location, Mohawk, Fulton, Seneca, and Bumbletown. Ahmeek Village is provided with water through the Northern Michigan Water System but owns the distribution system providing 8,000 gallons/day.

Municipal water systems include: Copper Harbor, Eagle Harbor, Eagle River, and Gay. These systems are maintained by a use fee. Improvements are usually conducted in cooperation with Rural Development. The outlying residents have private wells that supply water. Each municipal water system is operated by the Township or a community within the township. A special board oversees the operation and maintenance of these systems.

Water system flow rates in Keweenaw County are limited due to bedrock geology and distribution lines. Township well fields are located over glacial aquifers that have limited water flows. Availability of groundwater and limited community water systems will continue to inhibit development in certain areas. Protection of the limited water supplies and wellheads are vital to a healthy community and continued growth.

Local governments own and operate four community sanitary wastewater systems in the County. These systems include Ahmeek Village, Allouez Township, Copper Harbor, and Gay. Allouez Township has a field system capable of processing 75,000 gallons/day that serves the unincorporated communities of Mohawk, Fulton, and Allouez. Ahmeek Village system serves Ahmeek, Ahmeek Location, and New Allouez with a pond system designed for an average of 50,000 gallons/day with a current usage of 30,000 gallons/day. Copper Harbor has a lagoon treatment system capable of 80,000 gallons/day. Sherman Township has a small sanitary wastewater system that serves the community of Gay. The remainder of the County is served by individual septic tanks.

Another type of wastewater infrastructure is storm water collection and treatment. Storm water collection systems range from fair to poor in the County. Due to its rural nature with low-density development, there is not much curb and gutter. Only Ahmeek and Mohawk have storm collection sewers. Surface drainage is carried out by roadside ditches and through natural ground absorption.

Solid Waste Management Services in the County are regulated through a state mandated plan required by the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management. Each Township has a collection system designed to meet its needs.

Sanitation services from adjacent Houghton County provide services to Allouez, Grant, Houghton, Eagle Harbor, and Sherman Townships. Service levels vary by area and season with residents and businesses primarily hauling their garbage to compactor or collection sites for transport. All waste generated in Keweenaw County is hauled and processed outside of the county. Recycling is currently available in Eagle Harbor and Grant Township for cardboard only.

#### **COMPETE STREETS**

"Complete Streets" is a concept that "promotes safe and efficient movement of people and goods whether by car, truck, transit, assistive device, foot or bicycle." (PA 135 of 2010). The intention of Complete Streets is to "ensure that roadways are designed and operated to enable safe access along

and across a street for all users of all ages and abilities, including pedestrians, bicyclists, transit users and those with disabilities, in addition to automobiles." (MI Healthy Communities, MDCH)

The Western Upper Peninsula Health Department (WUPHD) and the Michigan Department of Community Health (MDCH) enhance the Complete Streets program by promoting the development of active and healthy communities. In order to make active living more convenient and safe, walking and bicycle trails, nearby destinations, convenient business locations, bicycle parking, roundabouts and walkability are encouraged. Economic considerations can be taken into account in applying Complete Streets laws. Vision, planning, and policy can minimize the cost of implementation.

During the community input meetings our concept is called "Connecting Keweenaw Communities." It began with a desire to create a safe trail that would connect all of the parks and playgrounds within the County. The desire is to give all residents and visitors an opportunity to walk or bike from one end of the County to the other without the concern of street traffic.

The Master Plan encourages other local units of government in Keweenaw County to coordinate their activities with one another and adopt Complete Streets Ordinances, or at least apply the Complete Streets principles whenever a street or road is constructed or reconstructed..

### **COMMUNICATIONS**

AT&T is the only hard line local phone access provider in the County. Verizon and AT&T provide cellular service.

Wireless broadband internet is available through cellular date, satellite, and "fixed wireless" providers in the County. Internet is available through wireless via cellphone and satellite in the county. A local provider of internet service, Pasty.net is also available in some populated remote areas of the County. DSL is available to less than .01% of the population of the county.

Satellite television coverage is available county-wide. Charter Communications provides internet service and cable television to the populated areas of Allouez Township. Cable America Corporation serves the community of Eagle Harbor.

### **PUBLIC SAFETY**

Law enforcement and other associated police services are administered by the Sheriff's Department in Keweenaw County. These services can be augmented upon request by Michigan State Police (MSP) and the Michigan Department of Natural Resources, Law Enforcement Division (MDNR). The MDNR conservation officers are periodically pressed into service because of their arrest powers.

The Sheriff's Department and holding facility are located in Eagle River next to the County Courthouse. The department operates around the clock, 24 hours a day, 7 days a week. It is staffed by the Sheriff, undersheriff, four full-time and other part time deputies. Besides addressing critical

situations, and serving the court, these officers routinely answer citizen complaints, investigate accident reports, conduct road patrols, and perform well being checks on residents and property. The Sheriff's Department also conducts patrols on snowmobile, ATV and marine patrols all with assistance of the MDNR State Grants.

Suppression of structure and wild fires are handled by organized volunteer fire departments in Keweenaw County. There are six departments in the County including Ahmeek Village, Allouez Township, Eagle Harbor Township, Sherman Township, Copper Harbor, and Lac La Belle. Houghton Township contracts with Allouez Township for fire suppression services.

Medical First Responders are available in Allouez, Eagle Harbor, and Grant Townships to provide medical assistance along with the Sheriff's Department whom is also MFR certified. Medical First Responders provides first aid until local BLS/ALS Ambulances provided by Mercy EMS arrive.

Ahmeek Fire and Rescue has capabilities to conduct off road rescue. They respond throughout the county including the cliffs for climbing accidents, extreme-mountain biking, and snowmobile accidents. The equipment to package and transport from trail to roadway is a great benefit to residents and visitors alike.

Emergency Communication within the County uses a number of methods. The Michigan Public Service Commission operates an 800 MHz system which has three statewide communications towers in the County, a VHF system with hard line links between fire districts that can page emergency responders as well as new technology to page responders through cell phones.

### **EMERGENCY SERVICES**

Emergency measures for Keweenaw County are addressed through a network of private, government, and non-government organizations. These measures are coordinated through an emergency measures coordinator appointed by Keweenaw County. This effort is supported with technical assistance from the Michigan State Police.

Mercy Ambulance Service, Inc. a privately owned company, is the primary (and only) provider of emergency medical services in Keweenaw County. Mercy serves Houghton County as well and maintains a fleet of emergency vehicles and a staff of EMT technicians and specialists. Mercy is available 24 hours/day, 7 days/week and has one basic life support unit stationed in Copper Harbor. First Response Units are available through Allouez and Grant Township as well as the Keweenaw County Sheriff's Department.

Marine emergencies on Lake Superior are primarily handled by the U.S. Coast Guard from its station on the Keweenaw Waterway at Dollar Bay. The station has 16 guardsmen who are responsible for aids to navigation as well as search and rescue operations in the portion of Lake Superior adjacent to the Western Upper Peninsula. Their coverage includes the Keweenaw Waterway and Isle Royale.

The coordination of emergency services is important in Keweenaw County. Due to its rugged terrain and remote areas, knowledgeable and trained rescuers are vital to the safety of residents and visitors. The emergency measures coordinator and Sheriff's Department work together on managing operations with many volunteer agencies including Superior Search and Rescue and the Civil Air Patrol.

### HEALTH CARE AND MEDICAL SERVICES

Aspirus Keweenaw located in Laurium and UP Health System Portage in Hancock, both in Houghton County, are the primary health care providers for residents and visitors in Keweenaw County. Aspirus is a community-directed health system based in Wausau, Wisconsin. UP Health System Portage is affiliated with Duke LifePoint of Brentwood Tennessee. Both facilities collaborate in the Upper Peninsula Health Care Network, which strives to create an integrated health care delivery system. Working through partnerships, Aspirus and UP Health use patient-focused and community-based models for health care that include home care, hospice care, ambulatory care, acute care, long-term care, primary care, affiliated hospital systems and wellness centers.

While both facilities serve all age groups, the community population base is largely geriatric with health issues such as cancer, diabetes, heart disease, and stroke being common concerns as well as arthritis and osteoporosis. The closest Level II trauma center is UP Health System Marquette located over 100 miles away, which provides acute primary care services. To meet the needs of the community, both facilities offer over 30 patient care services which include nuclear medicine, respiratory care, physical therapy, surgery, obstetrics, and much more.

