

2026

keweenaw county master plan

Approved by the Keweenaw County Planning Commission on September 28, 2026

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We acknowledge that Keweenaw County is located on the ancestral and contemporary homelands of the Anishinaabe, including the Ojibwe people, who have stewarded these lands and waters since time immemorial.

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In This Chapter

- Authority and Purpose
- Regional Context
- Goals and Strategies



01

introduction

Lake Superior From Brockway Mountain

Introduction

Regional Context

Keweenaw County is the northern-most, and least populated county in the State of Michigan. It is located in the western Upper Peninsula of Michigan, and comprises the northern portion of the Keweenaw Peninsula that projects into Lake Superior. In the native Ojibwe language "Keweenaw" roughly translates to "the crossing place" which reflects the early role of Portage Lake and the connecting Portage River as a shortcut for those traveling along the south shore of Lake Superior.

Keweenaw County is known for its rugged natural beauty, unique geology, and history, drawing people seeking to experience outdoor adventure in a rugged, remote wilderness setting. The County is a destination for outdoor sports including hiking, fishing, hunting, snowshoeing, rockhounding, snowmobiling, downhill and cross-country skiing.

Keweenaw County is bordered by on the south by Calumet Township and Houghton County, and Lake Superior on the west, north and east sides.

The County is comprised of two land masses: Isle Royale and the northern half of the Keweenaw Peninsula. The county also includes the waters of Lake Superior between the two, extending to the state's water borders with Ontario and Minnesota. It is thus the largest county in Michigan by total area, at 5,966 square miles, of which just 540 square miles is land and 5,426 square miles (91%) is water.

Keweenaw County is comprised of five (5) townships: Allouez, Eagle Harbor, Grant, Houghton and Sherman Townships. Allouez Township includes the incorporated Village of Ahmeek. The County also includes the unincorporated communities of Copper Harbor, Eagle Harbor, Eagle River, Gay, Mohawk, and Fulton.

Keweenaw County has experienced a slowly declining population, currently estimated at 2,110 persons. The reasons for this decline include outmigration of young people, fewer families with children, and its attraction as a retirement community. However, between 2020 and 2022, Keweenaw County had the highest percentage population gain in Michigan, growing by an estimated 5.4% while the State of Michigan as a whole declined. Remote work migration, following the 2020 pandemic, and potential interest as a "climate haven" are possible reasons for the recent influx.

Although Keweenaw County has engaged in community planning and zoning for many years, this new Master Plan will provide policy guidance and help set priorities for the County in the coming decade and beyond. The Master Plan recognizes that this is accomplished through understanding the desires of the community, appropriate planning, and the implementation and enforcement of reasonable zoning and development regulations which are necessary to protect the unique human and natural resources of the community.

The challenge is to manage changes in a manner that protects and improves quality of life in the County. As the term implies, planning is intended to anticipate problems and develop solutions, as well as identify opportunity and take advantage of them.

Authority and Purpose

The purpose of the Master Plan is to guide the future of Keweenaw County and help the community develop sustainably through a realistic and well thought out approach. The Master Plan has been prepared under authority of the Michigan Planning Enabling Act, P.A. 33 of 2008, as amended. The Master Plan is an important tool for a number of reasons:

- The Master Plan provides the legal basis for zoning, subdivision of land, and other local land use regulations.
- The gathering and analysis of community information and data

enables community leaders to holistically understand unique challenges and opportunities.

- By involving citizens and stakeholders in the planning process, the Plan serves as the supported community vision, including goals and strategies for achieving the shared vision.
- The Master Plan can help the community develop a sustainable economy.
- The Master Plan can serve as a catalyst for desired changes by engaging community action.
- The Plan can help to generate regional collaboration with neighboring communities.

The purpose of the master plan is to guide future development towards the economic and efficient use of land; promote the public health, safety, and general welfare; help guide the preservation and appropriate use of natural resources of Keweenaw County; provide for adequate transportation systems, public utilities, and recreation; and ensure efficient expenditure of public funds.

The Plan adoption is subject to a public hearing and approval by resolution of the Keweenaw County Planning Commission and County Board. (County Board approval is optional but highly recommended.)

Implementation of the plan is an on-going process, requiring the monitoring of changes in the community as well as the progress towards achieving the plan's goals. The Master Plan should be reviewed every five years and a determination made whether it needs updating or a new plan adopted.

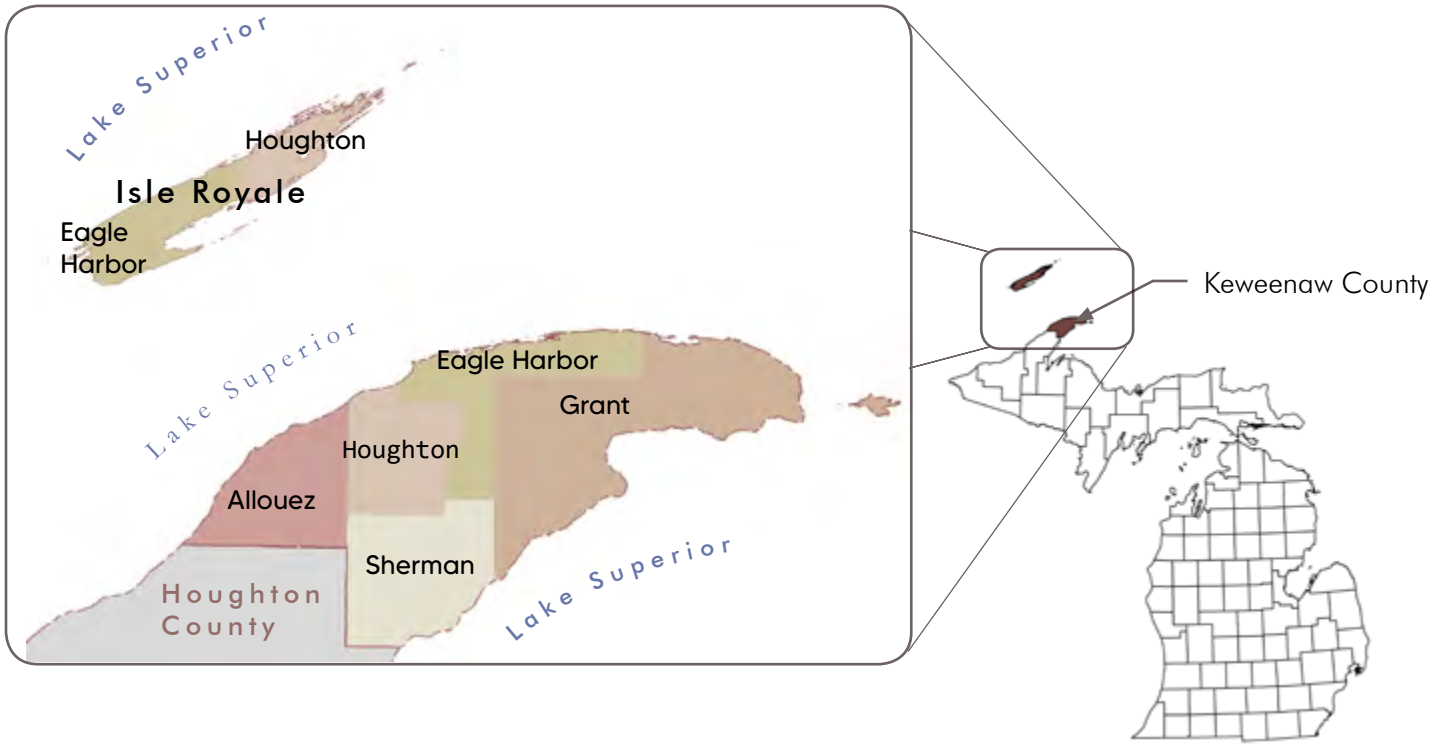


FIGURE 1.0 Keweenaw County & Township Vicinity Map



FIGURE 1.1 View from Brockway Mountain

Community Engagement

Involving County residents in this Master Plan process was a priority! The Keweenaw County Planning Commission provided ample opportunities to participate in the Master Plan, including a community survey, five (5) Community Open House Planning Workshops, stakeholder discussions, and an official public hearing on the Master Plan. Chapter 3 describes the results of the community engagement efforts.

Goals & Strategies

Throughout this document are listed Goals and Strategies that describe a course of action. These are a tool for future decision-making and help to define the character, values, and priorities of the Keweenaw County community.

Goals are broad statements that describe a desired outcome, where we want to be. Goals are often long-term in scope.

Strategies are a program, action, or practice that supports one or more policy statements. Strategies address at a high level, the "who, what, when, where, and how" of reaching a goal. A strategy may include multiple sub-strategies.

Implementation

The Plan concludes with a Chapter that provides strategic activities and initiatives to implement the Master Plan.

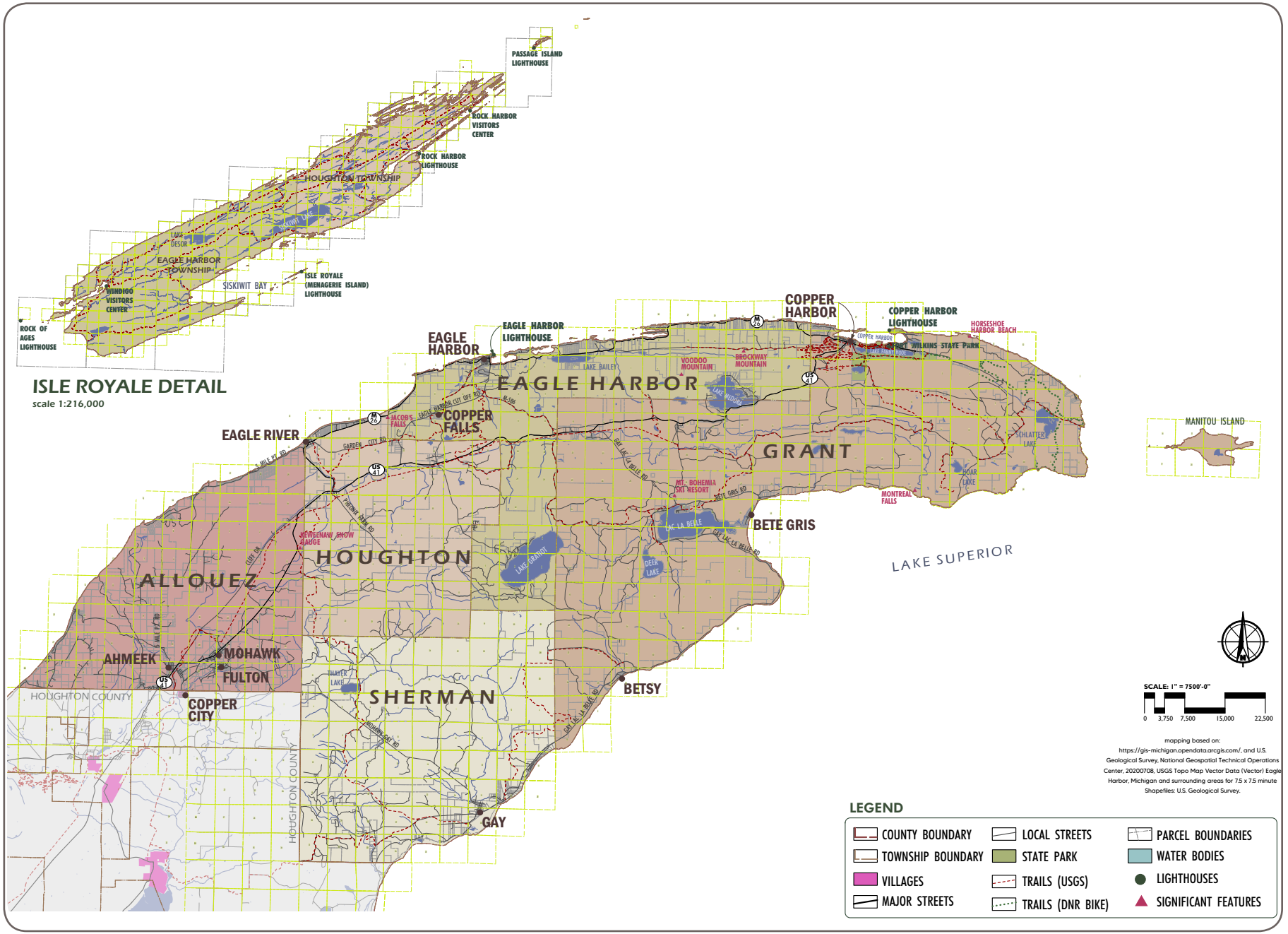


FIGURE 1.1 Existing Conditions, Overall Keweenaw County



In This Chapter

- Historical Background
- Keweenaw County Communities
- Physical Characteristics
- Community Demographics Summary

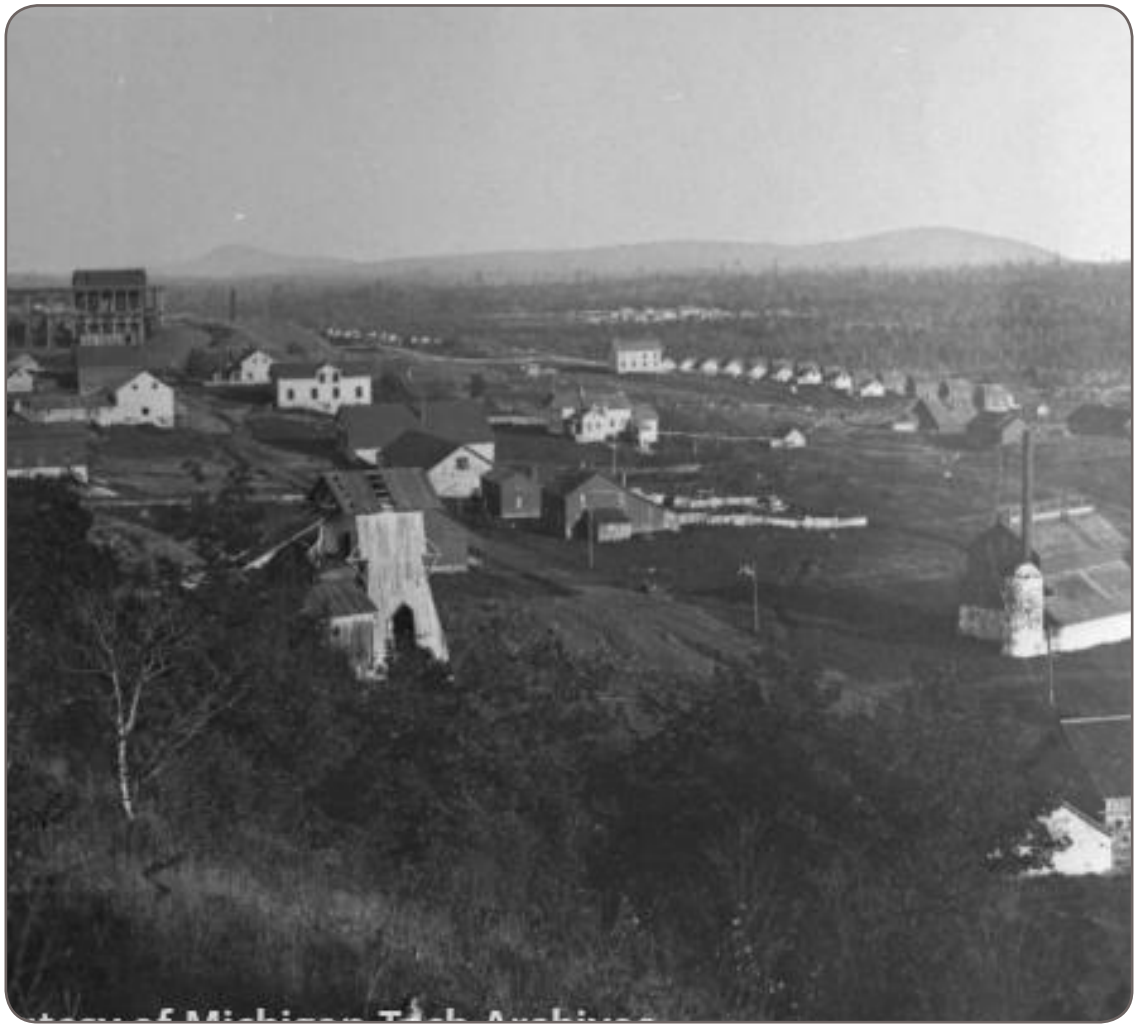


02

community description

Eagle River Falls

Community Description and Demographic Profile



Source: Michigan Technological University Archives and Copper Country Historical Collections, MTU Negative Photograph Collection, MTU Neg 05868, https://cchi.mtu.edu/

FIGURE 2.0 Amygdaloid and Delaware Mines, 1898

Keweenaw County is located in the western Upper Peninsula of Michigan. The County is bordered by on the south by Calumet Township and Houghton County, and Lake Superior on the west, north and east sides.

The County is comprised of two land masses: Isle Royale and the northern half of the Keweenaw Peninsula. The county also includes the waters of Lake Superior between the two, extending to the state's water borders with Ontario and Minnesota. It is thus the largest county in Michigan by total area, at 5,966 square miles, of which just 540 square miles is land and 5,426 square miles (91%) is water.

Keweenaw County is comprised of five (5) townships: Allouez, Eagle Harbor, Grant, Houghton and Sherman Townships. Allouez Township includes the incorporated Village of Ahmeek. The County also includes the unincorporated communities of Copper Harbor, Eagle Harbor, Eagle River, Gay, Mohawk, and Fulton.

A large segment of the population is retired and may or may not reside in The County year-round. Another segment of the population is made up of strictly seasonal summer residents.

Historical Background

Keweenaw County has a rich and colorful historical context. The County is considered the historic and contemporary homelands of the Anishinaabe, or Ojibwe Native Americans, particularly the recognized homeland territory of the Keweenaw Bay Indian Community. The word Keweenaw is an interpretation of the Anishinaabemowin (Ojibwemowin) word Gakiiwe'wewaning, which means "where portage is made."

In 1842, the Lake Superior Ojibwe Indians ceded the Western Upper Peninsula to the United States Government with the Treaty of LaPointe. This treaty allows the Ojibwe to continue to hunt, fish, and gather animal and plants within the ceded territory.

Shortly after the establishment of Michigan's statehood, Douglass Houghton was appointed as the first state's first geologist, a position he held for the remainder of his life. His fourth annual report, based on field work done in 1840, helped trigger the first great mining boom of American history in Keweenaw County, and earned him the title of "father of copper mining in the United States". In 1845, he and two companions drowned in Lake Superior near Eagle River in Keweenaw County, when their small boat capsized in a storm.

In 1843, a Land Office was established in Copper Harbor by the Secretary of War to issue mineral leases. Soon after, the first mineral rush in United States history began. This was the beginning of a rich copper mining history that built the foundation of the Keweenaw Peninsula.

The Military Road, was constructed from Fort Howard in Green Bay, Wisconsin, to Fort Wilkins, near Copper Harbor from 1864 to 1871. This road was built to connect the two forts during the Civil War for rapid reinforcements. This road also had many other uses such as connecting the northern timber resources with the rest of the world. The Military Road played a large role in connecting the Keweenaw Peninsula with the rest of the country and played a major role in industrializing the mining operations in Keweenaw County.

Copper mining began in Keweenaw County with ancient precontact Native Americans mining native copper at least 8,000 years ago. Following the1843 mineral rush, industrial mines were established, like the famous Cliff Mine (1845, first profitable mine) and Central Mine, which fueled growth but declined after the 1913-14 strike, and the Delaware Mine, leaving behind historic ruins and a rich legacy now preserved by the Keweenaw National Historical Park and the Keweenaw County Historical Society.



Source: Michigan Technological University Archives and Copper Country Historical Collections, Reeder Photograph Collection, Image No.: MS042-062-999-Z363, https://cchi.mtu.edu/

FIGURE 2.1 Lighthouses - Bete Grise, 1927

The Minong Mine Copper Mining District, which is part of Isle Royale National Park, has been designated a National Historic Landmark (NHL). In addition, there are a number of archaeological sites in the County, including the documented archaeological site 20KE20 dating back 8700 years before present, making this the earliest known copper-working site in Michigan (and possibly the United States).

Keweenaw and Houghton Counties were the leading producer of copper in America for decades. Following the 1912-14 labor strike, the industry struggled for a few more decades, with many leaving the area to pursue work in mines in the West and the Detroit auto industry. The mining boom resulted in the immigration of numerous Europeans to the County, including Cornish and Finns, descendants of whom continue to live in the County. Some negative legacy environmental impacts linger, such as the large delta of stamp sands in Lake Superior near Gay and smaller deposits scattered near the mining locations.

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. 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. Forest-based industry continued and some of the interior lands remain under timber company ownership today.

Tourism began with the development of resorts and hotels in Copper Harbor, Eagle Harbor and Eagle River, catering to those who wanted outdoor adventures and moderate summer temperatures. Today, tourism and retirement/second homes are dominant economic drivers in Keweenaw County.



Source: Michigan Technological University Archives and Copper Country Historical Collections, 06-088A Wendell J. and M. Jean Kraft Photograph Collection, Image No. Acc-06-088A-1142, https://cchi.mtu.edu/

FIGURE 2.3 Ahmeek Mill, 1947

Keweenaw County Communities

An important part of Keweenaw County's character are the unique communities found in the County. The settlement patterns that exist today can be tracked to the community's history as copper mining/processing locations, housing for miners and their families, commercial fishing, and commercial or transportation centers. Allouez, Mohawk, Fulton, Ahmeek Village and Gay are former mining and copper processing locations, whereas the communities of Lac La Belle, Copper Harbor, Eagle Harbor, and Eagle River are found along the shores of Lake Superior and have histories of fishing, transportation, and as commercial centers. The waterfront communities have become the center for seasonal home development, retirees, and tourism.

Mining communities that once were part of the landscape, but are mostly gone today, include Phoenix, Copper Falls, Clifton, Central, Delaware, Wyoming Location (Helltown), Bete Gris, Mandan, and Clark Mine. All but Bete Gris were located along the main corridor between Ahmeek Village and Copper Harbor.

Following is a brief description of each of the Townships including their towns and the unique characteristics they contribute to Keweenaw County:



Source: Michigan Technological University Archives and Copper Country Historical Collections, LaVanway Papers, Image No. MS061-002-014-049, https://cchi.mtu.edu/

FIGURE 2.4 Copper Harbor from Brockway, mid 1930's

Allouez Township (Allouez, Mohawk, Fulton, Village of Ahmeek)

Allouez Township is the "Gateway to Keweenaw County." The settled area of the Township was part of the urbanized industrial mining corridor that stretched from south of Calumet, in Houghton County, to Mohawk. The Township remains the center of population within Keweenaw County. The small communities of Allouez, New Allouez, Ahmeek Village, Ahmeek Mine Location, Mohawk, and Fulton are located along US 41/M-26 and exhibit many of the same characteristics that defined their roles during early mining days. Mohawk and Ahmeek Village continue to be the center of business activity in the area. Post offices still operate in Mohawk and Ahmeek Village. The only school in the area is also located in Mohawk, serving as the alternative high school for the CLK school district and is used as a public space for many social events.

Eagle Harbor Township (Eagle Harbor)

Eagle Harbor is primarily a residential community, with 228 permanent residents. Most residents of the Township are retired. 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 has many beautiful lakes, streams, beaches, and harbors. These natural assets, and the abundant recreational opportunities they offer, along with the many carefully preserved copper mining era historic sites, have for decades attracted summer vacationers. In recent years more retirement or seasonal homes have been constructed in the Township.



Source: Michigan Technological University Archives and Copper Country Historical Collections, 06-088A Wendell J. and M. Jean Kraft Photograph Collection, Image No. Acc-06-088A-1142, https://cchi.mtu.edu/

FIGURE 2.5 Lac La Belle Channel, undated

Grant Township (Copper Harbor and Lac La Belle)

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

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 the Keweenaw Peninsula issued there in 1843. Today it is an all-season destination for waterfalls, rock-hounding, hiking, mountain biking, kayaking, canoing, fishing, agate hunting, bird watching, berry picking, golfing, camping, snowmobiling, snowshoeing, downhill and cross country skiing, ATV trails, fall color tours, and many other activities.

Grant Township is the home to year-round extreme sports. Lac La Belle has Mt. Bohemia, with a vertical drop of 900 feet and numerous back country trails. Mount Bohemia has become nationally known for its back country skiing, Nordic Spa, and unique vibe. Copper Harbor is home to year-round trail systems for hiking, biking and cross-country skiing. The Copper Harbor Trail Club is a member of the International Mountain Bicycling Association and has gained the level of Silver Level Ride Center Status.

Fort Wilkins State Park and its historic lighthouse museum are located at Copper Harbor. The Estivant Pines, Horseshoe Harbor, Keweenaw Point Trail, and other protected lands are accessible from Copper Harbor, as well as the Brockway Mountain Drive. The Isle Royale Queen offers daily trips to Isle Royale National Park from Copper Harbor. The community includes the historic Keweenaw Mountain Lodge resort, a number of restaurants, stores, gift shops, motels, campgrounds, a post office, and other facilities, including a State of Michigan marina and safe harbor.

On the south shore, Lac La Belle (French for "beautiful lake") offers fishing, kayaking, and access to Bete Gris, a beach and 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. This activity lead to a channel being dredged in the late 1860's from Lac La Belle 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 the Lac La Belle community is comprised of year-round and summer residents who enjoy the pleasures of berry picking, fishing, hunting, and hiking the surrounding wilderness. Visitors to the area will find the Mt. Bohemia Ski Resort offering downhill skiing, snowshoe and hiking trails, a bar and restaurant, and a Nordic Spa facility. On Lac La Belle a store with gas pumps, a privately-owned marina, and a State of Michigan public access site and marina, and a number of rental cabins are available. The pristine "singing sands" of nearby Bete Gris are a favorite swimming beach with crystal clear water and a picturesque view of the historic Mendota Lighthouse and the Lake Superior shoreline out to Keweenaw Point

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

Houghton Township (Eagle River)

Within Houghton Township is the County Seat of Eagle River. The focus of population in Houghton Township, Eagle River, is home to the historic County Courthouse, Sheriff Department and offices. The Houghton Township Hall in Eagle River also houses the Keweenaw County Historical Society Museum of Eagle River and Cliff Mine. The town has a small year-round population but enjoys an influx of seasonal residents during summer months. With approximately three miles of shoreline, including a portion of Great Sand Bay, the Township offers a public beach area, a lakeside hotel/restaurant, the Gitchee Gumee Bible Camp and many waterfront homes. The spectacular Eagle River with falls that drop prominently along M-26 is in the Town of Eagle River.

The rich history of Houghton Township has left a landscape dotted with the intriguing former mining communities of Phoenix and Central along US 41. Today the Keweenaw County Historical Society continues to operate historic mining sites for the public, tours and some weekly rentals in Central. There are a few private residences and structures left in Central, including a Visitor Center and the Historic Central Church which holds an annual reunion the first weekend in August.

Phoenix at the intersection of M-26 and US 41 has the historic Phoenix Store, and gas station, the Historic Phoenix Church, and two taverns with rental cottages. It also affords a tremendous view of the Cliffs and is a favorite stop along the snowmobile trail system.

