KEWEENAW COUNTY
‘BLUEPRINT FOR TOMORROW’
LAND USE PLAN

Prepared by: Western U.P. Planning & Development Region
On behalf of: Keweenaw County Zoning & Planning Commission
KEWEENAW COUNTY ZONING/PLANNING COMMISSION

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David Latvala
Robert Crampton
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Jack Treganowan
Mark Quicksilver
RESOLUTION

At its scheduled meeting on December 17, 2002 at the Keweenaw County Courthouse, the Keweenaw County Zoning/Planning Commission adopted the following resolution:

WHEREAS, the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan was prepared under the planning authority granted by P.A. 282, 1945 of the Michigan Statutes with the assistance of township citizen advisory committees, and

WHEREAS, Section 125.105 of the Michigan Statutes authorizes and empowers the County Planning Commission to adopt the Land Use Plan, and

WHEREAS, the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan with its accompanying maps, plats, charts, and descriptive and explanatory matter shows the Commission’s recommendations for the future development of the County, and

WHEREAS, a public hearing was held before the Keweenaw County Zoning/Planning Commission on December 3, 2002 to review and receive comment on the Land Use Plan, and

WHEREAS, the contents of the Land Use Plan were reviewed by the citizens and elected officials representing the municipalities within Keweenaw County, and

WHEREAS, the Keweenaw County Board of Commissioners has endorsed the Land Use Plan at the December 11, 2002 meeting,

NOW, THEREFORE BE IT RESOLVED, that the Keweenaw County Zoning/Planning Commission adopts the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan in accordance with Section 125.105 of the Michigan Statutes.

I hereby certify that the foregoing is a true and exact copy of the resolution enacted by the Keweenaw County Zoning/Planning Commission at an official meeting held December 17, 2002.

James Regis, Chairperson
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INTRODUCTION

Keweenaw County is the most sparsely populated with 2,301 persons (2000 census) and remotest of all Michigan counties but it enjoys over 95 miles of Lake Superior coastline, many miles of uninterrupted forests, thriving small communities and a history all its own. Located at the northernmost tip of Michigan, the County is blessed with abundant and spectacular natural resources encompassing 241,894 acres of land (plus 133,623 acres of land that comprises Isle Royale National Park) that make it both visually captivating and economically significant. It is characterized by vast stretches of picturesque forestland, unspoiled views of coastline and rugged cliffs, accessible lakes and streams, and unique historic and seasonal communities.

The County includes a diverse landscape including a number of special communities, small towns to thriving destination resorts with miles of forestland and waterfront in between. A long history of corporate ownership through the mining and logging industries have left the unique legacy of small communities and large tracts of undeveloped lands present today. The land is only part of its story as a mix of people and characters as diverse as its landscape call the Keweenaw home. Keweenaw County has been enjoyed by many generations of residents and visitors with a mixture of memories both new and old.

Recent changes in Keweenaw County, including the development of Mt. Bohemia Ski Resort, accelerated waterfront home construction, and changing ownership patterns has raised concerns over the future of the area. The changes have elevated land use issues to the forefront of decision making in Keweenaw County. Although many wish that Keweenaw County would remain the same, change is inevitable. The impact of the change will be determined by Keweenaw County as they craft a vision for the future and make land use decisions that are consistent with that vision.
This ‘Blueprint for Tomorrow’ land use plan represents the culmination of months of discussion and study by the Keweenaw County Zoning & Planning Commission and Township Planning Advisory Committees, with technical assistance from the Western Upper Peninsula Planning & Development Region (WUPPDR). The planning process was guided by the citizens of Keweenaw County through the ongoing efforts and recommendations of the Township Planning Advisory Committees. The final plan was compiled by the Keweenaw County Zoning & Planning Commission. Funding for the ‘Keweenaw - Blueprint for Tomorrow’ Project has been provided by People and Land (PAL).

The plan can be broken down into three main sections ---Section 1: Background Information, Section 2: The Vision for Keweenaw County, and Section 3: Plan Implementation. Within Section 1 is an Introduction and four main discussion areas: Community Character and Community Life; Land and Water Resources; Economic Development and Fiscal Balance; and Public Facilities, Infrastructure and Services. Section 1 defines ‘where are we now?’ and details the existing conditions including background information on population trends, the local economy, land use, etc. and helps to form a complete picture of the County. In order to set the stage for Section 2, the Vision for Keweenaw County, the final chapter of Section 1 defines issues and opportunities within each Township and for the County.

Once a complete understanding of the past and present situation is gained, the question is ‘where do we want to go in the future?’ setting the stage for Section 2, the Vision for Keweenaw County. Section 2 is the framework or ‘blueprint’ including goals, and policies that will guide Keweenaw County’s future land use decision-making. Section 3 is the recommended plan implementation strategies and actions or more simply ‘how do we get there?’
In addition to providing a general framework for decision-making the plan will assist the Planning Commission in updating the zoning ordinance to reflect the desired future land use pattern for the County. The County Rural Zoning Enabling Act, Act 183 of 1943, requires that a County’s zoning ordinance “be based upon a plan designed to promote the public health, safety and general welfare, to encourage use of lands in accordance with their character and adaptability and to limit the improper use of land, to conserve natural resources and energy, to meet the needs of the state’s citizens for food, fiber, and other natural resources, places of residence, recreation, industry, trade, services and other uses of land, to assure that uses of the land shall be situated in appropriate locations and relationships, to avoid the overcrowding of population, to lessen congestion on the public roads and streets, to reduce hazards to life and property, to facilitate adequate provision for a system of transportation, sewage disposal, safe and adequate water supply, education, recreation, and other public needs, and to conserve the expenditure of funds from public improvements and services to conform with the most advantageous uses of land, resources and properties.”
SECTION 1: BACKGROUND INFORMATION

1.1 INTRODUCTION
High quality of life, a clean environment and abundant natural beauty are the reasons people chose to live, vacation, 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 a blueprint for future growth while protecting the intrinsic qualities that make it a special place. This section will document and evaluate the existing conditions within the County and identify issues and opportunities within the County.

Setting
In 1842, the Lake Superior Chippewa Indians (Ojibwa) people, ceded the Western Upper Peninsula to the U.S. 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 Keweenaw County. 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 jail facility. Five civil townships including 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 1,584 including the Village of Ahmeek and Sherman the smallest with only 60 persons. Each maintains a Township Board but due to limited resources planning and zoning activities have been carried out by the Keweenaw County Planning and Zoning Commission. The Village of Ahmeek has its own council but relies on the County for zoning enforcement.
1.2 COMMUNITY CHARACTER AND COMMUNITY LIFE

This section will look at the population and housing statistics in Keweenaw County and discuss the community attributes that give the 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, while others have relocated and chosen to call Keweenaw 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. From 1870 to 1900 gradual increases in population 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 decline of the regional 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 20th 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

<table>
<thead>
<tr>
<th>Area</th>
<th>1870</th>
<th>1880</th>
<th>1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allouez Township</td>
<td>615</td>
<td>975</td>
<td>1,103</td>
</tr>
<tr>
<td>Clifton Township</td>
<td>247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper Harbor Township</td>
<td>359</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
<td>778</td>
<td>527</td>
<td>576</td>
</tr>
<tr>
<td>Grant Township</td>
<td>152</td>
<td>365</td>
<td>100</td>
</tr>
<tr>
<td>Houghton Township</td>
<td>1,325</td>
<td>1,004</td>
<td>189</td>
</tr>
<tr>
<td>Sherman Township</td>
<td>929</td>
<td>1,001</td>
<td>868</td>
</tr>
<tr>
<td>Keweenaw County</td>
<td>4,205</td>
<td>4,270</td>
<td>2,894</td>
</tr>
<tr>
<td>Isle Royale County</td>
<td></td>
<td>55</td>
<td>135</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census

Table 1-2
Population 1900 – 1980

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmeek Village</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of Allouez Twp.</td>
<td>1,610</td>
<td>5,672</td>
<td>4,446</td>
<td>3,655</td>
<td>2,857</td>
<td>2,114</td>
<td>1,653</td>
<td>1,462</td>
<td>1,298</td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
<td>1,346</td>
<td>193</td>
<td>65</td>
<td>83</td>
<td>114</td>
<td>72</td>
<td>84</td>
<td>199</td>
<td>113</td>
</tr>
<tr>
<td>Grant Township</td>
<td>448</td>
<td>76</td>
<td>53</td>
<td>51</td>
<td>58</td>
<td>71</td>
<td>68</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>Houghton Township</td>
<td>157</td>
<td>258</td>
<td>244</td>
<td>243</td>
<td>230</td>
<td>145</td>
<td>245</td>
<td>229</td>
<td>161</td>
</tr>
<tr>
<td>Sherman Township</td>
<td>104</td>
<td>585</td>
<td>599</td>
<td>418</td>
<td>277</td>
<td>171</td>
<td>99</td>
<td>68</td>
<td>39</td>
</tr>
<tr>
<td>Keweenaw County</td>
<td>3,217</td>
<td>7,156</td>
<td>6,322</td>
<td>5,076</td>
<td>4,004</td>
<td>2,918</td>
<td>2,417</td>
<td>2,264</td>
<td>1,963</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census

Since 1990, Keweenaw County has seen strong growth in population. Census 2000 figures show a population of 2,301 residents, growth of 35 percent since 1990. This is 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. 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 1990 - 2000

<table>
<thead>
<tr>
<th>Area</th>
<th>1990 Census</th>
<th>2000 Census</th>
<th>% Change 1990-2000</th>
</tr>
</thead>
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<tr>
<td>Ahmeek Village</td>
<td>148</td>
<td>157</td>
<td>+0.06</td>
</tr>
<tr>
<td>Allouez Township (balance)*</td>
<td>1,274</td>
<td>1,427</td>
<td>+11.4</td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
<td>82</td>
<td>359</td>
<td>+242.7</td>
</tr>
<tr>
<td>Grant Township</td>
<td>104</td>
<td>172</td>
<td>+65.4</td>
</tr>
<tr>
<td>Houghton Township</td>
<td>54</td>
<td>126</td>
<td>+277.8</td>
</tr>
<tr>
<td>Sherman Township</td>
<td>39</td>
<td>60</td>
<td>+53.8</td>
</tr>
<tr>
<td>Keweenaw County</td>
<td>1,701 (L)</td>
<td>2,301</td>
<td>+35.3</td>
</tr>
</tbody>
</table>

*Does not include Ahmeek Village  
Source: U.S. Bureau of Census

Population Distribution

Keweenaw’s population is centered in a number of communities or locations 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 with Allouez Township the largest with 1,427 residents, 1,584 including the Village of Ahmeek. This is 62.6 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 US41 continue to be a focal point of the Township and County. The smallest population is in Sherman Township where there are only 60 residents, less than 4 percent
of the County’s population. The following table shows the complete population
distribution for the Keweenaw County:

Table 1-4
2000 Population Distribution

<table>
<thead>
<tr>
<th>Area</th>
<th>2000 Census</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmeek Village</td>
<td>157</td>
<td>6.8</td>
</tr>
<tr>
<td>Allouez Township (balance)</td>
<td>1,427</td>
<td>62.0</td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
<td>359</td>
<td>12.2</td>
</tr>
<tr>
<td>Grant Township</td>
<td>172</td>
<td>7.5</td>
</tr>
<tr>
<td>Houghton Township</td>
<td>126</td>
<td>8.9</td>
</tr>
<tr>
<td>Sherman Township</td>
<td>60</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Housing
The 2000 Census paints a portrait of seasonal homeownership as the number of housing
units in Keweenaw County outnumber residents. This statistic points to a growth in
seasonal home construction. In Eagle Harbor Township alone there are 488 housing
units, while the population is 359. Three-hundred and thirty nine (69%) of the housing
units are considered seasonal in the Township. Grant Township has 480 units, 389
(81%) are seasonal. Similar patterns exist in Houghton and Sherman Township with
79.5% and 46.0% of the units considered seasonal respectively. Allouez Township has
the most permanent year-round population with only 165 (19%) of their units
considered seasonal.

Further examination of housing statistics reveals that of only 112 renter occupied units in
the County, Allouez has the most with 75. Sherman Township has only 1 renter
occupied unit while Eagle Harbor only has 3. Of 2,327 housing units in Keweenaw
County only 4.8% are renter occupied.

Over 45% of the housing stock in Keweenaw County was built before 1940 according to
2000 statistics. The highest concentration of older housing units is in Allouez Township
including Ahmeek Village. The newest housing stock is in Eagle Harbor Township
which has also seen the number of housing units increase by 16% between 1990 and 2000. Sherman Township has seen a 14% increase in units since 1990. The following tables show the complete housing picture:

Table 1-5

<table>
<thead>
<tr>
<th>Housing Statistics</th>
<th>Ahmeek Village</th>
<th>Allouez Township</th>
<th>Eagle Harbor Township</th>
<th>Grant Township</th>
<th>Houghton Township</th>
<th>Sherman Township</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total units</td>
<td>120</td>
<td>853</td>
<td>488</td>
<td>480</td>
<td>273</td>
<td>113</td>
<td>2,327</td>
</tr>
<tr>
<td>% of Total</td>
<td>5.2%</td>
<td>36.7%</td>
<td>20.9%</td>
<td>20.6%</td>
<td>11.7%</td>
<td>4.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Occupied</td>
<td>82</td>
<td>628</td>
<td>122</td>
<td>87</td>
<td>45</td>
<td>34</td>
<td>998</td>
</tr>
<tr>
<td>Vacant</td>
<td>38</td>
<td>225</td>
<td>366</td>
<td>393</td>
<td>228</td>
<td>79</td>
<td>1,329</td>
</tr>
<tr>
<td>Seasonal</td>
<td>14</td>
<td>165</td>
<td>339</td>
<td>389</td>
<td>217</td>
<td>52</td>
<td>1,176</td>
</tr>
<tr>
<td>Owner Occupied</td>
<td>68</td>
<td>553</td>
<td>119</td>
<td>76</td>
<td>37</td>
<td>33</td>
<td>886</td>
</tr>
<tr>
<td>Renter Occupied</td>
<td>14</td>
<td>75</td>
<td>3</td>
<td>11</td>
<td>8</td>
<td>1</td>
<td>112</td>
</tr>
<tr>
<td>Average Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owner Occupied</td>
<td>2.07</td>
<td>2.32*</td>
<td>1.82</td>
<td>1.99</td>
<td>1.81</td>
<td>1.79</td>
<td>2.18</td>
</tr>
<tr>
<td>Renter Occupied</td>
<td>1.14</td>
<td>1.62*</td>
<td>1.67</td>
<td>1.91</td>
<td>2.25</td>
<td>1.00</td>
<td>1.69</td>
</tr>
<tr>
<td>% Built Before 1940</td>
<td>-</td>
<td>68.6%*</td>
<td>23.6%</td>
<td>24.0%</td>
<td>31.1%</td>
<td>60.7%</td>
<td>45.2%</td>
</tr>
</tbody>
</table>

*Includes Village of Ahmeek

Source: U.S. Bureau of Census

Table 1-6

<table>
<thead>
<tr>
<th>Population Growth vs. Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
</tr>
<tr>
<td>------------------------------------</td>
</tr>
<tr>
<td>Ahmeek Village</td>
</tr>
<tr>
<td>Allouez Township (balance)*</td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
</tr>
<tr>
<td>Grant Township</td>
</tr>
<tr>
<td>Houghton Township</td>
</tr>
<tr>
<td>Sherman Township</td>
</tr>
<tr>
<td>County Total</td>
</tr>
</tbody>
</table>

A household, as defined by the U.S. Census, includes all persons who occupy a housing unit; e.g., 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 998 households in the County of which 608 are family households. Of the family households there are 57 that are headed by a female with no husband present. Of the 357 single person households, 174 are age 65 and over. Just over half the households in each Township are family households. Sherman Township has the largest single-person households with 20 of 34 (41%) living alone.