Additional health care services are provided by health care professionals in the communities of Calumet/Laurium and Houghton/Hancock in Houghton County. Health care services available include physicians, surgeons, dentists, orthodontists, optometrists, podiatrists, physical therapists, etc.

### **SCHOOLS**

Keweenaw County is within the Copper Country Intermediate School District (ISD) which also includes Baraga and Houghton Counties. An ISD is a service agency to the local districts is the liaison between the State Board of Education and the local school districts. There are three school districts in the County. Children living in Allouez, Eagle Harbor, and Houghton Townships attend the Public Schools of Calumet, Laurium and Keweenaw (K-12). In Sherman Township, the children attend the Lake Linden-Hubbell Public Schools (K-12). Grant Township children attend the Copper Harbor School through 8<sup>th</sup> grade and attend high school in Calumet.

The Copper Harbor School, established in 1851, serves the children in Grant Township as well as others through schools of choice. The one room school house is the farthest point in the Upper Peninsula and the most northerly School in Michigan, 650 miles north of Detroit. Unique

educational opportunities present themselves in Copper Harbor with walking access to outdoor biology labs and local living history. The Copper Harbor School has a 95% rate of attending students going on to institutions of higher learning.

### PARK AND RECREATION FACILITIES

Due to the long history of corporate ownership in the County, residents and visitors have long benefited from the "open door" policy to lands within the County. Timber companies have allowed people to use their lands for recreation for many years with little restriction. This is changing with more ditch/berms and gates being erected. Liability fears limit the access to many of the forest lands which are listed under Commercial Forest Act. In the past, these properties were open to vehicle access for hunting and fishing. These policies are now limiting the frontier experience to those who are capable of hiking, biking, snowshoeing and cross country skiing. Access to boating, fishing, camping, and hunting via snowmobiling, or riding all-terrain vehicles is much more restrictive on the lands and trails throughout the area.

Connecting Keweenaw Communities: An idea which surfaced during the numerous Land Use Meetings. Connect all community parks with an ADA accessible multipurpose trail from Allouez to Copper Harbor and every recreation area in the County. Existing public recreational facilities vary from small roadside parks to larger tracks such Keweenaw Mountain Lodge, Fort Wilkins Historic State Park complex that includes historic, recreational and natural attractions. Following is a description of the public park facilities located in Keweenaw County (See Map 2) that could be connected through this program:

**Agate Harbor:** The County owns the tip of the rocky peninsula and an island located there. This property is undeveloped for recreational use. It is a nice place to sit, relax and enjoy the view of Lake Superior. This location is water access only.

**Ahmeek Park**: a large open space to the south of the village has long been the location of the Annual 4<sup>th</sup> of July Picnic put on by Ahmeek Fire and Rescue. The park has a band stand, concession stand, picnic tables, tennis, basketball courts, and horse shoe pits. The Village provides a porta potty in the summer. This wonderful open space provides a perfect location for family reunions and celebrations. This is a park location that will be part of the Keweenaw Connecting Communities.

**Ahmeek Location Ball Field and Ice Rink:** The George Mroz ball field is located on 1<sup>st</sup> Street just East of US 41. Numerous games are held during the season. The Emil Aho ice rink located on School Street at the end of 3<sup>rd</sup> Street. The Township and community volunteers maintain the grounds. These park locations will be part of the Keweenaw Connecting Communities.

**Allouez Township Community Building Park:** Located at the bottom of Bumbletown Hill this playground has swings, slides, and a merry-go-round for kids. Benches for adults encourage community. This is the desired trail head for the Keweenaw Connecting Communities.

**Bete Gris Beach:** This County owned beach, enjoys over 1,900 feet of beautiful sand frontage on Lake Superior. A changing room and toilet facilities are available.

**Brunette Park:** This County Park occupies a narrow strip of land with 1,000 feet on Lake Superior with a beautiful sandy beach. Picnic and toilet facilities are available.

**Copper Falls Park**: This small park includes an observation tower platform for viewing the Copper Falls area. Picnic tables, stoves, and toilet facilities are provided by the County.

**Eagle Harbor Beach**: Keweenaw County and the Township of Eagle Harbor own this sandy public beach on Lake Superior. Eagle Harbor is ideal for swimming, boating and picnics. It occupies a narrow strip of land along Highway M-26 in the community of Eagle Harbor. Playground equipment is available in the public square across from the Township Offices.

**Eagle River Lower Bridge Park**: A walking bridge and picnic area over beautiful Eagle River. It features picnic tables and a glorious view of Lake Superior. Owned by Houghton Township.

**Eagle River Upper Bridge Park:** A roadside park and picnic area in Eagle River featuring the historic Eagle River Bridge and a view of the Eagle River Falls. Owned by MDOT.

*Eagle River Beach:* Houghton Township, Keweenaw County, and the Keweenaw County Road Commission own the beach located along Lake Superior in the Town of Eagle River with water access and picnic tables.

**Eagle River Deer Park**: Located on M-26 is a picnic area with toilet facilities available. Deer commonly winter near this area. It is owned by GMO and maintained by Houghton Township

*Esrey Park*: The County and MDOT own 1,000 feet of rocky shoreline on Lake Superior and maintain a day use picnic area. Toilet facilities are available.

**Fort Wilkins Historic State Park:** Located East of Copper Harbor, it offers a restored Fort and interpretive center, beautiful camping, hiking, public beaches and picnic areas. The Fort, as it is referred to has over 200,000 visitors a year. Wilderness campers on the State Forest rustic camp areas are required to check in at Park Headquarters before heading east.

**Fulton Playground & Soccer Field**: Located on Central Street, this is a safe area for local youth to gather to play. This is a park location that will be part of the Keweenaw Connecting Communities.

**Gay Park**: County-owned Park overlooking the stamp and tailings in Lake Superior, located at the mouth of the Tobacco River. The park has picnic tables, BBQ grills, bathrooms, and a public beach.

**Gratiot River Park**: At the mouth of the Gratiot River in Allouez Township is a premier site for swimmers and rock hounds. This County Park is rustic without amenities. *This is a park location that will be part of the Keweenaw Connecting Communities*.

**Great Sand Bay Public Beaches**: State (MDOT) owned, near Owl Creek on M-26 in Eagle Harbor Township, 4 miles west of Eagle Harbor. Bathroom facilities and parking are provided along this picturesque lakeshore.

**Haven Park and Falls:** This County owned facility includes a pavilion including picnic and toilet facilities along with an attractive waterfall. The park is located across the road from beautiful Lac La Belle.

**Hebard Park**: A developed picnic and day use area with 990 feet of rocky shoreline. Picnic and toilet facilities are available. Owned by Keweenaw County

**Hunters Point**: This Park has access to 1700 feet of beach with beautiful hiking trails. An ADA parking area and boardwalk to the viewing deck are available. A grill and bathrooms are also available.

*Isle Royale National Park:* This remote island wilderness area is a part of Keweenaw County and is best known for its extensive hiking trails, camping, wildlife, and excellent fishing. Island access to this park is by water or air. Commercial transportation is available in Copper Harbor or Houghton.

**Keweenaw Mountain Lodge**: The County owns and operates the Keweenaw Mountain Lodge which was originally developed as a Works Project Administration (WPA) project. Patterned after Camp David, the Presidential retreat located in western Maryland, the Lodge has a main building with dining room, conference center, bar, tennis court, nine-hole golf course, nine-hole disc golf course, motel units, and cabins. The Lodge provides an architecturally unique setting with log buildings interspersed in a pine forest. Operating generally from May 15 to October 15, it serves residents and tourists and is a major attraction in the County. A portion of the facility has been upgraded and winterized with some ability to be operational year round.

Keweenaw Underwater Preserve: The Keweenaw Peninsula juts out into Lake Superior and has often been a "catcher's mitt" for wayward ships. As a result, the 103 square mile preserve is host to a variety of shipwrecks including the U.S. Coast Guard Cutter Mesquite that ran aground in 1989 off the tip of the peninsula. Other shipwrecks are concentrated at Eagle River, Eagle Harbor and Copper Harbor. These wrecks are both steamers and schooners, primarily of the 1800s and very early 1900s. In addition to shipwrecks, the Keweenaw is a popular area for exploring underwater geologic formations. Large deposits of copper and sometimes silver can be found in this region. Visibility is generally excellent and usually exceeds 35 feet. A maritime museum in Eagle Harbor highlights these historic shipwrecks.