Sherman Township (Gay)

Sherman Township is primarily woodland with a majority of the lands falling under Commercial Forest Act (CFA) designation. Timber harvesting is the primary industry, but recreation abounds in the Township with snowmobile and ATV trails, hunting, fishing, biking, hiking, and berry picking. Other features include a historical museum in the old Gay School building, the Tobacco River, Thayers Lake, Traverse River, and beautiful Lake Superior shoreline. The shoreline has been developed with year-round and seasonal homes where residents enjoy the calmer, more protected side of the Keweenaw Peninsula.

The only community in Sherman Township is the small historic copper milling community of Gay. The town was named after Joseph E. Gay, one of the founders of the Mohawk and Wolverine Mining Companies. The major stamp mill at Gay is where copper ore bearing rock was crushed to remove the metal. Stamp sand, the byproduct of the mining operation was deposited along the shore of Lake Superior from the Tobacco River to Little Traverse. The vast stamp sand deposits have been the subject of major environmental studies and are currently being remediated.

Physical Characteristics

Climate

Keweenaw County has a climate heavily influenced by Lake Superior, resulting in short, cool springs, mild, sunny summers, colorful autumns, and long, cold, snowy winters with massive lake-effect snow (averaging 180-250+ inches annually). Below freezing temperatures and deep snow are common from late November to April. Annual average snowfall is 208 inches but is greatly influenced by elevation. A record snowfall of 390 inches was experienced at Delaware in Grant Township in the winter of 1978-79.

Annual total precipitation (including snowfall) in the County averages 29 inches.



FIGURE 2.6 Eagle River Falls

Topography

Keweenaw County is characterized by a rugged, varied landscape shaped by ancient volcanic activity and glacial movement. The county is defined by two prominent parallel ridges, the Cliff Range and the Brockway Mountain ridge. Brockway Mountain Drive is notable for being the highest scenic roadway between the Rockies and the Appalachians.

Elevations of the County range from 600 feet at the Lake Superior shore, to peaks of over 1,400 feet, including:

- Mount Horace Greeley: The highest point at 1,550 feet.
- Gratiot Mountain: Elevation of 1,490 feet.
- Mount Houghton: Elevation of 1,467 feet
- Mount Bohemia: Elevation of 1465 feet.
- Brockway Mountain: Elevation of 1,320 feet.

Ground and Surface Water

Watersheds

Lake Superior is the largest freshwater lake by surface area in the world and a dominant feature of Keweenaw County. The extensive Lake Superior shoreline of the County is over 150 miles just on the peninsula, to well over 400 miles including Isle Royale.

Major watersheds in Keweenaw County include the following:

- Trap Rock River
- Gratiot River
- Montreal River
- Silver River
- Jacobs Creek
- Little Gratiot River
- Tobacco River
- Eagle River
- Numerous smaller streams

The major inland lakes of Keweenaw County include:

- Gratiot Lake
- Lac La Belle
- Lake Fanny Hooe
- Lake Medora
- Manganese Lake
- Lake Bailey
- Many smaller, less-known lakes are also present

Wetlands

Wetlands provide a buffer between aquatic and upland areas and are widespread throughout the County. Wetlands are generally not developable but are extremely important in providing habitat for local and migrating wildlife. They support the wider ecology of the many fresh water inland lakes and streams in the County.

Soils and Geology

Keweenaw County has a very unique geology, defined by 1.1 billion year-old volcanic lava flows (Portage Lake Volcanics) from the Mid-continent Rift System, which created rich deposits of native copper, alongside younger sedimentary rocks like Jacobsville Sandstone. Ice Age glaciers further defined the landscape into ridges and basins, with the major Keweenaw Fault separating volcanic and sedimentary layers, forming the peninsula's distinctive landscape.

The Keweenaw Fault is a major thrust fault that runs along the peninsula, pushing older volcanic rocks over younger sandstones (Jacobsville Sandstone), creating dramatic cliffs and defining the peninsula's shape.

During the Pleistocene Epoch, thick ice sheets/glaciers carved the landscape, creating features like kettle lakes, depositing gravel, and leaving glacial grooves in the volcanic rocks.

The rifting and faulting provided pathways for copper-rich solutions to deposit native copper, leading to the historic copper discovery and mining boom. The differential erosion of softer layers by glaciers and the presence of the fault created the rugged ridges, valleys, and lakes seen today.

Keweenaw County is a destination for rockhounding with minerals like native copper, silver, epidote, chrysocolla, and Michigan's state gemstone, the greenstone (chlorastrolite), as well as agates and more.

Many soil types are present in Keweenaw County, as the result of volcanic activity, glacial deposits and outwash, lake sediments and organic material deposits. The soils and geology of the County directly impacts site and land use suitability and limitations. On-site wastewater systems are severely limited by shallow bedrock that is present throughout most of the northern part of the County. In other areas, wetlands and wet soils also limit development.

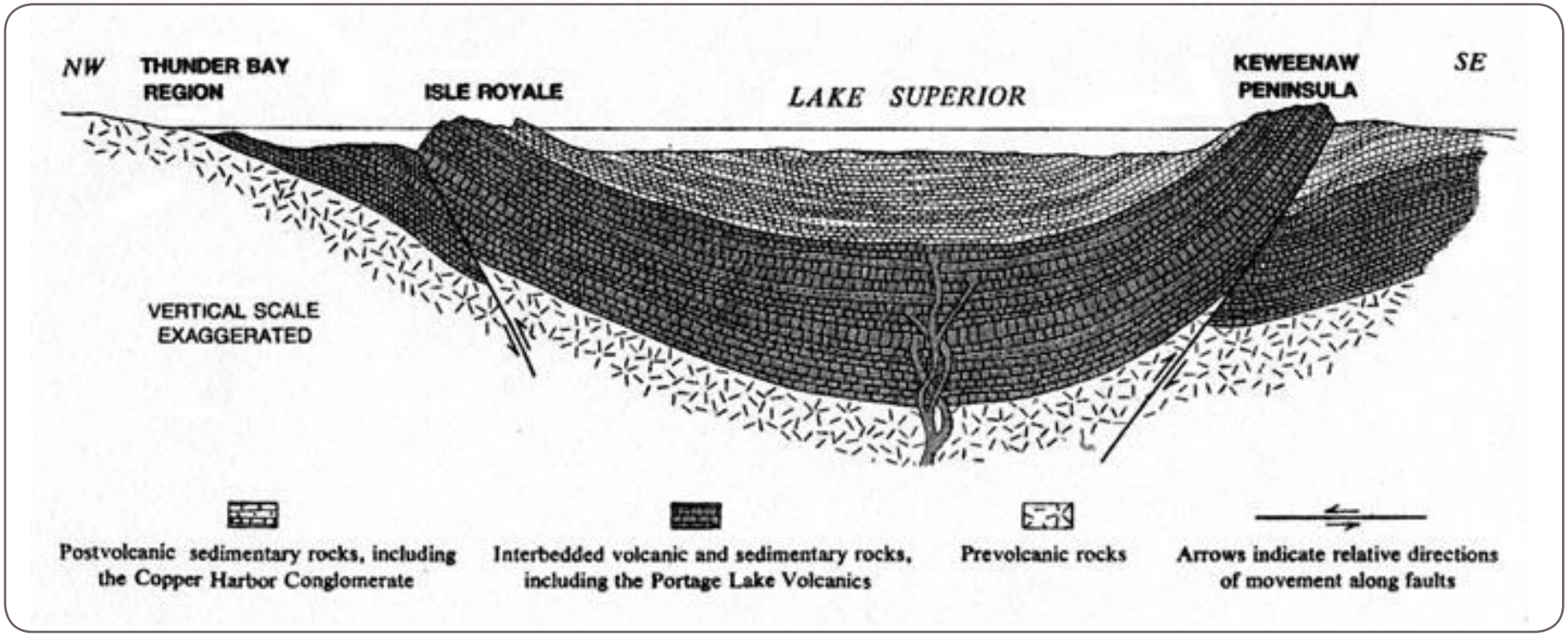


FIGURE 2.7 Keweenaw and Isle Royale Geology

Source: Norman King Huber, The geologic story of Isle Royale National Park, United States Geological Survey Bulletin

Community Demographics Summary

Population

Keweenaw County's population is made up of both year-round and seasonal residents who make the County their home. The seasonal residents include those who only reside in the County during the summer months but make their primary home somewhere else.

The population of Keweenaw County peaked in 1910, and has been in a slow decline since the copper industry declined. The entire region suffered economically, as those unemployed and their families left the area to work in other mining operations and downstate auto industries.

Limited opportunities for employment in the area continue to cause the outmigration of young people and families. Limited housing availability and land for housing development also contributes to the decline of population. While there is some in-migration of older, retired persons, many of these persons live in the County on a seasonal basis and may not be counted in the Census of Population every decade.

The impact on the County is evident in the population trend seen on the table below:

	Keweenaw County	Michigan	U.S.
1900	3,217	2,420,982	76,212,168
1910	7,156	2,810,173	92,228,496
1920	6,322	3,668,412	106,021,537
1930	5,076	4,842,325	122,775,046
1940	4,044	5,256,106	132,164,569
1950	2,920	6,371,766	150,697,361
1960	2,417	7,823,194	179,323,175
1970	2,264	8,875,083	203,302,031
1980	1,939	9,262,078	226,545,805
1990	1,701	9,295,297	248,709,873
2000	2,301	9,938,444	281,421,906
2010	2,156	9,883,640	308,745,538
2020	2,046	10,077,331	331,449,281
2023 (est.)	2,106	10,037,261	334, 900,000

Source: US Census

TABLE 2.0 Historical Population Trend, 1900-2023

Township	2020*	2023 (est.)**	% change
Allouez	1,428	1,309	-8.3%
Ahmeek Village***	127	90	-29%
Eagle Harbor	217	228	+5%
Grant	275	317	+15%
Houghton	72	85	+18%
Sherman	91	104	+14%
County Totals	2,046	2,106	+2.9%

*Source: *US Census*
*** American Community Survey*
****Included in Allouez Township #*

TABLE 2.1 Population by Township, 2020 and 2023

As shown on these tables, between 2020 and 2023, Keweenaw County had an estimated population gain, growing by 2.9%, while the state as a whole declined. The 2023 estimate shows that all Townships in the County gained population, except for Allouez. The drivers of this growth may include remote worker migration following the 2020 pandemic, and potential interest as a retirement location, or "climate haven". Accordingly, while there is potential for sustained modest growth, long-term projections for sparsely populated areas like Keweenaw County are uncertain, balancing in-migration against potential out-migration and natural changes. Realistically, expect Keweenaw County's population to hover around the low 2,000s through 2030 and beyond, potentially seeing small gains but remaining highly sensitive to migration trends, with 2020-2023 showing a rebound from the census number.

2025	2030	2035	2040	2045
2,154	2,083	1,985	1,846	1,704

Source: Michigan Department of Technology, Management, & Budget

TABLE 2.2 Keweenaw County Population Projections

Age Distribution

In addition to the out-migration of people, the population of Keweenaw County is older, with 37% of the population over 65 years of age. This compares to 18% for the State of Michigan.

The population is also made up of 16% of people who are 20 years of age or younger with only 8% under 10 years of age. 20-50 year olds comprise 27% of the population. The overall median age of the County is 62.2 years of age. The median age in Michigan is 40.1 years.

	Keweenaw County	Michigan	U.S.
9 and under	8%	11.3%	11.6%
10-19	8%	12.9%	13.2%
20-29	8%	13.2%	13.4%
30-39	7%	12.4%	13.4%
40-49	12%	11.7%	12.2%
50-64	13%	20.5%	19.3%
65-84	22%	15.9%	14.9%
85 and over	15%	2.1%	1.9%
TOTAL	2,083	10,077,331	331,449,281

Source: 2020 US Census

TABLE 2.3 Age Distribution, 2020

Gender & Households

The gender of the population is 49% female. Race is 96% white.

There are 1,090 households in the County. 71% are married. There are 1.9 persons per household in the County, compared to 2.4 persons per household in Michigan, reflecting the aging demographics.

Educational Attainment

Keweenaw County is a well-educated community, as shown on the table below:

	Keweenaw County	Michigan
High School grad or higher	97.5%	91.9%
Bachelor degree or higher	43.6%	31.8%
Post graduate	19%	-

TABLE 2.4 Educational Attainment, 2022

Income

Per capita: $46,593
(About 20% higher than the State of MI)

Median Household Income: $53,893
(About 75% of the amount of State of MI)

Poverty

Residents with an income below the poverty line: 8.7%
(State of MI 13.1%).

Children (under 18) living in poverty: 13%
(State of MI 17.5%).

Seniors (65+) living in poverty: 5%
(State of MI 9.3%).

Source: US Census 2020, Census Reporter, ACS 2022



In This Chapter

- The Planning Process
- Community Survey Summary
- Open House Workshop Events



03

community engagement & participation

Open House Workshop

Community Engagement & Participation

The Keweenaw County Master Plan was developed with a robust, transparent, and public planning process. It is clear that the County's full-time and seasonal residents are passionate about their love for the County, the quality of life, and its natural resources.

This Chapter provides an overview of the planning process, community engagement, and participation.

The Planning Process

Outlined below is a summary of the planning process:

Data Collection and Analysis

The Plan contains a summary of important information about Keweenaw County, current conditions, trends, issues and opportunities. This information was analyzed and summarized in order to provide an overview and gain an understanding about the community.

Previous Planning Document Review

The following documents were reviewed and relevant information incorporated into the Master Plan:

- Keweenaw County Blueprint for Tomorrow 2017
- Keweenaw County Recreation Plan 2025
- Keweenaw County Zoning Ordinance, as amended in 2025
- Blueprint for the Keweenaw Heartlands, The Nature Conservancy 2024



FIGURE 3.0 Open House Workshop

Public Involvement

Community engagement has been a priority of the Master Plan, so that the Plan responds to community needs and desires. The Keweenaw County Planning Commission offered several opportunities for people to become involved and express their ideas and opinions, including a Community Survey, Community Open House Workshops in each Township, a Master Plan project website, and discussion and review of drafts at Planning Commission public meetings.

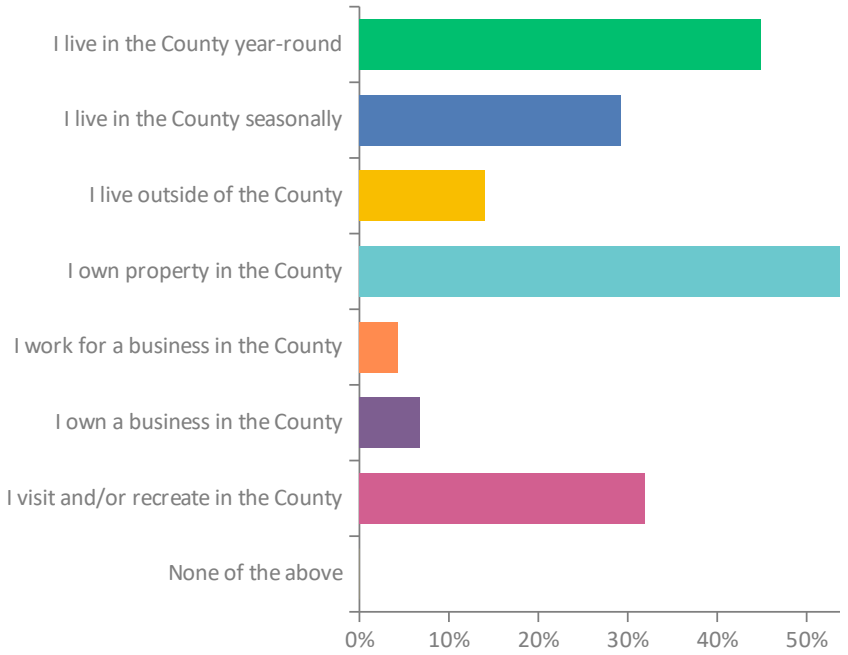
County residents were informed of the opportunities to participate in the Community Survey and Open House Workshops by a postcard mailed to 2,714 Keweenaw County property owners who have a validated mailing address. Notifications were also through posted on the County and Master Plan websites, and distributed posters and postcards.

This Chapter includes summaries and analysis of the Community Survey and Open House Workshops.

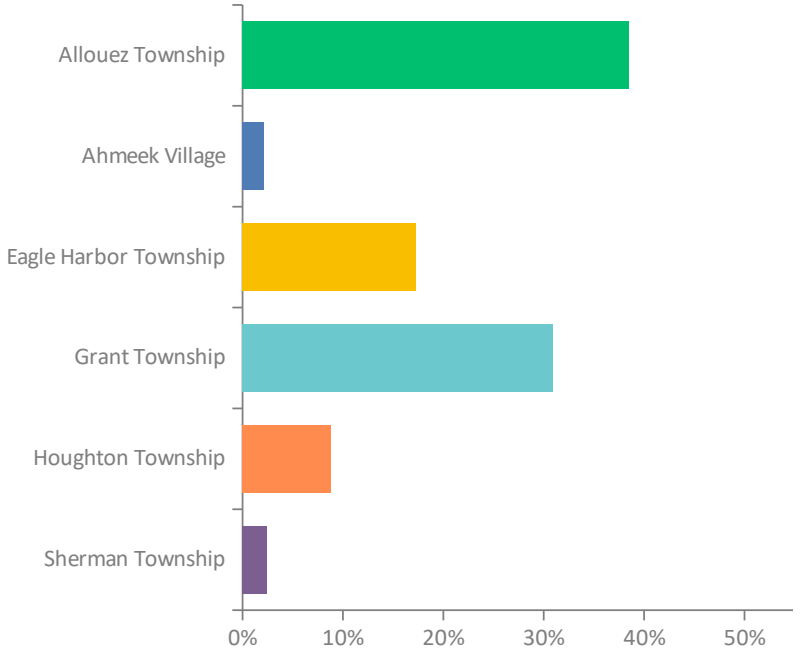
Community Survey

The Community Survey went live on August 1, and the postcard was mailed to property owners on August 8, 2025. A total of 417 responses were collected. The complete survey results, including all open-ended questions and comments can be found in the Appendix. A survey summary and analysis follows:

Q1: Which of the following describes your interest in Keweenaw County? Answered: 414 Skipped: 3



Q2: If you are a year-round or seasonal resident, where is your residence? Answered: 330 Skipped: 87

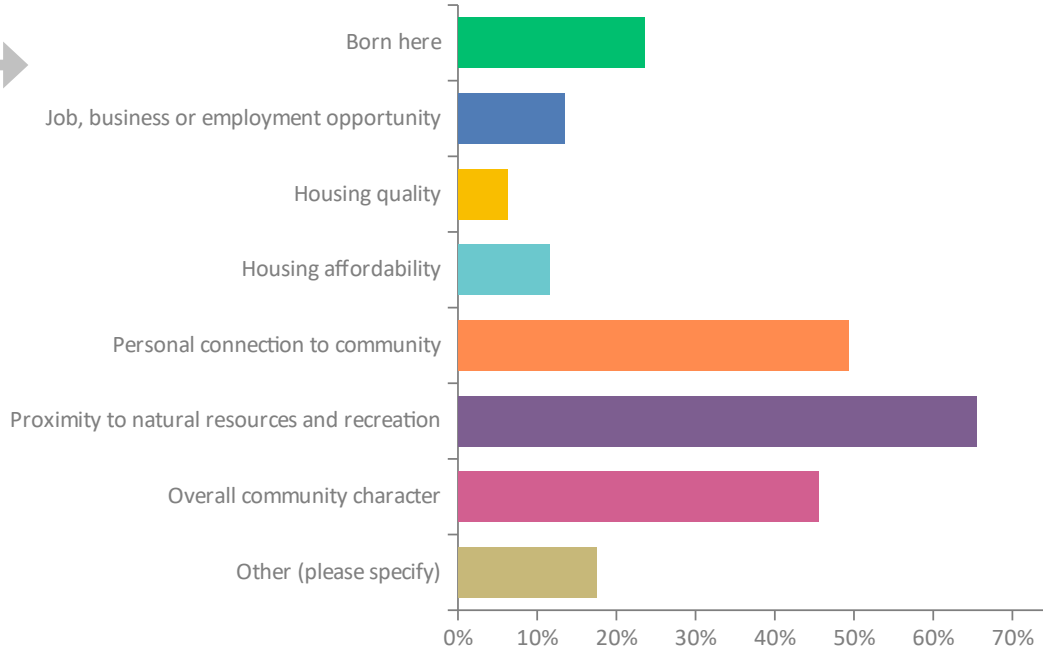


Q3-Q5: Age and Children

Analysis: The survey confirmed that the County is primarily a community of residents who are older. Only 19% said they have children under the age of 18 at home. Nearly 54% indicated they are 60+ years of age. Nearly 88% said they are over the age of 40.

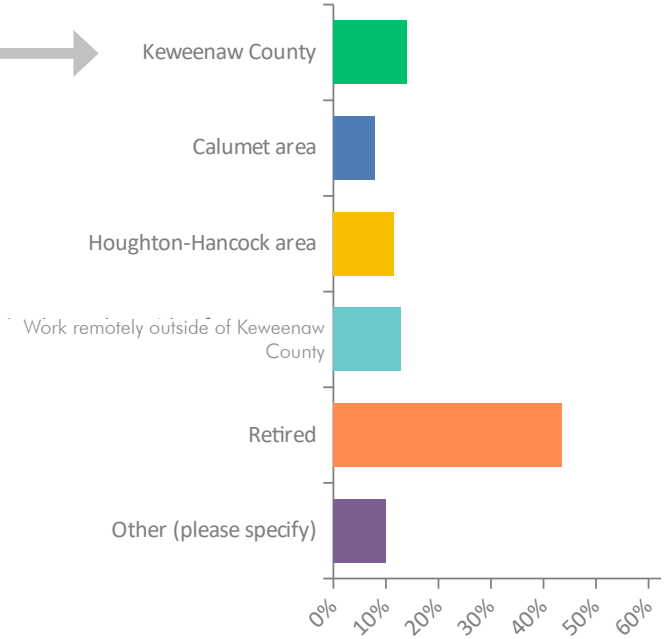
Q6: Why do you choose to live in Keweenaw County? (check all that apply)
Answered: 365 Skipped: 52

Analysis: Responses to the "Other" cited the beauty, quiet, and natural resources of the County.

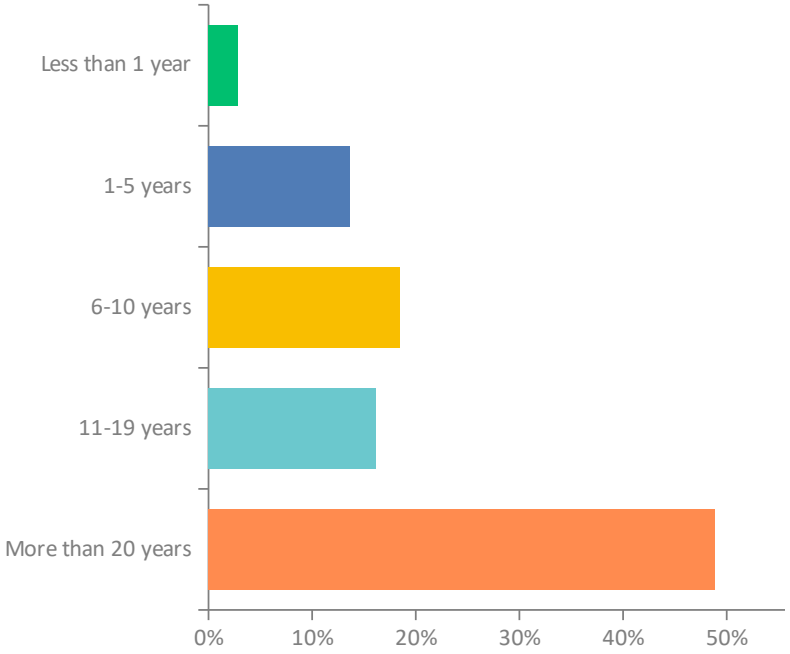


Q7: If you are employed, where is your workplace located:
Answered: 327 Skipped: 90

Analysis: It is notable that nearly 13% of respondents work remotely.

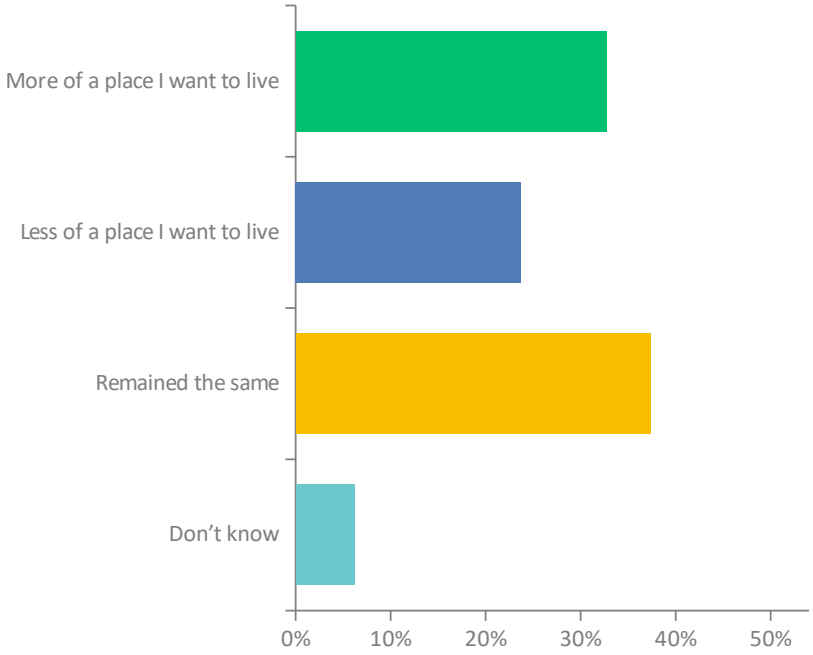


Q8: How long have you lived in Keweenaw County, either full time or seasonally? Answered: 352 Skipped: 65



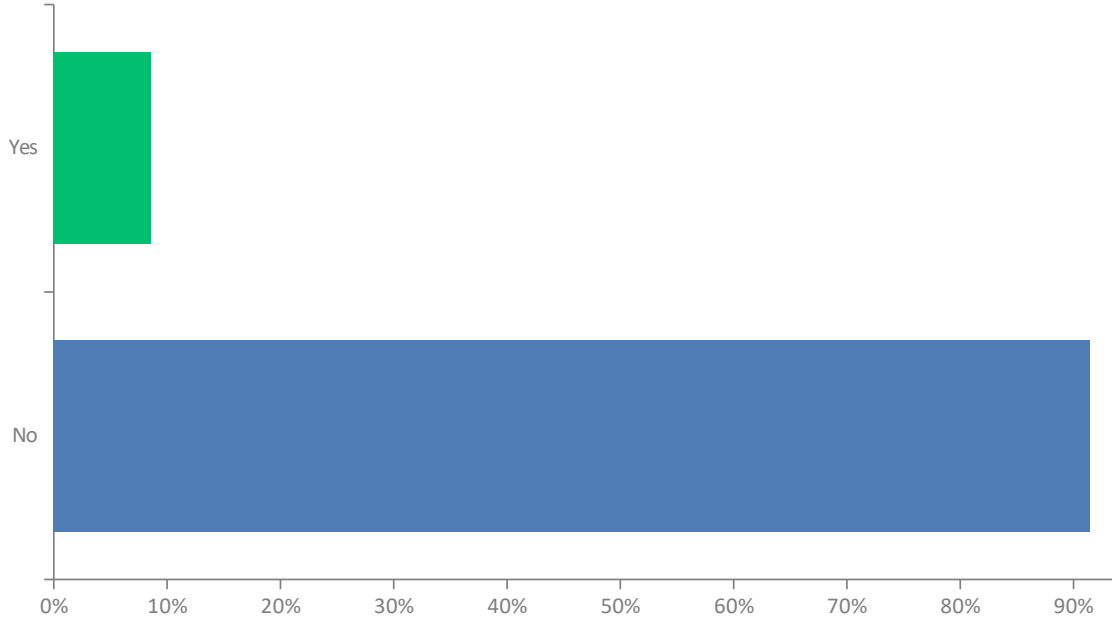
Analysis: Nearly 50% of respondents have lived in the County more than 20 years.