Table 1-7

Households by Type

<table>
<thead>
<tr>
<th>Household Type</th>
<th>Ahmeek Village</th>
<th>Allouez Township</th>
<th>Eagle Harbor Township</th>
<th>Grant Township</th>
<th>Houghton Township</th>
<th>Sherman Township</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>82</td>
<td>710</td>
<td>122</td>
<td>87</td>
<td>45</td>
<td>34</td>
<td>998</td>
</tr>
<tr>
<td>Family</td>
<td>37</td>
<td>431</td>
<td>82</td>
<td>52</td>
<td>26</td>
<td>14</td>
<td>605</td>
</tr>
<tr>
<td>Married-Couple</td>
<td>28</td>
<td>359</td>
<td>74</td>
<td>48</td>
<td>23</td>
<td>11</td>
<td>515</td>
</tr>
<tr>
<td>Female (No Husband)</td>
<td>3</td>
<td>45</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>Male (No Wife)</td>
<td>6</td>
<td>27</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Non-Family</td>
<td>45</td>
<td>279</td>
<td>40</td>
<td>35</td>
<td>19</td>
<td>20</td>
<td>393</td>
</tr>
<tr>
<td>Living Alone</td>
<td>40</td>
<td>252</td>
<td>37</td>
<td>29</td>
<td>19</td>
<td>20</td>
<td>357</td>
</tr>
<tr>
<td>65 Years and Over Living Alone</td>
<td>19</td>
<td>127</td>
<td>18</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>174</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census

Community Composition

The median age of Keweenaw County residents in 2000 was 44.9. This compares with a median age of 35.5 at the state level. Nearby Houghton County’s median age is 34.0. 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 1980-2000

<table>
<thead>
<tr>
<th>Area</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keweenaw County</td>
<td>44</td>
<td>46.4</td>
<td>44.9</td>
</tr>
<tr>
<td>Houghton County</td>
<td>27.6</td>
<td>31.7</td>
<td>34.0</td>
</tr>
<tr>
<td>Michigan</td>
<td>28.8</td>
<td>32.6</td>
<td>35.5</td>
</tr>
<tr>
<td>United States</td>
<td>30.0</td>
<td>32.9</td>
<td>35.3</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Census

The highest median ages in Keweenaw County are found in Eagle Harbor and Grant Townships, while Houghton and Allouez have the youngest population. However, the 13-18 age category is skewed for the County and Houghton Township due to the Keweenaw Youth Academy that at the time of the 2000 Census housed 95 boys. The number was also mistakenly included in Houghton Township’s count rather than Eagle Harbor Township where the Academy housing is located. This should be taken into consideration when examining County trends as student numbers fluctuate 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 1,238 to 1,063. The largest difference is in Houghton Township where males outnumber females nearly 4 to 1 with the inclusion of the Keweenaw Youth Academy figures. In every other township the male population is only slightly higher than the female population.
Table 1-9

2000 Population Statistics

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Ahmeek Village</th>
<th>Allouez* Township</th>
<th>Eagle Harbor Township</th>
<th>Grant Township</th>
<th>Houghton Township</th>
<th>Sherman Township</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5</td>
<td>9</td>
<td>83</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>103</td>
</tr>
<tr>
<td>5 to 9</td>
<td>11</td>
<td>83</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>109</td>
</tr>
<tr>
<td>10 to 14</td>
<td>5</td>
<td>102</td>
<td>4</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>130</td>
</tr>
<tr>
<td>15-19</td>
<td>5</td>
<td>93</td>
<td>16</td>
<td>4</td>
<td>120**</td>
<td>2</td>
<td>240</td>
</tr>
<tr>
<td>20 to 24</td>
<td>5</td>
<td>64</td>
<td>8</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>25 to 34</td>
<td>21</td>
<td>124</td>
<td>28</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>186</td>
</tr>
<tr>
<td>35 to 44</td>
<td>28</td>
<td>210</td>
<td>24</td>
<td>16</td>
<td>17</td>
<td>10</td>
<td>305</td>
</tr>
<tr>
<td>44 to 54</td>
<td>22</td>
<td>218</td>
<td>59</td>
<td>38</td>
<td>21</td>
<td>12</td>
<td>370</td>
</tr>
<tr>
<td>55 to 59</td>
<td>7</td>
<td>76</td>
<td>32</td>
<td>20</td>
<td>8</td>
<td>4</td>
<td>147</td>
</tr>
<tr>
<td>60 to 64</td>
<td>9</td>
<td>93</td>
<td>34</td>
<td>17</td>
<td>5</td>
<td>2</td>
<td>160</td>
</tr>
<tr>
<td>65 to 74</td>
<td>21</td>
<td>154</td>
<td>39</td>
<td>35</td>
<td>9</td>
<td>9</td>
<td>267</td>
</tr>
<tr>
<td>75 to 84</td>
<td>14</td>
<td>91</td>
<td>19</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>150</td>
</tr>
<tr>
<td>85 &amp; Over</td>
<td>0</td>
<td>34</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>51</td>
</tr>
</tbody>
</table>

Median Age

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Keweenaw County</th>
<th>Houghton County</th>
<th>Michigan County</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.8</td>
<td>42.9</td>
<td>54.4</td>
<td>54.3</td>
<td>51.5</td>
</tr>
</tbody>
</table>

*Does not include Ahmeek Village

**Figures include Keweenaw Youth Academy

Source: U.S. Bureau of Census

Table 1-10

Age Groups

<table>
<thead>
<tr>
<th>School Age</th>
<th>Keweenaw County</th>
<th>Houghton County</th>
<th>Michigan County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Female</td>
<td>Male Percent</td>
<td>Total Percent</td>
</tr>
<tr>
<td>5-11</td>
<td>160</td>
<td>66 7.0</td>
<td>8.3 10.6</td>
</tr>
<tr>
<td>12-14</td>
<td>79</td>
<td>36 7.4</td>
<td>4.0 4.4</td>
</tr>
<tr>
<td>15-17</td>
<td>175</td>
<td>141 7.6</td>
<td>4.7 4.3</td>
</tr>
</tbody>
</table>

Working, Voting & Retirement Age

<table>
<thead>
<tr>
<th>School Age</th>
<th>16+</th>
<th>16-64</th>
<th>18+</th>
<th>18-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,912</td>
<td>1,444</td>
<td>1,784</td>
<td>1,316</td>
<td>468</td>
</tr>
<tr>
<td></td>
<td>83.1</td>
<td>62.8</td>
<td>77.5</td>
<td>57.2</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>81.0</td>
<td>65.5</td>
<td>78.5</td>
<td>62.7</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Note: Figures include Keweenaw Youth Academy.
School age children (5-17) are the least influential of age groups in the County composing only 18 percent of the population while the working age of 18-64 represents the largest portion of the population with 57.2 percent. The total percentage of school age children is similar to Houghton and the State with Keweenaw Youth Academy figures included. Without the Academy only 8 percent of the population is school age following population trends related to child-birth but also is representative of the older composition of the community.

Retirement age (65+) persons make up 20.3 percent of Keweenaw County which is significantly higher than nearby Houghton County with 15.5 percent and Michigan with 12.3 percent. The retirement percentage is 21% excluding the Keweenaw Youth Academy. This percentage indicates that the County’s population base is older than other areas of the state and may be partially attributed to the retirement community.

The racial composition of Keweenaw County is primarily white. Of the total population 2,185 persons or 95% are white while the next largest population is black or African American with 75. The number of black or African American persons reflects the resident population of the Keweenaw Youth Academy that is included in Houghton Township’s Census 2000 statistics. Excluding the Academy population, it is estimated that over 99% of the permanent County population is white. Following is the detailed racial composition breakdown from the 2000 Census.
Table 1-11
Racial Composition of the County

<table>
<thead>
<tr>
<th></th>
<th>Ahmeek Village</th>
<th>Allouez Township*</th>
<th>Eagle Harbor Township</th>
<th>Grant Township</th>
<th>Houghton Township</th>
<th>Sherman Township</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>152</td>
<td>1,415</td>
<td>270</td>
<td>170</td>
<td>119</td>
<td>59</td>
<td>2,185</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>75</td>
<td>0</td>
<td>81</td>
</tr>
<tr>
<td>American Indian and Alaska Native</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Asian Indian</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Korean</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Some other race</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>25</td>
</tr>
</tbody>
</table>

*Does not include Ahmeek Village

Source: U.S. Bureau of Census

Educational Attainment
Residents of the County that are 25 and older numbered 1,634 in 2000. Of these 37.2% have a high school diploma while 12.2% hold a bachelor’s degree. The percent of residents having high school diplomas is slightly higher than the state average of 31.3% while the amount with bachelor’s degrees is slightly lower than the state’s average of 13.7%.

Personal Income
In 1999, Keweenaw County had a per capita personal income of $17,897 ranking it 83rd in the State according to the Bureau of Economic Analysis. For comparison, the State average was $28,104 while the national average was $28,546. Total personal income 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. In 1999, earnings were 49.7 percent of total personal income; dividends, interest, and rent were 23.3 percent; and transfer payments were 27.1 percent.
Retirement Income

Keweenaw County had 597 persons receiving Old-Age and Survivors, and Disability Insurance (OASDI) in the year 2000. The OASDI program in the United States provides protection against the loss of earnings as the result of retirement, death, or disability. The OASDI program consists of two separate parts that pay monthly benefits to workers and their families--Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI). The table below shows the benefits to residents of Keweenaw County for the month of December, 2000.

<table>
<thead>
<tr>
<th>Category</th>
<th>Persons</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>OASDI Total Recipients</td>
<td>597</td>
<td>$469,000</td>
</tr>
<tr>
<td>Retirement Benefits</td>
<td>385</td>
<td>$323,000</td>
</tr>
<tr>
<td>Retirement Benefits – Wives and Husbands</td>
<td>50</td>
<td>$21,000</td>
</tr>
<tr>
<td>Retirement Benefits – Children</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Survivors Benefits – Widow &amp; Widowers</td>
<td>70</td>
<td>$54,000</td>
</tr>
<tr>
<td>Survivors Benefits – Children</td>
<td>15</td>
<td>$8,000</td>
</tr>
<tr>
<td>Disability Benefits – Disabled Workers</td>
<td>65</td>
<td>$57,000</td>
</tr>
<tr>
<td>Disability Benefits – Wives &amp; Husbands</td>
<td>5</td>
<td>$2,000</td>
</tr>
<tr>
<td>Disability Benefits – Children</td>
<td>5</td>
<td>$1,000</td>
</tr>
<tr>
<td>Recipients Age 65 &amp; Over - Men</td>
<td>200</td>
<td>$189,000</td>
</tr>
<tr>
<td>Recipients Age 65 &amp; Over - Women</td>
<td>245</td>
<td>$166,000</td>
</tr>
</tbody>
</table>

Source: Social Security Administration

Thirty-two persons in Keweenaw County receive Supplemental Security Income (SSI) assistance through the Social Security Administration. SSI guarantees a minimum level of income for needy aged, blind, or disabled individuals. Of the 32 persons, 28 are blind and disabled while 10 of the 32 receive both SSI and OASDI.

In 1999, 274 Keweenaw County residents were below poverty levels. This was 12.7% of the County. This number compares to 16.8% in Houghton County and 10.5% in Michigan.
**Population Projections**

Projections for population in Keweenaw County were done by the State Demographer in 1996 and estimated that the population would be declining from 1995 on. However, Census 2000 revealed that the population had grown to 2,301 which is contrary to the declining population prediction in the following table:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Population</td>
<td>2,000</td>
<td>1,900</td>
<td>1,800</td>
<td>1,800</td>
<td>1,700</td>
<td>1,700</td>
</tr>
</tbody>
</table>

Source: Michigan Department of Management and Budget, Office of the State Demographer, January 1996.

Because projections are based on primarily the economic trends of a locality and also on 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.

**Population Density**

The population density of Keweenaw County is very low at 6.5 persons per square mile. This figure compares with a State of Michigan density of over 165 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 and Grant Township with .9 and 1.3 persons per square mile respectively. The highest population density is in Allouez Township with 25.7 and is due to the concentration of communities that contribute to 62.6 percent of the County’s population.
Table 1-14

Population Density

<table>
<thead>
<tr>
<th>Area*</th>
<th>Sq. Miles</th>
<th>2000 Census</th>
<th>Population per Sq. Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allouez Township</td>
<td>55.50</td>
<td>1,427</td>
<td>25.7</td>
</tr>
<tr>
<td>Eagle Harbor Township</td>
<td>54.50</td>
<td>359</td>
<td>5.2</td>
</tr>
<tr>
<td>Grant Township</td>
<td>128.40</td>
<td>172</td>
<td>1.3</td>
</tr>
<tr>
<td>Houghton Township</td>
<td>48.20</td>
<td>126</td>
<td>4.2</td>
</tr>
<tr>
<td>Sherman Township</td>
<td>66.0</td>
<td>60</td>
<td>.9</td>
</tr>
<tr>
<td>Keweenaw County</td>
<td>352.6</td>
<td>2,301</td>
<td>6.5</td>
</tr>
</tbody>
</table>

*excluding Isle Royale

Community Attributes

Keweenaw County has a character all its own. Beyond the people that 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 their history as copper mining/processing locations, commercial fishing stations, and commercial or transportation centers. Allouez, Mohawk, Fulton, and Ahmeek Village are former mining locations while the communities of Gay, Lac LaBelle, 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 and include a number of small tract and platted areas.
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 Grise, Mandan, and Clark Mine. All but Bete Grise and Copper Falls were located along the US 41 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 is 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, 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 US41/M26 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 to be the center of business activity in the area. Post offices still operate in Mohawk and Ahmeek Village and the only school in the area is also located in Mohawk and serves lower elementary and intermediate school district functions.