*Lake Bailey Island*: The County owns this island which is used primarily for primitive camping, day use, and ideal for fishing.

**Lake Medora Islands**: Several islands in Lake Medora are owned by the County and are used by fisherman for primitive camping. There is a public access site on the east side of the lake where boats can be launched.

**Lake Manganese**: Owned by the state of Michigan, it is a great inland lake and is excellent for swimming, fishing and canoeing.

**Mohawk Park:** Known as the Old School Park is a community playground on US 41. A pavilion commonly used as a band stand, swing set, slides, merry-go-round and volleyball courts lure children of all ages is owned by Allouez Township. This is a park location that will be part of the Keweenaw Connecting Communities.

**Riverside Park**: County picnic area that is a popular site for fishing and smelting during the spring of the year. It is located on the Little Gratiot River near Lac La Belle.

**Seneca Lake**: This Allouez Township recreation area is along Cliff Drive. Picnic tables, fishing dock, and canoe launch make the location family friendly. *This is a park location that will be part of the Keweenaw Connecting Communities*.

Silver River Falls Park: A small roadside park for viewing the Silver River Falls. Owned by MDOT.

**Snow Thermometer Park**: Along US 41 in Allouez Township's north end is the famous Snow Thermometer designed by Byron Muljo while working at the County Road Commission. This area is complete with picnic tables, BBQ pits, bathrooms, and hiking.

**Tobacco River Mouth:** This County recreation area is popular with fishermen despite its undeveloped state. Work is underway to develop this area into a picnic and boat launching site with handicap access.

**Veale Park**: This Keweenaw County owned park is primarily used for picnics and day use, includes picnic facilities, toilets, and 235 feet of Lake Superior frontage on Five Mile Point.

**Veterans Park** on US-41 Ahmeek: A tourist information center, toilets and a Veterans Memorial are located there. Owned by MDOT.



There are several State-owned marinas and harbors of refuge in Keweenaw County located. Eagle Harbor, Copper Harbor, and Lac La Belle are all harbors of refuge for mariner traffic. Each also has a state owned Marina. Copper Harbor and Lac La Belle were upgraded in 2002 and 2010 respectively.



Lake Bailey, Lake Medora, and Thayers Lake all have state owned boat launches. Each site is equipped with a dock and restroom facilities.

**Trail systems:** An interconnected ATV and snowmobile trail system connects the communities of Keweenaw County. This system provides a vital economic resource for businesses that rely on tourism. The majority of the trails are on private forest property, and continued access is based on 1-year contracts. There is a well-developed non-motorized trail system on municipal-owned land in and around Copper Harbor and Fort Wilkins that provides skiing and snowshoeing activities in the

winter, biking, and hiking during non-winter months. The system, maintained by the Copper Harbor Trails Club (non-profit) is recognized by the International Mountain Bike Association as a Silver Level Ride Center, one of only seven Ride Centers in the world. A number of the nature preserves in the County also maintain hiking trails for visitors. The State, County, Township, and Private partnership is a perfect example of working together. Donations are accepted and tax deductible when made payable to the CHTC.

Silver Level Riding Trails near Copper Harbor Photo courtesy of Hansi Johnson



### **COMMUNITY RELATIONS**

The Keweenaw County Board of Commissioners maintains a number of affiliations with regional organizations, allowing federal and state program resources to flow into the county for the benefit of residents. Organizations include the Western Upper Peninsula Planning and Development Regional Commission, the Western Upper Peninsula Health Department, the Baraga-Houghton-Keweenaw Community Action Agency, the Houghton-Keweenaw Conservation District, Western Upper Peninsula Manpower Consortium, the Western Upper Peninsula Resource Conservation and Development Council, and the NorthCare Network. These affiliations represent a diverse network of economic, natural resources, and social service resources.

Within the County, each Township seeks to maintain its own identity despite the very small population of the County. All Townships maintain their own township boards but due to limited budgets, planning and zoning activities in four of the Townships are performed by the County. Eagle Harbor Township is the only Township that performs its own planning and zoning functions. The County strives to include the townships and village in zoning and land use decision making.

This "Blue Print for Tomorrow" plan is being completed by the Keweenaw County Planning Commission with input from the Townships. At least three land use planning discussion meetings were held in each township and Ahmeek prior to submitting this final plan to the County Planning Commission. Eagle Harbor, Schoolcraft, Calumet Township and Copper City have been consulted on any change near the township or county boundary.

#### 1.8 ISSUES AND OPPORTUNITIES

### VILLAGE OF AHMEEK ISSUES AND OPPORTUNITIES

<u>Opportunity – Walkable Community:</u> Ahmeek is the only village in the County. Nestled within Allouez Township, it is the reviving small town. The Village Hall located on Vivian Street is next to the Fire Hall. The mixed use community desires more store front business. Residents take pride in their homes and believe rejuvenation "Starts At Home."

<u>Opportunity – Municipal Services:</u> The Village has natural gas, electricity, water and a sewer system. The fire and rescue unit also has medical first responders. The Village Council is eager to work with individuals who desire to come to the Village and be a part of the progress.

<u>Opportunity – Parks and Recreation:</u> The Ahmeek Park is home to the annual 4<sup>th</sup> of July festivities sponsored by the fire and rescue department. The Ahmeek park is a large facility available for community and family activities.

<u>Issue – Drainage System</u>: The drain system surrounding the Village was installed to divert runoff water around the village. Put in place through a FEMA program, the ditching needs to be maintained. The Council is looking for creative ways to mediate the brush and enhance usability.

<u>Issue – Streets, Buildings, & Sidewalks:</u> The low amount of revenue generated by the village taxes does not cover the desired improvements to the streets and sidewalk system. Many buildings are abandoned and left in disrepair. The community is working on removing blight and creating an environment for growth.

### ALLOUEZ TOWNSHIP ISSUES AND OPPORTUNITIES

<u>Opportunity – Gateway Community:</u> Allouez Township is the gateway to Keweenaw County. It enjoys family-oriented activities. The possibilities for manufacturing growth are increased with the availability of natural gas, municipal water, industrial power capability, and high-speed internet access. This can create potential employment opportunities within Keweenaw County. The Township has numerous attributes that make it an attractive place to live including a stable non-seasonal population base and wide range of age groups.

<u>Opportunity – Historic Resources:</u> The Township is the location of major centers of historic mining activities along the spine of the peninsula. This rich history has provided tremendous historic resources that can be enhanced and built upon in order to preserve and enhance community character and economic opportunities. Preservation of each community's heritage provides each with its own identity and link to the past. The industrial history of the mining era is a plethora of structures just awaiting a new manufacturing boom.

<u>Issue – Decreasing Ad-Valorum Tax Base:</u> With the increasing number of tax exempt organizations preserving the Keweenaw, the ad-valorum rolls continue to diminish. The need for public safety does not decline with private ownership. The Township must maintain fire protection and the County must maintain Law Enforcement with the reduction in tax base.

<u>Issue – Land Divestiture</u>: Large tract forest owners (example: GMO) are expected to continue to divest of large tracts of timberland throughout the County. The long enjoyed "open door" policy to these lands is threatened by fragmentation of ownership. The divestiture also threatens trail access unless permanent easements are secured for the future.

<u>Issue – Watershed Protection</u>: Water resources are an important attribute to the health of Allouez Township. These resources, both surface and groundwater, provide for a healthy community and environment. Protective measures that regulate the extent and type of development need to be enacted to protect these resources.

<u>Issue – Abandoned Buildings & Junk:</u> A number of old buildings have been abandoned and have succumbed to deterioration rendering many beyond rehabilitation. Measures must be taken to remove these hazards that are both a blight and danger to the community. Junk vehicles and lack of property maintenance are an ongoing problem that needs to be addressed through township ordinance provisions.

<u>Opportunity – Public Services:</u> Many areas of the Township enjoy both public water and sewer systems. These systems should be promoted in order to encourage both commercial and residential developments in close proximity to existing development patterns. Allouez Township has economic opportunities not present in other areas of the County due to its year-round population, availability of business and industrial properties.