Q9: In the past 5-10 years, Keweenaw County has become: Answered: 388 Skipped: 29



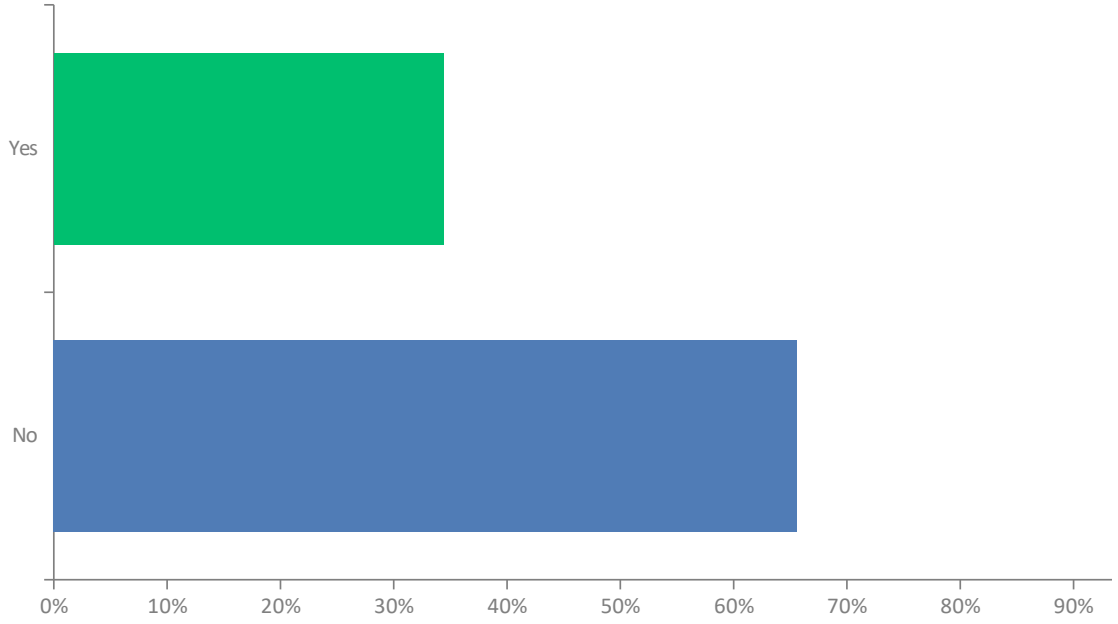
Analysis: A majority (70%) of respondents believe the County has stayed the same or become more of a place they want to live in. This question drew 153 comments which cite a variety of views about life in the County, as well as concerns about restricted public access, the number of tourists, too much government control or not enough restrictions.

Q10: If you are a current resident, do you plan on moving from the County in the next five to ten years? Answered: 292 Skipped: 125



Analysis: Most of the comments about why they would move cited remoteness, climate, taxes, health care, home maintenance, etc.

Q11: If you are not a current resident, do you plan to move to the County in the next five to ten years? Answered: 154 Skipped: 263



Q12: What are the top four priorities the Master Plan should focus on? (choose a maximum of four responses)

Answered: 408 Skipped: 9



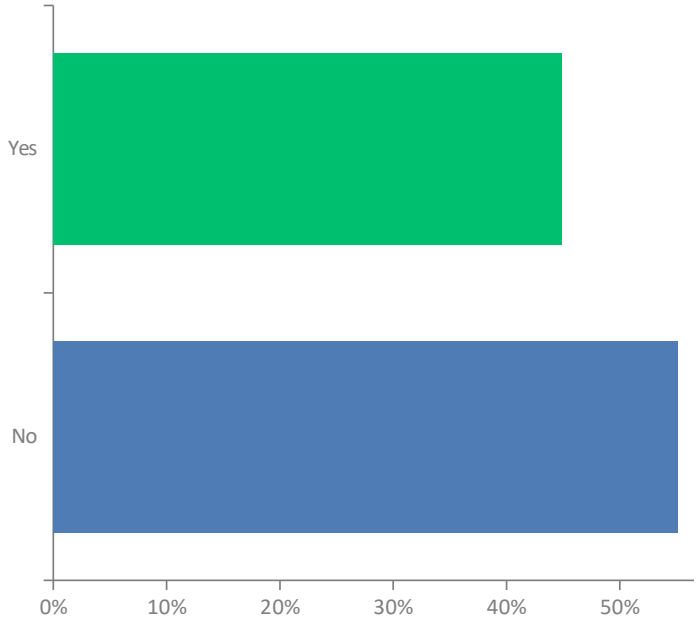
Analysis: The top four priorities are:

- Preserving the rural and scenic character of the County (74%)
- Balancing tourism development and preservation of open lands (62%)
- Historic Preservation (43%)
- Walkability/Connectivity/Trails (29%)

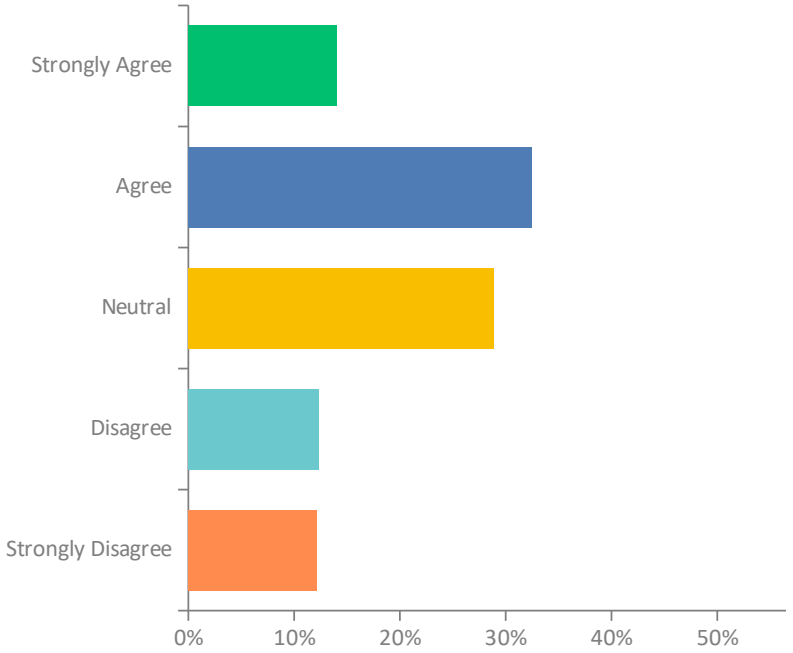
The "Other" category had 60 responses. Many supported the concepts of limiting commercial development, protecting lands, balancing tourism development, etc.

Q13: Should the county consider adding industrial zones or expand or improve existing industrial zones to accommodate economic development?

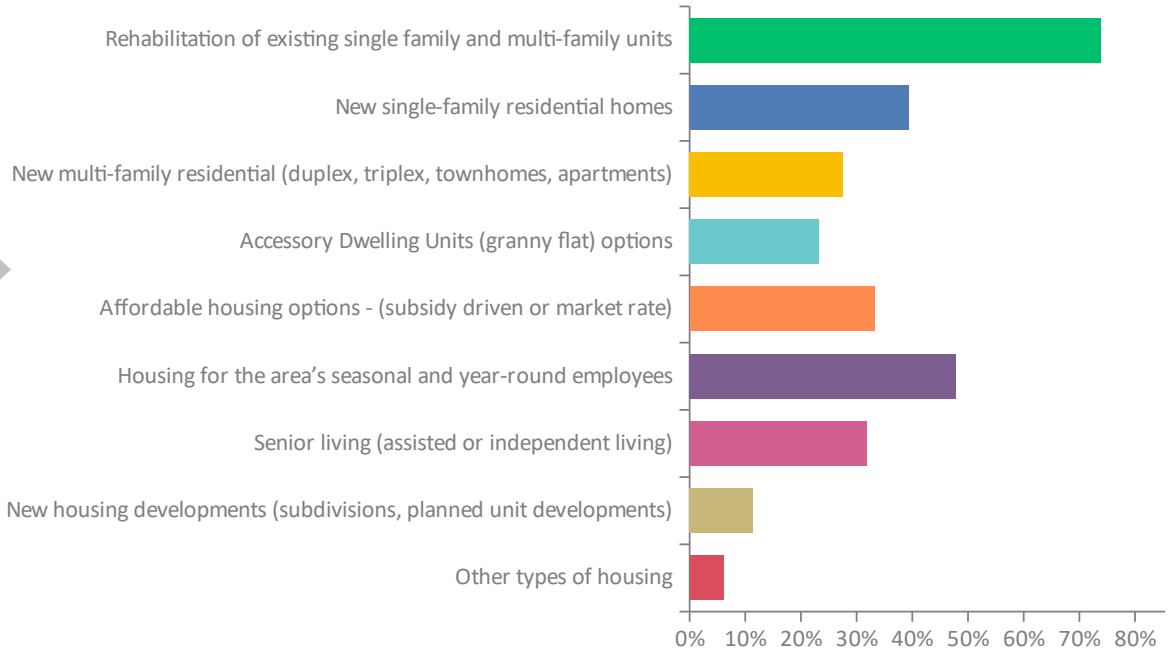
Answered: 388 Skipped: 29



Q14: In your opinion, should there be more residential development in Keweenaw County in the coming years?
Answered: 412 Skipped: 5



Q15: If you agree to more residential development, what types of residential development is needed in the County? (mark all that apply)
Answered: 280 Skipped: 137

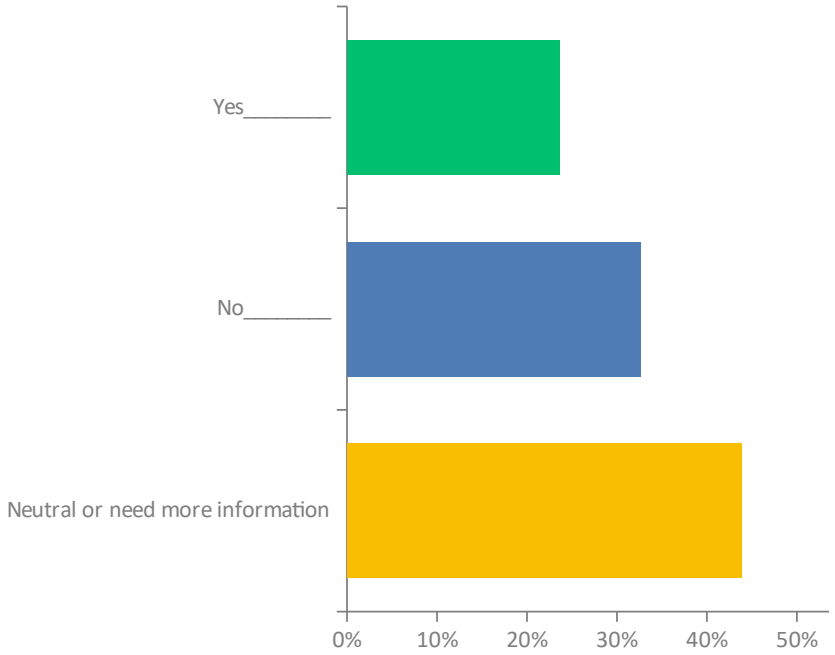


Analysis: Responses to "Other" cited concerns about where housing would be developed, focusing new housing in existing communities, the need for employee and affordable housing options.

Q16: Where in the County should new single and multi-family housing developments be located?

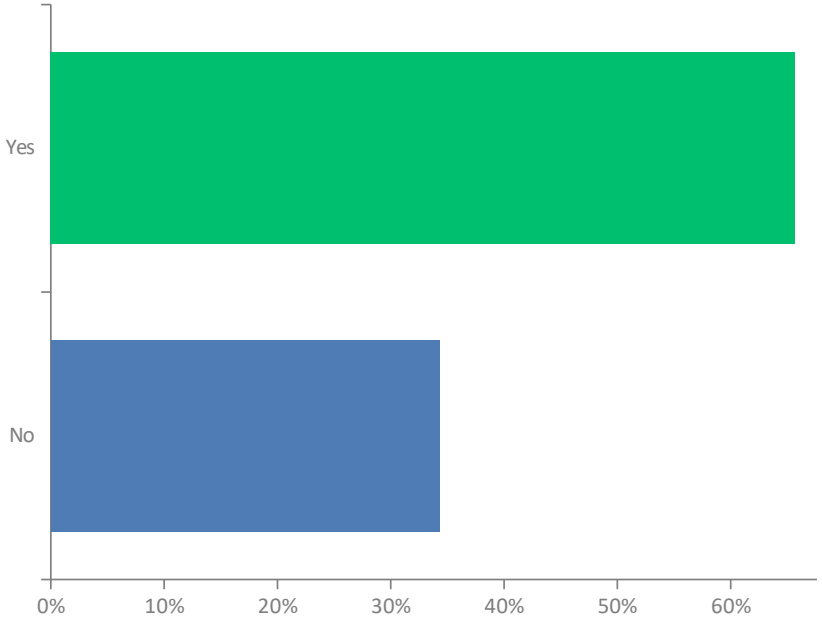
Analysis: The majority of the 213 open-ended responses to this question were neutral (about 90%), with a small portion being negative (7%) and positive (3%). The most common themes identified include specific location suggestions (20%), township-focused development (14%), and development in existing areas (10%). Other notable themes are proximity to existing settlements, highway and road proximity, infrastructure considerations, and rural/natural preservation.

Q17: Would you support local tax incentives or other similar programs to help boost the development of affordable housing? Answered: 399 Skipped: 18



Analysis: Most respondents are neutral or need more information about this topic.

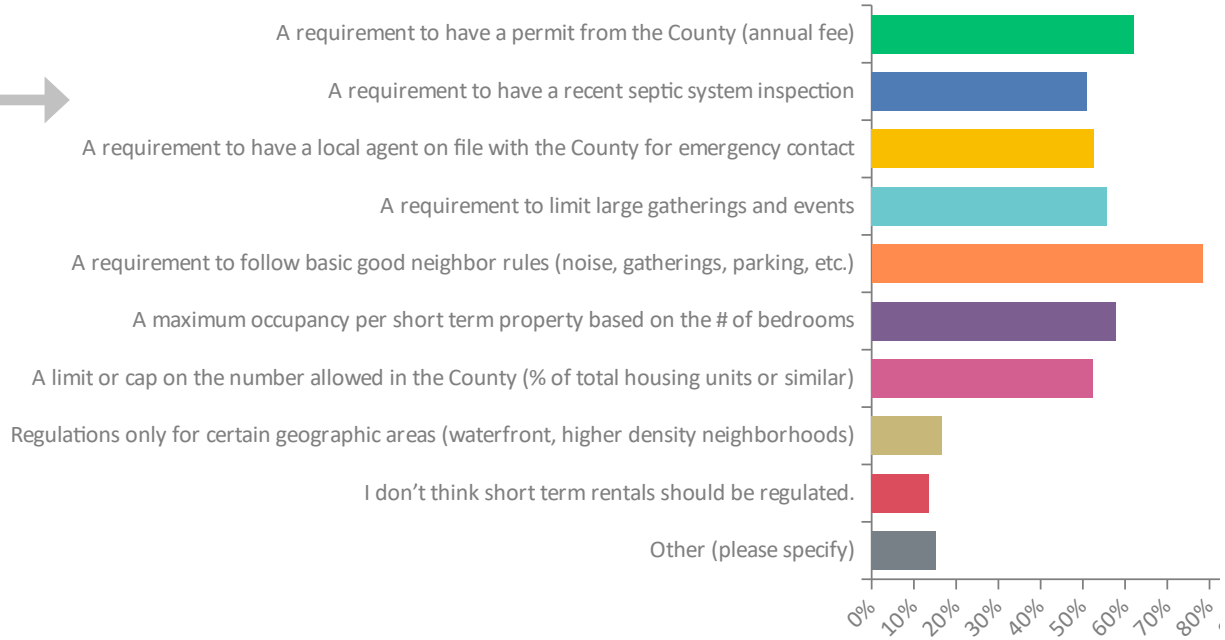
Q18: Basic regulations for Short Term Rentals currently exist in Keweenaw County. Do you feel Short Term Rentals (STR, Airbnb, VRBO, etc.) should be further regulated in the County? Answered: 402 Skipped: 15



Analysis: Most respondents are in favor of more STR regulations.

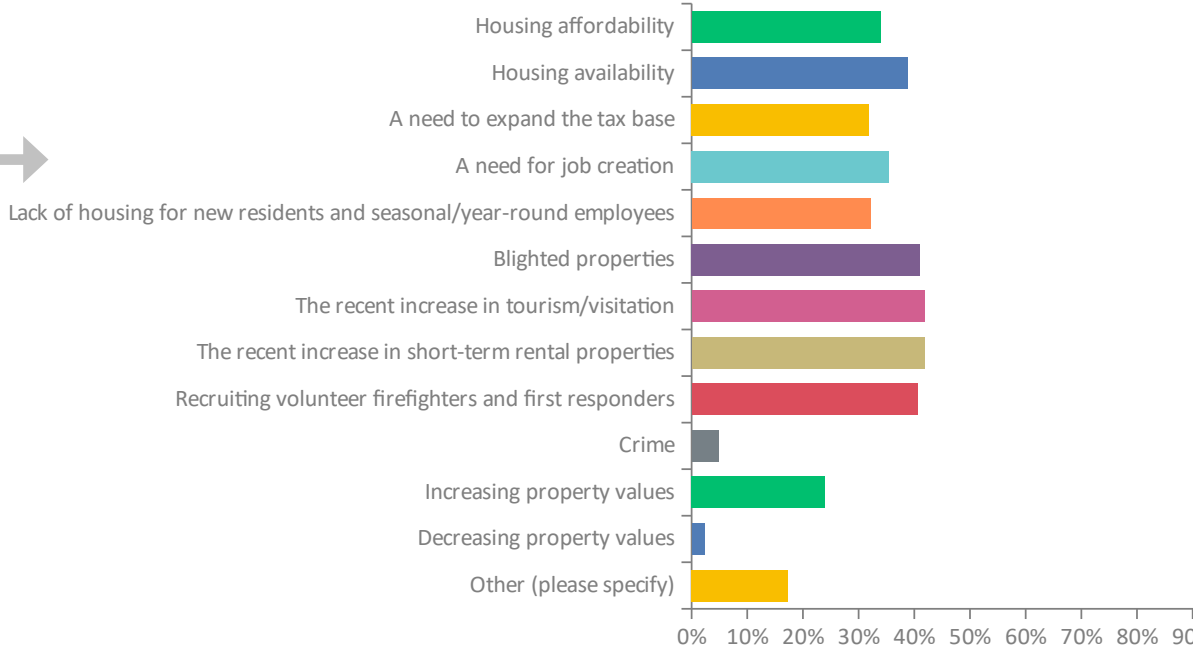
Q19: If so, what types of regulations for Short Term Rentals do you feel are appropriate (mark all that apply)
Answered: 355 Skipped: 62

Analysis: Respondents are clearly in favor of various forms of Short Term Rental regulations. The "Other" category responses (54) are both for and against regulation of STRs.

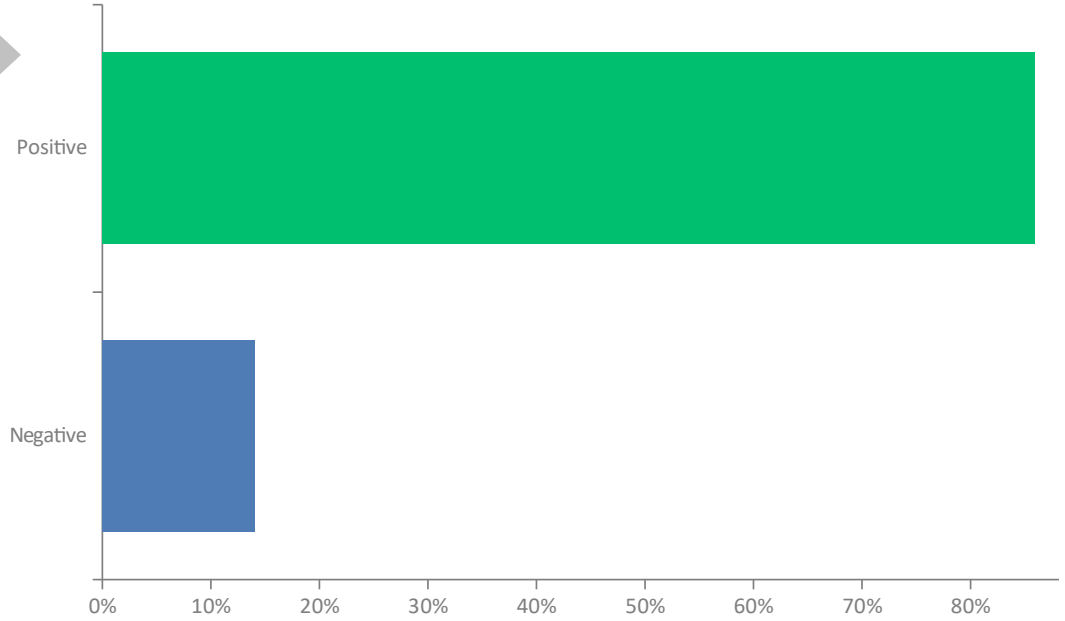


Q20: What are the challenges facing Keweenaw County?
Answered: 392 Skipped: 25

Analysis: Housing, blight, tourism increase, STRs, economic development, and public safety are top concerns for the community. The "Other" category had 68 comments addressing a number of concerns.

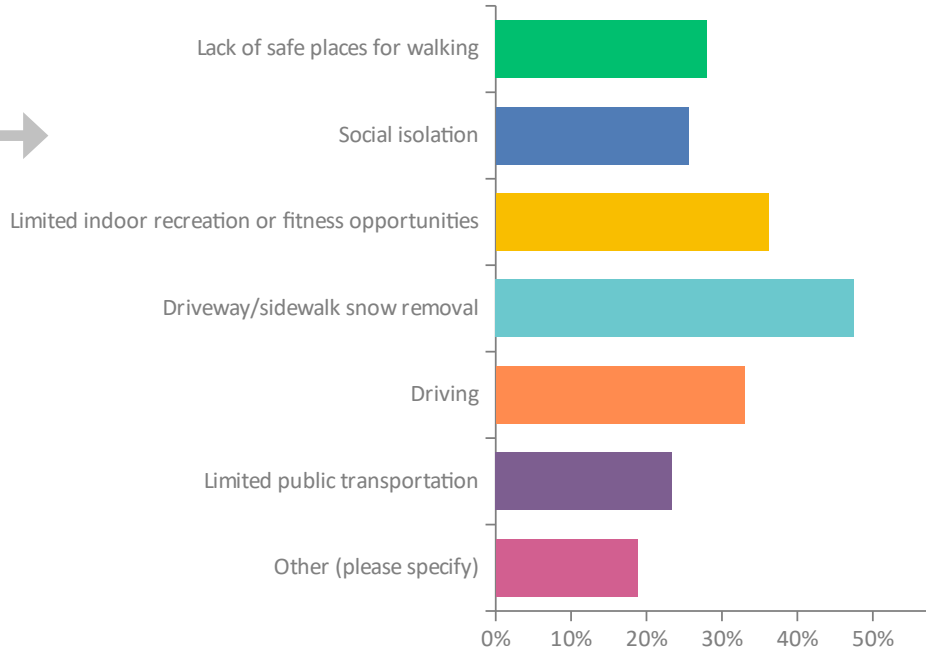


Q21: Is Winter a positive or negative attribute to living in Keweenaw County?
Answered: 377 Skipped: 40



Analysis: Obviously, Keweenaw County residents generally view winter as a positive attribute. The open-ended question "Why?" solicited 204 comments with varying views of winter and its challenges.

Q22: What challenges do you face in winter? Choose as many as needed.
Answered: 282 Skipped: 135



Analysis: Winter is especially challenging for an older population. There were responses to the "Other" category with a variety of comments mostly related to the listed challenges.

Q23: Do you have any ideas for the County to make winter a more positive experience? (facilities or services)

Analysis: This open-ended question had 128 responses with ideas for the winter season.

The most common suggestions focused on:

- Winter event promotion (11%)
- Indoor recreation facilities (8%)
- Snow removal services (8%)
- Community fitness and public recreation facilities (7% each)
- Cross country ski trails and winter trail maintenance (6% each)
- Other themes included public transportation, outdoor winter recreation access, infrastructure development, and community support services.

Overall, respondents are interested in more community events, better indoor and outdoor facilities, improved snow removal, and enhanced transportation and support services to improve the winter experience.