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 intermixed 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 75% of its 488 dwelling units occupied only seasonally by vacationing families with their permanent residence elsewhere. Of its 225 permanent residents (exclusive of the students and staff of the Keweenaw Academy), 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, and in recent years many who build 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 its inland lakes. Eagle Harbor, an historic mining and commercial fishing port, is the Township’s largest community with nearly 45% 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. One of Keweenaw County’s major employers, Keweenaw Academy, is located in the Township atop Mt. Horace Greeley at the location of the former Air Force radar base.
Grant Township (Copper Harbor and Lac LaBelle) – 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 and has a rich history beginning with the Native Americans, then the copper boom of the 1840’s and then the timber industry. Today it is known for its spectacular scenery, numerous recreational opportunities and 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 100 year-round residents. Copper Harbor has a rich mining history with the first mineral lease in Keweenaw issued there in 1843. Today it is an all-season destination featuring waterfalls, rock-hounding, hiking, biking, kayaking, canoeing, fishing, agate hunting, bird watching, berry picking, golfing, camping, snowmobiling, snowshoeing, cross country skiing, fall color tours, etc. Visitors can venture into the fascinating history of the Fort Wilkins State Park and lighthouse museum, explore a virgin white pine forest at the Estivant Pines, dive in underwater preserve areas to view sunken ships or drive Brockway Mountain to enjoy the fabulous view. It also offers the shortest water route to Isle Royale National Park. The community offers a number of restaurants, stores, gift shops, motels, campgrounds and other facilities including a 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 Bay 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 leading to a channel being dredged in the late 1800’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 that enjoy the pleasures of berry picking, fishing, hunting and hiking the surrounding wilderness. Visitors to the area will find the recently developed Mt. Bohemia Ski Hill offering extreme downhill and backwoods skiing, and at the shoreline a restaurant/bar and small store with gas pumps, as well as two marinas. The pristine “singing sands” of nearby Bete Gris are a favorite swimming beach with crystal clear water and a picturesque view of historic Mendota Lighthouse.

Following the shoreline from Lac La Belle to Copper Harbor, the rugged coastline, including the beautiful Montreal Falls offer wonderful opportunities for boaters and kayakers. In between are vast stretches of undeveloped wilderness, including numerous areas of ecological, geologic and historical significance.

*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 Township has a small year-round population but enjoys an influx of seasonal residents during summer months. With approximately 3 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, numerous small in-home shops and many waterfront homes. Cutting through the township is the spectacular Eagle River with falls that drop prominently along M26 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, Central and Delaware along US41. Today Central and Delaware have only a few residences and structures left, while Phoenix at the intersection of M26 and US41 boasts a convenience store and two bars, 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 CFA lands.

*Sherman Township (Gay)* - Sherman Township has the smallest population of the County and is primarily woodland with a majority of the lands falling under Commercial Forest Act (CFA) designation. Timber harvesting is the primary industry, but recreation is a focus of the Township with hunting, fishing, biking, hiking, berrypicking, snowmobiling, skiing and snowshoeing enjoyed throughout the area. In addition to forestland, 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.

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 (stampsand) 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 destinations for the locals as well as the tourists including numerous snowmobilers.

Like other locations in Keweenaw County, the summer season brings new life to the community. With the addition of summertime residents and vacationers, Gay becomes a destination and gathering place. The friendly gatherings at the Gay Bazaar and the spectacle of the Gay 4th of July Parade are famous, but mostly the community is well known and enjoyed for its remoteness and relaxed lifestyle.
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, it 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. 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. State and National Registered Site.

Central Mine Methodist Church- the church was once the civic center of the mining company town. At its peak membership the church numbered over 300. Designed after
religious architecture in Cornwall, England, it was a sanctuary for homesick miners. Descendants continue to hold annual services at the location. State and National Registered Site.

*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. 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 lightkeeper’s dwelling, 1866 lighthouse, 1933 steel light tower and interpretive trails. The complex can be reached by boat. State Registered Site.

*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, probably to provide suitable housing for visiting officials, the building became a destination for summer travelers and visitors to the area. Note: The structure has sustained significant damage due to a fire in the summer of 2001 and is currently being rebuilt. State Registered Historic Site.

*Eagle Harbor Light Station* – In the mid-19th 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 22nd ‘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. National Registered Site.
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. State and National Registered Site.

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. State Registered Site.

Eagle River Historic District – This district contains structures which date mostly from the mid-19th to early 20th 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. National Registered Site.

Eagle River Upper Bridge – Commonly known as the 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. 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-19th 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. State and National Registered Site.

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. National Registered Site.

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 19th century. The church was renovated by diocese members and is now used for regular services during the summer months. State and National Registered Site.

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. State Registered Site.

Keweenaw Mountain Lodge Complex – Located on 177 acres and consisting of a lodge/clubhouse and park grounds containing 23 cabins, tennis, shuffleboard and horseshoe courts, golf course and pro shop the complex 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. State and National Registered Site.

*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. National Registered Site.

*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. National Registered Site.

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

*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 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.

*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.

*Eagle Harbor Cemetery* – Also know 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.

**Mandan (Ghost Town)** - Located off of U.S. 41 south of Copper Harbor, this town once had a population of 300 in 1910.

**Douglas Houghton Memorial** – Located in Eagle River. This memorial recognizes the first State geologist who drowned in a boating accident off of Eagle River.

**Mendota Lighthouse** – Privately owned and operational, now a private residence. On Mendota Point at Bete Gris.

**Estivant Pines** – located outside Copper Harbor, these are the last stand of privately owned Virginia white pine in Michigan. The sanctuary features unique rock outcroppings, steep hillsides, cliffs and nearby are old upper mine workings dating back 125 years.

Another notable historic site is the **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 1877, the Delaware Copper Mine Tour is one of the area’s longest established tourist attractions.

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. However, fragmentation of ownership due to changes in forestland ownership, is a major threat to the wilderness experience.

**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. There are currently no design or landscaping regulations that protect these intrinsic values other than height, size and setback requirements in the existing zoning ordinance. 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 regulates signage within Keweenaw County, the only exception being the state trunkline 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.
1.3 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, are 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 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 shore, 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, form 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.

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 stream 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 cobbly 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 very thin soils with much exposed bedrock where gravel and cobbles are the norm.

Due to glacial retreat, differential erosion and deposition of materials, the landscape of Keweenaw County has been greatly influenced. 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 is near completion that will allow for careful examination of lands within Keweenaw County. This soil survey will be a tremendous tool for local government in determining the capacity of lands for development and to aid in land use decisions. The soil 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 subregion (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 1980 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 including: Gay, Calumet and Isle Royale. See Map 4.

*Gay Sub-subsection:* composes the area southeast of the Keweenaw Fault and is characterized by coarse-textured ridges and swamps; sandy till plain and ground moraine; Northern Hardwood and Hardwood Conifer forest; and Conifer swamp and bog. Gratiot Lake is found on the ground moraine and Lac La Belle is found on the sand lake plain and is separated from Bete Grise Bay by sand bars. Shallow peatlands surround Lac LaBelle on the sand lake plain. Soils are typically gravelly sands and sandy loams. Soils of the uplands are typically well-drained, acidic, loamy sands and sandy loams derived from the underlying Jacobsville sandstone and shale.

No rare plant communities are known but the following rare plants are:

- Bigleaf Sandwort (*Arenaria Macrophylla*)
- Calypso or Fairy-Slipper (*Calypso Bulbosa*)
- Pale Indian Paintbrush (*Castilleja Septentrionalis*)
- Black Hawthorn (*Crataegus Douglasii*)
- Blue Wild-Rye (*Elymus Glaucus*)
- Marsh Willow-Herb (*Epilobium Palustre*)
- Satiny Willow (*Salix Pellita*)
- Torrey’s Bulrush (*Scirpus Torreji*)

One rare animal is found in the Gay sub-subregion:

- Merlin (*Falco Columbarius*)
**Calumet Sub-Subsection:** Forms the Keweenaw Fault and areas north and is characterized by basalt and conglomerate ridges; bedrock knobs and shoreline; Northern Hardwood forest; Northern balds (treeless ridgetop communities); White Pine forest; White Pine, Red Pine, Red Oak growing on bedrock, Spruce-Fir forest and bog. Narrow wetlands are common within depressions formed by erosion patterns of resistant bedrock, local areas of lacustrine sands including dunes exist along the north shore, and broad areas of rocky ground moraine in the west. Two large lakes fall within this sub-subsection including Lake Medora which is surrounded by bedrock and Schlatter Lake on the sand lake plain near the tip of the peninsula. Soils are rocky with red sandy loams and silt loams with moderate slopes in the south and moderate to steep slopes with bedrock in the north.

The Calumet Sub-Subsection is known for its rare plant communities that occur on several of the ridges (Mount Lookout, Mount Houghton, Bare Bluff, Mount Bohemia, and Fish Cove Knob), at The Cliffs and along the bedrock beaches of Lake Superior (Horseshoe Harbor and from Agate Harbor to Copper Harbor). The rare plants are from one of two communities; those common in Arctic regions and ‘western disjunts’ that grow primarily in the mountains of the Pacific Northwest. Rare plants in this area include:

- Bigleaf Sandwort (*Arenaria Macrophylla)*
- Heart-Leave Arnica (*Arnica Cordifolia)*
- Pale Sedge (*Carex Pallescens*)
- Ross’s Sedge (*Carex Rossii*)
- Calypso or Fairy-Slipper (*Calypso Bulboa*)
- Pale Indian Sagebrush (*Castilleja Septentrionalis*)
- Redstem Ceanothus or Wild Lila (*Ceanothus Sanguineus*)
- Keweenaw Rock-Rose (*Chamaerhodos Erecta var. keweenawensis*)
- Small Blue-Eyed Mary (*Collinsia Parviflora*)
- Black Hawthorn (*Crataegus Douglasii*)
- Male Fern (*Dryopteris Filix-mas*)
Blue Wild-Rye (Elymus Glaucus)
Marsh Willow-Herb (Epilobium Palustre)
Purple Cliff-Brake (Pellaea Atropurpurea)
Mountain Timothy (Phleum Alpinum)
Prairie Cinquefoil (Potentilla Pensylvanica)
Pearlwort (Sagina Nodosa)
Satiny Willow (Salix Pellita)
Torrey’s Bulrush (Scirpus Torreji)
Rayless Mountain Ragwort (Senecio Indecorus)
Downy Oat-Grass (Trisetum Spicatum)

One rare animal is also found in the Calumet sub-subregion:
Merlin (Falco Columbarius)

The third sub-subregion is Isle Royale and is identified separately due to its Lake Superior influenced climate. Isle Royale is not addressed as part of this plan.

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 over 6,000 acres along the south shore of Grant Township. The Michigan Nature Association has 14 preserves in the Keweenaw County. A number of smaller conservancies including Gratiot Lake Conservancy, Northwoods Conservancy, and Michigan Audobon 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 was recognized by the State of Michigan with the designation of U.S. Highway 41 from Central Mine to Copper Harbor as a Scenic Heritage Route. The natural landscape and rolling hills of the route provide access to historic sites, recreational opportunities, and provide a scenic escape as it opens up to the resort community of Copper Harbor at its northern-most end. A management plan for the US 41 corridor from Mohawk to Copper Harbor, dubbed the ‘Copper Country Trail’ is under development to guide the protection of resources along this route. The route beginning at Delaware is currently protected by a 100 foot right of way and 150 foot scenic strip where building is not allowed and logging restrictions are in place.

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 Grise Road:** This short stretch of forested roadway provides access to Bete Grise and its ‘singing sands’ from Lac LaBelle. It parallels the public Bete Grise beach at its east end and also provides a view of the Mendota lighthouse.

**Brockway Mountain Drive - Copper Harbor to intersection with M26 – Brockway**

Mountain Drive is a 9.5 mile road that winds up the side of West Bluff near Copper
Harbor and ends along M26 near Agate Harbor. The drivable route is easily the most accessible, high-elevation (735 feet above sea level) viewpoint in the County, providing panoramic views of the area. The road parallels the bluff line and is edged by a rock fence line for most of its length. Unplowed, it is a favorite among snowmobilers during the winter months.

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 Shortcut: Delaware to Eagle Harbor – Traversing the County from Central to Eagle Harbor, this route is a favorite among locals. It provides quick access to Eagle Harbor off of U.S. 41 but 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 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.
*Lac LaBelle Road (Gay to Lac LaBelle)*- 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 but along the Lake Superior shore, seasonal homes are common. The route passes the community of Lac LaBelle and continues west towards U.S. 41 near the foot of Mt. Bohemia.

*Lac LaBelle Road (Delaware to Lac LaBelle):* Exiting U.S. 41 near Delaware, this stretch of county road drops down towards Lac LaBelle. 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 Grise when heading southeast. It is the primary route to Lac LaBelle and Mt. Bohemia.

*M26: Phoenix to Copper Harbor* – M26 is an unmatched route for its Lake Superior views, access to the quaint towns of Eagle Harbor and Eagle River, and also as 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 due to 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.

*US41: 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 that tourists are introduced to when taking U.S. 41. Historic residential architecture intermixed with modern day commercial development characterizes the route.

Another notable route is the seasonal Mandan Road from Mandan off US41 South of Copper Harbor to the beginning of US41. This route is a gravel road maintained by Lake Superior Land Company and used as a snowmobile trail in the winter. The road and adjacent trails provide access to the tip of the Keweenaw including Schlatter Lake, High Rock Bay, Keystone Bay, among others.

Scenic vistas in Keweenaw 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, West Bluff (Brockway Mountain). Bare Bluff is protected as a nature sanctuary by the Michigan Nature Association and Mt. Lookout (Baldy) has recently been purchased by the Nature Conservancy. Mt. Bohemia was developed in 2000 as an ‘extreme’ ski resort with open run 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 and access to lakes and streams is 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 LaBelle, Eagle Harbor and Copper Harbor and a number of boat launches that provide access to the waters of Lake Superior. There are also a number of aids to navigation surrounding the peninsula including lighthouses at Eagle Harbor, Copper Harbor, Gill Rock, Manitou Island and Lac LaBelle.

There are approximately 374 water bodies in the County including 11 lakes of 40 acres or greater. Notable inland lakes of Keweenaw County include in Grant Township: Lake Fanny Hooe, Schlatter Lake, Lake Manganese, Hoar Lake, Breakfast Lake, Lake Addie, Deer Lake and the south third of Lake Medora; in Eagle Harbor Township: the remainder of Lake Medora, Lake Upson, Lake Eliza, Long Lake, Owl Lake, Copper Falls Lake, Lake Bailey, and Gratiot Lake; in Allouez Township Seneca Lake and Mud Lake, and in Sherman Township: Thayer Lake. The lakes in 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, Tobacco River, Big Betsy and Little Betsy in Sherman Township. The river systems can be both a physical hinderence but also an attraction for home development.

The County has over 94 miles of shoreline excluding Isle Royale. By Township, Grant has the most with approximately 44 miles (not including Manitou Island), Sherman has 7, 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 along the north shore of Keweenaw County in Allouez, Houghton and Eagle Harbor Township. Michigan's sand dunes are a unique natural resource of global significance that collectively represent the largest assemblage of fresh water dunes in the world and support numerous threatened and endangered species. The combination of topographic relief, vegetation and climatic conditions are a phenomena 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 lakeward 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. Three watersheds, Trap Rock, Tobacco, 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.