#### EAGLE HARBOR TOWNSHIP ISSUES AND OPPORTUNITIES

**Eagle Harbor Zoning and Land Use Plan** Eagle Harbor Township is zoned independently from the County ordinance. The zoning ordinance and their land use plan are available on the township website at <a href="http://www.eagleharbortwp.org/">http://www.eagleharbortwp.org/</a>

## **GRANT TOWNSHIP ISSUES AND OPPORTUNITIES**

<u>Issue – Decreasing Ad-Valorum Tax Base:</u> With the increasing number of tax exempt organizations preserving the Keweenaw, the ad-valorum rolls continue to diminish. The need for public safety does not decline with private ownership. The Township must maintain fire protection and the County must maintain Law Enforcement with the reduction in tax base

<u>Issue - County Decision Making:</u> Keweenaw County controls land use planning and zoning within the Township. Grant Township residents and the Township Board have a strong voice in land use

and zoning decisions. The County Planning Commission supports and respects local concerns regarding growth.

<u>Opportunity - Community Enthusiasm:</u> Grant Township has committed individuals representing the diverse composition of the community that desire to plan for their own destinies. The community recognizes the tremendous resources of the Township, both environmentally and economically. The need to make wise land use decisions into the future that are consistent with wilderness preservation and low-impact usage is a community priority.

<u>Issue - Community Character:</u> The Township continues to pursue development with regard to the existing wilderness character of the community. New businesses and new homebuilders are encouraged to recognize and adapt to the character of the entire community.

<u>Issue - Land Divestitures:</u> GMO is divesting large parcels of undeveloped land and lakeshore that have been largely open for public access. In the past, this land has provided rich natural habitats for native species and recreational opportunities. Human powered access only to these lands puts in danger the accessibility of those with mobility issues.

<u>Issue - Trail Access:</u> Multi-season trails (specifically snowmobile and ATV) are vital to Copper Harbor and the local tourism-based economy. Access is only provided through annual permission. These trails must be permanently secured to protect and enhance the local economy.

<u>Opportunity - Public Lands:</u> Grant Township has a large amount of public lands due to Fort Wilkins, the Tip of the Keweenaw DNR lands, and a recent 3000 acre sale with a conservation easement. GMO owns large portions of the Township and has shown cooperation in working with local interest groups in permanently securing parcels for permanent public access. Public lands are a tremendous asset to both residents and visitors for public recreation and also the preservation of unique areas. Maintaining access for all is important to the continued growth of the community.

<u>Opportunity - Ecosystem Preservation:</u> The Township contains unique and rare ecosystems that are under increasing development pressure and property division. There are active endeavors to protect these areas. The Keweenaw enjoys numerous local conservation organizations and individuals with interest in the preservation of unique and rare ecosystems through education, purchase, or conservation easement that can assist with these efforts.

<u>Issue – Invasive Species</u>: Invasive species include aquatic/wetland species and upland types. It is imperative that the public understand the dangers associated with potential cross-contamination. It is everyone's responsibility to be aware of the balance and be educated on impacts in order to protect the health of the environment

<u>Opportunity - Development Potential</u>: New housing starts continue. Developments within communities put pressure on existing public services which are being addressed by local

government. Power at Delaware does allow for development and could support industry and residential use alike.

<u>Opportunity – Tourism</u>: Increasing tourism in a responsible manner is necessary. Providing affordable housing and transportation for both seasonal and non-seasonal visitors will enhance tourism throughout the Township and County.

### HOUGHTON TOWNSHIP ISSUES AND OPPORTUNITIES

<u>Opportunity – Waterfront:</u> Houghton Township enjoys over three miles of Lake Superior shoreline including portions of Great Sand Bay. The proximity to Lake Superior makes the Township an attractive place to live and vacation.

<u>Issue – Seasonal Ownership:</u> Eighty percent of the households in the Township are seasonal, with the majority of the homes located in Eagle River and along the Lake Superior coastline. These homes may in the future be converted to year-round residences and the Township must be ready to provide services to a changing community. Because shoreline property is limited, future development may also extend pressure to larger parcels away from the coast.

<u>Issue – Population:</u> Due to the small year-round population of the Township, volunteers to serve on Township boards and volunteer committees are limited.

<u>Issue – Decreasing Ad-Valorum Tax Base:</u> With the increasing number of tax exempt organizations preserving the Keweenaw, the ad-valorum rolls continue to diminish. The need for public safety does not decline with private ownership. The Township must maintain fire protection and the County must maintain Law Enforcement with the reduction in tax base

<u>Opportunity – Historic Resources:</u> Houghton Township has a tremendous wealth of historic resources including many within Eagle River and the communities of Phoenix and Central. These places provide significant opportunities for preservation and promotion of the region's heritage resources. Private interests and public entities should build upon the region's heritage and its tourism draw. New development should complement the historic elements of the community.

<u>Opportunity – Physical Characteristics:</u> Houghton Township enjoys a number of significant features including portions of the Cliffs, Eagle River, Great Sand Bay, and many acres of forests. These features provide both scenic and recreational resources that should be preserved through responsible management in order to protect the attractiveness of the Township.

<u>Issue –Forest Resources:</u> Due to the divestiture of large land owners, access to forestlands and trails is at risk. Permanent public access must be acquired to protect long-enjoyed areas of the township and also the trail system that is vital to the economy of the area.

<u>Issue – County Decision Making:</u> Decisions in regard to land use are made at the County level. Land owners and Township officials do participate in County planning meeting and have had great impact on decisions being made regarding land use and zoning.

## SHERMAN TOWNSHIP ISSUES AND OPPORTUNITIES

<u>Opportunity – Quality of Life:</u> Residents enjoy a natural, rural quality of life, virtually unrestricted access to forestlands, and the smallest population in the County, 67 persons. The remoteness of the Township offers some protection from development. Preservation of large tracts of forestlands and maintaining the scenic buffers along roadsides will ensure the future quality of life in the Township.

<u>Issue – History:</u> Sherman Township has a number of historically significant sites and structures. Many homes and buildings are currently being restored and others are in need of restoration. The Gay School is owned by the Keweenaw County Historical Society. Open Wednesday and Saturday in the summer, they are always looking for additional financial resources and incentives for continued restoration this site and others which have potential as community attractions. The Gay Smoke Stack is a community monument to the men and women who worked hard to maintain Gay. It is in a tender state and needs to be structurally restored, and possibly be repurposed as a tower for communication purposes.

<u>Opportunity – Waterfront Development:</u> The Township has a number of waterfront areas that could be developed into recreational areas. The 'downtown' community park facilities include a pavilion and restrooms. This tourist draw is good for the area. There is a desire to increase opportunities for new business that complement the existing business in the Township.

<u>Opportunity – Development Potential</u> Development is primarily along the Lake Superior waterfront with housing units increasing. Other development potential is along the routes from Gay to Mohawk and Lake Linden along existing roads. The ability to allow small residential development where utilities exist would maintain the access to forestland through planned access points.

<u>Issue – Tax Base</u>: The Township is severely limited in revenues due to a small population and only one commercial establishment, the Gay Bar. Without expansion of business opportunities, the Townships' potential for growth is limited. Development that does occur must incur the costs of public facility expansion rather than place the burden on existing residents. The increasing transfer of property from the Ad valorem roll to exempt impacts even the smallest of townships.

<u>Issue – Junk Vehicles:</u> Many properties have numerous junk vehicles and unmaintained lawns that are an eyesore. Currently a township junk/blight ordinance does not exist to discourage this practice.

<u>Issue – County Decision Making:</u> Due to its small population, Sherman Township has historically had little influence on County decision-making. Although the Township accounts for only a very

small percentage of the County population it provided the largest percent per capita of participants in the land use discussions. The residents embrace the opportunity to direct its own future. Despite its limited population a new planning potential was created through the Land use meetings held here.

<u>Issue – Decreasing Ad-Valorum Tax Base:</u> With the increasing number of tax exempt organizations preserving the Keweenaw, the ad-valorum rolls continue to diminish. The need for public safety does not decline with private ownership. The Township must maintain fire protection and the County must maintain Law Enforcement with the reduction in tax base.



July 4<sup>th</sup> Parade in Gay

Photo by Chris Strykowski

## KEWEENAW COUNTY ISSUES AND OPPORTUNITIES SUMMARY

<u>Issue – Growth:</u> Keweenaw County population has stagnated. An increase in seasonal housing provides additional tax revenues. The best method for growth is to increase the local job market.