FIGURE 3.1 Open House Workshop

Q24: Overall, how do you rate the quality of the following public facilities and services within the County?
Answered: 401
Skipped: 16

	GOOD	FAIR	POOR	DON'T KNOW / NO OPINION	TOTAL	WEIGHTED AVERAGE
Police protection	60.05% / 239	18.84% / 75	3.52% / 14	17.59% / 70	398	1.79
Roads and Streets	62.31% / 248	32.66% / 130	3.77% / 15	1.26% / 5	398	1.44
Fire protection	46.48% / 185	22.61% / 90	5.03% / 20	25.88% / 103	398	2.10
Emergency Medical Service	27.07% / 108	31.08% / 124	13.78% / 55	28.07% / 112	399	2.43
Public Schools	44.50% / 174	14.07% / 55	3.84% / 15	37.60% / 147	391	2.35
Cell phone service	15.83% / 63	36.18% / 144	45.73% / 182	2.26% / 9	398	2.34
Internet	18.43% / 73	32.58% / 129	39.39% / 156	9.60% / 38	396	2.40
Broadband	7.75% / 30	17.05% / 66	36.18% / 140	39.02% / 151	387	3.06
Cable TV	10.08% / 39	13.44% / 52	21.19% / 82	55.30% / 214	387	3.22
Water and sewer utilities	26.92% / 105	24.36% / 95	9.74% / 38	38.97% / 152	390	2.61
Electric service	51.02% / 200	32.91% / 129	8.16% / 32	7.91% / 31	392	1.73
Storm water drainage	27.25% / 106	26.99% / 105	7.71% / 30	38.05% / 148	389	2.57
Snow removal	66.67% / 262	17.56% / 69	2.04% / 8	13.74% / 54	393	1.63
Parks/open space	70.26% / 274	24.62% / 96	3.08% / 12	2.05% / 8	390	1.37
Recreational facilities	52.66% / 208	31.39% / 124	7.34% / 29	8.61% / 34	395	1.72
Cultural facilities	32.82% / 128	31.03% / 121	14.87% / 58	21.28% / 83	390	2.25

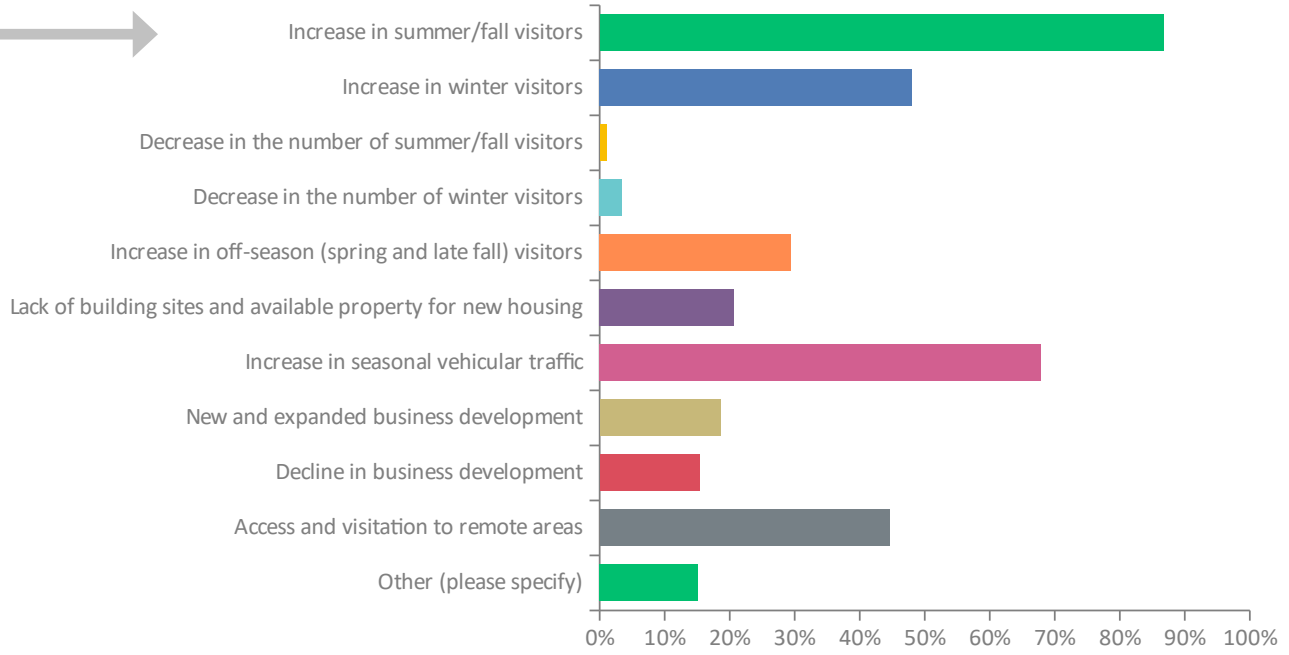
Analysis:

- Parks/open space received the best ratings with 70% rating it as "Good."
- Snow removal, electric service, police protection, and recreational facilities were also rated positively by most respondents.
- Roads and streets and fire protection had generally favorable ratings, though fire protection had a higher percentage of "Don't know/No opinion."
- Public schools, cell phone service, and Internet were rated more moderately, with a significant number of respondents selecting "Fair" or "Poor."
- Broadband and cable TV received the lowest ratings, with many respondents indicating "Poor" or "Don't know/No opinion."
- Water/sewer, storm water drainage, and cultural facilities were also rated less favorably.

There were 20 comments to the "Other" that expressed opinions on a number of topics.

In summary, outdoor and emergency services are viewed most positively, while broadband, cable TV, and some utilities are seen as areas needing improvement.

Q25: What, if any, changes have you seen in the last 10 years in the County? (mark all that apply)
Answered: 377 Skipped: 40



Analysis:
The most commonly observed change is an increase in summer/fall visitors, noted by 87% of respondents.

- 68% reported an increase in seasonal vehicular traffic.
- 48% noticed an increase in winter visitors.
- 45% observed more access and visitation to remote areas.
- 29% saw an increase in off-season (spring and late fall) visitors.
- 21% mentioned a lack of building sites and available property for new housing.
- 19% noticed new and expanded business development, while 15% saw a decline in business development.
- 15% selected "Other" changes.
- Only a small percentage observed a decrease in the number of winter (3%) or summer/fall visitors (1%).

Overall, the community has observed significant growth in tourism and related activity over the past decade, with some concerns about housing availability and business trends.

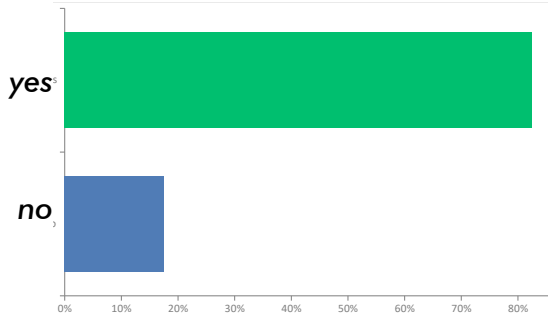
Q26: Which of these changes, if any, have affected you? (mark all that apply) Answered: 382 Skipped: 35

	POSITIVELY	NEUTRAL/ HASN'T AFFECTED ME	NEGATIVELY	TOTAL
Increase in summer/fall visitors	16.71% / 61	46.30% / 169	36.99% / 135	365
Increase in winter visitors	14.69% /52	67.80% / 240	17.51% / 62	354
Decrease in the number of summer/fall visitors	10.18% / 23	85.40% / 193	4.42% / 10	226
Decrease in the number of winter visitors	6.52% / 15	88.26% / 203	5.22% / 12	230
Increase in off-season (spring and late fall) visitors	11.56% / 34	68.71% / 202	19.73% / 58	294
Lack of building sites and available property for new housing	5.05% / 15	77.10% / 229	17.85% / 53	297
Increase in seasonal vehicular traffic	4.08% / 14	41.98% / 144	53.94% / 185	343
New and expanded business development	24.33% / 73	67.33% / 202	8.33% /25	300
Decline in business development	2.38% / 6	74.21% / 187	23.41% /59	252
Access and visitation to remote areas	19.69% / 64	41.85% / 136	38.46% / 125	325

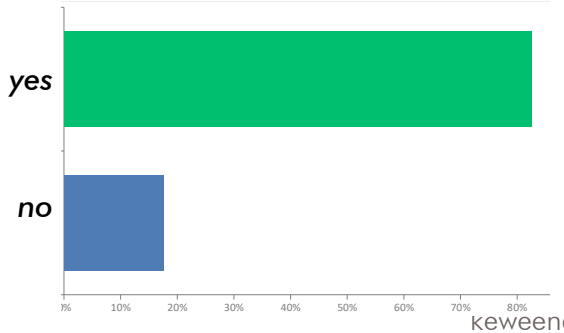
Analysis: In summary, the most common impact was "no effect" for most changes, but increases in seasonal traffic and summer/fall visitors had notable negative impacts for a significant portion of respondents.

There were 33 comments on this question.

Q27: Are you aware of The Nature Conservancy's 2022 acquisition of the forest known as the Keweenaw Heartlands?
Answered: 406 Skipped: 11



Q28: If yes, are you aware of the community's plans for the future of the Keweenaw Heartlands forest?
Answered: 372 Skipped: 45



Open House Workshop Events

From August 21-September 16, five (5) community engagement open house workshops were held, one in each of Keweenaw County's Townships. A total of 93 persons attended these events which encompassed more than 10+ hours of contact with Keweenaw County citizens.

County residents were informed of the opportunity to participate by a postcard mailed to 2,714 property owners who have a validated mailing address, through posting on the County and Master Plan websites, and distributed posters and postcards.

Attendees had the opportunity to view and leave comment notes on various maps, a housing-types graphic, and to comment with Ideas, Rants, and Raves. By placing a colored sticker on previous comments and notes, attendees were able to "like" the comment or note.

This outline documents all comments posted at various display stations at each of the 5 events. **Asterisks (*) by the comments indicates how many "likes" the comment had.**

Eagle Harbor Township: August 21, 2025

32 attendees

Ideas

- Add pedestrian walking along M-26. ***
- Cell tower to service basic needs (emergencies and standard usage).
- Clean and maintain beach areas.
- Employee housing that is affordable. ***
- There needs to be: ***
- More police presence in heavy tourist areas like Copper Harbor, perhaps seasonally.
- More DNR presence in areas beyond US 41 where people illegally.
- Turn High Rock Bay camp into a day park with NO CAMPING enforced with a heavy fine for those who violate
- Control traffic on Eagle Harbor Front Street. *
- Coordinate with Visit Keweenaw and the tourist office so that incorrect info isn't shared, such as 'have a wedding at the EH Lighthouse etc.
- What about increased population, increased tourism greater impact on conservation land, trails managed by gov't or non-profits?

Rants

- Ensure that new development is tasteful (complements the environment) ***
- Be sure to control STRs ***
- Eagle Harbor Township does have an STR ordinance in place
- Bright lights on cell towers-yuk ***
- Trespassers, no land respect, littering
- How can what type of housing is required w/o considering rezoning which may be required, but not supported?
- What about restoration/renovation of existing vacant buildings? *
- Recognize and control the danger of overdevelopment *

- Keep off-road vehicles (4 wheelers, snowmobiles, SXS) off the roads-create more trails to keep them off *
- Allow off-the-grid houses on lots less than 20 acres on shoreline
- How do you enforce time limits on STRs?

Raves

- Thanks for painting lines on the Cut-off Road!! Whew!
- Esrey Park and Hebard Park are wonderful gems. Copper Falls Park is too!
- EH Twp Planning Commission and Master Plan *
- Housing Need Graphic notes
- Single Family. Low income housing? Are long-term rentals encouraged and do they have rules like STR? *
- Single Family mostly. Limit multi-family apartments in towns/ villages
- Refurbish existing buildings before building new
- New housing should be kept in areas where housing already exists-prevent sprawl
- Think outside the box-Co-housing opportunities would benefit elderly and young families. Cottage Court and triplex would be much more affordable

Existing Land Use Map Notes

- Maintain Great Sand Bay for public use
- Off Grid Housing
- Why is Little Gratiot River Wilderness categorized as "Timber"? Should be "Conservation"

Comment Cards

- Wondering how organizations within the County can have input "a seat at the table" in the planning process since decisions impact organizations and individuals.



FIGURE 3.2 Open House Poster Advertisement

Sherman Township: August 26, 2025

12 attendees

Ideas

- Shoulders on roads *
- Bike trails *
- Need more flexibility with zoning *
- Recycling locations ***
- Code enforcement funded through rental ordinance fees **
- Single family workforce housing *
- Garbage pickup—reasonable price
- Rail to trail bike route—Mohawk to Copper Harbor **
- Restrict snowmobiles and ATVs from unmarked trails
- Public access to fishing lakes *

Rants

- Closed ATV trails
- No manufacturing jobs to keep young people here
- Stamp sand mitigation project is not working, it is making it worse
- No enforcement of ordinances *
- Snowmobile/ATV trail connectivity
- The large numbers of snowmobilers visiting the Gay Bar strain the sewer system
- Short term rentals—limits?
- Snowmobile trail #33—open again?
- Bridge taken out by Little Betsy
- We all used to walk that trail

Raves

- Small population *

Allouez Township: August 29, 2025

21 attendees

Ideas

- STRs: Classify properties for consideration of terms (owner occupied/family property/business only). Limits on #s – by owner, or overall in county ***
- Promote more permanent housing
- Consider tax break for rehab housing
- Short-term rental control
- Conservancy land-reduced tax base **
- Remote workers/broadband access and cell coverage/service *
- Positive aspects of STR - reduce regulations
- Equitable access to moderate housing development *
- Zoning will drive master planning, recognizing what is good and zone accordingly
- Redirect Isle Royale seaplanes to over water
- Non-motorized family friendly recreation trails (Eagle River-Gay) including silent sports *
- Themes I sensed at this meeting:
- public access-improve
- US 41 corridor: view-shed challenges
- Zoning = key & code enforcement
- Plan around traffic corridors: US 41/ M26
- Preserve capacity of highway infrastructure – curb cuts, etc. *
- Light manufacturing –block
- Public access/recreation areas –acquire land to increase access, camping areas *
- Areas for very low-density development – not just allowing for industrial along US 41 8
- Find new funding ideas – look into similar “island” communities
- Get special cell service for emergencies (like Isle Royale has)
- Treat this area like a state park, preserve, don’t allow overpopulation
- Offer work sponsored housing, only open for an active employer, get businesses involved
- Restrict business expansion to only allow those conducive to the existing environment

Rants

- Keep all roadways "natural" – expansion hidden *
- Short-term rental impacting areas
- Too much land going to conservancies with declining tax dollars ***
- There are noise corridors on ground and in the air –Isle Royale Seaplane routes *
- Climate refugees are aware
- Protect natural beaches
- Rule of law – code enforcement especially US 41 corridor **
- Best nature areas are on the Isle Royale Seaplane flight plan (Ahmeek Marsh, KNA land, 7 mile, and sewage treatment plant)
- If bike lanes are added, they cannot be just a "wider lane (shoulder) with stripes, people will use it to drive on

Raves

- Great people. Safe!
- Natural resources – protect lake shore, scenic areas *
- Quiet, less noisy **
- Wildlife *
- Dark sky *
- Keweenaw County zoning is doing a very good job of addressing short-term rental issues
- Unique in geography, resources, culture, & people. As we gain population, the challenges of retaining unique aspects grows *
- Don't destroy who/what we are just to accommodate what tourists/others say they want **
- Seaplanes (tourism) is ebb & flow just like the snow
- There is nowhere else like this *

Grant Township: September 11, 2025

10 attendees

Ideas

- Dog Parks
- Connecting parks with walking trails
- Paved or gravel "family" bike pathways
- Incentives for restoring blighted properties *
- Public/private housing partnership **
- More ADA facilities including recreation
- Water/sewer infrastructure upgrades
- Hiking/biking trails to connect communities
- Connect existing hiking trails
- EMS + bike patrol trails
- Bike lanes on M26, Copper Harbor to Phoenix on expanded shoulder

Rants

- Enforcement of zoning needed
- Inspection of health department – beds vs septic field *
- STR tax capture. Visit Keweenaw's 5%@10+ beds. What is capture from real estate taxes? (Growth allowed to prosper) **
- "Tax" STR to pay for EMS & county enforcement *
- Need for infrastructure, especially Copper Harbor; sidewalks, parking **
- Public access to waterways
- -kayak launch, non-motorized **
- STR density – address; residents don't want to be sandwiched
- STR – occupancy; 2 per bedroom + 2. Septic field, health degradation concern (voted in motions and minutes 4/29/24, approved 5/10/24 minutes)
- Bed tax STR *
- Mirror Eagle Harbor Twp for STR ordinance
- Defund "Visit Keweenaw" – too many people

Raves

- Maintain public access
- Heartlands – is the "draw". Tell young people at the colleges
- Copper Harbor needs "streetscape" – improve safety and reduce congestion *
- New owners – improve value – property and pay more taxes
- Lack of current housing stock being used for affordable housing
- Keweenaw Co Sheriff + Search and Rescue
- Active clubs and organizations that help to maintain the resources
- Balance between economics, the environment, and quality of life

Land Use Map comments

- Montreal Falls and Bare Bluff access needed
- Montreal Falls- why are we offering access so far away? Why make the hike more dangerous?
- RS-2 land-lock (at Lac La Belle)

Housing Graphic comments

- Need all of the above (all types of housing) – determine appropriate types based in individual scenarios
- Accessory Dwelling Unit for long term rental or purchase – vote yes ***
- Work-live units (in Copper Harbor)
- Duplex – long term rental (or purchase) vote yes ***

Houghton Township: September 16, 2026

18 attendees

Ideas

- Blight ordinances and enforcement are necessary ***
- Read and heed the Eagle Harbor guidelines that took 3 years of in-depth thought to produce **
- Make sure there is public access to beaches *****
- Develop a rail trail along M26 from 5 mile through Eagle River to EH/Copper Harbor ***
- Get ATT to extend fiber optic line that goes past the Phoenix Store to the Eagle Harbor Cutoff to Eagle Harbor and goes right along M26 @ the ATT switching building near Ratigans ½ way to Copper Harbor. And from Phoenix to Eagle River. Federal funds available for Zoom meetings **
- Growth is not necessarily good **
- Our American Indians out west have regrets – take care of people who are here while planning for the others
- Develop Phoenix as an economic hub *
- Natural gas brought north of Mohawk***
- Revise zoning to allow limited local business -Eagle River and Gay, etc. Form Base Code ***
- Restructure County townships to resolve the many we face (lack of people and funds) **
- Advocate for health care (Aspirus) **
- Housing for seasonal workers in Copper Harbor *

Rants

- Lack of funds – limited tax base leading to inability to maintain structures, cemetery, etc. *
- New build business needs to mimic existing architecture, "cottage/core cabin
- Lack of full-time residents leading to few people available to fill needed twp roles *
- Require business to utilize historical buildings
- Sustainable tourism – not all growth is good
- Lack of economic opportunities to improve tax base **
- Fragile water system (in Eagle River) *****
- Traffic speeds too high in Eagle River *
- No more Dollar Stores ****

- Open Meetings Act requiring "in person" participation of Board members leads to lack of candidates' due to seasonal residency ****
- Restrict % of STR/Airbnb ***
- Inconsistent building codes enforcement ***
- WM (Waste management? Renters roles and enforcement of rules *
- Stamp sand impact on whitefish hatching grounds
- County not owning lighthouses
- Lack of enforcing that utility right-of-ways (specifically New Allouez) are kept clear and junk/garbage removed *****
- No place to buy coffee in County Seat *
- Lack of sufficient health care and specialty services

Raves

- This museum (Houghton Twp Hall) ******
- Our Park (HoughtonTwp) ***
- Scenery/Lake/Falls etc. *******
- Quietness of Eagle River, eg: residential community primarily *****
- Our traffic! *
- A high-end business sensitive to neighbors *
- Ability to hike, bike, drive in the woods ****
- Escape from the busy-ness, smog, traffic, noise of a city **
- Dark skies to view stars ***
- Our stoic, humble people
- Fresh lake fish **'

Existing Land Use Map Comments

- Unite Isle Royale and merge into one Township after consolidation
- Better if radar station was in one Township
- Sherman Township/Gay – additional commercial use for a store and/or gas station

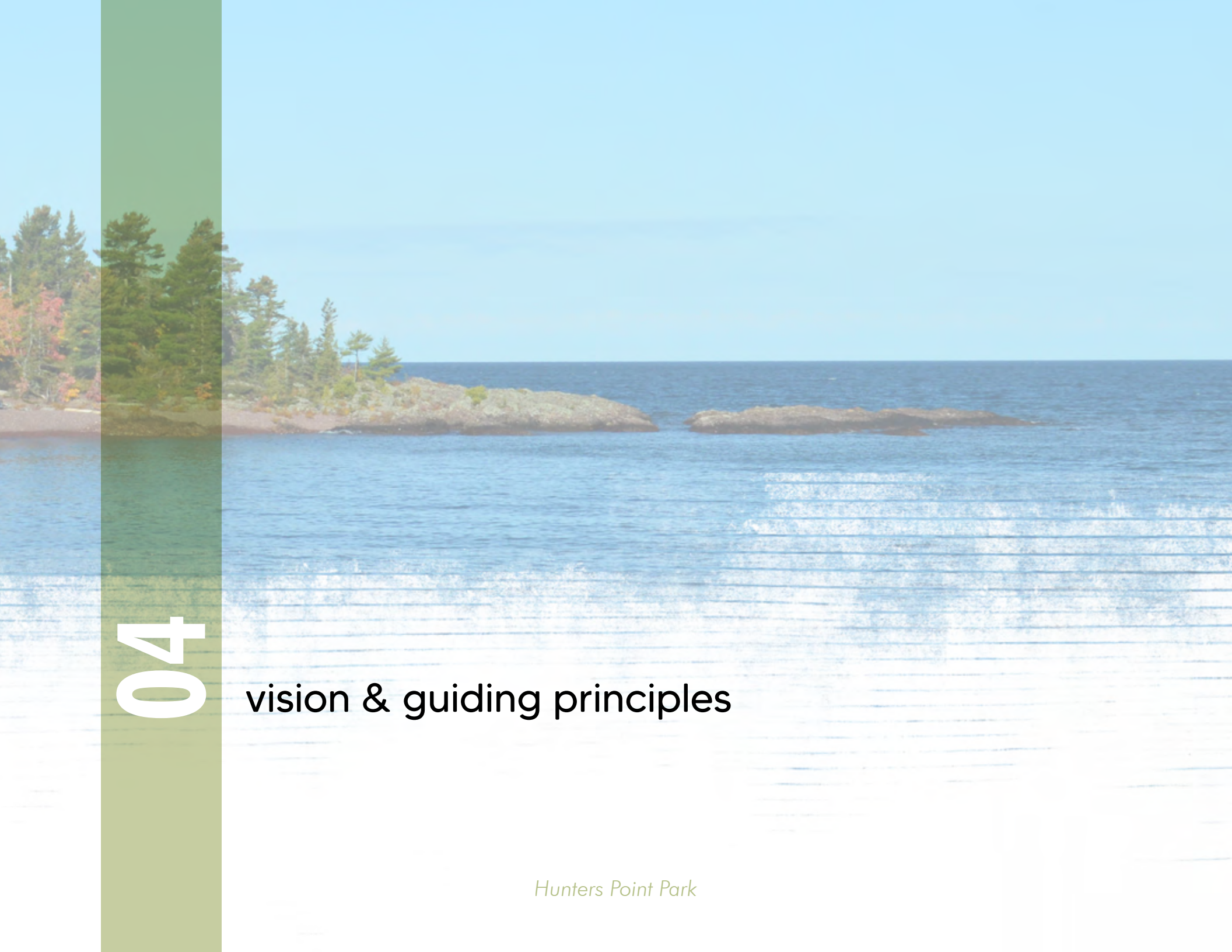


FIGURE 3.3 Open House Workshop Key Words and Phrases



In This Chapter

- Vision Statement
- Guiding Principles



04

vision & guiding principles

Hunters Point Park

Vision Statement & Guiding Principles

The Keweenaw County Master Plan values toward growth and development is reflected in their Vision Statement, Guiding Principles, Goals, and Strategies.

Vision Statement

Keweenaw County will continue to be a great place to live, work and play, fostering community while protecting historic, natural, and scenic resources; balancing change, sustainable tourism & recreation, and economic development with preservation of open lands and the qualities that make the County unique.

Guiding Principles

The following guiding principles are based upon the community input of the Master Plan Community Survey and open house planning workshops.

Respect and preserve our natural assets, including the shores of Lake Superior, inland lakes, wetlands, watersheds, topography, scenic views, water quality, and air quality, are vital to the character and well-being of everyone in the County. These assets should be protected so that future generations can access and enjoy them.

Encourage a variety of housing options, for people of all income and ages, at locations with access to community services and transportation.

Preserve Keweenaw County's rich historical and cultural heritage, dating back thousands of years as the site of ancient precontact copper mining, through the mining development and industrialization of the 19th and 20th centuries. Continue to respect, preserve, and incorporate this heritage into our community fabric, including our historic sites, buildings, architecture, parks and trails, and public spaces.

Maintain and connect our small individual communities, providing for new housing development and redevelopment that is sensitive in terms of design and scale of nearby neighborhoods, with higher density development clustered in existing commercial and resort communities.

Recognize that tourism is vital to the economy, well-being, and tax base of the County, while balancing sustainable tourism development with the quality of life of residents.



FIGURE 4.0 Copper Harbor



In This Chapter

- Housing Characteristics Summary
- Housing Needs and Issues
- Redevelopment Opportunities
- Goals and Strategies

05 housing



Copper Harbor

Housing

This chapter will describe the existing housing supply, identified housing issues and provide goals, strategies and recommendations. There are only a handful of multi-family housing units.

Housing Characteristics

Single-family, owner-occupied homes both year-round and seasonal, dominate the housing supply in Keweenaw County, with only 8% of housing units that are renter occupied.

About 42% of the County's housing units are located in Allouez Township. Most of these units are located in the small communities of Allouez, New Allouez, Ahmeek Village, Ahmeek Mine Location, Mohawk, and Fulton. 30.4% of Allouez Townships housing units were built in 1939 or earlier. Typically, housing in this area is situated on small, platted lots. The availability of community water and sewer service benefits the higher-density neighborhoods.

Housing throughout the rest of the County is characterized as rural low-density single-family residential, with homes on lots and tracts generally more than 1 acre in size. Housing units located in the rural communities of Eagle River, Eagle Harbor, Copper Harbor, Lac La Belle, and Gay are higher density, on smaller lots, mostly platted years ago.

Many rural year-round and seasonal housing units in Keweenaw County are located along the shore of Lake Superior along M-26, from Five Mile Point to Copper Harbor, and from Gay to Bete Grise. Year-round and seasonal housing units are also located on the shores of the major inland lakes, including Gratiot, Medora, Bailey, Fanny Hooe, and Lac La Belle.

Keweenaw County

Housing Characteristics Summary

Total Housing Units: 2,292

- Single Family: 96%
- Multi-family: 2%
- Mobile homes: 2%

Occupied Housing Units: 52%*

*reflects the seasonal nature of housing in Keweenaw County

- Owner-occupied housing units: 92%
- Renter-occupied housing units: 8%

Lived in same housing unit before 1990: 11%

Median value: $181,400
(Michigan-$217,600)

- Value under $100,000: 33%
- Value of $100K to 200K: 21%
- Value more than $200K: 36%
- Value more than $500K: 10%

Source:. US Census, 2020, American Community Survey 2022

New Housing Construction

A review of Keweenaw County building permit data shows that 96 new homes have been constructed since 2020 (roughly 48 per 1000 persons). In the previous 5 years, from 2015-2020, 70 new housing units were constructed (WUPPDR Housing Study and Strategy, 2022).

By comparison, Houghton County, with a population of approximately 38,000, issued permits for 620 new homes (roughly 16 per1000 persons) from 2020-2025.

The data for recent new housing construction reinforces the trend that most new homes are seasonal. Of the 96 new housing units constructed since 2020, only 23 qualified for the Primary Residence Exemption (PRE), also known as Homestead Exemption. The 73 non-qualified units mean that these homes will be seasonal dwellings.



FIGURE 5.0 Eagle River National Historic District

In the last 20 years, there were several new subdivisions, complete with public roads and available infrastructure, constructed in Keweenaw County; at Eliza Creek (Eagle Harbor South) and Harbor Coast by Copper Harbor. These subdivisions have sold out and are filling in with new homes.

Land available for construction of homes in Keweenaw County has become very limited. Most platted residential lots on the Lake Superior and inland lakes shoreline are developed.