There is no comprehensive wetlands study completed for Keweenaw County, however there are a number of resources valuable in determining where wetlands exist including the NWI and soil surveys. The NWI defines wetlands according to the "Classification of Wetlands and Deepwater Habitats of the United States," a system that describes wetlands by soils, hydrology, and vegetation. According to this system, wetlands are defined as lands transitional between terrestrial and aquatic systems, where the water table is usually at or near the surface or the land is covered by shallow water. For this classification, wetlands must have one or more of the following three attributes: (l) at least periodically, the land supports mainly hydrophytes (aquatic plants), (2) the substrate is mainly undrained hydric (moist) soil, and (3) the substrate is saturated with water or covered by shallow water at some time during the growing season each year. Because plants and soils furnish a record of the hydrology of a site, they form the basis of the hierarchical classification scheme that divides wetlands into five major systems: marine, estuarine, riverine, lacustrine (lakes), and palustrine (marshes).

There are three classifications of wetlands found in Keweenaw County including palustrine, lacustrine, and riverine. The term "lacustrine" is related to the word "lake" - thus a lacustrine wetland is, by definition lake-associated. This category may include
freshwater marshes, aquatic beds as well as lakeshores. The Lacustrine System includes wetlands and deepwater habitats with all of the following characteristics:

1. situated in a depression or a dammed river channel;

2. lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30% aerial coverage;

3. total area exceeds 20 acres.

"Palustrine" comes from the Latin word "palus" or marsh. Wetlands within this category include inland marshes and swamps as well as bogs, fens, tundra and floodplains. Palustrine systems include any inland wetland which lacks flowing water and contains ocean derived salts in concentrations of less than .05%.

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 LaBelle. 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 do exist but there is currently no market due to extraction costs. Mineral resource activities today 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.

**Climate**

Keweenaw County has a typical humid continental climate that is heavily influenced by Lake Superior. The County enjoys cold dry 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 lakes 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% occurs from April-September. Heaviest precipitation is August.

Due to the moderate summer weather conditions and extreme winter snowfalls, the Keweenaw enjoys a wide-range of season. These weather characteristics make the areas an attractive place for summer cottages but also 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 which occupy the better
upland soils and which also occur in poorer quality on lighter soils. These stands include
principally sugar maple, elm, basswood, and yellow birch and with hemlock and white
pine often in 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 insure 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, however, 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 typical 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), fur bearers (muskrat, beaver, bobcat, fox, and coyote). Some fish
species include: trout (lake, rainbow and brook), salmon (coho, chinook, and steelhead),
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.
1.4 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 and Michigan and Lake Superior Land Company. Lake Superior Land Company (a subsidiary of International Paper) owns approximately 140,000 acres which represents about 40 percent of the entire county. See Map 8.

The State of Michigan through the Michigan Natural Resources Trust Fund has purchased over 6,000 acres of prime recreational land at the tip of the Keweenaw
Peninsula from the Lake Superior Land Company. With this purchase the State of Michigan owns over 10,000 acres of land that will be managed primarily for recreational uses.

Overall, the majority of land in Keweenaw County is in private holdings. These holdings can be broken down into four categories: forest industry, miscellaneous private corporations, miscellaneous private individuals, and small residential tracts and private plats.

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 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. Lake Superior Land Company has been the exception, it owns land throughout the county.

The land ownership categories represented by miscellaneous private corporations and private individuals include a wide range of parcel sizes, ranging from 10 acres to multiple sections of land. Three examples of miscellaneous private corporations include The Michigan Nature Association and Michigan Technological University. 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.

Keweenaw County’s landscape is changing with ownership patterns. Ownership of lands within Keweenaw County as Lake Superior Land Company/International Paper is disposing of non-valuable timberlands, long treasured open access provided by timber companies in much of the Keweenaw is disappearing. Waterfront land is now blanketed with residential development and large inland parcels have become private. However, amongst the change is also a tremendous thrust towards land stewardship and public trust as represented by the transfer of over 6,000 acres to the State from Lake Superior Land Company with the assistance of the Nature Conservancy and the Mouth of the Gratiot River being purchased by the County. Conservancies themselves account for many hundreds of acres of land within Keweenaw County and serve to preserve a number of the treasured sites for both their natural and intrinsic values.

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 split to minimum lot sizes and maximize profit. 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 land in Keweenaw County is under timber company ownership. Lake Superior Land Company a subsidiary of International Paper and Heartwood Forestland Ltd. are the primary timber companies operating in the County. Timber company policy is to manage the lands as working forests in order to provide a secure source of pulpwood and to generate income from forest product sales to other forest industry customers. Lake Superior Land Company manages their forestlands as natural stands, using silvicultural systems that depend upon natural revegitation. 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.

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 new residential areas surrounding Eagle Harbor, there is a demand
for new residential areas, even non-waterfront. It is anticipated that these trends will continue well into 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. As of 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 doubles 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 Audobon Society, Gratiot Lake, Northwoods among others. The Nature Conservancy has preserves east of Copper Harbor at Horseshoe Harbor and Mt. Lookout while the Audobon Society has 14 throughout the County most notably the Estivant Pines (virgin hemlock forest) and Brockway Mountain Sanctuary. The conservancies recognize and seek to preserve some of the unique natural characteristics of the County.

**Current Zoning**

The current Keweenaw County Zoning Ordinance was originally drafted in 1975. The ordinance provides for a number of zoning districts including agricultural (A), conservation (CD), country estate (CE), resort residential (RR), resort service (RS), single-family residential (R-1), two-family and multi-family residential (R-2), business (B-1), highway service (HS), limited manufacturing (M-1), general manufacturing (M-2), extraction (ED), and planned development (PD). The ordinance is thorough in its regulations but the interpretation of its intent has been difficult without a thorough up to date land use plan.
A Future Land Use Plan drafted in 1987 provided for seven levels or categories of land use which corresponded to zoning controls in the 1975 ordinance including Resort Residential, Multi-Family Residential, Resort Service, Industrial, Agriculture, Planned Unit Development, and Conservation-Environmental Protection. The recommendations in the plan encouraged development based on trends that were occurring and were likely to occur into the future including development near existing areas and adjacent to roadway networks. 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 LaBelle. It is primarily an intermediate to advanced ski hill with open runs as well as backcountry gladed terrain skiing. Mt. Bohemia caters to the newly discovered winter tourism niche of the area. This development, due to its large scale has impacted the character of the Lac La Belle area through changed landscape, increased traffic patterns, unwelcome light pollution, controversial promotional activities and loss of public access to the once popular area.
1.5 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 sources of employment and income for County residents varies greatly due to limited opportunities within the County. Although the attraction to the area is through the natural resources of the area, many persons travel to nearby Houghton County for employment opportunities. In 1990 it was estimated that 56.7 percent of the workforce worked outside Keweenaw County. Personal income in 1999 was 49.7 percent earnings, 23.2 percent dividends, interest, and rent while transfer payments accounted 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 depend 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 with an increase 21.1 percent from 1998 to 1999 alone.

The civilian labor force in Keweenaw County was estimated to be 900 in 2001 by the Michigan Department of Career Development. Employment is estimated at 800, with an unemployment rate averaging around 11 percent. Allouez Township has the majority of the County labor force with 700. Wage and salary disbursements in 1999 totaled $12.2 million dollars with an estimated 700 employed at an average wage per job of $17,476.
Employment by industry in 1999 based on the number of jobs included a total employment of 973 including 263 with proprietor’s employment. By industry the largest employer was services (356 jobs), followed by retail trade (202 jobs), government and government enterprises (84 federal, civilian jobs and 102 state and local jobs), finance, insurance, and real estate (114), manufacturing (68 jobs) and construction (22 jobs).

Establishments in the County numbered 62 in 1999 according to the U.S. Department of Commerce and Bureau of Census. There were 19 accommodation and food services, 10 retail trade, 5 construction, and 5 manufacturing. Other establishments included 4 forestry, fishing, hunting, and agriculture support and 4 other services (except public administration). Establishments of 1-2 in number included mining; food manufacturing; wood product manufacturing; fabricated metal product manufacturing; furniture and related product manufacturing; wholesale trade; transportation and warehousing; finance and insurance; real estate and rental and leasing; professional, scientific and technical services; health care and social assistance; arts entertainment and recreation and unclassified establishments. A breakdown of employers by number of establishments in the year 2000 is as follows:

Table 1-15

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</tr>
<tr>
<td>Auto Repair Shops</td>
<td>7536</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7538</td>
<td>2</td>
</tr>
<tr>
<td>Misc. Amusement &amp; Recreation Services</td>
<td>7999</td>
<td>4</td>
</tr>
<tr>
<td>Elementary &amp; Secondary Schools</td>
<td>8211</td>
<td>1</td>
</tr>
<tr>
<td>Residential Care</td>
<td>8361</td>
<td>1</td>
</tr>
<tr>
<td>Religious Organizations</td>
<td>8661</td>
<td>1</td>
</tr>
<tr>
<td>Engineering Services</td>
<td>8711</td>
<td>1</td>
</tr>
<tr>
<td>Private Households</td>
<td>8811</td>
<td>3</td>
</tr>
<tr>
<td>Executive &amp; Legislative Government</td>
<td>9131</td>
<td>7</td>
</tr>
<tr>
<td>Public Order &amp; Safety</td>
<td>9221</td>
<td>1</td>
</tr>
<tr>
<td>Administration of Environmental Quality</td>
<td>9512</td>
<td>1</td>
</tr>
<tr>
<td>Non-Classifiable Establishments</td>
<td>9999</td>
<td>2</td>
</tr>
</tbody>
</table>

The employment patterns and establishments in the county reveal the limited amounts of industrial opportunities in the county. The economy is dominated by small business. The patterns also reveal the tourist oriented nature of the township with almost half the establishments either accommodation and food service or retail trade. 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 market 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 Tourism Council work in Houghton and Keweenaw County to promote the entire region to potential businesses and tourists.

The Keweenaw 2000 Economic Adjustment Strategy prepared in 1997 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. Over half a 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. While property taxes account for over half of the annual budget for the County, within the townships property taxes account for a larger portion of the operating budget.

The monetary values of lands differ within each township while the cost of providing services increases in areas with more residential/commercial development. Eagle Harbor Township enjoys a large tax base because of the amounts of waterfront development, while Sherman Township has a very small tax base primarily dependent on commercial forest act payments. When reviewing the value of lands within the County, residential/commercial development generate the most revenues, however the CFA lands that provide very limited tax dollars also offer the greatest potential for recreational opportunities. See Map 10.

The number of taxable parcels in the County varies among Township. While Allouez Township had 1,490 taxable parcels in the year 2000, Sherman only had 241. Allouez was the only township with industrial parcels while Sherman only had 1 commercial parcel. The following table reveals the property tax breakdown by parcel within the County:
### Table 1-16

**Taxable Parcels Year 2000**

<table>
<thead>
<tr>
<th>Category</th>
<th>Allouez Township</th>
<th>Eagle Harbor Township</th>
<th>Grant Township</th>
<th>Houghton Township</th>
<th>Sherman Township</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Parcels</td>
<td>1,664</td>
<td>947</td>
<td>1,194</td>
<td>379</td>
<td>368</td>
<td>4,552</td>
</tr>
<tr>
<td>Total Assessable</td>
<td>1,490</td>
<td>808</td>
<td>969</td>
<td>269</td>
<td>265</td>
<td>3,801</td>
</tr>
<tr>
<td>Assessable Real</td>
<td>1,395</td>
<td>763</td>
<td>869</td>
<td>245</td>
<td>241</td>
<td>3,511</td>
</tr>
<tr>
<td>Assessable Personal</td>
<td>97</td>
<td>45</td>
<td>100</td>
<td>24</td>
<td>24</td>
<td>290</td>
</tr>
<tr>
<td>Agriculture</td>
<td>10</td>
<td>2</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Commercial</td>
<td>33</td>
<td>26</td>
<td>64</td>
<td>5</td>
<td>1</td>
<td>129</td>
</tr>
<tr>
<td>Industrial</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Residential</td>
<td>1335</td>
<td>735</td>
<td>763</td>
<td>228</td>
<td>240</td>
<td>3,301</td>
</tr>
<tr>
<td>Timber Cutover</td>
<td>8</td>
<td>0</td>
<td>23</td>
<td>12</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>Exempt</td>
<td>87</td>
<td>73</td>
<td>72</td>
<td>42</td>
<td>23</td>
<td>297</td>
</tr>
<tr>
<td>CFA</td>
<td>87</td>
<td>66</td>
<td>153</td>
<td>68</td>
<td>80</td>
<td>454</td>
</tr>
</tbody>
</table>

Source: Keweenaw County Equalization Report 2000

The difference between total parcels and assessable parcels is accounted for by 454 Commercial Forest Act parcels and 297 tax-exempt lands (conservancy, church, etc.) By property tax value, Eagle Harbor Township accounts for 34% of Keweenaw County totals, Grant Township 29.2%, Allouez Township accounts for 25.6% of the County, Houghton Township - 7.3% and Sherman - 3.9%. Residential land accounts for the majority of the taxable property in the County including 3,301 parcels (72.5%) while industrial only accounts for 7 parcels (<1%). Although CFA lands include only 454 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 under the Commercial Forest Act (Public Act 94, 1925) 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 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, Eagle Harbor Township has seen the most growth and now accounts for over 37% of the SEV total for the County. 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) growth from 1990 through 2002.

Table 1-17
SEV Growth 1990 to 2002

<table>
<thead>
<tr>
<th>Area</th>
<th>1990 SEV</th>
<th>1995 SEV</th>
<th>2000 SEV</th>
<th>2002 SEV</th>
<th>% of County Total in 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allouez</td>
<td>$10,003,600</td>
<td>$11,734,231</td>
<td>$21,600,014</td>
<td>$28,725,247</td>
<td>25%</td>
</tr>
<tr>
<td>Eagle Harbor</td>
<td>$8,513,900</td>
<td>$16,039,048</td>
<td>$28,618,210</td>
<td>$43,267,228</td>
<td>37%</td>
</tr>
<tr>
<td>Grant</td>
<td>$9,795,900</td>
<td>$13,508,052</td>
<td>$24,605,392</td>
<td>$31,897,133</td>
<td>27%</td>
</tr>
<tr>
<td>Houghton</td>
<td>$2,082,300</td>
<td>$3,133,499</td>
<td>$6,181,943</td>
<td>$8,110,700</td>
<td>7%</td>
</tr>
<tr>
<td>Sherman</td>
<td>$1,372,300</td>
<td>$4,123,031</td>
<td>$3,288,534</td>
<td>$4,705,147</td>
<td>4%</td>
</tr>
<tr>
<td>County</td>
<td>$31,768,000</td>
<td>$45,937,861</td>
<td>$84,294,093</td>
<td>$116,705,455</td>
<td>100%</td>
</tr>
</tbody>
</table>
1.6 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 included government service buildings, maintenance and storage facilities. With growth comes increased demand on services and maintenance of facilities and services along with increased costs to provide additional coverage.

Public Facilities

The County Building/Courthouse is located on 4th Street in the town of Eagle River in Houghton Township. The building holds the administrative offices for the County including Clerk, Register of Deeds, Administration, Board of Commission, Tax Equalization, and 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, Mohawk – Houses Township offices, is handicapped accessible, has public sewer and water, and is used for public meeting as well as community activities such as line dancing. Fire department is attached.