<u>Issue – Public Safety:</u> As the number of tourists increases so does the number of calls for emergency services. The manpower and equipment necessary to preform rescues is expensive. The increase in lands available for human powered activity, also has limited the accessibility and response time for the responders.

<u>Issue – Age Structure:</u> As populations grow older additional services are necessary to meet specialized needs: health care, transportation, emergency and public safety services, elder care and housing. Traditionally, these needs were often met by younger family members; however, emigration trends (or population outflow) may increase residents' reliance on community services.

<u>Issue – Land Divestiture:</u> GMO is a land holding company and is expected to sell off large parcels of lakefront and forestlands throughout the County as opportunities arise. GMO currently restricts some types of trail use on their properties. Because GMO is the primary landholder in the County, loss of public access to lands and trails is at risk unless action is taken to secure access through purchase or permanent easement. As fragmentation of ownership continues, it will be more difficult in the future to secure these lands.

Issue – Energy Access & Affordability: Keweenaw County residents and businesses pay some of the highest electric utility rates in Michigan. The County is serviced by the Upper Peninsula Power Company (UPPCO), an investor-owned utility, and the Ontonagon County Rural Electrification Association (OCREA), a member-regulated electric cooperative. As of January 1<sup>st</sup>, 2017 UPPCO residential customers paid between \$0.23/kWh and \$0.27/kWh, which was 46% higher than the state average for investor-owned utilities. This high cost represents a challenge to economic development, particularly energy intensive industries, and increase cost of living for County residents. Keweenaw County also has no electrical power generation source and relies on a single 69 kV transmission line (operated by the American Transmission Company) to supply its electricity needs.

Another energy-related challenge for the County pertains to energy access. In much of the County residential and commercial properties do not have access to natural gas. The northbound natural gas transmission line operated by Northern Natural Gas Company services only a narrow corridor of concentrated development at the southern part of the County and ending in Mohawk. The lack of natural gas access is a deterrent to manufacturing-based economic development and creates an over-reliance on other, often more expensive, heating energy sources such as propane, kerosene, and wood.

### Opportunity – Renewable Energy & Brownfield Redevelopment:

Given the area's high energy cost and low energy demand, distributed renewable energy projects have relatively rapid payback periods and high return on investment (ROI). Keweenaw County boasts substantial off-shore and on-shore wind resources that have the potential to meet much of the area's energy needs.

Renewable energy projects developed on brownfield sites offer the County an opportunity to: 1) generate pollution-free energy for local residents and businesses, 2) help improve the local tax base, 3) create jobs, and 4) convert blight into economic and educational opportunities. A recent analysis by the EPA has identified two brownfield sites in the County with the potential to produce a combined 18 MW from wind resources. The two identified sites were the former Calumet Air Force Station (estimated wind capacity of 9.5 MW) and a 59-acre site one mile west of Delaware, MI off Highway 41 (estimated wind capacity of 8.4 MW).

Additional research indicates County brownfield sites can be used for solar power generation as well. Based on solar resource estimates, 1 MW of solar power can be generated on as little as 4 acres of redeveloped property. Applications for non-commercial scale solar and wind systems may also be financial viable under utility the managed net-metering program that allows power generated from those sources to be sold back to the utilities.

<u>Opportunity – Rural/Wilderness Character:</u> Keweenaw County has many unique characteristics: a stunning visual landscape, inland lakes and streams, many miles of Lake Superior shoreline from sandy to cobble beaches, the ridges of the Keweenaw uplift and unmatched wilderness access and recreational opportunities. With proper stewardship of the land, the area will continue to be a draw to residents and tourists alike. Measures must be taken to balance the influx of people with protection of the characteristics that draw people to the area.

<u>Issue – Decreasing Ad-Valorum Tax Base:</u> With the increasing number of tax exempt organizations preserving the Keweenaw, the ad-valorum rolls continue to diminish. The need for public safety does not decline with private ownership. The Township must maintain fire protection and the County must maintain Law Enforcement with the reduction in tax base

<u>Opportunity – Visual Landscape:</u> The stunning visual landscape of Keweenaw County includes everything from tree lined roadways to Lake Superior views. The roadways currently include many areas of untouched beauty that can be preserved for the future through action such as easements or buffering requirements.

<u>Issue – Environmental Protection:</u> Keweenaw County enjoys a healthy natural environment with a number of unique ecosystems. Because the environment is a fragile balance of many elements that do not follow political boundaries, all factors, including watersheds and wetlands must be considered when making development decisions. Human impacts to the environment come in many forms, and can include everything from sedimentation from over clearing of a lot to contamination from an ineffective septic system. Invasive species include aquatic/wetland species and upland types. It is imperative that the public understand the dangers associated with potential cross-contamination. It is everyone's responsibility to be aware of the balance and be educated on impacts in order to protect the health of the environment.

<u>Issue – Age Structure:</u> The median age of 50.6 (2010 Census) in the County is higher than other areas of the State. An older age group indicates the retirement trend of the community but also indicates the decline of numbers in the younger age groups. Stability of the County may in the future depend on an influx of younger families. The inclusion of services directed to an aging population is a target. Keweenaw County will have difficulty in projecting future population trends as the area is more affected by in-migration than birth and death rates.

<u>Opportunity – Diverse Communities:</u> Keweenaw County is composed of five townships, all with diverse populations, characteristics, and needs. All townships want a say in the future of their communities. The County does recognize and is being responsive to the desires of the local communities when making land use decisions within Keweenaw County.

<u>Opportunity – Economic Development:</u> Each community has unique assets with regard to economic development and tax base growth with the potential for additional growth in keeping the entire county a highly desirable place to live, work and play. It is anticipated the future of Keweenaw County will primarily relate to recreational outdoor activities, ongoing forestry activities, and new manufacturing facilities. Lands must be kept intact to support all. To balance development with potential opportunities, areas can be planned to cater to certain land uses such as Eagle Harbor as a seasonal/retirement community, Copper Harbor a resort community, Mohawk a mixed-use community, and interior lands continuing as large tract forestry/recreational lands.

<u>Opportunity – Residents and Visitors:</u> There is a tremendous mix of people and characters who contribute to the Keweenaw County community. The residents and homeowners of the County are knowledgeable, skilled, and diverse, all sharing the love of Keweenaw County. These people are willing and able to offer their services in guiding the future of the Townships and County to preserve its beautiful and distinct character.

<u>Opportunity – Local Organizations:</u> Numerous organizations are available and willing to assist the County with historic and land use preservation efforts in the Keweenaw. Good communication amongst these groups can result in a coordinated effort for preservation throughout the County. Using science based land use decisions, we can grow for our future.

<u>Opportunity – Regulation Interpretation:</u> Numerous concerns have been raised over current land use regulations in place often related to interpretation of the intent of the ordinance or consistency of enforcement. With a new land use plan in place that clearly states the desires of each Township and Keweenaw County, interpretation and enforcement will be easier in the future.

#### SECTION 2: VISION FOR KEWEENAW COUNTY

#### 2.1 INTRODUCTION

Section 1 of this plan detailed the historical and present situation in Keweenaw County while recognizing the issues and opportunities within each township. This background information provides an understanding of the forces that have shaped Keweenaw County. For the county to have a sound plan for future growth and development, it is essential that goals and policies to guide decision making are based on the community's overall vision for the future.

This section presents the overall vision for Keweenaw County, identifies goals and policies, and finally establishes a future land use plan to provide guidance in achieving vision, based on input from the community. In general, goals are broad statements that reflect desired future conditions that are both realistic and achievable. Policies define actions that can be taken to implement the goals. Based on identified goals and policies, Section 2.4 presents the Future Land Use Plan for Keweenaw County.

The backbone of Vision for Keweenaw County is the contributions of township committees that worked diligently to define needs within their own communities. These ideas have been incorporated into Section 2.2, The Vision for Keweenaw County, with specific results of township efforts from 2016 (surveys, etc.) included in Appendix B. While the plan is based on the best information available and the goals of county and townships at this time, changing needs and desires within the area, or changes in local population or the economy may mean that the Future Land Use Plan will need re-evaluation over time. The plan must remain flexible in order to respond to changing needs and conditions while still providing a strong guiding mechanism for future land use decisions.