Township	Occupied Units/%	Vacant Units/%*	Total
Allouez	689/71%	281/29%	971
Ahmeek Village**	55/51%	53/49%	108
Eagle Harbor	146/33%	296/67%	442
Grant	162/32%	344/68%	506
Houghton	39/18%	180/82%	219
Sherman	55/36%	99/64%	154

Source: US Census, 2020, American Community Survey 2022
*Vacant units reflect the seasonal nature of Keweenaw County housing and residency. Compare to:
Houghton County – 76% Occupied
City of Houghton – 92% Occupied
**Ahmeek Village units are included in Allouez Township data

TABLE 5.0 Housing Units by Township

Short Term Rentals

In recent years, Keweenaw County has experienced a dramatic increase in the number of short-term rentals (STR), with a 166% increase in STR between 2018 and 2020. Historically, STRs have existed on the Lake Superior and inland lake shores in the County, typically with owners renting out their seasonal lake homes to friends and family. The growth of this industry in the last 5-7 years is attributed to the availability of on-line booking platforms, such as Airbnb and VRBO.

Currently, permits have been approved for 61 STR units in Keweenaw County and 50 in Eagle Harbor Township. A number of STR units in the County are operating without the required permit.

The growth of the STR industry in Keweenaw County is complex. Short-term rentals do increase a community's bed base for tourism. They also benefit taxing jurisdictions through non-homestead taxes. In addition, STR are generally improved and maintained in order to be attractive as rentals.

At the same time, STRs also result in fewer homes for sale, fewer long-term rentals available for people who live and work in the community, and can create community conflicts over the intrusion of commercial lodging activity into residential neighborhoods. In a small community like Keweenaw County, long-term effects could include further loss of year-round population, fewer families with children, fewer community volunteers for boards and commissions, fire departments, first responders, and other community efforts that require manpower and volunteers.

Many of the units being used for STR in the County are waterfront properties and likely to be un-affordable for lower to middle income families or seasonal workers. In addition, waterfront properties are highly desirable for year-round or seasonal living, and the conversion to STR reduces the inventory of homes available to attract year-round residents to the County.



Source: Image by Stephanie Maltarich,"Unique partnership brings net-zero affordable housing to Basalt, Colorado", KSUT Public Radio, KSUT.org

FIGURE 5.1 Example of Innovative Workforce Housing

The Master Plan Community Survey identified STR as a major issue, with more than 65% of respondents desiring STR regulations. Concerns about STRs were expressed in open-ended comments throughout the survey, and include capacity of on-site septic systems, parking, noise, the intrusion of a commercial land use into residential neighborhoods/areas, and traffic.

Other Housing Needs

Currently, Keweenaw County offers few housing options, as the housing stock is primarily single family, detached homes. There is a need for other housing options that would serve current and future Keweenaw County residents.

Workforce Housing

In the community Master Plan Survey, Open House Workshops and stakeholder interviews, the need for housing for seasonal and year-round workers in all types of employment in the County was identified as a major County issue. The lack of this housing is constraining the recruitment of employees for tourism service, construction, and for public employees, such as for the Sheriff Department.

The communities in the County with water and/or sewer systems are better able to serve a higher density housing option that could fill this need. The Allouez Township area was identified in the survey as a location for workforce housing because of potential land and utilities availability, as well as being close to educational and medical facilities.

Seasonal employment in the County is primarily located in Copper Harbor and the Lac La Belle area. Housing for these seasonal workers would best be located where the need is.

Housing for an Aging Population

Long-time residents may want to downsize to a smaller, maintenance-free home, due to age or health. This market segment would enjoy remaining in the community near family and friends, if other options were available, such as detached townhomes, duplexes, apartments and condominiums.

Remote workers

In recent years, new year-round residents who are able to work from home via Internet have relocated to the County, especially due to the availability of a Starlink satellite Internet connection. In the Community Survey, nearly 13% (42 responses) of employed persons indicated they work remotely.

The Keweenaw has a lot to offer people who want a more rural, recreation-oriented lifestyle, while being able to work from home, yet, housing options are limited, and not everyone can afford an expensive waterfront home. In addition, high-quality broadband availability is a key locational factor to bringing the remote workforce to Keweenaw County, and fortunately broadband availability will be expanded greatly in the coming years in the County. A broader variety of housing types, would help attract more remote workers to the County.

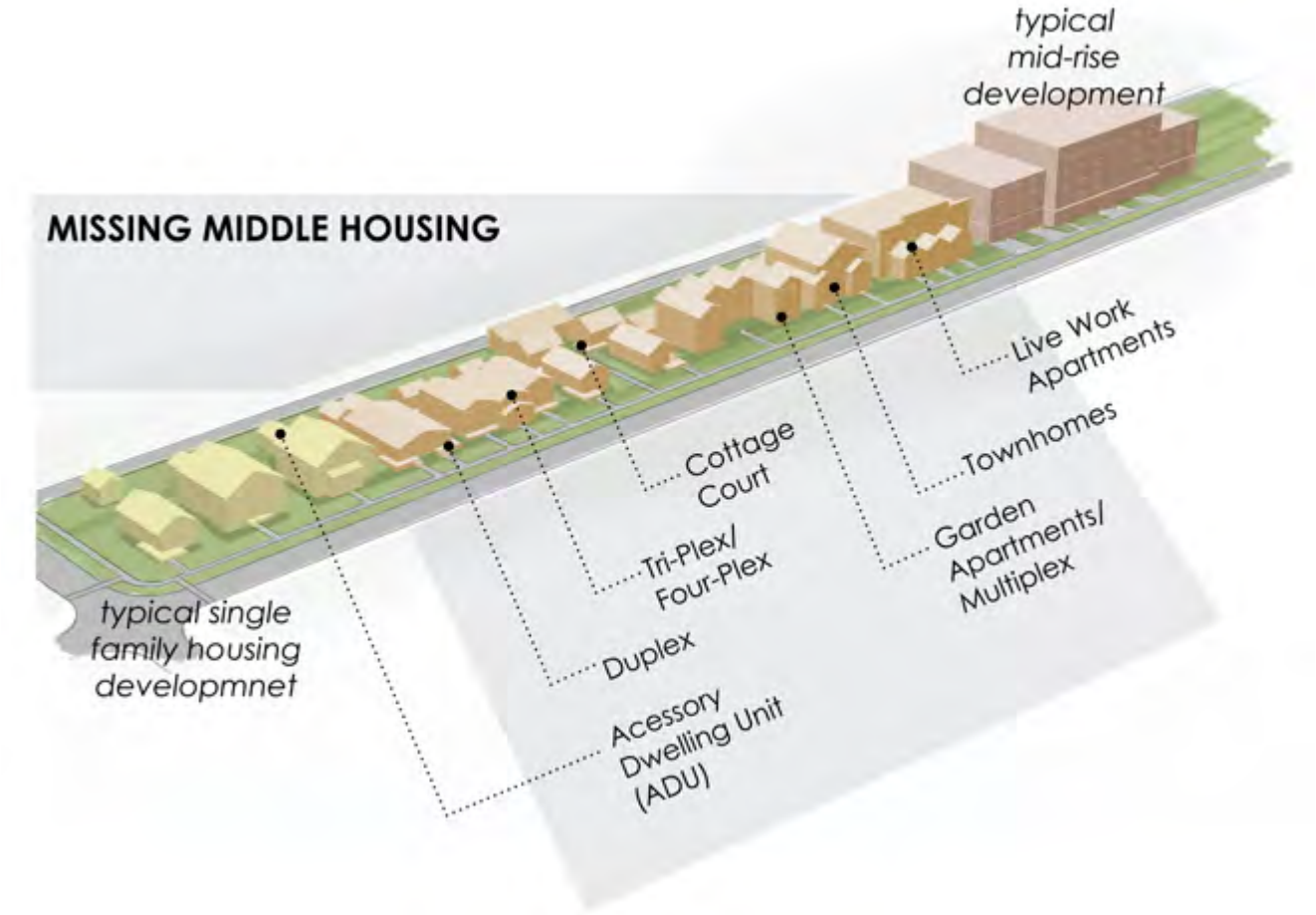


FIGURE 5.2 Different Housing Options

Redevelopment Opportunities

There are properties in Keweenaw County that could benefit from redevelopment assistance to eliminate



FIGURE 5.3 Eagle River Home

blight, create new housing sites, and make them productive. Many Michigan counties are active in providing redevelopment assistance. The former Calumet Air Force Station (Open Skies Project) is a candidate for redevelopment assistance. There is a need for Keweenaw County to get involved in several programs that could lead to strengthening existing neighborhoods, especially in Allouez Township and the Village of Ahmeek. These programs include:

Brownfield Redevelopment Authority (BRA)

Keweenaw County has an inactive Brownfield Redevelopment Authority. The purpose of a BRA is to promote the redevelopment of blighted, obsolete or tax reverted properties within the County.

The BRA can provide significant incentives to developers to facilitate the redevelopment of qualifying sites throughout the County. The primary incentives include the use of tax increment financing (TIF) along with the management of brownfield grants and loans. If a developer purchases a structure that is blighted, obsolete, or is environmentally contaminated, the developer can utilize Brownfield tools for low interest loans which can be paid back through a Brownfields TIF, thereby saving the developer significantly, as the increased property taxes they pay on the property are used to repay the loans. This is a major incentive to facilitate the redevelopment of underutilized and blighted properties.

Land Bank Program

A Land Bank Authority can facilitate the return of tax-foreclosed properties to the tax roll, while helping to eliminate blight, providing economic development opportunities and revitalizing communities. This can be done locally, as in neighboring Houghton County, or through the State of Michigan Land Bank (MLB).

The Blight Elimination Program (BEP Program)

This program is available through the MLB is a state and federally funded initiative to invest in disproportionately impacted communities around the state which will attract more investment at the neighborhood level. Specific eligible activities are demolition or stabilization of public or privately-owned structures as well as environmental remediation or rehabilitation of publicly owned structures.

Goals and Strategies

Goal 1: Address Housing Supply

Strategy 1.1

Explore opportunities to expand housing opportunities and consider alternate housing formats/types on vacant lands where community water and sewer services are available.

Strategy 1.2

Continue to work with and encourage broadband providers to expand the availability of quality broadband in the County to encourage remote workers to live in the County year-round.

Strategy 1.3

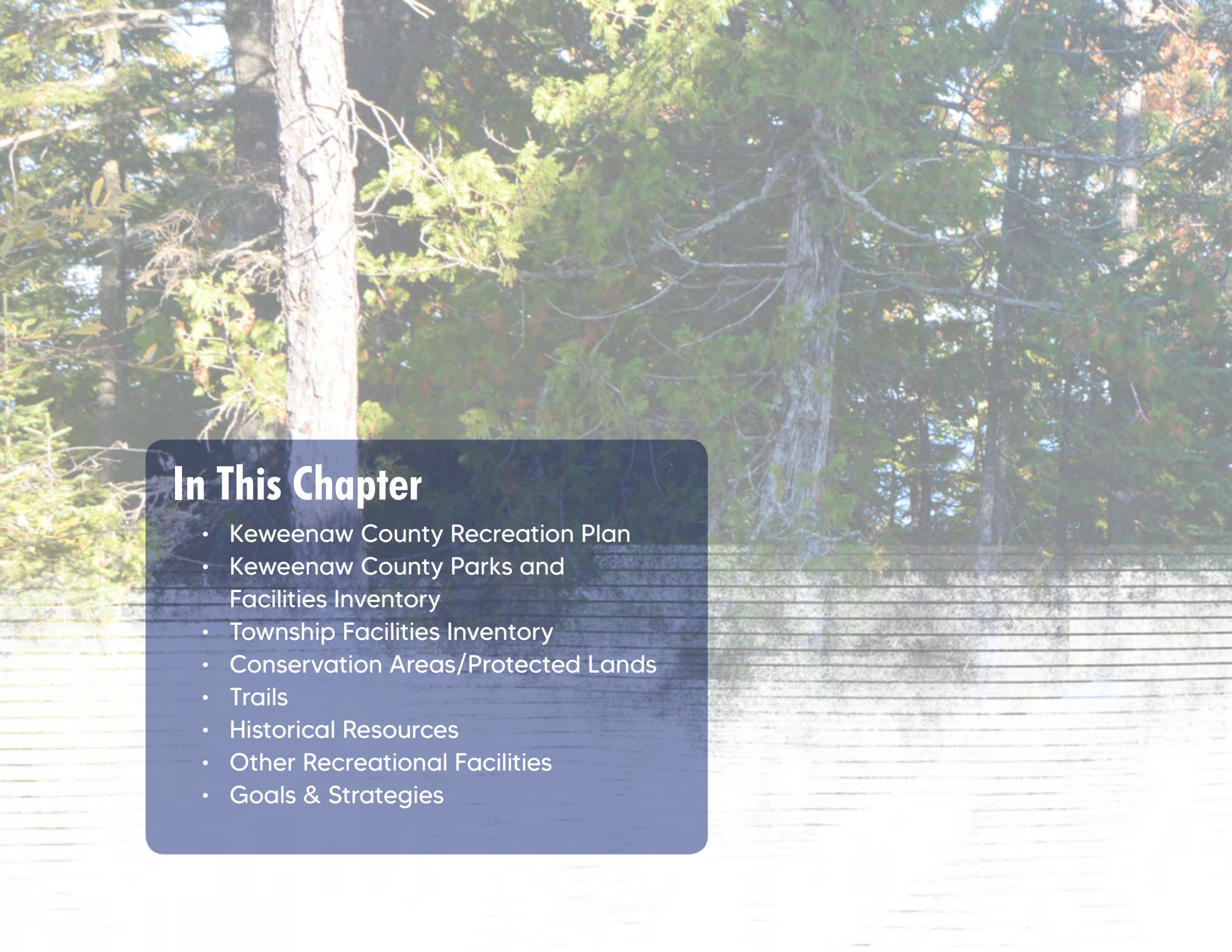
Monitor STR activity, and enact new appropriate STR standards and regulations through the Zoning Ordinance, and enforce the regulations.

Strategy 1.4

Consider opportunities to modify the Zoning Ordinance to encourage duplex and multi-family housing, as well as accessory dwelling units on larger residential properties for long-term workforce rentals.

Strategy 1.5

Activate the Brownfield Redevelopment Authority and consider coupling it with a Land Bank program to facilitate the elimination of blight, strengthening of older neighborhoods and create more housing opportunities.



In This Chapter

- Keweenaw County Recreation Plan
- Keweenaw County Parks and Facilities Inventory
- Township Facilities Inventory
- Conservation Areas/Protected Lands
- Trails
- Historical Resources
- Other Recreational Facilities
- Goals & Strategies



06

natural features/parks & recreation facilities/public lands/county owned recreational facilities

Overlook at Hunters Point Park

Natural Features/Parks & Recreation Facilities/ Public Lands

Keweenaw County residents are fortunate to live in one of Michigan's most beautiful and unique natural environments. Over 65% of respondents to the Master Plan Community Survey cited proximity to natural resources as a reason why they live in the County.

Keweenaw County's abundant natural resources and recreation facilities also drive the County's economy. A 2024 study of County tourism impacts by the University of Michigan Economic Growth Institute estimates a total direct economic impact of $53 million, with additional indirect and induced impacts of business to business and spending by labor. It also estimates that 65% of all local jobs are supported by tourism.

Historically, much of the land in Keweenaw County was privately held by large corporate land owners and open for public recreational use under the Michigan Commercial Forest Act (CFA). While the law allows public access to these lands for hunting and fishing, the corporate landowners allowed nearly unlimited use. Over time, the trails and logging roads were gated due to abuse by the public, while still allowing the non-motorized access for hunting and fishing, as well as hiking, berry picking and low impact use.

In more recent times, much of this commercial forest land has been sold, both to other corporations, and to a number of conservancies. The fragmentation of the large corporate land holdings and loss of public access has been a major concern in Keweenaw County for many years.

In 2022, A key acquisition of 32,500 acres of timberland was made by The Nature Conservancy (TNC). This acquisition, known as the Keweenaw Heartlands, is transitional, as the land is intended to be sold and transferred to the Michigan DNR and a County entity to be created to manage this land.

Keweenaw County Recreation Plan

Recently, Keweenaw County adopted a Recreation Plan, 2025-2029. This document inventories existing recreation facilities, and recognizes the important role of partnerships with the many organizations engaged in recreation and tourism in the County. The Recreation Plan identifies goals and objectives, and a number of projects to be planned and implemented in the next five years. Adoption of the Recreation Plan enables the County to apply for Recreation Grants from the Michigan DNR to continue the development of recreation facilities and infrastructure. This chapter supplements and supports the Keweenaw County Recreation Plan as part of the Master Plan.

Keweenaw County Parks and Facilities Inventory

Parks and recreation responsibilities in Keweenaw County are split among the Keweenaw County Board of Commissioners, and the Keweenaw County Road Commission. The Keweenaw County Board of Commissioners provides oversight to county-owned facilities. The Keweenaw County Road Commission is responsible for maintenance of Road Commission owned facilities and for care taking Michigan Department of Transportation (MDOT) roadside facilities.

The Keweenaw County Road Commission has a budget of approximately $75,000 for annual maintenance of county roadside parks and an additional $30,000 for the maintenance of MDOT roadside facilities. The County does not have a dedicated budget for general recreation expenses. For additional recreation projects, the County Board of Commissions allocates funds as needed and available.

Agate Harbor

The County owns the tip of the rocky peninsula, and an island located there. This property is undeveloped for recreational use.

Bete Grise North Beach

Owned by Keweenaw County Road Commission, this beach provides over 1,000 feet of beautiful sand frontage on Lake Superior. Toilet and changing facilities are provided.

Brockway Mountain Drive

A Copper Country Trail National Byway-designated site and a popular tourist destination known for its scenic views. From the top of Brockway, visitors are treated to a 360-degree panoramic view of miles of beautiful Lake Superior coastline and Keweenaw forestland (refer to Figure 6.0).

Brunette Park

Owned by Keweenaw County Road Commission, this roadside park occupies a narrow strip of land with 1,000 feet on Lake Superior with a beautiful sandy beach. Picnic and toilet facilities are provided.

Cliff Mine

The Cliff Mine is a historic site famous for being the first copper mine in Keweenaw County to generate a profit. Opened in 1845, the mine produced large quantities of copper through the 1870s, diminishing yields thereafter until its closing in the 1950s. Today, the site is owned by the Keweenaw County Road Commission and contains some archaeological remnants in addition to hiking trails. The site is visited by individuals interested in the region's mining heritage, geological and rockhounding enthusiasts, and outdoor recreationists.

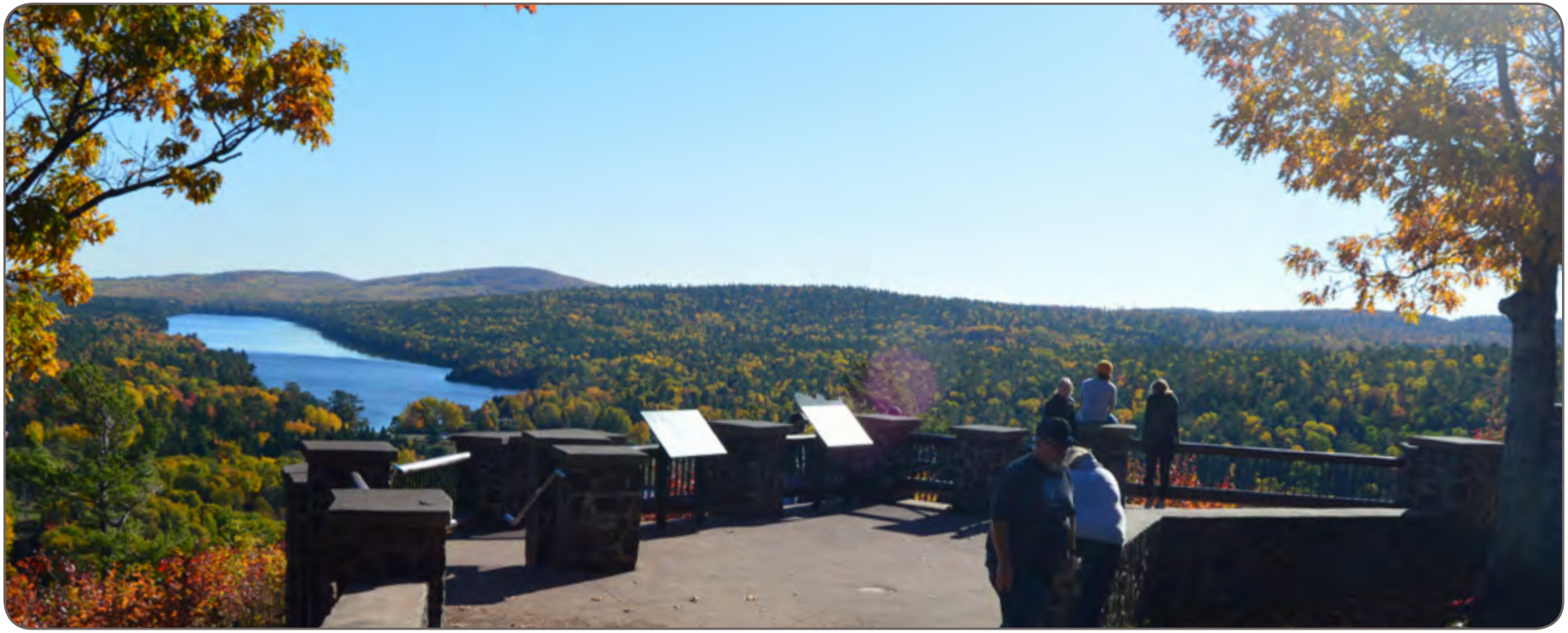


FIGURE 6.0 Brockway Mountain Overlook

Copper Falls Park

Owned by Keweenaw County Road Commission, this roadside park has a toilet that was recently replaced in 2023 and includes picnic tables, grills and toilet facilities.

Copper Harbor Overlook

Overlooking the town of Copper Harbor, this roadside property on Brockway Mountain Drive is owned by the Keweenaw County Road Commission (refer to Figure 6.1).

Eagle Harbor Beach

Keweenaw County and Eagle Harbor Township own this sandy public beach on Lake Superior. Eagle Harbor Beach is used for swimming, boating, and picnics. It occupies a narrow strip of land along Highway M-26 in the community of Eagle Harbor.

Eagle River Beach

Public beach located in the community of Eagle River with picnic tables, and toilet/changing room facilities. The land is owned by Houghton Township, Keweenaw County, and Keweenaw County Road Commission.

Eagle River Bridge Park

A roadside park adjacent to the township hall in Eagle River featuring the historic Eagle River Bridge along with a view of the Eagle River Falls. This is owned by MDOT (refer to Figure 6.2).

Esrey Park

Keweenaw County and MDOT own this roadside park located off Highway M-26. It features over 1,000 feet of rocky shoreline, a small shelter, a small pavilion near the water, water source, toilet facilities, picnic tables, rock stairway, grills, and bear-proof garbage cans.



FIGURE 6.1 Copper Harbor Overlook

Gay Stamp Sands Park

Owned by Keweenaw County Road Commission, this park overlooks the stamp sands and tailings piles on Lake Superior. No facilities are provided and there are no plans for the site.

Gratiot River County Park

This park is owned by Keweenaw County and provides 222 acres of land, 8,489 feet of Lake Superior shoreline, and one-half mile on the Gratiot River. Only day use is allowed.

Great Sand Bay Public Beaches

State (MDOT) owned scenic turnouts and table sites with parking, restrooms, and beach access near Owl Creek on M-26 in Eagle Harbor Township. Maintained by Keweenaw County Road Commission.

Haven Falls Park

Owned by Keweenaw County Road Commission, this roadside park includes picnic and toilet facilities along with an attractive waterfall. The park is located across the road from beautiful Lac La Belle.

Hebard Park

A developed MDOT roadside park with 990 feet of rocky Lake Superior shoreline. Picnic and toilet facilities are provided. The park is split by M-26. Owned by MDOT and maintained by Keweenaw County Road Commission.

Jackson Riverside Park

Owned by Keweenaw County Road Commission, this developed roadside picnic area is a popular site for fishing and smelting during the spring of the year. It is located on the Little Gratiot River near Lac La Belle.

Lake Bailey Island

The County owns this undeveloped island, and it is used primarily for primitive camping, day use, and fishing.



FIGURE 6.2 Historic Marker at Eagle River Bridge Park



FIGURE 6.3 Hunters Point Park in Grant Township

Lake Medora Islands

Several undeveloped islands in Lake Medora are owned by the County and are used by fishermen for primitive camping. There is a MDNR public access site on the east side of the lake including a boat launch and outhouse.

Silver River Falls Park

An accessible and iconic waterfall for Keweenaw tourists on M-26 in Eagle Harbor Township.

Tobacco River Mouth

This Keweenaw County Road Commission-owned area is popular with fishermen and features pit toilets and picnic tables.

Veterans Park

Located on U.S. 41 in Ahmeek, this roadside park includes a tourist information center, toilets and a Veterans Memorial. The Keweenaw County Road Commission owns both sides of US-41 at intersection of Cliff drive, as well as the toilet facilities and the handicraft shop.

W.C. Veale Park

Owned by Keweenaw County Road Commission, this small roadside park has a rocky shore and is a day use park and includes picnic facilities, pit toilets and 235 feet of Lake Superior frontage.

Township Facilities Inventory

In addition to County recreation facilities, each Township also owns and maintains community recreation areas and public access sites.

Village of Ahmeek

- **Gabriel Chop Park:** a community park in Ahmeek, MI. The park plays host to many community events throughout the year.
- **Ahmeek Park:** The Emil Aho Memorial Ice Rink (Ahmeek Rink) is located on School Street. There is a small playground adjacent to the ice rink. It consists of a swing set, a slide, and a merry-go-round.

Allouez Township

- **Mohawk Park:** The Mohawk Park is located at the site of the old Mohawk school. It is bordered by a unique rock fence that has been a historical landmark for many years. The park consists of a small pavilion, concessions, picnic tables and benches, a volleyball court, and a variety of playground equipment.
- **Seneca Lake Township Park:** A serene spot featuring a small lake perfect for fishing, picnicking, and wildlife watching, this park is located off Cliff Drive, near Mohawk, MI. There is also a dock and rustic walking trail for hiking through the wooded area that surrounds the lake.

Eagle Harbor Township

- **Eagle Harbor Beach:** This approximately 1.7-acre beach located in the town of Eagle Harbor is located on the west side of the harbor. It is a very popular spot for locals and visitors alike on warm summer days. Eliza Creek, known to provide habitat and spawning areas for Coaster Brook Trout and other fish varieties, exits into Lake Superior at the south end of the beach. This beach and harbor have been used as a recreational area for more than one hundred years.
- **Koop-Black Cove:** This 5.3-acre roadside park provides a picturesque view of the Eagle Harbor Lighthouse across the harbor and is the most photographed view-scape in Eagle Harbor. Many visitors stop to take pictures and walk along the beach.
- **Boggio's Fishing Hole Park:** This quiet .57-acre park within the town of Eagle Harbor is located along side Eliza Creek on 6th Street.



FIGURE 6.4 Houghton Township Park

It has traditionally been the place children of Eagle Harbor catch frogs, tadpoles, and fish as they learn about nature.

- **Eagle Harbor Public Square Complex:** The Public Square Complex is located in the center of the town of Eagle Harbor. The site includes the township hall, a children's play area consisting of a slide, swings, sand box, elevated bars, and other equipment for small children as well as a basketball court, baseball field, soccer field, a pavilion, a picnic area, horseshoe pits and a volleyball court. This public square serves as the hub for many community events.