Eagle Harbor Township Hall, Eagle Harbor - Holds township offices and attached fire department, is handicapped accessible, connected to public water, and is used for a variety of public and community meetings.
Grant Township Hall, Copper Harbor – Houses the township offices as well as the cable company office, is handicapped accessible, connected to public sewer and water, and is used for variety of public meeting and community facilities. Outside access to public restroom is provided.

Houghton Township Hall, Eagle River – As of 2003 will house the township offices, not currently handicapped accessible, and is used for weddings and other community activities.

Sherman Township Hall, Gay – Houses township offices and is connected to public sewer and water. Community building is next door which provides meeting space and community activities.

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 (U.S. 41) and Michigan Highway 26 (M-26). U.S.41 is an interstate highway that begins just outside Copper Harbor and ends in the state of Florida. U.S. 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 U.S. 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. Primary county roads go from point to point. Good examples are Mohawk-Fulton to Gay, Gay to Lac LaBelle, and Lac LaBelle 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 but are 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 much of Keweenaw County.

**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. Except for the community of Gay in Sherman Township that draws its water from Lake Superior, the remaining public water systems draw their water from wells/groundwater.

The Michigan American Water Company with its well in Houghton County provides water to Allouez Township including 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 their distribution system providing 8,000 gallons/day. Grant Township provides 40,000 gallons/day in the summer and 15,000 gallons/day in the winter to the residents of Copper Harbor. Houghton Township provides 100,000-600,000 gallons/month depending on season to the residents of Eagle River. In Eagle Harbor, the town’s system provides 8,000 gallons/day except in the summer when output doubles to 16,000 gallons/day. Gay is served by the Sherman Township water system. Outside of these areas, private wells supply water.

Water for the Copper Harbor water system comes from six wells located south of Copper Harbor along Garden Brook. The wells are screened in glacial drift and are approximately 50 feet deep and produce 20 to 27 gallons per minute (gpm) each. Water is pumped to a 125,000 gallon ground-level steel reservoir south of the well field on a hill adjacent to the Keweenaw Mountain Lodge. Chlorine is added to kill harmful bacteria.
Eagle Harbor’s water is from three wells located west of the village between Eliza Lake and Long Lake. Wells are 50 feet deep with 90 feet of bedrock. Each well can produce 90 gpm or more. One well is sufficient for peak demands during summer months. A 5,000 gallon hydronematic tank at the well field in a pumphouse maintains pressure while it is delivered through 4,020 feet of 8-inch water main and approximately 2.6 miles of 65-year-old 3 inch pipe. Chlorine is added to the water.

The water supply for Gay comes from Lake Superior through a tunnel bored 2,700 feet out from town. A chemical alum is added to remove particles that make the water cloudy or turbid, it is then passed through sand filters to remove the particles. Chlorine is added in the treatment process.

Water systems in Keweenaw County are limited by water flows due to bedrock geology and distribution lines. Township well fields are 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 Allouez Township, Grant Township, Ahmeek Village, and Sherman Township. Allouez Township has a field system capable of 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 capable 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 any 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 their needs.

Peninsula Sanitation provides 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 to K&W landfill in Ontonagon County.

**Communications**
Ameritech is the primary local phone access provider in the County while Cellular One provides cellular service. Internet is available through phone dial-up connections but no high-speed internet access is available due to the County’s remote location and limited customer base.

Charter Communications provides cable television to Mohawk and Fulton, Cable America Corporation serves the community of Eagle Harbor and the Copper Harbor Cable TV system serves Copper Harbor. Satellite coverage is available in other areas.

**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 to the Michigan State Police (MSP) who also have three statewide communications towers in the County 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 MSP regularly patrol U.S. Highway 41 as far north as Phoenix, the junction of U.S. 41 and M-26.

The Sheriff’s Department and jail 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 and three deputies. Besides addressing critical situations, and serving the court, these officers routinely answer citizen complaints, investigate accident reports, conduct road patrols, and operate the jail. It also conducts marine patrols with assistance of the MDNR. These public servants are all certified by the Law Enforcement Council as trained law enforcement officials.

Suppression of structure and wildfires are handled by organized volunteer fire departments in Keweenaw County. There are six departments in the County including Ahmeek Village (16 volunteers), Allouez Township (16), Eagle Harbor Township (15), Sherman Township (6), Copper Harbor (8-10), and Lac LaBelle (6-8). Houghton Township contracts with Allouez Township for fire suppression services. These are strictly fire departments except for Allouez and Grant Townships who provide First Response. The Sheriff’s Department also has First Response. First Response provides first aid until Emergency Medical Technicians arrive. Firefighters are knowledgeable in a number of areas through mandatory training, including hazardous materials, emergency medical services, and safety.

**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., is the primary (and only) provider of emergency medical services in Keweenaw County. Mercy maintains a fleet of emergency vehicles and a staff.
of EMT technicians and specialists. Mercy is available 24 hours/day, 7 days/week. 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 their 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.

Health Care and Medical Services
Keweenaw Memorial Medical Center (KMMC) located in Laurium (Houghton County) is the primary health care provider for residents and visitors in Keweenaw County. It is a non-profit organization governed by a board of directors. KMMC is a collaborator in the Upper Peninsula Health Care Network which strives to create an integrated health care delivery system. Working through partnerships, KMMC uses patient focused and community-base 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 KMMC serves all age groups, its population base is largely geriatric with diseases such as cancer, diabetes, heart disease and stroke being common concerns as well as arthritis and osteoporosis. The closest tertiary care is through Marquette General Hospital located over 100 miles away that provides acute primary care services. To meet
the needs of the community, KMMC offers 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 school districts. It also serves as a liaison between the State Board of Education and the local school districts. There are three school districts in the County. They are divided along township lines. 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). In Grant Township, the children attend the one room school house in Copper Harbor for K-8 while generally attending high school in the Calumet, Laurium, Keweenaw school district.

Park and Recreation Facilities
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. Although many of the forest lands are listed as Commercial Forest Act that leaves them open to hunting and fishing, the companies have allowed all types of recreation. 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.
Existing public recreational facilities vary from small roadside parks to the Fort Wilkins Historic 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):

*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.

*Bete Grise Beach:* This County owned beach, enjoys over 1,000 feet of beautiful sand frontage on Lake Superior. Toilet facilities are available.

*Brunette Park:* This 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:* The County of Keweenaw and the Township of Eagle Harbor both 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.

*Eagle River 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:* Beach located along Lake Superior in town of Eagle River with water access and picnic tables. Leased to Houghton Township by Lake Superior Land Co.
**Eagle River Park:** Located on M-26 is a picnic area with toilet facilities available. Owned by MDOT.

**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 State Park:** Located north of Copper Harbor, it offers a restored fort and interpretive center, camping and picnic area.

**Frimodig Park:** This roadside park is located by Lake Medora on U.S. 41. Picnic facilities are available. Owned by the Michigan Department of Transportation.

**Gay Park:** County owned park overlooking the stamp and tailings in Lake Superior.

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

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

**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.

**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 42 rooms located in 35 buildings, a dining room, bar, one tennis court, one
shuffleboard court and a nine-hole golf course. Although it does not have water access, 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.

Great Sand Bay Public Beaches: State (MDOT) owned, near Owl Creek on M-26 in Eagle Harbor Township, 4 miles west of Eagle Harbor. No facilities are currently provided along this picturesque lakeshore.

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. Plans are being made to construct a maritime museum in Copper Harbor which will highlight these historic shipwrecks.

Lake Bailey Island: The County owns this island and it 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.

Mohawk Park: Community playground on US41, owned by Allouez Township.
Riverside Park: This developed picnic area is a very popular site for fishing and smelting during the spring of the year. It is located on the Little Gratiot River near Lac LaBelle.

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

Tobacco River Mouth: This 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, day use, and includes picnic facilities, toilets and 235 feet of Lake Superior frontage.

Veterans Park on U.S. 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 facilities in Keweenaw County located at Eagle Harbor, Copper Harbor, Lake Bailey, Lake Medora, and Lac LaBelle.

Trail systems: An interconnected snowmobile trail system connects the communities of Keweenaw County in the winter months. This system provides a vital economic resource.
for businesses that rely on winter tourism. The majority of the trails are on Lake Superior Land Company/IP property and continued access is based on 1-year contracts. There is a well developed non-motorized trail system on state-owned land in and around Copper Harbor and Fort Wilkins that provides skiing and snowshoeing activities in the winter and biking and hiking during non-winter months. A number of the nature preserves in the County also maintain hiking trails for visitors.

**Community Relations**

The Keweenaw County Board of Commissioners maintains a number of affiliations with regional organizations which allows federal and state program resources to flow into the county for the benefit of its 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 Western Upper Peninsula Substance Abuse Service Coordinating Agency. These affiliations represent a diverse network of economic, natural resource, 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 are performed by the County. In the past there has been limited regular communication between the townships and the County in decision-making regarding these issues.

This plan is being completed through the input of township planning committees upon request of Keweenaw County. Through this arrangement, the townships will have thorough input to the County planning process. The County’s role will be to provide oversight to the planning process and to make decisions in the future that respect the wishes of the Townships.
1.7 Issues and Opportunities

Allouez Township Issues and Opportunities

**Opportunity – Gateway Community:** Allouez Township is the gateway to Keweenaw County and enjoys family-oriented activities, and close proximity to employment opportunities in Houghton 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.

**Opportunity – Historic Resources:** 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.

**Issue – Land Divestiture:** Lake Superior Land Company is divesting 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.

**Issue – Watershed Protection:** 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.

**Issue – Abandoned Buildings & Junk:** 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 ordinance provisions.

**Opportunity – Public Services:** 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, and availability of business and industrial properties.
Eagle Harbor Township Issues and Opportunities

**Issue - Major Land Divestitures:** Lake Superior Land Company, a division of International Paper, the owner of a majority of all lands in Eagle Harbor Township, is now divesting large parcels of undeveloped land and lakeshore. These parcels have historically been accessible to the public for recreational pursuits through CFR designation and the benevolence of the owner but are now at risk to fragmented ownership.

**Issue - Waterfront Access:** Eagle Harbor Township has become a highly desired second or retirement home choice, with much of this new home development occurring along our Superior lakeshore and around our inland lakes and streams. Continued general public access to or enjoyment of these water-related areas is threatened.

**Issue - Water Quality:** Most of the existing housing, as well as much of the new housing within Eagle Harbor Township is located on lands adjacent or directly tributary to our inland lakes, our streams, our harbors and our many miles of Lake Superior shoreline. Many of our older seasonal homes, served by decades old septic systems, are being converted into permanent or extended season properties. This intensified development pattern increases the potential for contamination, threatening adjacent waters and groundwater, and may result in the need for expensive investments in pollution control facilities. This development pressure also has the potential of placing many of our wetlands at risk, wetlands that serve as storage areas for runoff and provide critical habitat for our indigenous flora and fauna.

**Issue - Recreational Resources:** Anticipated growth in our permanent, seasonal and visitor populations will place added pressure on many of our recreational resources that are of limited supply, such as our swimming beaches, our boating facilities, and our recreational trails. Unless these and similar resources are well maintained, well managed, and appropriately expanded, our use and enjoyment of them may be severely jeopardized.
**Issue - County Government Decisions:** Eagle Harbor Township, like other County townships, has traditionally had little opportunity to influence County government decisions on planning, zoning, and development regulation within our community. Township vision and policy to be a residential community for permanent and seasonal residents, often seems inconsistent with County policy. Unless we are highly effective in articulating and advocating our chosen vision, development objectives and strategies, and unless County planners and elected officials demonstrate greater flexibility and responsiveness to the choices neighborhoods and communities make in defining their character and development patterns, our ability to achieve our chosen vision is substantially at risk.

**Issue - Tax Burden:** Most of the developed property within Eagle Harbor Township is owned by individuals who occupy the properties only seasonally which is reflected by 339 of 488 units considered seasonal. These owners often perceive that they derive less benefit from many tax-supported public services desired and needed by our permanent residents. And because seasonal residents are not eligible for tax assistance programs, such as homestead exemptions, these owners pay disproportional higher taxes. In the absence of effective communication of shared service benefits, the continued support by all property owners for the public services and projects needed to serve a growing permanent population, including programs intended to implement our community development plans, may be at risk.

**Opportunity – Forests, Recreation and Jobs:** Much of the forested land within Eagle Harbor Township is expected to continue to serve as a growing and harvesting resource for our area’s wood products industry. This offers the opportunity for large tracts of forestland to remain available for recreational purposes, and, as importantly, the opportunity for our township to continue to be a major source of jobs for Keweenaw workers and an important contributor to the economic well being of Keweenaw County.
Opportunity - Tax Base Growth and Economic Contribution: While other areas of Keweenaw County are appropriately pursuing commercial, industrial and tourism related development to strengthen our County tax base and economy, Eagle Harbor Township is making its own contribution by capitalizing on the strength and draw of the Township’s abundant and unique natural and recreational assets, and keeping our development focus on maintaining the Township as a highly desired place for permanent and seasonal residency. This development focus and strategy is causing people to choose to invest themselves and their personal wealth in our Township, and in the process producing substantial growth in County tax base, providing hundreds of jobs for area realtors and builders, and establishing a significant ongoing customer base for area businesses.

Opportunity: Preserving Natural Resources and Recreation Properties: Several national and regional conservancy organizations are actively engaged in identifying and protecting many of Eagle Harbor Township’s most important natural assets, and our township government, in conjunction with state and federal grant funders, is moving aggressively to preserve many of our most important recreational properties. We have strong partners and a committed township government in our quest for preserving our natural and recreational assets.

Opportunity – History: Eagle Harbor Township is the site of many of the Copper Country’s most historically significant structures and sites. These places, carefully preserved and interpreted by our Historical Society and other private and public interests, offer significant opportunity for linking our residents and visitors with our community’s rich and interesting history. Their presence adds significantly to the character of our community.

Opportunity - Physical Characteristics: The physical characteristics of Eagle Harbor Township - our fifteen miles of spectacular billion year-old basalt Lake Superior shoreline, the extensive volcanic cobble and sand beaches, the great dunes of Sand Bay, the heavily forested ridges of the Keweenaw uplift, the many beautiful lakes, streams and
harbors that lie within our borders, as well as the historic and small town feel of our
developed residential communities, are all significant and in many ways unique
community assets. They combine to make our community a highly desired choice for
residency, vacation and visiting. We have the opportunity to continue to enjoy and
perpetuate this physical character through responsible and enlightened stewardship.

**Opportunity - Rich sources of skills, volunteer support, and leadership:** Many of
the growing number of second and retirement home owners in Eagle Harbor Township
are men and women with considerable experience and interest in community
involvement – representing a rich source of skills, volunteer support, and leadership for
our public and non-profit organizations.

**Opportunity - Cohesiveness:** There is strong support for comprehensive land use
planning and effective development management within Eagle Harbor Township, and
substantial agreement on the Township’s future direction. Township cohesiveness is a
major plus for achieving positive outcomes.
Grant Township Issues and Opportunities

**Issue: County Decision Making.** Keweenaw County controls land use planning and zoning within the Township. Land use decisions have been made without much participation by land owners and townships. Unless Grant Township articulates its chosen vision and the County responds to local concerns, the future is at risk. Keweenaw County needs to be proactive rather than reactive in land use decision making.