#### 2.2 THE VISION FOR KEWEENAW COUNTY

<u>Vision:</u> Keweenaw County will be a county that is environmentally and economically sustainable through the responsible management of land and water resources for the benefit of present and future generations; a place where residents and visitors have continued access to the many scenic, recreational and historical assets of our area; and a county that respects the choices of its townships in defining their own character, priorities and development patterns. Keweenaw County will be a county that is capable of transition to new technologies supporting recreation, residential, commercial, and manufacturing through appropriate land use.

#### 2.3 GOALS AND POLICIES

### **Goal 1 – Future Growth and Development:**

Retain the character of Keweenaw County by ensuring orderly future growth and development consistent with local community values.

- Policy 1-1. Through land use regulation ensure new developments function as extensions of existing development patterns including: Copper Harbor, Lac La Belle, Gay, and Eagle River as extended vacation, seasonal, and permanent residential communities; Allouez, Ahmeek, Mohawk, Fulton, each as a focus for permanent residential/business development; and Copper Harbor and Lac La Belle as tourist-oriented business/residential communities.
- Policy 1-2. Continue levels of residential use based on compatibility, parcel size, maximum density, and availability of existing and proposed sewer and water systems, and provide areas in the County for large lot residential development and varied housing opportunities.
- Policy 1-3. Encourage industrial, commercial and business development that is appropriate to the area based on compatibility with surrounding uses, and availability of high speed internet, energy, sewer and water systems, and accessibility.
- Policy 1-4. Allow home-based businesses as a viable component of the local economy, but carefully review proposals for impacts on adjoining properties (i.e. traffic, parking, lighting), as well as the overall character of the areas in which they would locate.

  Place strict controls on conversion of properties to permanent commercial uses.
- Policy 1-5. Minimize removal or disruption of historical structures, whether or not listed on the state and federal register of historic places, and preserve architectural character of communities through design regulations with strict controls in historical and sensitive areas of the County.

# Goal 2 - Open Space:

Preserve the quality of life and economic value of land by actively protecting contiguous open space for its natural, scenic, and recreational benefits.

Policy 2-1 Create and maintain a Keweenaw County Priority Lands Map and list of targeted areas for public acquisition based on scenic and natural value, recreation potential, and risk of loss.

- Policy 2-2 Use available resources and establish funding sources to pursue protection of valuable open space with emphasis on 1) important scenic views, 2) valuable timberlands and recreation areas, 3) trails and other open space linkages.
- Policy 2-3 Establish partnerships with federal and state governments, the townships, and land conservancies in order to accept grants and donations for purchase or acquisition of conservation easements on key tracts of land based on the Keweenaw County Priority Land Map, while limiting the reduction of revenues to the municipality by maintaining ad valorem taxes.
- Policy 2-4 Require preservation of the landscape in its natural state as practical, by using topography, natural vegetation buffers, natural drainage ways, and setback requirements to determine road, lot, and development configurations.
- Policy 2-5 Require existing natural vegetation to be maintained in front of and around new development, as practical, to provide separation from roadways and buffering for adjoining properties. Revegetate disturbed areas with native species. Apply these same requirements to the change or expansion of nonconforming uses as defined within the ordinance.
- Policy 2-6 Maintain and enforce current sign regulations. Encourage signage that is compatible with its surroundings and promotes the character of the area (ex. Keweenaw County roadside park signage).

#### **Goal 3 – Ecosystem Protection:**

Protect ecosystems including unique natural features, dunes, basalt rock outcrops, plant communities, lakeshores, wetlands, high risk erosion areas, and watersheds.

- Policy 3-1. Maintain maps and lists of sensitive areas. Support public and private efforts to protect these lands through acquisition, conservation easement or other preservation efforts.
- Policy 3-2. Recognize and balance the value of natural features when evaluating development proposals. Require and work with developers to incorporate conservation principles and open space protection during site plan review.
- Policy 3-3. Use state and federal resources to guide protection.

#### **Goal 4 – Heritage Preservation:**

Preserve the heritage of the area through protection, enhancement, and promotion of important archeological and historical sites.

- Policy 4-1. Support efforts and offer incentives for the adaptive reuse or preservation of historical structures and sites within the County.
- Policy 4-2. Encourage the protection and preservation of historical sites and artifacts as properties are developed.
- Policy 4-3. Work with historical societies and related organizations to promote heritage tourism within the County and educate residents and visitors about the unique history of the area.

# Goal 5 - Tourism:

Support and promote Keweenaw County as a four-season tourist destination.

- Policy 5-1. Secure permanent easement or purchase existing trail systems and further develop the trail network in order to promote enjoyment of the outdoors and secure access for motorized and non-motorized activities.
- Policy 5-2. Encourage businesses that promote and support wilderness-oriented tourism opportunities and outdoor recreation.
- Policy 5-3. Endorse efforts to expand year-round opportunities at existing public recreational facilities.

#### **Goal 6 – Sustainable Forests:**

Support the timber products industry and their contributions to the local economy as employers and large landholders within the County.

- Policy 6-1. Cooperate with local timber products industry including landholders, loggers and wood products processors in identifying and preserving sustainable timber areas within the County through zoning.
- Policy 6-2. Support Sustainable Forest Initiative, further information is available at sfiprogram.org.

# **Goal 7 – Keweenaw Decision Making:**

Realize the vision of Keweenaw County through effective zoning regulations, consistent decision-making and coordination with all of the Townships and residents of Keweenaw County.

- Policy 7-1. Make multi-year, land-use planning a conscious and consistent element of county government, including an annual review of goals, policies, and accomplishments.
- Policy 7-2. Be receptive to township-based review processes that provide recommendations to county decision-makers. Be responsive to township concerns relating to planning and zoning.
- Policy 7-3. Encourage Township participation in land use decision-making through their local 'town-hall' events, surveys, and educational opportunities.
- Policy 7-4. Maintain working relationships with all levels of government to coordinate decision making.

#### 2.4 FUTURE LAND USE PLAN

The future land-use plan provides a blueprint for future growth as well as ways to maintain the rural, wilderness character of Keweenaw County. Growth is important for Keweenaw County, but if it is not balanced and sensible; the County will pay a high price and ultimately lose the intrinsic value that makes it unique. It is important to remember that Keweenaw County is a rural county with unmatched wilderness characteristics, and maintaining this character is a vital component of this plan. It is also important to consider that all the lands of the County contribute to the economic prosperity of the area, although contributions toward quality of life, heritage, wildlife habitat, water quality and open space protection may be difficult to quantify.

A future land-use plan for the County is presented in the following narrative and map, which provides a physical representation of the goals and policies. The plan identifies various land-use categories, each with different land-use/development objectives. It draws upon existing land-use patterns, environmental features and future growth expectations. In summary, the land-use plan relates to the goal statements identified in Section 2.3 in the following ways:

- Maintains rural and open landscape character by encouraging low intensity development in rural-settings and wilderness areas, and it directs high intensity development to established communities offering existing public services.
- Directs intensive development away from sensitive environmental areas and areas with environmental limitations.
- Protects and maintains Keweenaw County's natural resources, specifically its timber resources and related recreational opportunities.
- Maintains the County's visual character by identifying and protecting important viewsheds.
- Encourages business, commercial and industrial development in areas with existing public utilities, and where it is compatible with surrounding uses.
- Promotes continuation of resort-residential and resort-service development that compliments the County's natural environment.
- Provides for areas of large-lot, residential development, where open space design would be encouraged.
- Provides for areas of large-lot industrial and manufacturing.

# PLAN CLASSIFICATIONS

The following text presents each of the major land-use classifications as depicted on the Preferred Future Land-Use Map. The specified classification identifies areas for that particular use to occur but does not limit the use to that location. It is not the intent of the plan to see the entire area develop but rather a specified use be allowed if consistent with the type, location, and density of the development in the event of a land conversion. In some cases, the preferred future land use is different than current zoning allows, and thus changes in zoning may be necessary to guide the County towards its preferred future. The eleven primary land-use Plan classifications and their purpose are as follows:

# **AGRICULTURAL (AG)**

The AG use is designed to provide for continuation of the limited agricultural activities in the County. These areas are designed to protect those areas suitable for agricultural pursuits and to encourage "hobby" farms within the County. Open space development options are encouraged in order to protect the character of the County. Agricultural lands have been identified primarily on inland properties of Allouez Township where they are compatible with the surrounding uses.