- **Eagle Harbor Conservation and Recreation Area:** The conservation area located west of the town of Eagle Harbor is made up of Eliza Lake Preserve, Long Lake Refuge, and George Hite Dunes and Marshes. Eliza Lake Preserve is 169.3 acres, Long Lake Refuge is 400 acres, and the George Hite Dunes and Marshes 360 Acres. This area hosts a wide variety of recreational activities while conserving and protecting a coastal watershed and dunes area.
- **Eagle Harbor Hiking and Cross-Country Ski Trail:** The trail system within the Eagle Harbor Conservation and Recreation Area is extensive and is used for cross country skiing and snowshoeing. During the winter, the trail system is well used by year-round residents. There are approximately 10 miles of trails that are contained in the Eliza Lake Preserve, Long Lake Refuge, and the George Hite Dunes and Marshes. Trail Head parking has been established at the Lake Eliza Trail Head. A storage/shelter building has been constructed at the trail head to house trail grooming equipment and provide some shelter for skiers.

- Brockway Mountain Summit: In 2013, the Township purchased 320 acres at the west summit of Brockway Mountain with a grant from the Michigan Natural Resources Trust Fund (MNRTF) and The Nature Conservancy. Matching funds for the grant were provided by private donations. The property is open for public use.

Grant Township

- Hunters Point Park: Located in Copper Harbor, Michigan, this park is a scenic peninsula with trails along Lake Superior's rugged shoreline, offering views of the water and abundant wildlife (refer to Figure 6.3). The park is popular for its rocky beaches, birdwatching, and peaceful natural setting.

- Donny Kilpela Memorial Park: This three-acre park in the heart of



FIGURE 6.5 Community Center and Eagle River Museum in Houghton Township

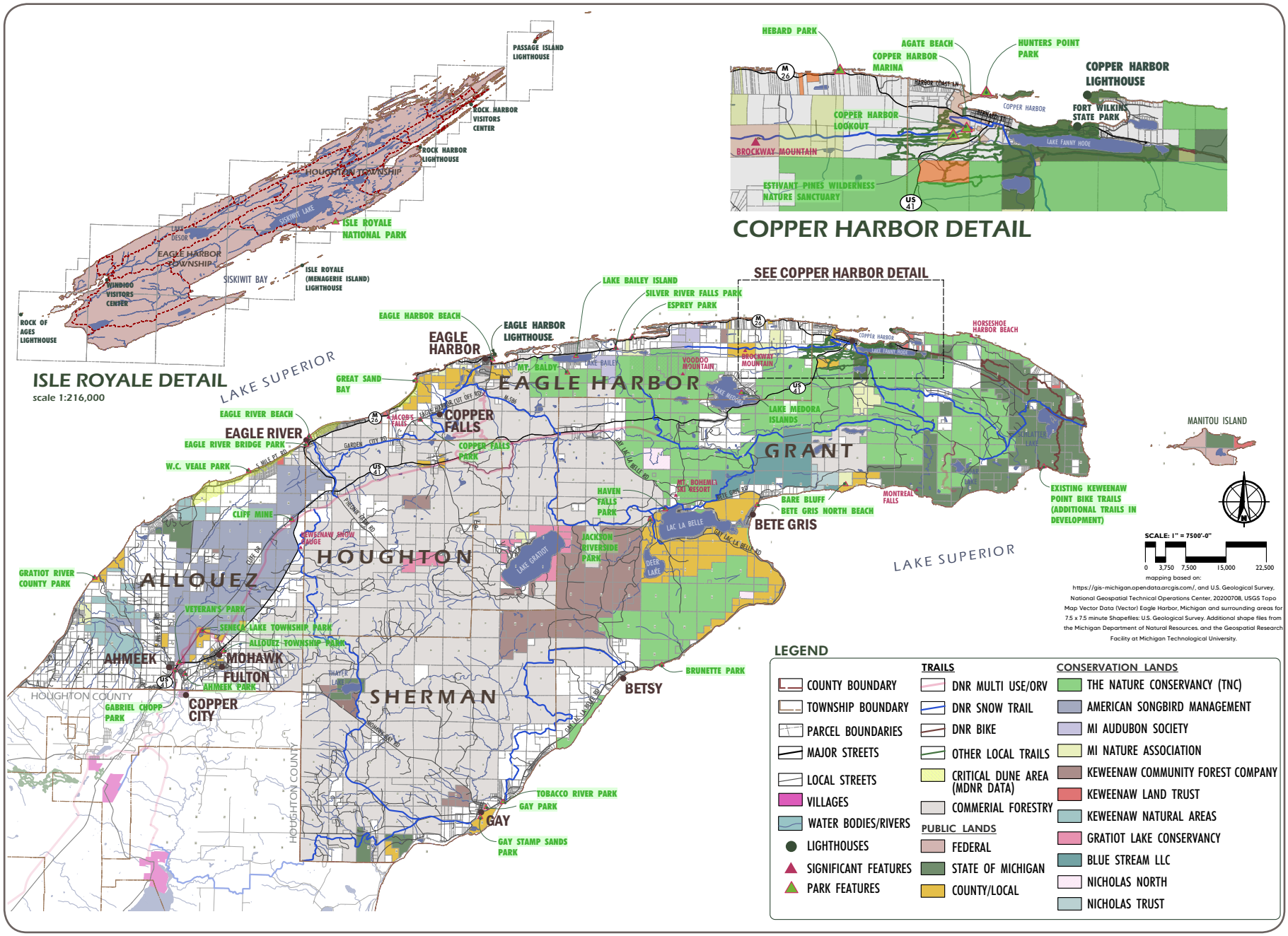


FIGURE 6.6 Natural Resources Map, Overall Keweenaw County

Copper Harbor's business district has an outdoor pavilion with barbeque pit. The Park also features a community center with a tourist information area, public restrooms, the Grant Township offices and the U.S. Postal Service in Copper Harbor.

- Third Street Mini Park: This Park features a viewing platform with benches on the harbor.

- 6th Street Dock: This dock features 300 feet of boardwalk; boardwalk lighting; a stone wall; and landscaping. It provides an area to tie up a small outboard watercraft and a boardwalk to 5th Street, and provides a views of Copper Harbor.
- 7th, 8th, and 9th Street Parks: These undeveloped parks are located at the end of 7th, 8th and 9th Streets in Copper Harbor.
- Union Park: This undeveloped park is located next to the Lac La Belle Fire Hall.

Houghton Township

- Community Center, Eagle River Museum and Park: Constructed in 1912 as a school, the building houses the Township offices and meeting room, and the Eagle River Museum which is operated by the Keweenaw County Historical Society. Next to the Community Center is a new park with a pavilion, public restrooms, gardens, soccer/play field and walking pathway (refer to Figure 6.4 and 6.5).

- Emil Dyni Deer Park: M-26 on east side of Eagle River. The park has public vault toilets, picnic tables and potable water, and is a major tourist attraction in the winter.



FIGURE 6.7 Michigan Nature Association land near Brockway Mountain

Sherman Township

- School House Park: This park is located next to the historic school in Gay, and features include a pavilion, picnic tables, grills, toilet, water and a playground. The pavilion includes over 20 unique carvings completed by a local artist.

Conservation Areas/Protected Lands

Keweenaw County, excluding the 133,788 acres of land in Isle Royale National Park, contains approximately 345,600 acres (about 540 square miles) of land on the mainland Peninsula. Just over 87,000 acres of land in Keweenaw County are protected by a variety of government, conservancies and non-profits organizations. This represents just over 25% of all the land in the County, excluding Isle Royale National Park. The Natural Resources map included with this chapter shows the various conservation areas and protected lands.

Federal, State and Local Government Lands	
OWNER	ACRES
Federal	594.20
State of Michigan	11,511.12
County / Local	8,793.23
Subtotal	20,898.55
Conservancies and Non-Profits	
OWNER	ACRES
American Songbird Management	10,765.30
Audubon Society	803.10
Blue Stream, LLC	3,045.40
Gratiot Lake Conservancy	1,333.67
Keweenaw Community Forest Company	8,929.13
Keweenaw Land Trust	352.36
Keweenaw Natural Areas	2,447.49
Nature Conservancy	35,616.11
Nicholas North	518.53
Nicholas Trust	404.65
Michigan Nature Association	2,004.91
Subtotal	66,220.65
Total	**87,119.20 Acres (25.2% of Keweenaw County)**

TABLE 6.0 Conservation & Protected Lands by Acre

Keweenaw Heartlands

The Keweenaw Heartlands refers to tracts of land purchased in 2022 by The Nature Conservancy (TNC). TNC, a global conservation

organization, became involved as a result of concerns expressed by the Keweenaw community about the potential sale and fragmentation of 32,500 acres of land owned by The Rohatyn Group ("TRG"), an asset management firm that owned more than 100,000 acres of forest land on the Keweenaw Peninsula.

TNC already had ownership of and manages almost 3,000 acres on the peninsula in three parcels. These include:

- The Mary Macdonald Preserve at Horseshoe Harbor
- The Helmut and Candis Stern Preserve at Mount Baldy
- The Bete Grise Wetlands Preserve

The TNC agreed to purchase, and hold the land in the interim until ownership and governance arrangements could be made. The MDNR was highly interested in acquiring a portion of the land nearest the tip of the peninsula to connect its existing state forest and state park lands and secure access to some of the peninsula's most desirable and visited features, as well as acquiring easements protecting existing trails through other portions of the land.

An extensive community engagement process was carried out to develop Management and Governance Principles for the Heartlands, and the Blueprint for the Keweenaw Heartlands was published, including a description of the planning process and recommendations.

About 20,000 acres of the Heartlands will be owned by a public entity and managed as a Community Forest by a local Recreation and Natural Resources Authority. This new entity/authority to would be created following the approval of pending needed changes to Michigan law enabling legislation and approval of articles of incorporation. If this concept moves forward, Keweenaw County should consider having this Authority manage and maintain all County parks and public access sites.

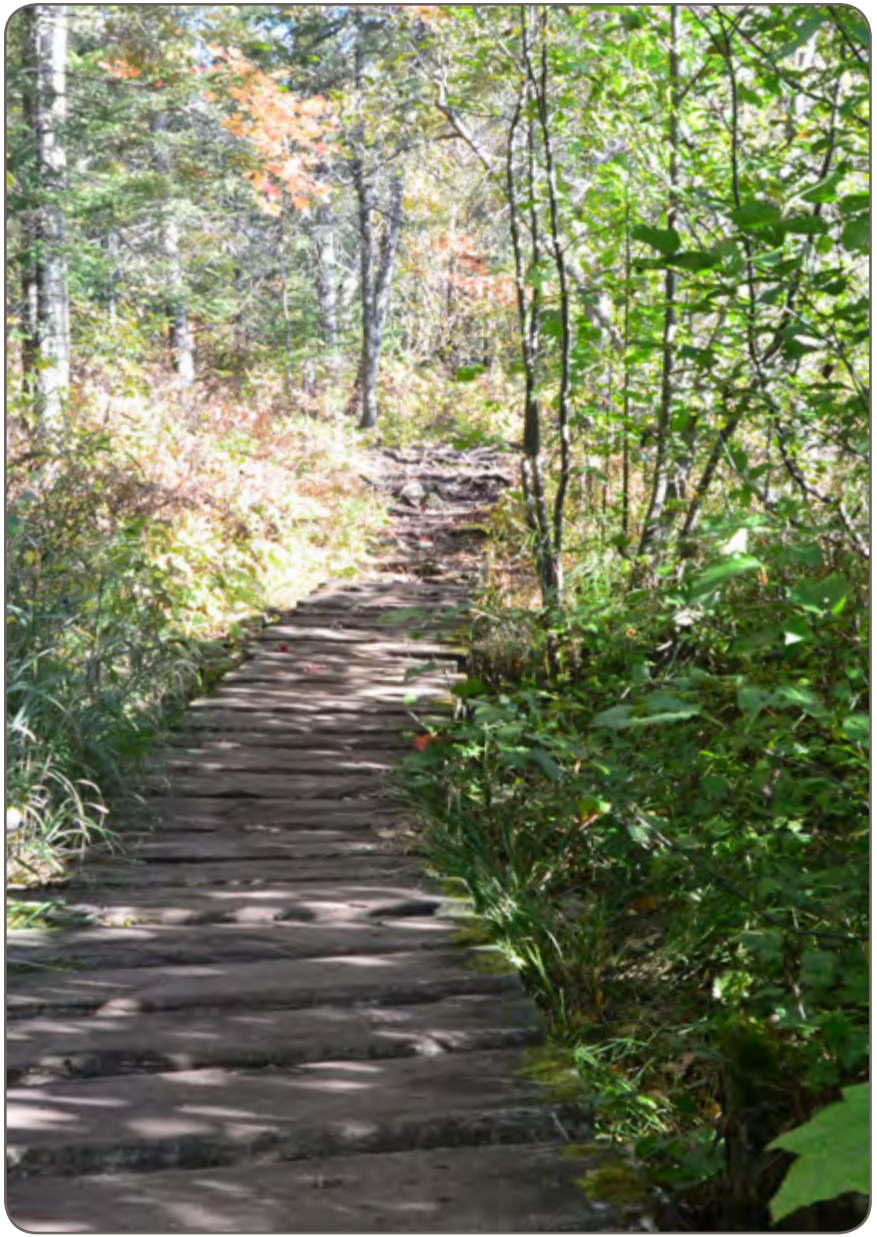


FIGURE 6.8 Trail at Hunters Point Park

About 200 acres of the Heartlands, including parcels in Eagle Harbor and Grant Townships, will be analyzed in 2026 for community infrastructure development, which could include workforce housing, support infrastructure, and other opportunities.

Trails

Motorized Trails

- Snowmobile Trails: During the winter months, 235 miles of snowmobile trails connect communities in and out of the county. The trails are groomed by the Keweenaw Snowmobile Club in partnership with the Michigan DNR. The system traverses private, township, county, state, and conservancy lands with continued access contingent on one-year easements and agreements. This trail system and abundant snowfall makes Keweenaw County a premier destination for snowmobiling, generating significant economic impacts in the region.

- ATV trails: There are 160 miles of ATV trails in the ATV trail system in Keweenaw County includes many miles of state designated trails. Like the snowmobile trail system, some of the trails are contingent upon one-year easements and agreements. Much of the work on these trails is completed by the Keweenaw ATV Club in partnership with the Michigan DNR. This trail system helps generates significant economic impacts in the region.

Non-Motorized Trails

Hiking Trails: There are over 44 miles of hiking trails in Keweenaw County that are owned and maintained by numerous organizations and local units of government.

- Copper Harbor Trail System: More than 50 miles of trails combine to create a unique system of biking and hiking trails in Grant Township on state, township, and privately-owned land in and around Copper Harbor. The trail system is maintained by the Copper Harbor Trails Club (CHTC) and offers skiing and

Universal Design for Recreation Facilities

Recreation universal design creates parks, playgrounds, and recreational facilities that are usable by all people to the greatest extent possible, without the need for adaptation or specialized design. It goes beyond basic ADA compliance to foster inclusion for individuals of all abilities, ages, and backgrounds, ensuring equitable, intuitive, and safe participation.

There are seven core principles for universal design:

1.) Equitable use
2.) Flexibility in use
3.) Simple and intuitive use
4.) Perceptible information
5.) Tolerance for error
6.) Low physical effort
7.) Size and space for approach and use

Key Features in Recreational Spaces

- Parks/Plazas: Feature grade-level, accessible entryways and seating
- Playgrounds: Utilize surfacing and equipment that offer sensory-rich, inclusive play.
- Water Facilities: Incorporate zero-entry designs.
- Amenities: Include family restrooms and multi-sensory wayfinding
- Trails: Maximizing trail widths and rest areas, limiting slopes where possible.

Source: The Ability Center, https://abilitycenter.org/
University of Buffalo IDEA Center, https://idea.ap.buffalo.edu/



FIGURE 6.8 Copper Harbor Trails

snowshoeing in the winter. There are also the East Bluff Trails east of Copper Harbor beyond the end of US-41.

- Eagle Harbor Hiking and Cross-Country Ski Trail: The 10-mile trail system within the Eagle Harbor Conservation and Recreation Area available for hiking, cross country skiing and snowshoeing. During the winter, the trail system is groomed.

Other Recreational Facilities

Marinas and Boat Launches

- Marinas: There are three state-owned marinas and harbors of refuge facilities in Keweenaw County located at Eagle Harbor, Copper Harbor and Lac LaBelle.
- State Boat Launches: These are available at Thayer Lake, Gratiot Lake, Lake Bailey, Lake Medora and Lake Fanny Hooe.

Mount Bohemia Ski Resort

The Mount Bohemia Ski Resort opened in Keweenaw County in the year 2000, and has since gained national recognition as a premier destination for downhill and back country skiing. The resort has an advertised vertical drop of 900 feet, two chairlifts, chalet, bar, and lodging both on and off site. Mount Bohemia is one of the largest commercial tax payers in Keweenaw County, and has had a major economic impact on the community with employment, and both direct and non-direct spending. In recent years, Mount Bohemia has added the Nordic Spa facilities, which is used year-round by many residents, as well as visitors.

Historical Resources

The history of Keweenaw County dates back thousands of years to the mining of copper by Indigenous Peoples to the "discovery" of abundant copper resources in the 1840's, through the first US mineral rush and industrialization of the late 19th and early 20th centuries. An important part of this legacy is the immigration of a number of nationalities to mine the copper and log the woods of the County. This legacy is recognized as having national significance, leading the to the creation of the Keweenaw National Historic Park, with headquarters in nearby Calumet.

Within Keweenaw County are numerous archeoglogical sites. The Minong Mine Copper Mining District, which is part of Isle Royale National Park, has been designated a National Historic Landmark (NHL). The documented archaeological site 20KE20 is a site dating back 8700 years before present, making this the earliest known copper-working site in Michigan (and possibly the United States).

In addition, the Keweenaw County Historical Society (KCHS) is a viable organization that works to preserve and showcase important sites in the County. The KCHS manages an impressive 12 museums including 8 sites and 24 buildings. With about 1,000 members, the KCHS is an active organization although is challenged by the County's aging population and a need for 50-75 active volunteers. The KCHS operates through rentals, admissions, donations and available grant funding.

Keweenaw Outdoor Recreation Coalition

The Keweenaw Outdoor Recreation Coalition (KORC) was created to bring together a variety of user groups with one shared goal: to protect the Keweenaw's vast landscapes for everyone. Members include individuals, businesses, and outdoor recreation, conservation, and community organizations that are working together to secure permanent public access to at-risk land in the Keweenaw. Since forming in 2019, KORC has been active in supporting recreation improvements, creating public access, and infrastructure that benefits Keweenaw County outdoor recreation and tourism.

Other Recreation Needs

The Master Plan Community Survey identified a recreation need currently not available in Keweenaw County. A number of respondents commented on the need for an indoor health and fitness facility in the County, especially needed in the winter season. Respondents cited the need for maintaining fitness and the effects of social isolation in winter, and having to drive to Houghton County for such a facility.

Goals and Strategies

Goal 1: Maintain Keweenaw County parks and recreation facilities to provide the public with safe, usable, and attractive recreational opportunities.

Strategy 1.1
Replace/upgrade aging facilities and equipment.

Strategy 1.2
Provide and maintain appropriate signage for each park or facility.

Goal 2: Engage the community when planning for improving parks and adding new park facilities.

Strategy 2.1
Promote citizen input when making decisions related to recreation facilities.

Strategy 2.2
Continue to collaborate with the County's recreation partners, stakeholders and community groups who volunteer to assist the County maintaining, creating, or improving recreation facilities and programs.

Strategy 2.3
Continue to seek grants from the State of Michigan and continue to ask local groups and individuals to fund the local match requirements for those grants.

Goal 3: Improve existing recreation facilities to increase ADA and Universal Access where appropriate.

Strategy 3.1
Make accessibility improvements so that all facilities meet ADA and Universal Access requirements.

Goal 4: Promote recreational programming and recreation facilities that help people overcome social isolation, especially in the winter season, as people who are fit and socially engaged are healthier, happier, and live longer.

Strategy 4.1
Continue to work with community groups and individuals who promote activities that encourage social engagement near where people live.

Strategy 4.2
Consider opportunities for development of an indoor fitness and recreation facility.

Goal 5: Collaborate with other local units of government, stakeholders and special interest groups to offer improved recreational opportunities.

Strategy 5.1

Be open to any local government and organized group that seeks partners to jointly develop new recreation trails or facilities.

Strategy 5.2

Cooperate with KORC efforts to establish a new trailhead, parking, and trail to access Bare Bluff and the Mouth of the Montreal River.

Strategy 5.3

Collaborate with the Keweenaw Bay Indian Community (KBIC) to develop co-management agreements, traditional ecological knowledge (TEK), and the protection of specific cultural landscapes or archaeological sites.

Goal 6: Implement the Keweenaw County Recreation Plan projects identified in the Recreation Plan 2025-2029.

Strategy 6.1

Appoint a permanent Recreation Committee or Commission as recommended in the Recreation Plan. Or, consider making the proposed Recreation Heartlands Recreation and Natural Resources Authority responsible for all County parks and recreation facilities.



Source: Image by Chris Guibert courtesy of Visit Keweenaw

FIGURE 6.9 Snowboarding at Mount Bohemia



In This Chapter

- County Public Facilities
- County Services
- Goals and Strategies

07

county infrastructure, public facilities, safety & emergency services



Houghton Township Hall & Pavillion

County Infrastructure, Public Facilities, Safety & Emergency Services

This Chapter provides an overview of Keweenaw County and regional infrastructure and services.

Keweenaw County Courthouse

The County Building/Courthouse is located on 4th Street, Eagle River in Houghton Township (refer to Figure 7.0). The building holds the administrative offices for the County including Clerk, Register of Deeds, Administration, Board of Commissioners, Tax Equalization, Treasurer, Zoning and Construction, and 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.



FIGURE 7.0 Keweenaw County Courthouse

In recent years, the historic Courthouse has undergone renovations, including the addition of an elevator for ADA access to the second-floor courtroom. A current project is providing security upgrades to the facility.

Township Halls

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

Allouez Township Hall Complex (located in New Allouez)

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

Eagle Harbor Township Hall, Eagle Harbor

The Township Hall has offices and a gathering and meeting room. The fire department is located on the Eagle Harbor Cutoff Road 1 mile south of town. A Community Building,

the old school house, is also available for residents for small gatherings. All Eagle Harbor Township Buildings are handicapped accessible, and are used for a variety of public and community meetings.

Grant Township Hall, Copper Harbor

The Community Building includes the Township offices as well as a Visitor Center, United States Post Office and public restrooms, which are handicapped accessible. The building is used for variety of public meetings and community events. An Emergency Call Box and 24-hour outside access to public restrooms is provided. The Copper Harbor Fire Hall is located on the south-east side of town near the transfer station.

Grant Township also has the Lac La Belle Fire Hall and Community Center, that includes a commercial kitchen, and community hall for gatherings.

Houghton Township Hall, Eagle River

The historic Houghton Township hall serves as the Township offices and is used for weddings and other community activities (refer to Figure 7.1). The Hall is also a museum operated by the Keweenaw County Historical Society with historic displays. In recent years, a new park/town square was constructed that includes a pavilion and public restrooms, play area, soccer/play field, gardens, and a walking path.

Sherman Township Office and Hall, Gay

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



FIGURE 7.1 Houghton Township Hall

Water Systems

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.

In Allouez Township, the potable water used for drinking and fire protection in the area is supplied by Upper Michigan Water Company, a private for-profit company. The water system was originally installed in the area by C&H Mining Company and in 1962 the Mining Company sold the water system to a private corporation. There have been several owners over the last 60 years. In 2022 the private corporate owner became the Upper Michigan Water Company.

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

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

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

Sanitary Sewer Systems

Local governments own and operate four community sanitary wastewater systems in the County. These systems include Ahmeek Village, Allouez Township, Copper Harbor, and Gay.

Allouez Township has a field system capable of processing 75,000 gallons/day that serves the unincorporated communities of Mohawk, Fulton, and Allouez.

Ahmeek Village system serves Ahmeek, Ahmeek Location, and New Allouez with a pond system designed for an average of 50,000 gallons/day with a current usage of 30,000 gallons/day.

Copper Harbor has a lagoon treatment system capable of 80,000 gallons/day, seasonally.

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/ drainfields.

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

Solid Waste

Solid Waste Management Services in Keweenaw County are regulated through a state-mandated plan required by the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Part 115, Solid Waste Management.

Each Township has a collection system designed to meet its needs.

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

Law Enforcement

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

The Sheriff's Department and holding facility are located in Eagle River next to the County Courthouse (refer to Figure 7.2). The department operates around the clock, 24 hours a day, 7 days a week. It is staffed by the Sheriff, six (6) full-time deputies, 1 temporary position, and a part-time trail patroller.



FIGURE 7.2 Sheriff Department in Eagle River

Besides addressing critical situations, and serving the court, these officers routinely answer citizen complaints, investigate accident reports, conduct road patrols, transport prisoners, deal with mental health issues, and perform well-being checks on residents and property. The Sheriff's Department also conducts patrols on snowmobile, ATV and marine patrols all with assistance of the MDNR State Grants. They also coordinate and license the large network of about 120 volunteers who are First Responders, Emergency Medical Services (EMS) and firefighters in the County.

The Sheriff's department also supports and participates in the Keweenaw Search and Rescue organization, which has about 30 volunteers and is based in Allouez. This group is playing a vital role in assisting distressed adventurers. A new Emergency Services facility is proposed to be constructed in Mohawk for housing Keweenaw Search and Rescue vehicles and equipment. This facility will be shared with the Keweenaw County Road Commission.

According to the Keweenaw County Sheriff, the past three (3) years has seen a 27% increase in calls, with a 50% increase in Search and Rescue calls. These increases are due to the influx of visitors which began with the COVID epidemic and continues today. The number of people visiting and staying in the County has also increased in part, due to the growing number of short-term rental units available.

Emergency Services

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

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

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

The Keweenaw County Sheriff Department also has watercraft available to respond to water-based emergencies.

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 an increasing number of visitors. The emergency measures coordinator and Sheriff's Department work together on managing operations with many volunteer agencies including Keweenaw Search and Rescue and the Civil Air Patrol.



Image courtesy of Ahmeek Village Volunteer Fire & Rescue Department Facebook Page

FIGURE 7.2 Ahmeek Village Fire and Rescue, June 2025

Fire Protection

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

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

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

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

Due to an aging population and lack of population growth, recruiting firefighters and emergency responders has become a challenge for the Township-based fire departments.

Education

Keweenaw County is served by the Calumet-Laurium-Keweenaw (CLK) School District for most K-12 students. The CLK Schools District also operates the Horizons Alternative School located in Mohawk. The Grant Township School District operates a K-8 one room school in Copper Harbor. A private Charter School, the Copper Island Academy, also may serve local students. Children living in Sherman Township/ Gay attend school in Lake Linden.

The closest colleges/universities are Michigan Technological University, and a branch of Gogebic Community College, both located 28 miles away in Houghton, and Northern Michigan University in Marquette, about 130 miles away.