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

**Issue: Community Character.** Development with ineffective regulations and inconsistent enforcement threatens the existing wilderness character of the township. New businesses and new homebuilders fail to recognize how one incompatible development can affect and change the character of the entire community.

**Issue: Land Divestitures.** Lake Superior Land Company (owned by International Paper), is divesting large parcels of undeveloped land and lakeshore that have been largely open for public access due to the generosity of owners for the last 100 years and have provided rich natural habitats for native species and recreational opportunities.

**Issue: Trail Access.** Multi-season trails (specifically snowmobile) are vital to Copper Harbor and the local tourism-based economy but access is only provided through annual permission. These trails must be permanently secured in order to protect and enhance the local economy.
**Opportunity: Public Lands.** Grant Township enjoys a large amount of public lands due to Fort Wilkins and the newly purchased Tip of the Keweenaw DNR lands. Lake Superior Land Company still owns large portions of the Township and has shown cooperation in working with local interest groups in permanently securing miscellaneous 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.

**Opportunity: Ecosystem Preservation:** The township contains unique and rare ecosystems that are under increasing development pressure and property division but 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.

**Issue: Tax Burden** - Townships with small numbers of registered voters pay significantly more taxes and subsidize townships with more registered voters in the county but have not had opportunity to voice concerns and influence land use decisions.

**Issue: Development Pressure** - New housing developments driven by large investors put pressure on existing public services and also the environment. Development must be balanced with what the local facilities and lands can support while the cost of expanding services should be supplemented by new development.
Houghton Township Issues and Opportunities

Opportunity – Waterfront:  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.

Issue – Seasonal Ownership:  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.

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

Opportunity – Historic Resources:  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.

Opportunity – Physical Characteristics:  Houghton Township enjoys a number of significant features including portions of the Cliffs, the 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.
Issue – Forest Resources: Due to the divestiture of Lake Superior Land Company holdings, access to forestlands and trails is at risk. Permanent public access must be acquired in order to protect long-enjoyed areas of the township and also the trail system that is vital to the economy of the area.

Issue – County Decision Making: Decisions in regard to land use are made at the County level. Land owners and Township officials have had little input or influence on decisions being made regarding land use and zoning.
Sherman Township Issues and Opportunities

**Opportunity – Quality of Life:** Residents enjoy a natural, rural quality of life, virtually unrestricted access to forestlands, and the smallest population in the County, 60 persons. The remoteness of the Township offers some protection from development but preservation of large tracts of forestlands and scenic buffers along roadsides will ensure the future quality of the Township.

**Issue – History:** Sherman Township has a number of historically significant sites and structures in need of restoration but a lack of resources for rehabilitation. With financial resources and incentives for restoration these sites have potential as community attractions.

**Opportunity – Waterfront Development:** The Township has a number of waterfront areas that could be developed into recreational areas. The development of community park facilities would be a tremendous tourist draw for the area while providing opportunities for new business that compliments the one business in the Township, the Gay Bar.

**Issue – Development Pressure:** Development pressure is primarily along the Lake Superior waterfront with housing units increasing from 99 to 113 since 1990. Other development pressure means fragmentation of forestland that could threaten both the availability of timber resources and public access.

**Issue – Tax Base:** 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 Township’s potential for growth is limited. However, development that does occur must incur the costs of public facility expansion rather than place the burden on existing residents.
**Issue – Junk Vehicles:** Many properties have numerous junk vehicles and unmaintained lawns that are an eyesore to the Township. Currently a junk ordinance does not exist to discourage this practice.

**Issue – County Decision Making:** Sherman Township, due to its small population has little influence on County decision-making. Although the Township accounts for only a very small percentage of the County population it must be provided the opportunity to direct its own future despite its limited population.
Keweenaw County Issues and Opportunities Summary

**Issue – Growth:** Keweenaw County population has grown 35% between 1990 and 2000 while housing units have also increased by 70 units. An increase in population and housing provides additional tax revenues but also puts pressure on government services and the environment. This growth threatens the health of the community if not monitored through comprehensive land use regulations that guide not only the quantity but also the quality of development.

**Issue – Land Divestiture:** Lake Superior Land Company (International Paper) is selling off large parcels of lakefront and forestlands throughout the County as opportunities arise. Because LSLC is the primary landholder in the County, loss of public access to lands and trails is at risk unless action is taken to secure through purchase or permanent easement. As fragmentation of ownership continues, it will be more difficult in the future to secure these lands.

**Opportunity – Rural/Wilderness Character:** 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.

**Opportunity – Visual Landscape:** 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.
Issue – Environmental Protection: 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, wetlands, etc. 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. The County decision makers must be aware of the balance and be educated on impacts in order to protect the health of the environment.

Issue – Age Structure: The median age of 44.9 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. Keweenaw County will have difficulty in projecting future population trends as the area is more affected by in-migration than birth and death rates.

Issue – Diverse Communities: 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 must recognize and be responsive to the desires of the local communities when making land use decisions within Keweenaw County.

Opportunity – Economic Development: Each community has unique assets in regard to economic development and tax base growth with the future 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 but also ongoing forestry activities. Lands must be kept intact to support both. In order to balance development with potential opportunities, certain areas can be planned to cater to different 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.

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

**Opportunity – Local Organizations:** 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.

**Opportunity – Regulation Interpretation:** 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 has provided an understanding of the forces that have shaped Keweenaw County. In order 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 set based on the community’s overall vision for the future.

This section will present the overall vision for Keweenaw County, then identify goals and policies and finally a future land use plan to provide guidance in achieving this 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 the identified goals and policies, Section 2.4 presents the Future Land Use Plan for Keweenaw County.

The backbone of the Vision for Keweenaw County, is the contributions of Township committees that have worked diligently to define needs within their own communities. These ideas have been incorporated into ‘The Vision for Keweenaw County’ with specific results of Township efforts (surveys, etc.) included in Appendix B. While the plan is based on the best information available, and the goals of the 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

Vision: 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 communities; and a County that respects the choices of its Townships in defining their own character, priorities and development patterns.

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 regulations, direct development toward areas of the County with adequate services and access, away from areas with significant physical limitations such as topography and soils.

Policy 1-2. Create mechanisms to ensure new developments function as extensions of existing development patterns including: Eagle Harbor, Lac LaBelle, Gay and Eagle River as extended vacation, seasonal, and permanent residential communities; Allouez – Ahmeek – Mohawk – Fulton as a focus for permanent residential/business development; and Copper Harbor as a tourist-oriented business/residential community.

Policy 1-3. Continue to utilize levels of residential use based on compatibility, parcel size, maximum density, and availability of existing and proposed sewer and water systems and to provide areas in the County for large lot residential development and varied housing opportunities.
Policy 1-4. Encourage industrial, commercial and business development that is appropriate to the area based on compatibility to surrounding uses, availability of sewer and water systems, and accessibility.

Policy 1-5. 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 where they are located. Place strict controls on conversion of the properties to permanent commercial uses.

Policy 1-6. Minimize the removal or disruption of historic structures listed on the state and federal historic register and preserve architectural character of communities through design regulations with strict controls in historic 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 loss risk.

Policy 2-2 Utilize 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 of or acquisition of conservation easements on key tracts of land based on a priority lands map.

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 to provide separation from roadways and buffering for adjoining properties. Revegitate areas disturbed by development with native species. Apply these same requirements to the change or expansion of non-conforming uses.

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.  Develop and maintain maps and lists of sensitive areas and 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.
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 historic structures and sites within the County.

Policy 4-2. Encourage the protection and preservation of historic sites and artifacts as properties are developed.

Policy 4-3. Work with historic and related organizations to promote heritage tourism within the County and educate residents and visitors of 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.

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 governance, including an annual review of goals, policies and accomplishments.

Policy 7-2. Be receptive of 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 inevitable and important for Keweenaw County but if it is not balanced and sensible, the County will pay a high price and ultimately lose the intrinsic values that make 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 towards 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 providing 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, wilderness areas and 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.

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 that 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. Agricultural areas are mostly comprised of lands currently zoned and used for agricultural purposes. 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

CD-EP:

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

The C-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, i.e., wetlands;

• To be kept open to protect sources of water supplies, i.e., acquifer recharge, discharge, and potential water impoundment areas;

• To protect scenic viewsheds that define the wilderness and waterfront beauty of the County;

• Lands to be kept open from development because of unsuitable and unstable soil conditions; and

• Lands 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 are 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
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 economic 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. The land use plan encourages private property currently listed under the Commercial Forest Act (CFA) and private interior lands currently zoned CD-EP to remain in CD-EP. Camps and recreational dwellings are considered compatible within these areas but small lots and permanent residential occupancy should be discouraged.

COUNTRY ESTATE  CE
The CE use is designed to provide for areas topographically and locationally 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. Higher density development through open space design is both promoted and encouraged in these areas. CE use is identified for areas along the Eagle Harbor Cutoff Road.

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, and 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, allows a diversity of housing options and focuses 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 of the type and character that would allow possible conversion to year-round dwellings on or near waterfront, woodland or other resort or vacation areas. Areas considered for resort residential development should have adequate access, water and sewer/septic, and suitable natural topography. Lands identified for RR use include Lake Superior and inland shoreline areas as well as 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 LaBelle, 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 US41 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 US41 and in Mohawk where compatible with the surrounding property. Because of the close proximity to residential homes, high standards of performance 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 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 US41 and its compatibility with surrounding uses of agriculture and timber resources.

EXTRACTION ED
The Extraction use is to provide land for or to be used for all types of extractive operations. The only area currently identified for this use is south of Gratiot Lake where a mining operation has been proposed in recent years.

PLANNED DEVELOPMENT PDD
PDD use includes areas suitable for complex projects which may consist of more than one use and more than one building designed to take maximum advantage of unique site characteristics and potentials, along with original design and use concepts, and submitted for review under the Planned Development Procedure. The only identified PDD use in the County is at Mt. Horace Greeley/Keweenaw Youth Academy.
SECTION 3: IMPLEMENTATION

3.1 INTRODUCTION
The vision of this 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 affect 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

Plan Adoption and Support – Following adoption of the Plan by the Keweenaw Zoning/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 Zoning/Planning Commission

Review of Zoning Ordinance and Maps – Several of the recommendations of this Plan require amendments and/or revisions to the County Zoning Ordinance. The Zoning and 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.

Amend zoning ordinance site restrictions to incorporate...
natural buffer requirements to preserve the wilderness/natural character along roadways and shoreline.

Incorporate open space/conservation design options in the ordinance that allows increased unit/acre density when 50 percent of the tract is preserved as open space. This option should be encouraged in Agricultural and Country Estate Districts with an emphasis on preserving unique site features as dedicated open space.

Other key issues include: uses not previously addressed by the zoning ordinance, appropriate uses within the Resort Service Districts, historic preservation sites, and attention to definitions such as ‘hunting lodge’. Careful review of existing allowable uses should be completed in order to provide more local control over future development. Calculation of lot size, setback requirements, etc. should be reviewed to address the issue of properties dissected by roadways with the possible redefinition that uses only that portion of the lot being built on for the formula.

- **Lead Responsibility: Keweenaw Zoning/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 multi-use trail system and protection of critical viewsheds.

- **Lead Responsibility: Keweenaw Zoning/Planning Commission**

(Recommendation to County Board)
**Develop Intergovernmental Coordination Strategies** – 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 Z/P Commission and Townships*

**Monitor Progress** – The Plan should be regularly visited in order to insure its consistency with current needs of the County.

  - *Lead Responsibility: Keweenaw Zoning/Planning Commission*

**Citizen Responsibility** – 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*
Map 9
Keweenaw County Zoning

Legend

- Conservation District-Environmental Protection = CD-EP
- Agricultural = AC
- Country Estate = CE
- Single-Family Residential = R1
- Two-Family & Multi-Family Residential = R2
- Resort Residential = RR
- Resort Service = RS
- Business = B1
- Manufacturing = M1
- General Manufacturing = M2
- Planned Development District = PDD
- Extraction District = ED

Data Source:
MIRIS/MI Geographic Framework Base Data
Keweenaw County Zoning Ordinance - December 2002

Map is for Reference Only
Map 10
Keweenaw County
Land Use by Tax Category

Legend

<table>
<thead>
<tr>
<th>Tax Category/Land Use</th>
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<tr>
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<td>Residential</td>
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<tr>
<td>Timber Cutover</td>
<td>Pink</td>
</tr>
<tr>
<td>Small Tracts / Platted</td>
<td>Gray</td>
</tr>
</tbody>
</table>

Data Source:
MIRIS/Mi Geographic Framework Base Data
January 2002 County Tax Roll

Map is for Reference Only

January 2002
TOWNSHIP SURVEY RESULTS SUMMARY

Surveys were completed in 4 of the 5 Townships of Keweenaw County during 2001. Thanks to funding assistance from the Americana Foundation, surveys were drafted by the Township Planning Committees within the Townships of Allouez, Eagle Harbor, Grant and Sherman. No survey was done in Houghton Township. Each committee formulated questions unique to each Township and mailed surveys to landholders in order to solicit the collective opinions of residents and landholders. The following pages are summaries and comments from the township surveys. The complete survey results are available from the respective township offices and should be consulted for more detailed responses.

The survey response rates within each township are as follows:

- Allouez: 1,200 Sent - 54 Returned
- Eagle Harbor: 572 Sent - 371 Returned
- Grant: 574 Sent - 195 Returned
- Sherman: 200 Sent - 49 Returned
1. What do you like about the Keweenaw area?

The scenic rugged natural beauty of the rivers, lakes and timberlands.
Great scenery, hunting, fishing and other recreational opportunities.
The undeveloped and unimproved lakeshore and timberlands
Peaceful and quiet, a great place to raise a family.

2. What are our township’s good points?

Sense of community, friendliness, good/great people.
Allouez Township Firemen and EMT,
Snow plowing in the winter and road maintenance
Parks are clean with flowers, cemetery is clean

3. What are our township’s shortcomings?

Junk cars and old appliances in the woods, abandon buildings
The lakeshore and rivers are getting inaccessible - loss of public access
Need recreation for kids
Need more small business

4. What historic features in the township would you like to preserve?

The general ambiance of Eagle River
Cliff cemeteries
Allouez township mining sites - some old rock piles
Patrick’s buildings, Ahmeek Fire Hall

5. What natural features in the township would you like to preserve?

Scenic highway M 26/ US 41, Cliff Drive
Mouth of the Gratiot, Gratiot River, Seneca Lake
Lake Superior shoreline, Veale Park
Mouth of all rivers

6. What kinds of businesses would you like to see in Allouez township and where should they be located?

Grocery store, Restaurant, service businesses
Businesses utilizing timber resources
Tourism related businesses
Bank, gas station, food store
Those with minimal impact on the environment
Locate in Mohawk, Ahmeek, Allouez, Fulton area

7. To preserve public access to Lake Superior shoreline and interior timberland for recreation, hunting, and fishing, would you support the township and/or the county buying land with monies obtained through:

   a) the township/county pursuing grant funding? 52 yes out of 57
   b) the township/county asking for a special millage? 28 yes out of 57

8. What park or recreational facilities would you like to see developed in Allouez Township? Should the township/county expand Veale Park?