#### **CONSERVATION DEVELOPMENT – ENVIRONMENTAL PROTECTION:**

Two categories of use have been identified under the Conservation Development – Environmental Protection land use for planning purposes. In order to identify those lands to be managed primarily for conservation, versus lands for timber management, the following categories have been developed:

# **CONSERVATION – ENVIRONMENTAL PROTECTION (CD-EP):**

The CD-EP designation has been created to identify environmentally critical and important recreational lands within the County. The purpose of the C-EP areas is to preserve total environment character, particularly in connection with unique ecosystems and significant water resources within the County. This use identifies land areas which are:

- To be kept open to preserve unique ecosystems and endangered species.
- To be kept open to protect sources of water supplies, (i.e. aquifer recharge and discharge, and potential water impoundment areas).
- To protect scenic viewsheds that defines the wilderness and waterfront beauty of the County.
- To be kept open from development because of unsuitable and unstable soil conditions.
- To be managed for conservation but may allow for site specific and compatible types of recreation as well as timber management.

Lands identified for this future use include those that are currently or are soon to be held in conservancy ownership, public lands (or soon to be) that have been identified for preservation

and compatible recreation, small/undevelopable coastline where preservation is in the best public interest, and those lands where owner intention has indicated future conservation efforts.

# **TIMBER RESOURCE (TR)**

The TR use has been created to identify and provide for the continuation of forest programs and related uses in those areas best suited for such activities. It is intended to encourage the commercial growing and harvesting of timber, and to protect compatible recreational opportunities. The primary purpose of these areas is to protect and encourage the economic, sustainable growing and harvesting of timber and related recreation by protecting large blocks of contiguous forestland. Camps and recreational dwellings are considered compatible within these areas, however, small lots and permanent residential occupancy should be discouraged.

# **COUNTRY ESTATE (CE)**

The CE use is designed to provide for areas geographically well suited for large lot, single-family residential development. The purpose of these areas is to provide for a recommended minimum of 5-acre lots, and to preserve the rural, open character of the community. This designation promotes and encourages residential development with attention to an open-space design. The Garden City Road provides example of areas well-suited for CE designation.

#### **RESIDENTIAL:**

Residential areas are established to provide the full range of residential housing types in an environment where all of the facilities for urban living, such as community sewer and water facilities are available. Residential use includes the following categories:

#### **SINGLE-FAMILY RESIDENTIAL (R1)**

#### TWO AND MULTI-FAMILY RESIDENTIAL (R2)

Areas identified for residential development are consistent with existing settlement patterns. This pattern has worked well for the County, and allows diversity of housing options for high intensity development within the core communities of Allouez, Ahmeek, Fulton, and Mohawk.

### RESORT RESIDENTIAL (RR)

The purpose of the RR use is to accommodate single-family residential homes at varying densities with the type and character that would allow possible conversion to year-round dwellings on or near waterfront, or woodland. Areas considered for resort residential development should have road access, and suitable natural topography. The land must be able to meet standards for potable water supply and sewer/septic. Lands identified for RR use primarily includes Lake Superior and inland shoreline and appropriate adjacent areas throughout the county.

#### **RESORT SERVICE RS**

The purpose of the RS use is to provide recreation or vacation goods and services (restaurants, lodging, small gift shops, outdoor outfitter, etc.) for families living in or using resort or vacation areas. Development should be limited to those uses that are compatible with the wilderness/resort character of the County. The RS future land use is focused in Copper Harbor, Lac La Belle, and Delaware with small amounts of RS along M-26 in Eagle River and Eagle Harbor, and along US41 in Allouez and south of Mohawk. It is recommended that RS be carefully defined to include only those goods and services that are compatible with the character of Keweenaw County or a new more restrictive use be developed that provides for more guidance to future development throughout the County.

# **BUSINESS(B1)**

The B-1 use is established to provide areas for commercial establishments that offer a wide range of goods and services. Uses such as retail and wholesale activities; consumer services; professional, business and government offices; and other compatible uses should be directed to these areas. The business category encourages a mix of uses primarily focused along US 41 from Allouez to Mohawk.

# LIGHT MANUFACTURING (M1)

The M-1 use is established to provide areas for light, industrial, office and administrative uses having few, if any, adverse effects on neighboring properties. The M-1 use has been identified for areas along US 41 and in Mohawk where compatible with the surrounding property. Because of the close proximity to residential homes, high standards of protection of the human environment are expected in these areas.

#### GENERAL MANUFACTURING (M2)

The M-2 use is established to provide areas in which manufacturing and related commercial operations are the principal use of the land. Such uses have some adverse effects on surrounding properties, and are not compatible with residential and retail uses. The former Louisiana Pacific Sawmill site has been identified for this use due to its accessible location along US 41 and its compatibility with surrounding uses of agriculture and timber resources. Delaware should also be considered for light or general manufacturing.

#### PLANNED DEVELOPMENT DISTRICT (PDD)

PDD includes areas suitable for complex projects which may consist of more than one use and more than one building. The PDD should be designed to take maximum advantage of unique site characteristics and potentials, along with original design and use concepts. PDD designs are submitted for review under the Planned Development Procedure. -

# **SECTION 3: IMPLEMENTATION**

#### 3.1 INTRODUCTION

The vision of The Future Land-Use Plan will only be realized through the cooperation of Keweenaw County residents and the committed leadership of elected officials. A plan is one of the best tools a

community has to better guide its own future without being dominated by outside influences that may have an adverse effect on the interests of the community.

The adoption of this Plan and implementation recommendations by the Keweenaw County Zoning/Planning Commission should not be considered the end of the process but a sign of commitment to the planning process and its continued response to changing needs within the County. Identified below are primary measures and the agency with lead responsibility for implementation.



#### 3.2 IMPLEMENTATION MEASURES

<u>Plan Adoption and Support</u> – Following adoption of the updated Plan by the Keweenaw County Planning Commission, the support of the Keweenaw County Board and all Townships within the County is recommended. The County-wide support provides additional credibility and support to the plan and the planning process.

Lead Responsibility: Keweenaw County Planning Commission

**Review of Zoning Ordinance and Maps** – Several of the recommendations of this Plan may require amendments and/or revisions to the County Zoning Ordinance. The Planning Commission has lead responsibility for considering and drafting changes or recommending a re-write of the Zoning Ordinance and Maps. Through the process, the Commission would re-evaluate the appropriateness of existing zoning provisions for all property within the County.

Lead Responsibility: Keweenaw County Planning Commission

# Explore Options for Protecting Assets of the County – Delegate Citizen Land Protection Committee to begin immediate work towards the identification, evaluation and acquisition of important properties within the County. This advisory committee would serve as a coordinating body to all public and private preservation efforts within Keweenaw County. Immediate attention should be paid to permanent protection and development of the multiuse trail system and protection of critical viewsheds.



 Lead Responsibility: Keweenaw County Planning Commission (Recommendations made to County Board)

<u>Develop Intergovernmental Coordination Strategies</u> – This Plan specifically recommends closer land use decision coordination between the County, townships and other governmental units. Cooperation agreements would ensure forward progress on the measures of this plan.

• Lead Responsibility: Keweenaw County Planning Commission and Townships

<u>Monitor Progress</u> –The Plan should be regularly visited in order to ensure its consistency with current needs of the County.

• Lead Responsibility: Keweenaw County Planning Commission

<u>Citizen Responsibility</u> – The citizens of Keweenaw County are responsible for the ultimate success of this Plan. In order for the goals to be achieved, County residents must stay informed and participate in carrying out the vision for the future.

• Citizens of Keweenaw County

#### 3.3 RECOMMENDED FUTURE PROJECTS FOR KEWEENAW COUNTY

A number of future projects were identified in Keweenaw County and its communities during the planning process. The following is a list of future projects as of August, 2016.