Health Care

Health care, hospital, and clinic services for the County are provided by Aspirus-Keweenaw in Laurium, and Portage Health Systems, located in Hancock. Both health care systems have clinics in Calumet and the Houghton area, and are part of larger regional healthcare networks to provide specialized care and treatment.

The region is also served by the Upper Great Lakes Family Health Center with clinics in Calumet, Houghton and Lake Linden

Natural Gas

SEMCO Energy Gas Company serves the south urbanized part of Keweenaw County with natural gas. Liquid propane is the primary gas in use in the rural areas of the County.

Can the County tax tourists to help pay for increased infrastructure and service costs?

Hotels and resorts in Keweenaw County may participate in a tax on lodging that funds the Visit Keweenaw CVB. Those funds may be used only for tourism marketing and promotion.

Currently there is not a Michigan law that enables local governments to fund increased demand on infrastructure and services. However, such a tax may be possible. The Wisconsin legislature recently created the Premier Resort Area Tax, and a growing list of cities is adopting the measure, including Minocqua, Eagle River, Rhinelander and more. This is a sales tax (generally 0.5%) that can help tourism-impacted communities fund needed improvements and services.

Keweenaw County officials should consider opening a dialogue with legislators to see if such a tax could be created in Michigan.

Electric

The Upper Peninsula Power Company (UPPCO) provides electrical power for the County. The Ontonagon County REA serves the southern part of Sherman Township.

Communications

AT&T was the only land-line local phone access provider in the County. On March 31, 2026, UP Fiber assumed and is now responsible for former AT&T land-line and home Internet services in Keweenaw County. Verizon, AT&T, and other providers offer cellular service. A number of areas in the County have spotty or no cell phone service due to topography, low population density and a lack of towers.

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

Satellite television coverage through various providers is available county-wide. Spectrum provides Internet service and cable television to the populated areas of Allouez Township. Cable America Corporation serves the community of Eagle Harbor.

Goals and Strategies

Goal 1: Work with the Keweenaw County Sheriff's Department and the Michigan State Police to encourage adequate police protection, and maintain/fund local capacity for fire protection and first responders.

Strategy 1.1
Continue to recruit and train Volunteer Firefighters and Medical First Responders.

Strategy 1.2
Support the 911 Emergency System.

Strategy 1.3
Continue to support an effective emergency response to all areas of the County by Keweenaw Search and Rescue, Emergency Medical Responders, Firefighters, Sheriff's Department, and State Police.

Strategy 1.4
Require that all access roads to residences and businesses be accessible to emergency vehicles.

Strategy 1.5
Complete the Emergency Services Building in Mohawk.

Strategy 1.6
Continue to explore and pursue options for financing, including federal and state grants, foundations, and special assessments.

Strategy 1.7
Continue to collaborate with regional jurisdictions for mutual aid services, such as fire and police protection.

Strategy 1.8
Work with Michigan State legislators to create a tourism taxing tool like Wisconsin's ***Premier Resort Area Tax***, which allows local units of government to impose a sales tax on goods, services, and lodging, and then use the revenues to pay for infrastructure and public safety costs.

Goal 2: Work to improve collaboration and cooperation between the County and Townships

Strategy 2.1
Lead an effort to identify and study opportunities to cooperate by hosting a regular regional meeting of Township and County elected officials, Planning Commissions, other boards, and staff.

Goal 3: Resiliency

Strategy 3.1
Plan for and coordinate emergency response and relief activities in the face of man-made or natural disasters.

Goal 4: Preserve the Keweenaw County Courthouse

Strategy 4.1
Continue to seek funding opportunities to preserve and improve the Courthouse, including appropriate window replacement and a fire suppression system.

Strategy 4.2
Keweenaw County should develop a Capital Improvements Plan that identifies needed major expenditures and funding sources for projects for the next six (6) years, to be updated annually.



Source: Michigan Technological University Archives and Copper Country Historical Collections, Reeder Photograph Collection, "Eagle River Courthouse and Jail", MS042-017-261-032, https://cchi.mtu.edu/

FIGURE 7.2 Keweenaw County Courthouse in 1925



In This Chapter

- Road Systems
- Transportation Planning
- Goals and Strategies



08 transportation

Eagle River Timber Bridge, M-26

Transportation

Local roads and streets draw the most attention from residents and visitors. All residents use roads, either as drivers of vehicles, or as passengers, or depend on them for the transport of good needed for daily life. People also use roads, sidewalks, and trails for active transportation and recreational activities such as walking, bicycling, rollerblading, etc. Unlike underground infrastructure such as water and sewer lines, which are equally vital to a community, roads are highly visible, and deteriorated roads and bridges are readily observed by all who travel them.



FIGURE 8.0 Eagle Harbor Cutoff Road

Michigan Act 51 of 1951 requires that all counties, incorporated cities, and villages establish and maintain road systems under their jurisdiction, as distinct from state jurisdiction, as identified on the Keweenaw County Act 51 map.

State Trunkline Highways

The state trunkline system includes state and federal highways that connect communities to other areas within the same county, state and other states. These roadways provide the highest level of traffic mobility for the traveling public. State and federal highways are designed by the prefixes “M” and “U.S.” respectively.

There is one US highway in Keweenaw County. US 41 begins east of Copper Harbor and runs 2,008 miles south to its terminus at Miami, Florida.

M-26 enters Keweenaw County at the southern boundary of the County and follows US 41 to Phoenix, then travels through Eagle River, Eagle Harbor and along the Lake Superior shoreline to the intersection with US 41 at Copper Harbor.

These major highways are maintained by the Keweenaw County Road Commission under contract with the Michigan Department of Transportation (MDOT).

Michigan Act 51 requires that MDOT bear all maintenance costs consistent with department standards and specifications for all state highways including those within incorporated communities.

Local Road Systems

A system of primary and local county roads serves the County, maintained by the Keweenaw County Road Commission, as described below:

Primary Road System

A system of primary roads in each incorporated Township is approved by the state highway commission pursuant to Michigan Public Act 51. Primary Roads are selected by the County Road Commission on the basis of greatest general importance to the County. County roads may be added or deleted from the system subject to approval of the state highway commissioner.

There are 102 miles (204 lane miles) of Primary Roads in Keweenaw County.

Local Road and Street System

Other local roads, exclusive of state trunklines, major county roads and those included in the major road system, make up the local street system. The process of approval, additions and deletions is the same as with other road system designations.

There are 74 miles of Local Roads (146 lane miles) in Keweenaw County.

The Keweenaw County Road Commission levies a county-wide millage for local roads which generates about $409,000 for maintenance and improvements. Recent projects include repaving streets in Mohawk, Copper Harbor, and the Bete Gris Road.



FIGURE 8.1 Eagle River Timber Bridge, M-26

There are a number of private roads in Keweenaw County that will not meet the standards for becoming a part of the County Road System. People have purchased property without understanding that the Road Commission does not maintain and plow snow on private roads. Developers should be encouraged to meet County Road standards for design and construction on new developments.

Traffic Volumes

The Michigan Department of Transportation conducts annual vehicle counts on highways. The Average Daily Total (AADT) is used to identify traffic trends and needs for improvement. The table below shows 2024 and 2022 AADT totals for State Trunkline and Primary County Roads in Keweenaw County. These counts show a slight increase in traffic on trunklines and County primary roads, but increases are less than an estimated 5% annual increase in traffic on statewide roads.



FIGURE 8.3 Wayfinding Sign at Eagle River Falls

Segment	2024	2022	+/-
US 41 at County Line	5,493	5,285	+208
US 41 North of Mohawk	3,137	2,973	+164
US 41 at Phoenix	2,339	2,127	+212
US 41 Phoenix to Eagle Harbor Cutoff	1,362	1,291	+71
US 41 Eagle Harbor Cutoff to Copper Harbor	1,134	1,075	+59
M-26 Phoenix to Lake Bailey	1,056	1,001	+55
M-26 Lake Bailey to Copper Harbor	1,571	1,489	+82
Eagle Harbor Cutoff Rd	422	418	+4
Lac La Belle Rd, US 41 to Betsy	636	630	+6
Gay-Lac La Belle Rd to Betsy	341	338	+4
Five Mile Point Rd	690	683	+7
Mohawk-Gay Rd	226	224	+2
Gay Rd County line to Gay	759	751	+8
Gratiot Lake Rd	161	159	+2
Brockway Mountain Drive*	1,750*		

Source: Michigan Department of Transportation

* Peak color season count. Brockway Mountain Drive is a seasonal road.

TABLE 8.0 2024/2022 AADT State Trunkline and Primary County Roads

Transportation Planning

Planning for transportation improvements takes place at both the state and local level. The Michigan Department of Transportation maintains a statewide long-range transportation plan, and holds hearings around the state to gather input regarding residents' needs and desires. In addition to the long-range plan, MDOT prepares a five-year program for road improvements statewide. The various phases, such as right-of-way acquisition, design, and construction, are scheduled over a multi-year period so as to keep large projects on track.

Local planning efforts consist of the County Road Commission's annual prioritizing of road improvement projects.

Access management refers to long-term planning for access to highway corridors, in order to preserve the long-term capacity of the roadway, improve safety, and maintain accessibility. Access management examines the spacing and location of driveways, access roads and intersections, and access management plans can recommend such measures as driveway consolidations, front or rear access roads, turn lanes, intersection realignments, addition or removal of traffic control devices, and other measures. Implementation can involve use of zoning and subdivision control ordinances, private road ordinances, standards for subdivision design, and use of local review boards in granting driveway permits.

At this time, there is not an Access Management Plan for Keweenaw County, however, the principles and standards for access management are included in the County Zoning Ordinance for consideration during site plan review and other zoning decisions.

Copper Country Scenic Byway

US 41 in Keweenaw County is designated a National Scenic Byway, part of the Copper Country Trail National Scenic Byway, designated by the US Secretary of Transportation. The National Scenic Byways Program, established by Congress in 1991, recognizes historic, scenic, and culturally important roads, all of which promote economic development and tourism in communities around the U.S. There are only two other National Scenic Byways in Michigan.

Brockway Mountain Drive

Brockway Mountain Drive is a scenic, 9.5-mile paved seasonal road offering 360-degree views of Lake Superior, surrounding woodlands, and inland lakes from 1,320 feet above sea level. It is the highest-elevation drive between the Rockies and the Alleghenies, featuring dramatic fall colors, bird-of-prey migration (April-June), and, on clear days, views of Isle Royale. Brockway Mountain Drive has historically been one of the major attractions in the County and provides access to important recreation activities, including mountain bike and hiking trails. A recent traffic count by the Road Commission during the peak color season showed an AADT of 1750 vehicles. In winter, the road serves as an important part of the snowmobile trail system.

The road was constructed by the Keweenaw County Road Commission in 1933-35 with funding from Great Depression-era employment programs, and includes unique stonework walls.

The Brockway Mountain Drive paved surface and base has deteriorated over the years and is now in fair to poor condition. According to the Road Commission Manager/Engineer, improving the road will require about $9-10 million, well beyond the financial ability of the Road Commission and Keweenaw County to fund needed improvements. In the past, the Road Commission has tried to receive special funding appropriations from the Michigan Legislature without success.

Non-motorized Transportation Facilities

In recent years, the construction of non-motorized facilities has increased in many communities in response to public interest. Walking and bicycling are among the top five individual exercise activities according to a national survey (walking is number one). Alternate modes of transportation are encouraged and made safer by facilities such as sidewalks, bike lanes and walking paths. These types of transportation facilities are different from recreational mountain bike trails that exist in Keweenaw County.



FIGURE 8.2 Brockway Mountain Drive

Generally, sidewalks are not present in the residential areas in Keweenaw County, however, the residential streets generally have light traffic that allows for safe walking and bicycling. The recent Master Plan survey indicated 29% of respondents viewed walkability as a priority of the Master Plan and 28% cited the lack of safe places for walking as a winter challenge.

Residents in Allouez Township who participated in the Master Plan Open House Workshop favored creating non-motorized trails for pedestrians, bicyclists and families in and around the urbanized area of the Township. Participants in the Master Plan Open House Workshop in Eagle Harbor Township favored creating space for walkers and bikers along M-26 in the Township. Grant Township has plans to add walkways along US 41 in Copper Harbor but has not found funding for the project.

The Keweenaw County Road Commission spends about 10% of annual road improvement funds to expand shoulders on County roads for non-motorized use, widening the road pavement width to 22'-24' to accommodate this use.

Air Service

The nearest airport providing commercial and charter passenger service is the Houghton County Airport, a distance of about 23 miles from Eagle River. United Airlines offers daily flights to and from Chicago (ORD).

Goals and Strategies

Goal 1: Maintain and upgrade existing roads

Strategy 1.1
Continue to implement road and street paving in the County.

Strategy 1.2
Review current zoning standards for private roads to ensure they meet minimum requirements for public safety.

Goal 2: Improve non-motorized/pedestrian facilities.

Strategy 2.1
Continue the policy of widening shoulders on County roads for non-motorized transportation.

Strategy 2.2
Identify opportunities to create non-motorized trails in and around the urbanized areas of Allouez Township.

Strategy 2.3
Look for opportunities to create pedestrian facilities in along M-26 in the Eagle Harbor village area, and along US 41 in Copper Harbor.

Goal 3: Improve Brockway Mountain Drive

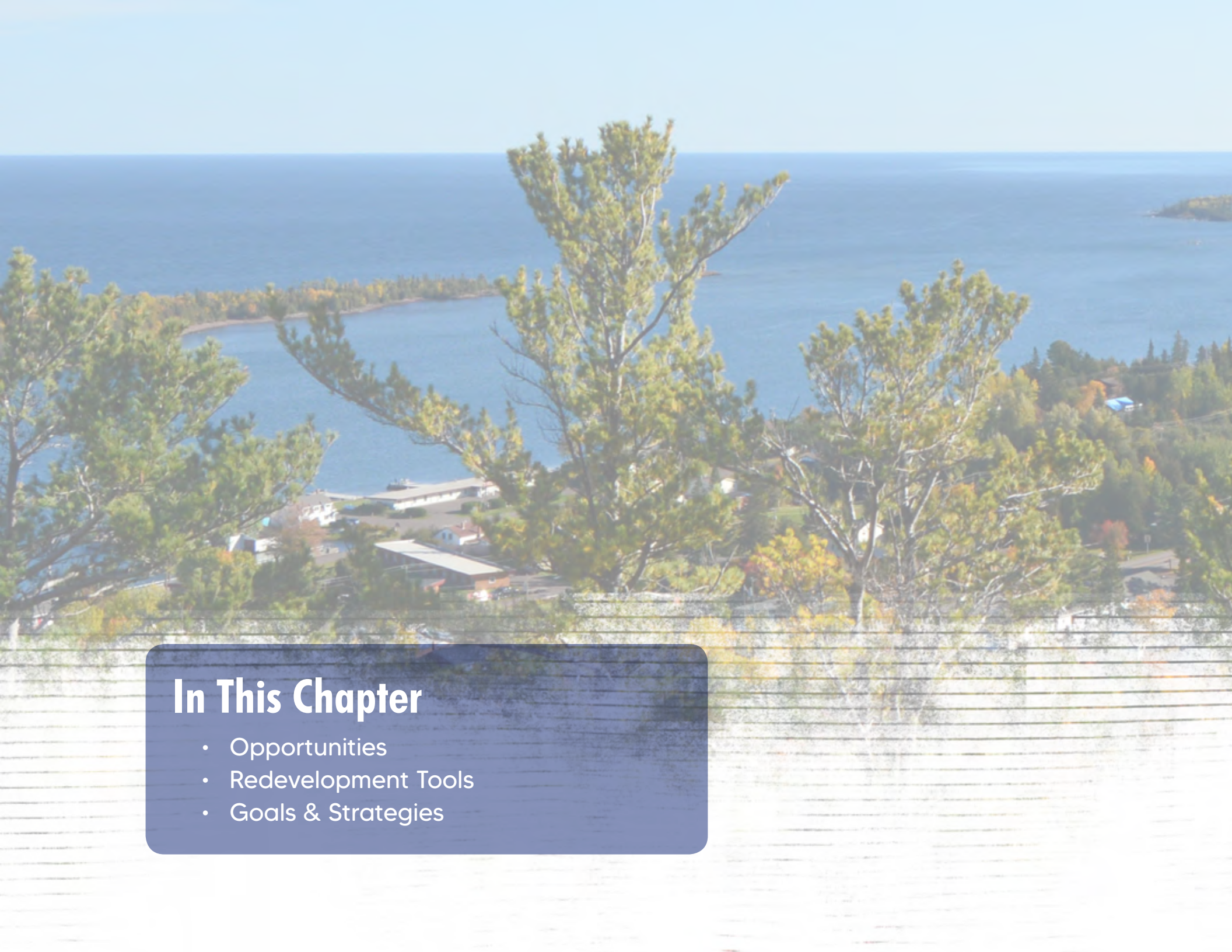
Strategy 3.1
Look for non-traditional transportation, economic development, and legislative funding for improving Brockway Mountain Drive.

Goal 4: Maintain highway traffic capacity and scenic resources in Keweenaw County.

Strategy 4.1
Consider the access management standards in the Zoning Ordinance when reviewing site plans and zoning approvals.

Strategy 4.2
Consider adopting overlay zoning regulations to preserve scenic, historic and cultural resources along the US 41 corridor.

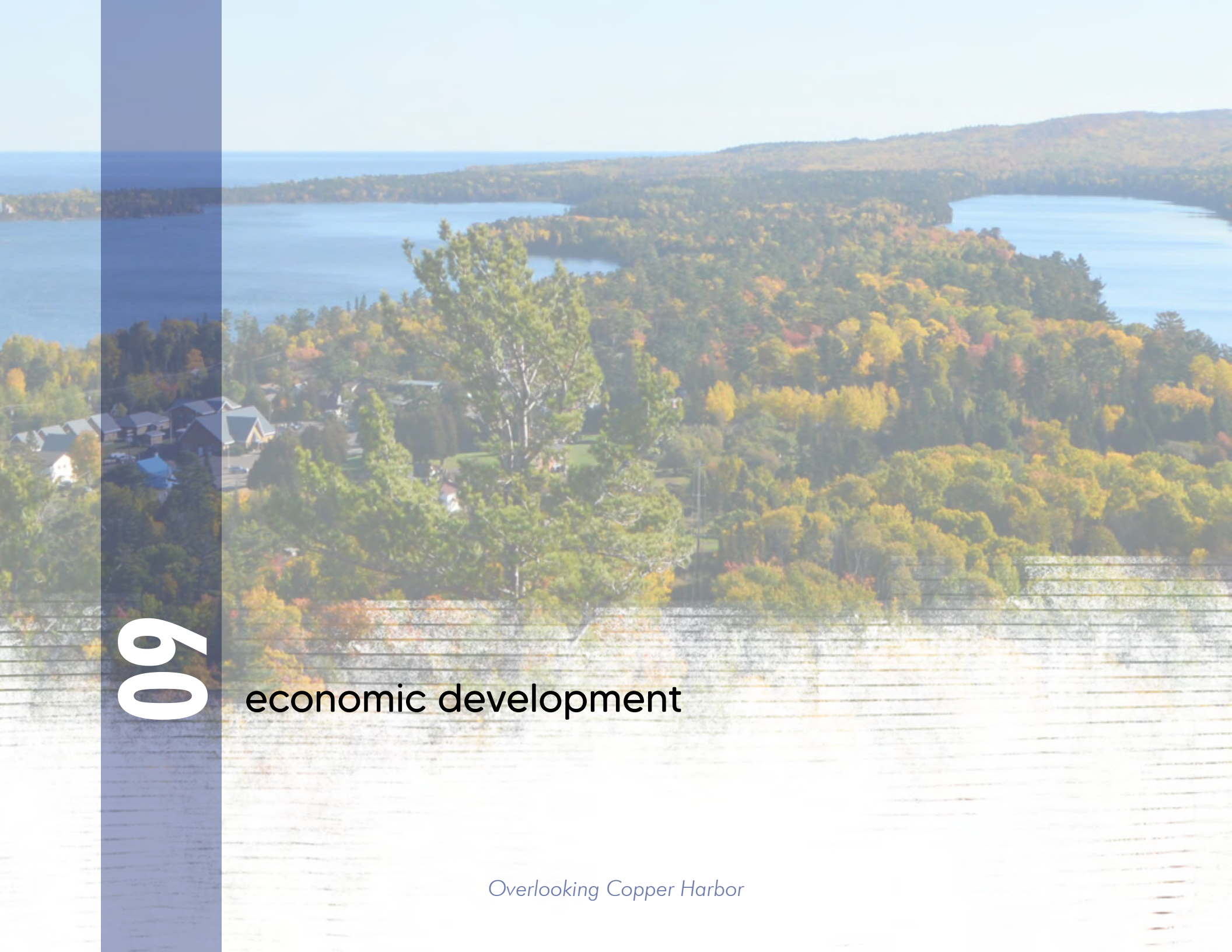
Strategy 4.3
Continue and expand the unique wayfinding signage system in Keweenaw County.



In This Chapter

- Opportunities
- Redevelopment Tools
- Goals & Strategies

09 economic development



Overlooking Copper Harbor

Economic Development

Economic development is important for Keweenaw County because it builds a sustainable financial foundation to provide public services, while improving the overall quality of life for residents. Recognizing that businesses may come and go, a proactive approach to business attraction and retention by local governments can help create community stability.

The key reasons for economic development include:

Strengthening the Fiscal Base

Businesses contribute significant property taxes that fund essential services like public safety, fire departments, schools, and roads without placing the entire tax burden on residents.

Fiscal Self-Sufficiency

A strong local economy reduces dependence on state or federal transfers, making local services more resilient to outside budget cuts.

Infrastructure Investment

Increased tax revenue allows for the upgrading of vital infrastructure which further attracts new residents and businesses.

Job Creation and Resident Well-being

Job creation and retention lowers unemployment and raises local income levels. When a community offers diverse career paths and a high quality of life, it attracts and keeps talented workers, ensuring a skilled workforce for the future. Economic development can lead to better access to goods and services, cultural activities, and recreational facilities, directly enhancing the daily lives of residents.

Community Resilience and Identity

By supporting a diversified economy, including manufacturing, technology, and multiple tourism sectors, the County can reduce their vulnerability to downturns in any single sector. Economic development can transform vacant or blighted areas into productive land uses in the community. As residents see their community improve, they are more likely to take pride in their area, volunteer, and participate in local governance.

The Keweenaw County Economy

The economy of Keweenaw County can be described as two-sided. In the northern part of the County, the economy is based upon tourism and serving the needs of retirees, while in the southern part of the county, the economy and employment is more aligned to the Calumet and Houghton areas, and includes several major industrial and tech employers in Allouez Township. From 2023 to 2026, employment in Keweenaw County grew at a rate of 3.6%, from 796 employees to 826 employees.

Major Regional Employers

There are a number of major employers in the region that draw employees from Keweenaw County, including:

- **Aspirus Keweenaw:** A major regional healthcare provider with several clinics and a hospital in nearby Houghton County, employing approximately 300 persons in the two-county area.
- **Michigan Technological University (MTU):** Located in Houghton, is the region's largest employer with approximately 1,600 employees
- **UP Health System-Portage:** A major regional healthcare employer for the region, based in Hancock, with a clinic in Calumet Township, employs about 800 persons.
- **Government & Education:** The Keweenaw County Government and local school districts are stable sources of public sector employment.

- **WalMart:** A major retailer located in Houghton with approximately 300 employees.
- **Calumet Electronics:** A manufacturer of electronic circuit board with 300+ employees.

Major Keweenaw County Employers

There are numerous locally-owned small businesses that provide both year-round and seasonal employment for Keweenaw County residents. Many of these businesses serve the tourism, service, and construction sectors.

The quality of life in Keweenaw County is attracting more remote workers, those persons who work from home for an employer outside of the region, and this is a growing segment of the workforce. In the Master Plan Community Survey, 42 respondents who are employed (nearly 14%) indicated they work remotely when asked about their employment.

In recent years, the County has experienced some growth in the industrial sector, reflecting the growth in the emerging Calumet to Mohawk technology corridor.

The list below includes some of the major employers in Keweenaw County:

- **Mohawk Technology:** Employs approximately 50 individuals including engineering, fabrication, welding, and administration. They are located in a new facility south of Mohawk on US 41.
- **Neuvokas Corporation:** Is the manufacturer of GatorBar and is estimated to have 30+ employees engaged in engineering, manufacturing, logistics, and sales at their facility near Ahmeek.
- **Mount Bohemia Ski Resort:** Has experienced growth of year-round employment with the development of their spa and restaurant facilities, and are currently at 17 year-round positions, with up to 88 during the winter ski season.

Keweenaw County
Key Employment Data

Employed persons	826
Unemployment rate	8.3%

Employment by industry in workers age 16 & over

Education, healthcare and social assistance:	28.3%
Construction:	13.3%
Professional, scientific, management, administrative, and waste management services:	9.8%
Manufacturing:	9.3%
Public administration:	8.8%
Other:	30.5%

Source: U.S. Bureau of Labor Statistics, April 2025

- **Keweenaw Mountain Lodge:** The former County-owned resort has approximately 11-50 employees depending on seasonal needs.
- **The Mariner North:** A resort in Copper Harbor, is estimated to have 11–50 employees depending upon seasonal needs.
- **Fort Wilkins Historic State Park (MI DNR**): Typically maintains a staff of approximately 5-45 persons, depending on seasonal needs.



Source: Keweenaw Mountain Lodge Website, Photo Gallery, https://keweenawmountainlodge.com/about/photos/

FIGURE 9.0 Keweenaw Mountain Lodge

- **Keweenaw County Road Commission (KCRC):** Has approximately 11 to 20 employees.
- **Rock Solid Contracting:** 15 seasonal trail builders are based in Copper Harbor, with about 110 employees across the country.

Tourism

Historically, tourism has long been an important part of the Keweenaw County economy, eventually replacing mining and timber harvesting as the primary economic driver of the County.

The breadth and variety of tourism and year-round outdoor adventure activities found in Keweenaw County is a strength not many regions can provide, all revolving around a spectacular natural setting. The natural areas, public facilities, and attractions are documented in Chapter 6 of this Master Plan. Popular spring, summer and fall activities include hiking, mountain biking, camping, berry picking, rock hounding/beaches and geo-heritage, historical sites, and waterfall viewing. Winter brings visitors for downhill skiing/snowboarding, snowmobiling, cross-country skiing, and snowshoeing. Viewing aurora borealis and night skies is becoming popular as well in all seasons, as the County offers one of the best locations for this activity. The Keweenaw Mountain Lodge is a designated International Dark Sky Park.

Until recently, it has been difficult to accurately measure how important tourism is to the Keweenaw community. A 2024 study conducted by the Economic Growth Institute, part of the University of Michigan, surveyed visitors and studied economic impacts of tourism in the western Upper Peninsula, including Keweenaw County. The study was done in cooperation with the Western UP Planning and Development Region (WUPPDR) and the local governments and organizations that promote tourism in the region.