   Gratior River
   Mohawk school yard
   Veale Park
   7 Mile Point
   Ahmeek Ice Rink and Park

9. Should there be a Township/County owned transfer station or sanitary landfill in Allouez Township?

   Yes 39 out of 57

10. Do you have any concerns with the present County Zoning Ordinance?

   Yes, 15 out of 57
   Junk and abandon buildings
   Preserving public access

11. Any other suggestions/comments you would like to make?

   Wider shoulders on roads for pedestrians and bicycles
   Make a place for kids to ski on the bluff by Ahmeek
   Plant fish and clean up Seneca Dam and Lake for kids to fish
   Be sure an updated zoning ordinance strikes a balance between economic development and natural preservation

   Mail or drop off at: Allouez Township Hall, 102 Second Street, Mohawk MI 49950

(Note: 840 questionnaires mailed, 57 responses received, Mailing cost $343.51)
ANALYSIS OF 2001 EAGLE HARBOR TOWNSHIP SURVEY

This reports and analyzes results from the September, 2001 Eagle Harbor Township Land Use Survey by the Township’s Land Use Planning Steering Committee. The committee and Township Board will use these results to refine land use goals and to suggest updates in county planning and zoning. Questions may be directed to the Township Office at 906-289-4407, or to survey coordinator Paul Freshwater at 906-289-4877.

Background — The committee was established in November, 2000 by the Township Supervisor at the request of the Township Board in response to a November, 2000 request for planning and zoning guidance by the Keweenaw County, Michigan Planning & Zoning Board which manages those functions for the county’s five townships. During the past year, a dozen local volunteers have belonged to the committee, supported in a variety of information gathering and planning projects by fellow citizens, other townships, and various county, regional and state agencies. This survey project received design guidance from participants in two well-attended public meetings and from MTU Professor of Marketing Alan Brokaw who oversaw the Keweenaw County voter survey in 1981. The Township Treasurer and Clerk helped with execution. Numerical data are presented via an Excel program designed and donated by part-time resident Michael Wakeman of ABB Corporation (231-398-0530).

Survey Design — The survey contained three parts. Part One used a 4-point, asymmetric scale (3 very important, 0 = not important) to assess the importance to respondents of 17 assets in the township, things we like about it and want to protect, and invited them to list their most special places here. Part Two used the same scale to assess the importance of 18 potential concerns in our township, things we might improve. Parts One and Two posed questions alphabetically to help reduce any bias, and invited respondents to vote for the three most important and three least important questions in each part as a way to help clarify priorities. Part Three used a yes-maybe-no scale to ask if respondents would vote to pay about $100 more property tax per year to protect specific assets or help fix specific concerns. Respondents were invited to add their own items at the end of each part, to add general comments at the end of the two-sided form, and to give their name and address (optional). Each mailing included two blank forms, a letter of explanation from the planning committee, an endorsement by the Township Supervisor, and a stamped return envelope.

Survey Audience and Response — Survey forms were mailed to each of 572 homes or business addresses, including the current list of 153 township voter addresses and 419 other property owner addresses. Each group received a different color of form to allow separate tabulation. Duplication was eliminated between addresses serving more than one voter or classification. Surveys were mailed on September 13, with responses requested by September 30 but included through October 22. Nine were returned as not deliverable. As of October 22, 268 deliverable addresses (48%) had responded with 371 individual forms. Voters returned 114 forms (31% of responses versus 27% of addresses mailed), while non-voters returned 257 forms.
Conclusions — A high response rate, rich with comments, makes this survey a valuable tool to
gauge thinking on planning issues by both voters and non-resident property owners, and
indicates that many value this opportunity to provide their opinions to township officials. The
survey pretty well covered what people like about this area, but respondents added dozens of
concerns and improvements they would pay for. There is strong consensus to keep the
wilderness character of the area, its environmental quality, and public access to its many special
places - as well as willingness to pay to preserve those places. However, opinions are divided on
at least two major issues and several minor ones. One major issue is restrictions on
development, where many want stronger planning, zoning and enforcement while a smaller but
significant group wants less regulation of private property. Local voters are especially concerned
about enforcement of zoning laws. Another major issue is local taxes, where many say they are
willing to pay more taxes for specific purposes but many others believe taxes already are too
high and should not be raised. There is an undercurrent of “taxation without representation”
among non-residents who outnumber voters almost 3 to 1. Lesser areas of disagreement include
the importance of logging, motor sports, local services, public safety, jobs, schools and age
diversity, as well as the quality of local governance.

Key Findings - Both numerical data and comments are summarized in the attached pages.
Numerical data are shown for voters, non-voters, and all respondents. The first page presents
each survey question with the number of responses for each importance rating, the average
rating for that question, and that rating’s rank compared with other questions. Parts One and
Two also show votes for “most important” and “least important,” which in most cases closely
parallel regular importance rankings. Five pages that follow show key data as bar graphs. Finally
come comment summaries, presenting information respondents added identifying their favorite
places, additional assets, additional concerns, and general thoughts. Comments are listed in
order of the number of respondents commenting, and are grouped by subject where possible.
Raw data from each respondent and a compilation of all
verbatim comments can be viewed in the township office.

Part One: Assets - Our top rated asset is clean air and water, followed by our wilderness
character and access to the shoreline and water. Priorities are similar for voters and non-voters,
except that voters place higher priority on safety/security, while non-voters indicate stronger
support for preserving special places. The list of special places mentioned is long - 58 within the
township and 16 beyond it, with more than 40 mentions each for the light station, beaches,
lake shore, Great Sand Bay, Brockway Mountain and Mt. Baldy. Seen as least important are
motor sport trails. Local services, schools and jobs also have low average ratings because there is
more disagreement about their importance than for most other items. Respondents suggested
only a few other assets (13) beyond those in the questionnaire, and some of those are similar to
listed ones.

Part Two: Concerns - Of greatest concern are too much development, loss of wilderness and
access to it, followed by threats to environmental quality. Also of strong concern to voters is
enforcement of zoning regulations. Of least concern are the “not-enoughs” — mix of ages,
affordable housing, opportunities for young people, people to hire, and well-paying jobs, although job issues show widely varying opinions. Few see taxes as too low, although this is not among the three concerns voted least important. Concern with high taxes is of only medium priority in the numerical rankings, but it drew more comments than any other subject. Also drawing large numbers of comments on both sides are the conflicting issues of private property rights versus restrictions on land development and use, and the numerical responses reflect this. Several medium-priority concerns also show divided opinions, including threats to safety and responsiveness of local officials. A noteworthy 47 concerns beyond those in the questionnaire were written in by one to three of 64 respondents, about evenly divided among issues of development, regulation, conservation, and local governance.

Part Three: What People Would Pay More Tax For - Majorities of respondents voted “yes” to purchase special places and for better enforcement of zoning, with voters carrying the zoning issue. Majorities voted “maybe” or “no” on three other issues, although in each case more than 40% voted “yes.” Voters were more likely than non-voters to pay for more health and safety services and for better planning, while non-voters were more likely than voters to pay to restore damaged environments. A noteworthy 36 items were added by one to three of 51 respondents willing to pay for them.

Other Comments - Respondents added 225 comments beyond the questions asked. They fall in five categories:

- **Regulation of Development** - Opinions are closely divided in this area of greatest interest. 24 comments urge stronger zoning, zoning enforcement and land use planning, and another 11 urge further restrictions on development. But 20 want less regulation of private property development and use. A few also believe that variances have not been granted evenly.

- **Conservation** - 18 comments urge keeping the character of the area, expressed as small, rural, natural beauty, wilderness, clean. 5 want to clean up ugly junk, graffiti and litter. There is minor disagreement over three issues — whether to clean up mine and logging sites or keep them as part of local history, whether or not to set aside more land for public use, and whether or not to have motorized ATV trails.

- **Taxes** - Broad dissatisfaction with high tax rates is evident in 21 comments that taxes are too high or need to be better managed, plus 18 comments against more taxes. Related issues include high CLK school taxes and variations in assessments (lake lots too high, CFR too low).

- **Governance and Government Services** - Service issues raised by more than one respondent include resolution of Hebard Plat boundaries, growing need for 911/medical/fire services, unplowed seasonal roads at Lake Medora and Gratiot Lake, deepening Lake Bailey, more help from the Regional Health Department in designing acceptable sanitation systems, and updating Eagle Harbor waterlines.
Governance issues raised by more than one respondent include non-responsiveness of the County Board (except for Don Keith), fairness/responsiveness of the Township Board, allegations that the Township Board improperly sold land, and more representation of non-residents.

- **This Survey** - 16 respondents expressed thanks, while 3 were critical. Names and addresses were given by 58% of non-voters but by only 32% of voters (who may feel more enfranchised despite anonymity).
1. **34% Survey Response Rate - 193 Respondents.**

   The profile of respondents mirrors the profile of Grant Township landowners -- largely homeowners and non-voters that work elsewhere or are retired.

2. **Homeowners, Non-voters, Voters are the three largest segments.**

   Homeowners (voters and non-voters) - 137 (71%)
   Non-voters - 132 (68%)
   Voters - 59 (31%)

3. **Respondents endorse Mission Statement - 4.4 average score.**

   Unique in Michigan, the United States and the world, Grant Township encompasses a wide range of largely undeveloped, unspoiled native ecosystems indigenous to the Great Lakes Region. The mission and purpose of Grant Township is to protect and preserve these special lands and waters for current and future generations. The focus of Grant Township is selective economic development and redevelopment which promotes and preserves the natural wilderness.

4. **Respondents very supportive of Goals & Objectives.**

   5 point scale: 5 = Strongly Agree; 4 = Agree; 3 = No opinion; 2 = Disagree; 1 = Strongly Disagree.

   Normal curve heavily skewed toward 5.

   Goals - average scores ranged from 4.5 to 3.9.

   Objectives - average scores ranged from 4.5 to 3.5.
5. **Respondents strongly endorse Goals focused on preserving Grant Township.**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Average score</th>
</tr>
</thead>
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<tr>
<td>Goal 1: Land Use</td>
<td>4.5</td>
</tr>
<tr>
<td>Goal 5: Community Character</td>
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<td>Goal 2: Environmental Protection</td>
<td>4.3</td>
</tr>
<tr>
<td>Goal 6: Archaeological and Historical</td>
<td>4.3</td>
</tr>
</tbody>
</table>

6. **More agreement than disagreement on all Goals & Objectives.**

   Average scores by major segment for each goal and objective varied by 4/10’s of a point or less.

   Voters rated Recreational and Cultural, and Economic Development goals and objectives relatively higher.

   Non-voters rated Land Use, Environmental Protection, and Community Character goals and objectives relatively higher.

   Homeowners tended to reflect the scores for all respondents. Sometimes homeowner average scores were closer to voters and other times to non-voters.

   Most wanted more input to land use issues, particularly non-voters.

7. **Topics of Concern - Personal properly rights, more government and duplicate regulatory responsibilities.**

   Infringement on personal property rights and creating more government were reasons respondents disagreed with goal and objective statements.

   Several respondents were concerned about duplication with existing laws and regulations and the corresponding cost.

   Goals and objectives that respondents felt less passionate about tended to have lower average scores.
8. **Respondents willing to pay 1-3 additional mils to accomplish certain purposes.**

   50% or more of All Respondents were willing to pay 1-3 more mils for each of the 5 items listed. A significant number of “maybe” respondents (approximately 10% of all respondents) wanted more information.

   All Respondents rated Health and safety services (61%), Purchase of special places by local government (56%) and Copper Harbor School (55%) most important.

   Voters rated Copper Harbor School (71%), Health and safety services (63%), and Purchase of special places by local government (51%) most important.

9. **Wonderful, thoughtful written comments demonstrate love for Grant Township and desire to preserve its uniqueness.**

10. **Areas for additional emphasis or examination**

    1. Trail systems, particularly non-motorized
    2. Watercraft regulation, power and non-power areas
    3. Timberland management direction and support
    4. Preservation of special places
SUMMARY OF SHERMAN TOWNSHIP QUESTIONNAIRE
FALL 2001

1. What brought you to Keweenaw County?
   - Family roots - 27
   - Natural setting - 14
   - Waterfront - 8

2. What do you like about the township?
   - Peace and quiet, rural setting, wilderness, Lake Superior - 48

3. Is there anything you would like to see changed in the township?
   - Better community services - 22
   - Ordinances - 12
   - Better roads - 2
   - New water system - 2
   - Better utilities - 2
   - Public marina - 1
   - Move trash bins - 3

4. Would you like to see commercial development in Sherman Township?
   - No - 29
   - Yes, small low impact, like a convenience store, small motel - 30
   - Yes, substantial job creation - 7

5. What do you think should be done with the old school?
   - Tear it down - 18
   - Preserve/restore - 29
   - Senior citizen - 3
   - B&B, motel - 5
   - Community building - 3
   - Museum - 9

6. Would you like to see the old Gay Park turned back into a park?
   - Yes - 48
   - No - 12
7. Would you like to see more public access to the waterfront?
   yes -34
   no - 25

8. Are you in favor of a small roadside park at the mouth of the Tobacco River?
   yes -42
   no- 13

9. What is the most Important thing you would like to see preserved in our area?
   Keep the status quo, peace and quiet.
   The smoke stack.
   The area could use a boat launching facility.
The chairman called the meeting to order at 6:08 P.M.

Roll call:

Members Present:  James Regis, Chairman
                 Eric Bjorn, Vice-chair
                 Robert Crampton, Member
                 David Latvala, Member
                 Robert Rippa, Member
                 Mark Pavolich, Member
                 Jane J. Pelto, Zoning Administrator

Members Absent:  Keith Walters, Member

Consultant:  Lori Hauswirth, WUPPDR

Public:  53

The meeting was called to order at 6:08 P.M. by the chairman.

A motion was made by Commissioner Crampton, supported by Commissioner Latvala, to approve the Agenda as presented. Motion carried.

Chairman Regis welcomed guests and visitors. He also read the Rules of Procedure to be followed for the public hearing. Each person would be allowed to give comments or make recommendations for three minutes. He also noted there were six letters from land owners in Lac LaBelle requesting that North Lac LaBelle be listed as Resort Residential on the Land Use Map. There were four letters from property owners west of Copper Harbor on Brockway Mountain Drive requesting their parcels reflect the current zoning on the Land Use Map.

Jon Soper asked to have the text on Page 90, Goals & Policies: Policy 1.1 should have the following added to it: away from lands targeted for public acquisition.

Anita Campbell thanked the Reuse Committee members and Lori Hauswirth for their work on the Land Use Plan and map. She spoke for some of the owners of the property on the north shore of Lac LaBelle. They want it to be shown as RR not RS on the Land Use Map. These residents fear business will move in. They would like to see business restricted to Superior Avenue in Mendota.

Paul Campbell has a copy of the residential QCD from Lake Superior Land Co. with the residential restriction included as a part of it.