# **Keweenaw County**

- Provide broadband service to the County.
- Develop/Implement energy strategies encouraging use of alternative energy sources.
- Support the improvement of cell, wireless and fiber optic communications for residents, current businesses and future businesses in Keweenaw County.
- Upgrade the Frank Stubenrauch Park at the mouth of the Gratiot to include restrooms, and a public campground with a host to collect overnight use fees.
- Encourage cross training between all township fire departments/rescue units. Add more first responders at the EMT or higher level. Support county-wide fire hall expansion.
- Expand/improve county parks, motorized and non-motorized trails and recreational opportunities to include county-wide fishing piers, Water Park and a County RV Park.
- Support efforts to make the Keweenaw Mountain Lodge financially self-supporting, including consideration of lease or sale to a private entity.
- Develop and implement a county wide recycling plan to include a transfer station that could utilize biomass to create energy or recycle.
- Develop Mount Horace Greeley for manufacturing, research, tourism, housing, retirement community or a possible wind farm.
- Support business development in Keweenaw County from small local businesses to large corporate businesses including the development of responsible mining in the County (compliant with all Federal, State and Local laws and regulations).
- Create hard surface trails connecting all communities from Bumbletown to Copper Harbor and every small town in-between. Trails should be removed from the road side to best secure the safety of all users.
- Increase accessibility to all County Parks including boat launch or docking facilities.
- Create and implement a transportation plan for employees in the resort areas.
- Purchase new squad cars as necessary.
- Maintain and upgrade equipment for marine, ATV, and snowmobile patrol.
- Assist implementation with townships for invasive species control or eradication.
- Encourage establishment of Rustic Camping at Keweenaw Mountain Lodge with potential growth of water hook up and a dump station.

# **Ahmeek Village Future Projects**

- Maintain and improve Village water and sewer systems.
- Reconfigure and replace village sidewalks.
- Construct a new fire hall emergency responder building.
- Enhance Current Park to include bandstand, concessions, and indoor bathrooms.
- Create a community garden.
- Lead by Example and develop a Junk/Blight Ordinance to improve the appeal of the community.
- Work with Allouez Township to provide walking trails to connect the communities.
- Upgrade the Frank Stubenrauch Park at the mouth of the Gratiot to include restrooms, and a public campground with a host to collect overnight use fees.

# **Allouez Township Future Projects**

- Upgrade Township water and sewer systems.
- Develop a Blight Ordinance.
- Provide broadband service to the township.
- Continue to upgrade all township parks and connect the parks by a hard surface trail, safe for all users.
- Roof the ice rink
- Add picnic tables to parks create a more inviting atmosphere
- Provide hiking trails and campground at Seneca Lake
- Upgrade the Frank Stubenrauch Park at the mouth of the Gratiot to include restrooms, and a public campground with a host to collect overnight use fees.

# **Grant Township Future Projects**

- Provide broadband service to the township with the benefit of increased commerce.
- Preserve ADA access to Deer Lake.
- Promote main street programs in all communities.
- Update township water/sewer systems to support residential and business development.
- Create a safer and more welcoming environment with well-planned municipal parking, sidewalks, crosswalks and public restrooms with land acquisition or donation.
- Determine feasibility of Public Parking in the right of way for Ninth Street from M-26 to Bernard Street.
- Increase bicycle paths through the community off of Gratiot Street in Copper Harbor.
- Create safe access to east end of Lake Fanny Hooe bathing beach.
- Support growth of broadband providers.
- Create affordable housing for workers within communities.
- Create event parking within Copper Harbor and Lac La Belle allowing for egress of emergency services equipment.
- Develop and maintain a walking path from Lac La Belle to Bete Gris.
- Review plat boundaries to determine feasibility of Old Military Road Access on South side of Copper Harbor.
- Create open space picnic park area at new Lac La Belle Community Hall enhancing Union Park.
- Create and maintain a responsible recycling program with multiple municipalities.
- Develop storm sewers for Copper Harbor.
- Create AG area for possible inclusion of small rural airport with grass landing strip.
- Improve the communication infrastructure to current technology capabilities.
- Advance the awareness of and encourage participation in community recycling initiatives.
- Develop methods to boost recruitment and retention of skilled labor, and improve seasonal housing opportunities for this valued work force to support our tourism industry.
- Educate the township on the threats of invasive species and strategies to mitigate these threats, and create a community program to eliminate the invasion of spotted knapweed throughout the township including Bete Gris Beach.
- Work together with the Keweenaw County Historical Society to preserve/share our rich County history.
- With the assistance of the Trails Committee and the State of Michigan work to achieve year round motorized and non-motorized access on or near the current system.
- Montreal Falls Trail Head Initiative: Extend the Smith Fisheries Road to State land, where
  parking and pit toilets could be placed. Create better Hiking/Biking Trails to the Upper and
  Lower Montreal Falls.

Support public ownership of traditional logging roads such as the Clakr Mine, Burma,
 Mandan Loop, Smith Fisheries, Iron Gate, Sotala, Plante, and Mt. Houghton Road. State DNR or Local acquisition of Mandan, Smith Fisheries and other popular private held roads.

# **Houghton Township Future Projects**

- Provide broadband service to the township.
- Upgrade the Eagle River water system.
- Continue the Houghton Township building maintenance fund.
- Maintain and enhance playground and park areas within the township by connecting with hard surface trails to enhance the desire to move outdoors in a safe environment.
- Acquire from GMO the area just east of the ROW of M-26 at Ten Foot Falls.
- Create a storm drain and municipal sewer system.
- Increase areas for development of manufacturing along current Class A roads
- Work with Eagle Harbor Township to determine possible use and zoning of Mt. Horace Greeley.

# **Sherman Township Future Projects**

- Provide broadband service to the township.
- Upgrade Community Hall.
- Support Volunteer Fire Department with fire hall expansion.
- Continue develop at Township Park with restrooms, pavilion, tables, grills, bike racks and a Veteran's Memorial.
- Maintain water and sewer systems.
- Construct a public boat ramp at the mouth of the Tobacco River.
- Restoration and use of the Smoke Stack in Gay.
- Allow for M-1 on Gay Sands for possible granule facility.

# **Keweenaw County Road Commission**

- Construct a new repair and office facility.
- Purchase replacement tandem dump truck.
- Obtain new front end loader.
- Pave roads not on the Federal Aid List such as
  - o Brockway, Cedar Bay, Tamarack Waterworks, Cliff Drive, Bete Gris, and Sand Point.
- Review acquisition of private roads for long term all season access for recreational purpose.

#### 4. ATTACHMENTS AND MORE ACKNOWLEDGEMENTS

#### A Special Thank You to the Residents and Friends of Keweenaw County

To the volunteers who spent tireless hours working on the Future Land Use Plan and Map.

# **Ahmeek Village**

Mark Vivhivh, Amy Kumpula, Richard Pollotta, Coreen Balbough, Suean Sherna, Frank Sager, Dave Sundberg, Bill Lahnala, Jim Curtis, Dave Maki, John Kezele, Stephane Kezele,

# **Allouez Township**

Kevin Gherna, Renee Pinsonneault, Julie Newman, Mark Aho, Chris Cronenworth, Bob Demarios, Jon Soper, Charmaine Parsons, John Parsons, Natalie Brusso, Tammy Mottonen, Marlene Dukart, Brian Sickler, Charles Dennis, Susie Strucel, Curt Pennala, Bill Luokkanen, Gary Bracco, Bill Hannon, Pete Halley, Victor Tanskanen

# **Eagle Harbor Township**

Richard Probst, Jean Olson, Connie Eddy, Richard Harrer, Ann Johnson, Ole Van Goor, Mary Beyers, Bill Eddy,

#### **Grant Township**

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# **Houghton Township**

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# Thank You to those of Houghton County who gave input and took the time to listen to the presentations.

# **Copper City**

David Strand, Ann Standridge, Dawn Bardo, Daneil Bardo, Brenda Ollikainen, Maija Tolkkinen, Tonya Stefonich, Carol Wiitanen, Lesly Koski, Eleanor Rautio, Kim Spelich, Reed Rastello,

# **Calumet Township**

Paul Lehto, Beth Salmela, Debbie Aubin, Bob Zander, Jeff West, Dale Yeo, Tim Gasperich,

# **Houghton County Planning Commission**

**Keweenaw Economic Development – Jeff Ratcliffe** 

Robert Loukus, Evan McDonald, Eugene Londo,, Barbara LaFex Lewis, Matt Huuki, Chris VanArsdale, Dr. Timothy Sears,

# **Schoolcraft Township**

Joel Keranen, Kevin Codere, Susan Marcotte, Dennis Racine, Gary Wenberg, Charles Heide,

Western Upper Peninsula Planning and Development – Jerald Wuorenmaa and Steve Rouser