Doug Sherk wanted to thank the Zoning/Planning Commission for asking the townships to work on the Land Use Plan.

Dick Powers was concerned about the Grant Township well head protection especially with the RS property of the county’s adjacent to it. You have to be careful what use the county would make of the property.
Dick Walwrath asked about the property west of Copper Harbor. Some of his clients had written letters to the commission expressing their preference to maintain the same designation on the Land Use Map as the Zoning Map for their property.

There being no further public comments, the commission discussed the recommended changes from the public.

It was the consensus of the commission to keep the written text as it is. To maintain a list of properties targeted for public acquisition and limiting their use until acquisition would put an unfair restriction on those properties and their owners.

There are only six letters from owners in North Lac LaBelle asking to change to RR from RS. There are at least forty owners in that area. Six is not a majority.

The commission also felt the areas around Lake Medora and west of Copper Harbor should reflect the current zoning. Also, the Zemke property in Gl-1 of Sec. 22-58-27 should remain RR, the same as the zoning at the request of the owner’s representative.

There being no further discussion by the commission members, a motion was made by Commissioner Latvala, supported by Commissioner Crampton, to approve the text of the “Keweenaw County Blueprint For Tomorrow” Land Use Plan, dated November 7, 2002, to approve the Land Use Map with the parcels west of Copper Harbor, the sections around Lake Medora, and also GL-1 of Section 22-58-27 changed to reflect the current zoning. The commission was polled and the motion unanimously carried. The text and the map will be forwarded to the Keweenaw County Board of Commissioners for their meeting on December 11, 2002, for their comments.

There being no further business before the commission, a motion was made by Commissioner Crampton, supported by Commissioner Latvala, and unanimously carried, to adjourn at 7:34 P.M.

James Regis, Chairman

Eric Bjorn, Vice-chair
The Board of County Commissioners, County of Keweenaw, Michigan, deems it necessary to foster, promote, and implement an emergency management system for the public safety, homeland security, emergency preparedness, and the public health of the citizens of the County of Keweenaw and the communities of Keweenaw County.

Motion by Keith supported by Roberts and unanimously carried to sign an Employee Assistance Program Agreement with the Western U.P. Substance Abuse Service Coordinating Agency for 2003.

Motion by Roberts supported by Bjorn and unanimously carried to purchase a $600 full page advertisement in the 2003 Houghton/Keweenaw County plat book from 4-H.

Motion by Keith supported by Roberts and unanimously carried to authorize any commissioner to attend a workshop for new commissioners in Marquette.

There being no further business motion by Keith supported by Roberts and unanimously carried to adjourn. Meeting adjourned sine die.

FRANK STUBENRAUCH, CHAIRMAN

Marilyn Winiquist, Clerk

PUBLIC HEARING
PROPOSED 2003 COUNTY BUDGETS
December 11, 2002

The Keweenaw County Board of Commissioners held a public hearing on proposed 2003 County budgets December 11, 2002, 6:45 P.M. at the Courthouse, Eagle River, MI.

Commissioners present: Full Board.

There was no public comment. Chairman Stubenrauch explained about the increase in hospitalization.

At 6:55 P.M. motion by Keith supported by Roberts and unanimously carried to close the hearing.

FRANK STUBENRAUCH, CHAIRMAN

Marilyn Winiquist, Clerk

OFFICIAL PROCEEDINGS
KEWEENAW COUNTY BOARD OF COMMISSIONERS
December 11, 2002

The regular monthly meeting of the Keweenaw County Board of Commissioners held December 11, 2002, 7:00 P.M. at the Courthouse, Eagle River, MI opened with the pledge of allegiance.

Commissioners present: Donald Keith, District 1; Jeff Turnquist, District 2; Eric Bjorn, District 3; Frank Stubenrauch, District 4; Gordon Roberts, District 5.

Motion by Roberts supported by Bjorn and unanimously carried to approve the agenda with the addition of other under new business, James Vivian as guest and YSI to read Evereds.

The minutes of the November 13th Public Hearing and Official Meeting were accepted as read.

The Treasurer, Sheriff, Equalization and Mine Inspector reports were received.

James Vivian stated there will be three vacancies on the Zoning/Planning Commission and one on the Zoning Board of Appeals and requested these be advertised. Motion by Keith supported by Roberts and unanimously carried to advertise requesting applications from residents interested in serving in these positions.

Motion by Keith supported by Roberts to adopt the Gratiot River Clean-Up budget, to amend the 2002 general fund budget: increase revenues - refunds $5538, Aid from Other Government $1500, Cigarette Tax $77, decrease fund balance $24,119.46 and increase expenditures - Board of Commissioners donation $100, Equalization Dept. phone $600, Insurance-Workman Comp $5538, decrease hospitalization $2000 increase hospitalization employee benefit $2000, property & liability $311.15, county share social security $3000, county share medicare $250, appropriation to Gratiot River Clean-Up fund $9,46, Snowmobile equipment $435, Marine Safety equipment $230, Road Patrol wage $1000, Sheriff deputy wage $3000, equipment repair $1000, 302 Training $1500, Appropriation to Building Code fund $9380, cigarette tax $77; and to pay the approved and audited bills: General Fund $116,251.29; 911 Fund $1819.12. Board polled. Ayes: Keith, Bjorn, Turnquist, Roberts, Stubenrauch. Motion carried.

Motion by Keith to table a contract for PastyNET until January.

Motion by Bjorn supported by Roberts and unanimously carried to adopt the following Zoning Ordinance KC-001-A02:
The Keweenaw County Zoning Ordinance, Section 2, General Provisions, 2.3 Site Restrictions, is hereby amended to include the addition of subsection 9, Open Space Preservation. This Ordinance Amendment is being implemented so as to preserve no less than 50% open space when land is developed according to the conditions outlined in PA 178, 2001 for Open Space Preservation.

Robert Murphy of AFSCME stated the Juvenile Officer position is suitable to the union. The Prosecuting Attorney differed saying there is law that states the Juvenile Officer is an officer of the court. Murphy suggested the Board take action now as this has been tabled for three months so the employee can write to the Michigan Employee Relations Commission who will determine if this is a suitable position to the union. Motion by Keith supported by Turnquist and unanimously carried to table the addendum to the union contract.
Motion by Keith supported by Bjorn and unanimously carried to recommend to the Zoning/Planning Commission to adopt the Keweenaw County Blueprint for Tomorrow Land Use Plan & Map as written.

Motion by Turnquist supported by Keith to adopt the 2003 budgets. Board polled. Ayes: Keith, Bjorn, Turnquist, Roberts, Stubenrauch. Nays: None. Motion carried. (see page 178)

Motion by Turnquist supported by Roberts and unanimously carried to have a plaqué made honoring Dr. Gilbert, County Medical Examiner, for his years of service improving medical response conditions for citizens of the County.

Motion by Keith supported by Roberts and unanimously carried to have a plaque made for Jeff Turnquist for his eight years of service on the County Board.

Motion by Turnquist to name the Mouth of the Gratiot area after Frank Stubenrauch. Stubenrauch explained it was part of the grant stipulation the area could not be named after an individual. Turnquist rescinded his motion and made a motion supported by Bjorn at board meetings this be referred to as Frank's Park.

There being no further business motion by Bjorn supported by Turnquist and unanimously carried to adjourn. Meeting adjourned sine die.

FRANK STUBENRAUCH, CHAIRMAN  
MARIYLIN WINQUIST, CLERK

2003 GENERAL APPROPRIATIONS ACT

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<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
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<tr>
<td>Taxes &amp; Penalties</td>
<td>700,387</td>
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<tr>
<td>Licenses &amp; Permits</td>
<td>965</td>
</tr>
<tr>
<td>Federal Grants</td>
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<tr>
<td>State Grants</td>
<td>228,023</td>
</tr>
<tr>
<td>Charges for Services</td>
<td>40,390</td>
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<tr>
<td>Fines &amp; Forfeits</td>
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<tr>
<td>Interest &amp; Rentals</td>
<td>14,200</td>
</tr>
<tr>
<td>Other Revenues</td>
<td>16,700</td>
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<tr>
<td>Legislative</td>
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</tr>
<tr>
<td>Judicial</td>
<td></td>
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<tr>
<td>General Government</td>
<td></td>
</tr>
<tr>
<td>Public Safety</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Welfare</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Capital Outlay</td>
<td></td>
</tr>
<tr>
<td>Other Uses-Operating Transfer Out</td>
<td></td>
</tr>
<tr>
<td>Appropriation from fund balance</td>
<td>159,643</td>
</tr>
<tr>
<td>TOTAL GENERAL FUND</td>
<td>1,161,198</td>
</tr>
<tr>
<td>SPECIAL REVENUE FUNDS</td>
<td></td>
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</tbody>
</table>

KEWEENAW PARK FUND 208

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charges for services</td>
<td>1,030,000</td>
</tr>
<tr>
<td>Interest &amp; Rents</td>
<td>8,000</td>
</tr>
<tr>
<td>Recreational &amp; Cultural</td>
<td></td>
</tr>
<tr>
<td>Capital Outlay</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,038,000</td>
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</table>

FRIEND OF THE COURT FUND 215

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Grants</td>
<td>50</td>
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<tr>
<td>Charges for Services</td>
<td>70</td>
</tr>
<tr>
<td>Judicial</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
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BUILDING IMPROVEMENT FUND 248

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriation from fund balance</td>
<td>20,816</td>
</tr>
<tr>
<td>Building Repair</td>
<td>20,816</td>
</tr>
<tr>
<td>TOTAL</td>
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CONSTRUCTION CODES FUND 249

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permits</td>
<td>36,800</td>
</tr>
<tr>
<td>Public Safety</td>
<td></td>
</tr>
<tr>
<td>Other Sources-Operating Transfer In -General Fund</td>
<td>9,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45,800</td>
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</table>

911 FUND 261

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Grants</td>
<td>60,000</td>
</tr>
<tr>
<td>Public Safety</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>60,000</td>
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</tbody>
</table>

LAW LIBRARY FUND 260

<table>
<thead>
<tr>
<th>Revenue Other Sources</th>
<th>Expenditures &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penal Fines</td>
<td>2,000</td>
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<tr>
<td>Judicial</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>2,000</td>
</tr>
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</table>
### SPECIAL REVENUE FUNDS con't.

<table>
<thead>
<tr>
<th>Fund Description</th>
<th>Revenue &amp; Other Sources</th>
<th>Expenditure &amp; Other Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Development Fund 283</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rental Income</td>
<td>21,000</td>
<td>5,000</td>
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<tr>
<td>Recreational &amp; Cultural</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>21,000</strong></td>
<td><strong>5,000</strong></td>
</tr>
<tr>
<td>Medical Care Facility Fund 291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taxes</td>
<td>100,265</td>
<td>100,000</td>
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<td>Delinquent Taxes</td>
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<tr>
<td>Commercial Forest</td>
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<tr>
<td>Interest</td>
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<tr>
<td>Medical Care Facility</td>
<td></td>
<td></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>115,092</strong></td>
<td><strong>100,000</strong></td>
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<tr>
<td>Probate Child Care Fund 292</td>
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<tr>
<td>State Grant</td>
<td>15,000</td>
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<tr>
<td>State Grant foster care</td>
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<tr>
<td>Strong Families Grant</td>
<td>9,999</td>
<td></td>
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<tr>
<td>Reimbursements</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Other Sources-Operating Transfer In General Fund</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Welfare</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>55,799</strong></td>
<td><strong>54,999</strong></td>
</tr>
<tr>
<td>Veterans Trust Fund 294</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health &amp; Welfare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriation from fund balance</td>
<td>426</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>426</strong></td>
<td></td>
</tr>
</tbody>
</table>
The chairman called the meeting to order at 6:08 P.M.

Roll call:

Members Present:  
James Regis, Chairman  
Eric Bjorn, Vice-chair  
Robert Crampton, Member  
David Latvala, Member  
Robert Rippa, Member  
Mark Pavolich, Member  
Jane J. Pelto, Zoning Administrator

Members Absent:  
Keith Walters, Member

Consultant:  
Lori Hauswirth, WUPPDR

Public:  
6

The meeting was called to order at 7:30 P.M. by the chairman.

A motion was made by Commissioner Crampton, supported by Commissioner Latvala, to approve the Agenda as presented. Motion carried.

A motion was made by Commissioner Latvala, supported by Commissioner Crampton, and unanimously carried to approve the Minutes of the December 3, 2002.

Chairman Regis welcomed guests and visitors.

The Keweenaw County Board of County Commissioners reviewed the Land Use Map at their meeting on December 11, 2002 and had made no recommendation for any changes. A motion was made by Commissioner Crampton, supported by Commissioner Latvala, and unanimously carried to change the Kauppi property located east of the Tobacco River from Resort Residential to Resort Service on the Land Use Map.

Commissioner Regis read a Resolution (copy attached) approving the Land Use Map and Text with the above change included. A motion was made by Commissioner Crampton, supported by Commissioner Rippa, to endorse the Resolution. The Board was polled and the motion was unanimously carried.

A motion was made by Commissioner Crampton, supporting Richard Probst, Jr. replacing him as the Eagle Harbor Township representative on the Zoning/Planning Commission. He also recommended the Board retain Commissioner Regis and Commissioner Walters on the Board. The motion was supported by Commissioner Latvala and unanimously carried. Commissioner Crampton now resides in Allouez Township. There are three
terms due to expire at the end of December, Commissioner Regis, Commissioner Crampton, and Commissioner Walters.

There being no further business before the commission, a motion was made by Commissioner Crampton, supported by Commissioner Latvala, and unanimously carried, to adjourn at 7:46 P.M.

James Regis, Chairman

Eric Bjorn, Vice-chair
RESOLUTION

At its scheduled meeting on December 17, 2002 at the Keweenaw County Courthouse, the Keweenaw County Zoning/Planning Commission adopted the following resolution:

WHEREAS, the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan was prepared under the planning authority granted by P.A. 282, 1945 of the Michigan Statutes with the assistance of township citizen advisory committees, and

WHEREAS, Section 125.105 of the Michigan Statutes authorizes and empowers the County Planning Commission to adopt the Land Use Plan, and

WHEREAS, the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan with its accompanying maps, plats, charts, and descriptive and explanatory matter shows the Commission’s recommendations for the future development of the County, and

WHEREAS, a public hearing was held before the Keweenaw County Zoning/Planning Commission on December 3, 2002 to review and receive comment on the Land Use Plan, and

WHEREAS, the contents of the Land Use Plan were reviewed by the citizens and elected officials representing the municipalities within Keweenaw County, and

WHEREAS, the Keweenaw County Board of Commissioners has endorsed the Land Use Plan at the December 11, 2002 meeting,

NOW, THEREFORE BE IT RESOLVED, that the Keweenaw County Zoning/Planning Commission adopts the Keweenaw County ‘Blueprint for Tomorrow’ Land Use Plan in accordance with Section 125.105 of the Michigan Statutes.

I hereby certify that the foregoing is a true and exact copy of the resolution enacted by the Keweenaw County Zoning/Planning Commission at an official meeting held December 17, 2002.

James Regis, Chairperson