The Understanding Tourism Impacts report provides data and survey information for each county. Significant findings for Keweenaw County include:

- A total economic impact of $61 million, including direct, indirect and induced economic impacts. *
- A total of 387 full-time equivalent jobs are supported by tourism in Keweenaw County.
- 65% of local jobs are supported by tourism.
- Direct jobs include lodging, recreation and entertainment, food and beverage, retail and transportation.
- Skiing/snowboarding is the top winter activity with 66% of surveyed visitors, snowmobiling is next at 17%.
- Northern lights/dark sky viewing is an important fall, winter, and spring activity.
- 77% of visitors surveyed report they are likely to return.

***Direct** are impacts are directly from tourist spending, **Indirect** are impacts from business to business purchases, and **Induced** are impacts from labor income.

Another source of visitor data is the 2024 annual visitor spending report by the Michigan Economic Development Corporation (MEDC) showing continued positive growth for Keweenaw County. This data reinforces tourism's role as a key economic driver for the region, supporting local businesses, jobs, and tax revenue. Keweenaw County's visitor spending reached $25.5 million in 2024, a 3.7% increase from the previous year. According to this report, the County has seen a 13.8% increase in visitor spending compared to 2019.

The report indicates that in 2024:

- Visitor spending contributed $9.8 million in tourism-supported labor income.
- Nearly $2.7 million in state and local tax revenues were generated.
- The tourism sector supported 193 direct jobs, approximately 33.9% of the County's employment.

Keweenaw County
Tourist Visits

Fort Wilkins State Park is a good indicator of visits to Keweenaw County, as many tourists who visit the Keweenaw also visit the park. The data below documents growth in visitation:

Year	Total Annual Visits
FY 2022	323,190
FY 2023	321,762
FY 2024	449,009
FY 2025	372,206

Note: MI DNR changed methodology for counting visitation during these years

The global COVID pandemic in 2020-2021 created a surge in visitation to Keweenaw County, and a high demand for lodging in hotels and short-term rentals (STR). The high occupancy rates experienced in those years has resulted in unprecedented investment in STRs in both Houghton and Keweenaw Counties, estimated by Visit Keweenaw at 489 total STR units in 2025, up from 192 STR units in 2019.

Sustainable Tourism

The Master Plan Community Survey and Workshops documented concerns of citizens and their perceptions about the number of Keweenaw visitors, and that the County lacks the infrastructure to handle this visitation. There are a number of reasons for the increase in visitation:

- The dramatic increase in the number of lodging units in Keweenaw and Houghton Counties in recent years, both hotel and STR units, results in more people in the County on a daily basis
- The COVID tourism boom in 2020-2021 introduced new visitors to the area who may be returning to spend more time in the County.
- Increased social media attention through a number of pages sharing photos and information about natural attractions and tourism facilities.

While many businesses have welcomed the increased visitation and spending, some of the local population may experience more traffic on the roads and busier trailheads at their favorite hikes. Keweenaw County is a vast area of land with numerous natural attractions and features, however, actual access points are somewhat limited which concentrates people into relatively small trailheads and access points.

At the same time, the increase in visitors contributes to the economic vitality of the County, sustaining local businesses, creating new tourism entrepreneurial opportunities, and expands employment for the local population. Finding a balance is critical for the economy and the well-being of those who live in the County. A Sustainable Tourism approach can help Keweenaw County manage this growth.

What is Sustainable Tourism?

Sustainable tourism minimizes negative impacts and maximizes positive contributions to environmental, social, and economic aspects of destinations. It aims to support local livelihoods, protect cultural/ natural heritage, and conserve resources, ensuring tourism remains viable for future generations.

Key principles include using environmental resources optimally, respecting host communities' socio-cultural authenticity, and ensuring long-term, fair economic operations.

Source: Global Sustainable Tourism Council

Key Principles of Sustainable Tourism

Environmental Protection: Conserving natural heritage, biodiversity, and ecosystems.

Socio-Cultural Respect: Protecting cultural heritage, traditional values, authenticity, and promoting intercultural understanding.

Economic Viability: Ensuring long-term economic operations that

provide fair, stable employment and income opportunities for local communities, especially small, local businesses.

Stakeholder Engagement: Addressing the needs of visitors, the industry, the environment, and host communities through improved communication.

Sustainable Tourism Recommendations

Here are some ideas for addressing sustainable tourism in the County, based upon best practices.

- It is fortunate that significant tracts of land in the County have been acquired by the Michigan DNR in recent years for public use, protection and management. Through the proposed Keweenaw County Heartlands Recreational and Natural Resources Authority, the County will have the governance to ensure and balance public access for all types of users and activities on more than 20,000 acres. By expanding the number of trails, access points, and trailheads with facilities, such as parking lots and restrooms, visitor overcrowding can be reduced.

- The historical and cultural resources have long been preserved in Keweenaw County by the Keweenaw County Historical Society and add to its attractiveness as a destination. These efforts should be supported.

- Businesses in the County are small, locally owned and operated. The County can support these businesses by being listening to business concerns and being responsive to their challenges, such as the lack of workforce housing.

- Promote "Leave no Trace" to visitors, tourism businesses, and residents through trailhead signage and posters.

- With the interest in sustainable tourism, encourage more communication and discussion with businesses, residents, and the various organizations involved in tourism.

Redevelopment Opportunities

There are sites and buildings in the County that are in need of redevelopment. These would include former mining sites/structures, commercial buildings, and residential sites in Allouez Township. Older and outdated motel properties throughout the County may become available for conversion to workforce housing.

An excellent example of redevelopment in the County is the former Calumet Air Force Station (CAFS) on Mount Horace Greely, currently being revitalized by the Open Skies project. Now in their 5th year of operation, their focus has been on stabilizing buildings and site cleaning. A blight stabilization grant sponsored by Eagle Harbor Township repaired roofs, and broken building windows were covered. A Visit Keweenaw grant helped with securing a viewing platform on one of the towers for public use. The site's wastewater lagoons have been resurrected and are being used with septic tank haulers fees paying for maintenance. The owners are planning a museum and a campground and the base housing and dormitories are being considered for workforce housing. The lack of a potable water source is a major constraint to fully redevelop this site.

As discussed in Chapter 5, Keweenaw County should get involved in several programs that could lead to the redevelopment of underutilized properties. These programs include:

Brownfield Redevelopment Authority (BRA)

Keweenaw County has an inactive Brownfield Redevelopment Authority. The purpose of a BRA is to promote the redevelopment of blighted, obsolete or tax reverted properties within the County.

The BRA can provide significant incentives to developers to facilitate the redevelopment of qualifying sites throughout the County. The primary

incentives include the use of tax increment financing (TIF) along with the management of brownfield grants and loans. If a developer purchases a structure that is blighted, obsolete, or is environmentally contaminated, the developer can utilize Brownfield tools for low interest loans which can be paid back through a Brownfields TIF, thereby saving the developer significantly, as the increased property taxes they pay on the property are used to repay the loans. This is a major incentive to facilitate the redevelopment of underutilized and blighted properties.

Land Bank Program

A Land Bank Authority can facilitate the return of tax-foreclosed properties to the tax roll, while helping to eliminate blight, providing economic development opportunities and revitalizing communities. This can be done locally, as in neighboring Houghton County, or through the State of Michigan Land Bank (MLB).

The Blight Elimination Program (BEP Program)

available through the MLB is a state and federally funded initiative to invest in disproportionately impacted communities around the state which will attract more investment at the neighborhood level. Specific eligible activities are demolition or stabilization of public or privately-owned structures as well as environmental remediation or rehabilitation of publicly owned structures.

Blight Control and Code Enforcement

Reducing or eliminating blighted properties can positively impact a community's ability to attract new residents and business. Blight enforcement requires a strong ordinance, enforced by a Civil Infractions Ordinance, to be effective.

Placemaking and Community Beautification

Placemaking is a multi-faceted approach to the planning, design and management of a community's assets, inspiration, and potential, with the intention of creating public spaces that improve community vitality and promote people's health, happiness, and well-being.

The US 41 corridor through the developed area of Allouez Township is the gateway to Keweenaw County, and would benefit from beautification efforts. Street banners, blight removal and landscaping treatments would visually improve this gateway and enhance its ability to attract new business and residents.

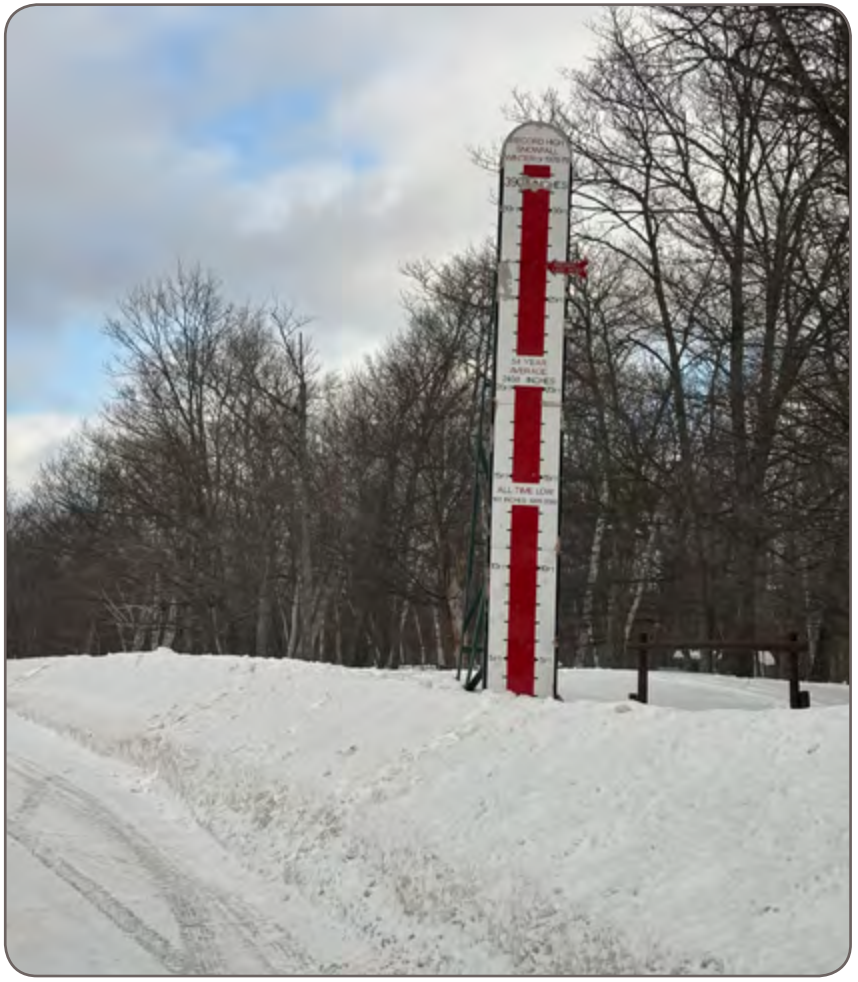


FIGURE 9.1 Keweenaw Snow Guage

Goals and Strategies

Goal 1: Embrace tourism as the primary economic driver in the County.

Strategy 1.1
Focus new commercial and mixed use development in existing developed areas, or adjacent lands, where utilities infrastructure is available or suitable soils allow for on-site infrastructure.

Strategy 1.2
Partner with organizations to improve access, trailheads and public facilities that support tourism.

Goal 2: Participate in and support area-wide economic development activities.

Strategy 2.1
Keweenaw County should continue to support the Keweenaw Economic Development Alliance.

Goal 3: Encourage and participate in local redevelopment efforts

Strategy 3.1
Re-activate the County Brownfield Redevelopment Authority and establish a County Land Bank to encourage redevelopment, infill development, and community revitalization.

Strategy 3.2
Support efforts to revitalize the Former Calumet Air Force Base at Mount Horace Greeley for a variety of uses.

Strategy 3.3
When updating the County Zoning Map, consider expanding areas for manufacturing and business development in the developed area of Allouez Township.

Goal 4: Enhance quality of life opportunities.

Strategy 4.1
Continue work to strengthen neighborhoods, eliminate blight, improve recreation opportunities, foster the development of new housing, and support business district improvements in communities.

Strategy 4.2
Encourage community beautification and placemaking projects.



In This Chapter

- Existing Land Use
- Future Land Use
- Zoning Plan
- Goals and Strategies

10

future land use & zoning plan

View from Brockway Mountain

Future Land Use & Zoning Plan

Copper mining, logging, tourism development, and transportation/ access have shaped the existing land use in Keweenaw County.

Historically, much of the forested land in the County was owned by private timber companies, however, much of that land ownership has now transferred to the Michigan DNR, non-profit land conservancies, and a proposed Keweenaw County Heartlands Recreational and Natural Resources Authority. These acquisitions, more than anything else, will shape future land use in the County by limiting private land ownership and development. At the same, these acquisitions will preserve the natural features and environment that make Keweenaw County special and are a magnet for tourism. Future land use and development then will be limited to those areas already developed.

The future land use plan is a non-binding policy document and map that outlines the County's long-term vision for how land should be developed, guiding future zoning decisions, infrastructure investment, and growth. It acts as a guide for planning commissions to balance residential, commercial, and environmental needs, serving as a primary component of the Master Plan. The Future Land Use Plan includes these purposes:

Guiding Zoning Changes: When a property owner requests to rezone land, officials check if the proposal aligns with the Future Land Use Plan and Map.

Infrastructure Planning: Helps prioritize budget spending for utilities, roads, and services in areas slated for development.

Community Vision: Enables residents to define the preferred future "look and feel" of their neighborhoods (e.g., preserving rural character vs. increasing density).

Unlike a zoning map, which is a legally enforceable regulation (law) determining what can be built today, the future land use plan is a flexible, long-term policy guide for future growth.

This chapter of the Master Plan describes the existing land uses, and provides a Future Land Use Plan for each Township. An overall plan is shown in Figure 10.0. A Zoning Plan describes potential changes to the County Zoning Ordinance needed to implement the Future Land Use Plan. The Chapter concludes with Future Land Use Goals and Strategies.

Allouez Township

The settled area of the Township was part of the urbanized industrial mining and residential corridor that stretched from south of Calumet, in Houghton County, to Mohawk. The Township remains the center of population within Keweenaw County.

Existing Land Use

The Existing Land Use map for Allouez Township is shown as Figure 10.0.

Residential
The small community neighborhoods of Allouez, New Allouez, Ahmeek Village, Ahmeek Mine Location, Mohawk, and Fulton are located along the US 41 corridor and exhibit many of the same characteristics that defined their roles during early mining days. These communities are primarily urban single-family residential.

Mixed Use
The actual US 41 corridor is characterized as mixed-use, with a number of small businesses and residential areas located along the corridor from the county line through Ahmeek Village and Mohawk.

Manufacturing/Industrial
There are scattered small industrial and manufacturing land uses, and a gravel operation south of Mohawk.

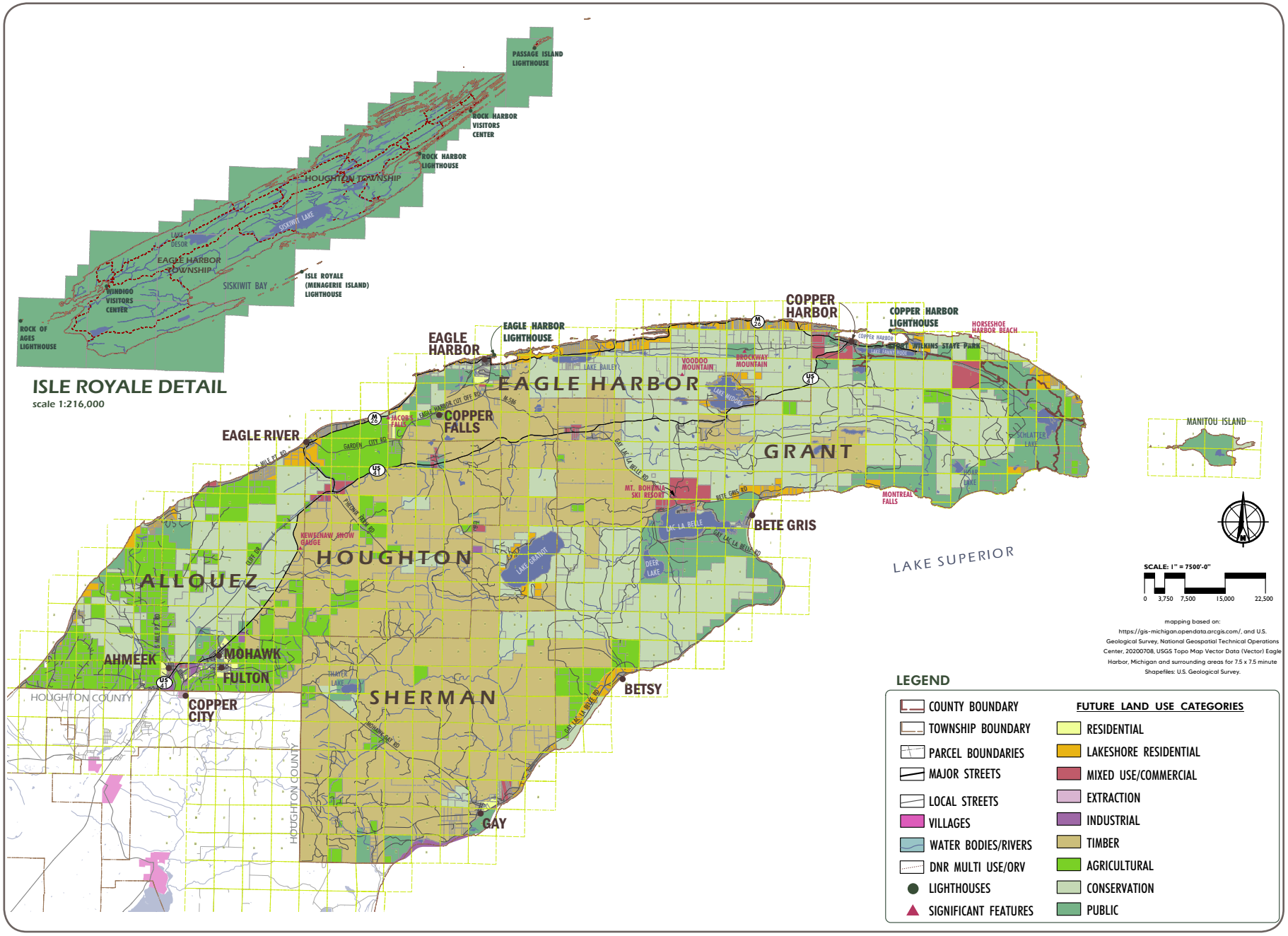


FIGURE 10.0 Existing Land Use, Overall Keweenaw County

Agriculture/Rural Residential
Surrounding the developed communities is low density rural residential/agriculture land use, characterized by larger tracts of land.

Lakeshore Residential
Several areas of the Lake Superior shoreline have been platted and developed with year-round and seasonal homes at Tamarack Waterworks, Seven Mile Point, and along the Five Mile Point Road.

Forestands/Timber
Most of the land in Allouez Township remains undeveloped due to topography, challenging access, wetlands, and land ownership. Large tracts of undeveloped lands are owned by corporate forestry companies who harvest timber and has been designated as Commercial Forest. This designation allows public access specifically for hunting and fishing. Snowmobile and ATV trails use corridors through this property permitted through easements or by annual permits.

There are undeveloped forest lands in Allouez Township that have been acquired for conservation, including the Township-owned Seneca Lake recreation area, and County Gratiot River Park. There are large tracts owned by American Songbird Management, a non-profit organization, for conservation. A large tract of timberland north of Ahmeek and Mohawk was recently acquired by American Songbird Management and is likely to become protected land.

Future Land Use

For the most part, Future Land Use in Allouez Township is proposed to follow the existing development pattern. Future Land Use changes are noted on Figure 10.1. Recommended changes include:

- **Expansion of the Residential Land Use District** west of Ahmeek, west of Mohawk and south of Fulton to allow for orderly expansion of higher density housing where utilities are available. This could be done through traditional subdivision, site condominiums, or rural cluster development.

- **A Mixed-use District along US 41** between Ahmeek and Mohawk to allow for limited commercial development and multi-family housing.

- **An Industrial/manufacturing District north of Mohawk** at the former LP Sawmill site. Utilities and 3 Phase electric power is available at that site.

- **Reducing the required 5-acre minimum lot size** in the Agricultural/Rural Residential District to allow for more rural housing sites.

- A large tract of timberland north of Ahmeek and Mohawk was recently acquired from TRG by a non-profit organization and is likely to become protected land. Several press releases indicate the land will be used to support recreational and trail development for a variety of users, including both motorized and non-motorized use.

Eagle Harbor Township

Eagle Harbor Township is the only township in Keweenaw County with its own Master Plan and Zoning Ordinance. In 2025, the Eagle Harbor Township Board approved a new Master Plan following a recommendation of the Planning Commission.

Existing Land Use

The Existing Land of the Township is described below:

Forestlands
Most of the land in Eagle Harbor Township remains undeveloped due to topography, challenging access, wetlands, and land ownership.

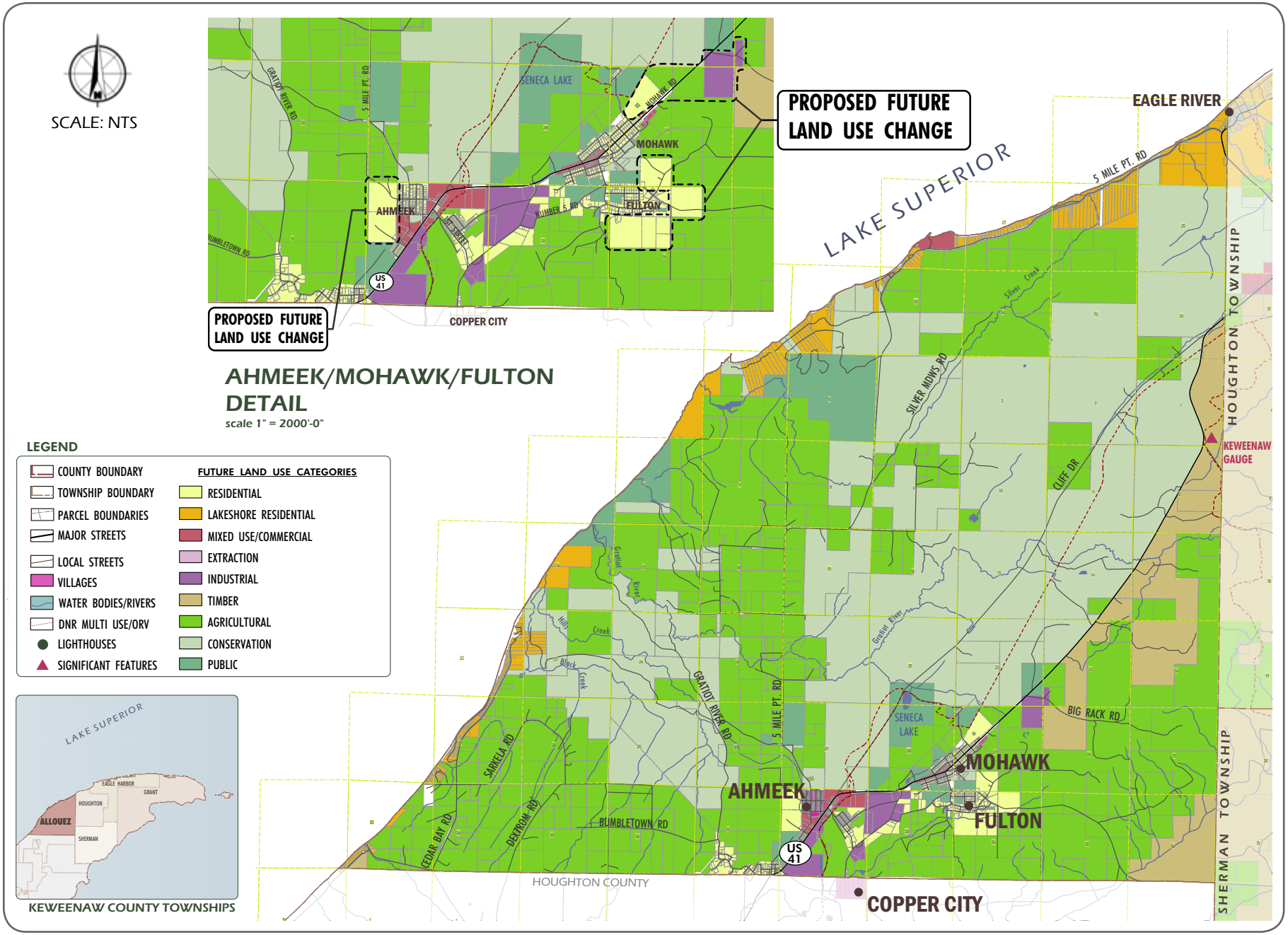


FIGURE 10.1 Existing Land Use with Proposed Future Land Use Changes, Allouez Township

Large tracts of undeveloped lands are owned by corporate forestry companies who harvest timber. Much of this land is designated as Commercial Forest. This designation allows public access specifically for hunting and fishing. Snowmobile and ATV trails use corridors through this property through easements or by annual permits.

Several large tracts of land are owned by Eagle Harbor Township, which were acquired specifically for conservation. These lands include the Red Pines Dunes Nature Sanctuary, George Hite Dunes and Marshes Preserve, and the West Brockway Mountain Summit.

A number of land tracts have been acquired by conservancies for the protection of the unique natural environments that exist on those tracts, including the Nature Conservancy, Michigan Nature Association, Michigan Audubon Society, Keweenaw Land Trust and Gratiot Lake Conservancy and several others.

Medium Density Residential
The historic village area of Eagle Harbor Township is primarily medium-density residential in the original grid development pattern from more than 100 years ago. Within this area, there are several businesses, as well as the Lighthouse Museum complex, Life Saving Station Museum, Marina, and public parks and open space.

Residential
The 45-lot subdivision known as Eagle Harbor South is the most recent residential development in Eagle Harbor Township. The low-density residential subdivision is served by the Township water system. Eliza Creek Lane was constructed to meet Keweenaw County Road Commission standards and is a public road.

Lakeshore Residential
Lakeshore residential development stretches east to west along M-26 and the Lake Superior coastline. These areas are mostly built-out. Several areas are served by private roads including the Agate Harbor and Grand Marais subdivisions. There are several parks and conservancies providing public access to Lake Superior along M-26.

Other lakeshore residential areas are located around the inland lakes of the Township. The west shore of Gratiot Lake is accessed by a public road. Much of Lake Medora is platted. It is accessed by US-41, and several private roads on the east, west and north shores. The north shore of Lake Bailey is platted and accessed by M-26, some platted lots exist on the south shore and accessed by a seasonal private road.

Low Density Residential
Very low density residential development on large lots is located along the Eagle Harbor Cutoff Road on parcels of land typically more than 5 acres.

Mixed Use
The Eagle Harbor village area includes several businesses and public museum areas interspersed within the residential area.

Industrial
There are several areas developed for extraction of sand and gravel near Central.

Special Protection Overlay Land Use Areas
Eagle Harbor Township has several overlay zoning areas for wellhead protection and for special protection of Eagle Harbor Township's Critical Sand Dunes and High Risk Erosion areas that are subject to special regulations under the Eagle Harbor Township Zoning Ordinance. Overlay areas include especially sensitive or important human or natural resource areas where regulations are in place for most activities in that district, but where additional regulations are needed to adequately protect them.

Future Land Use
The Eagle Harbor Future Land Use Map is included as Figure 10.2.

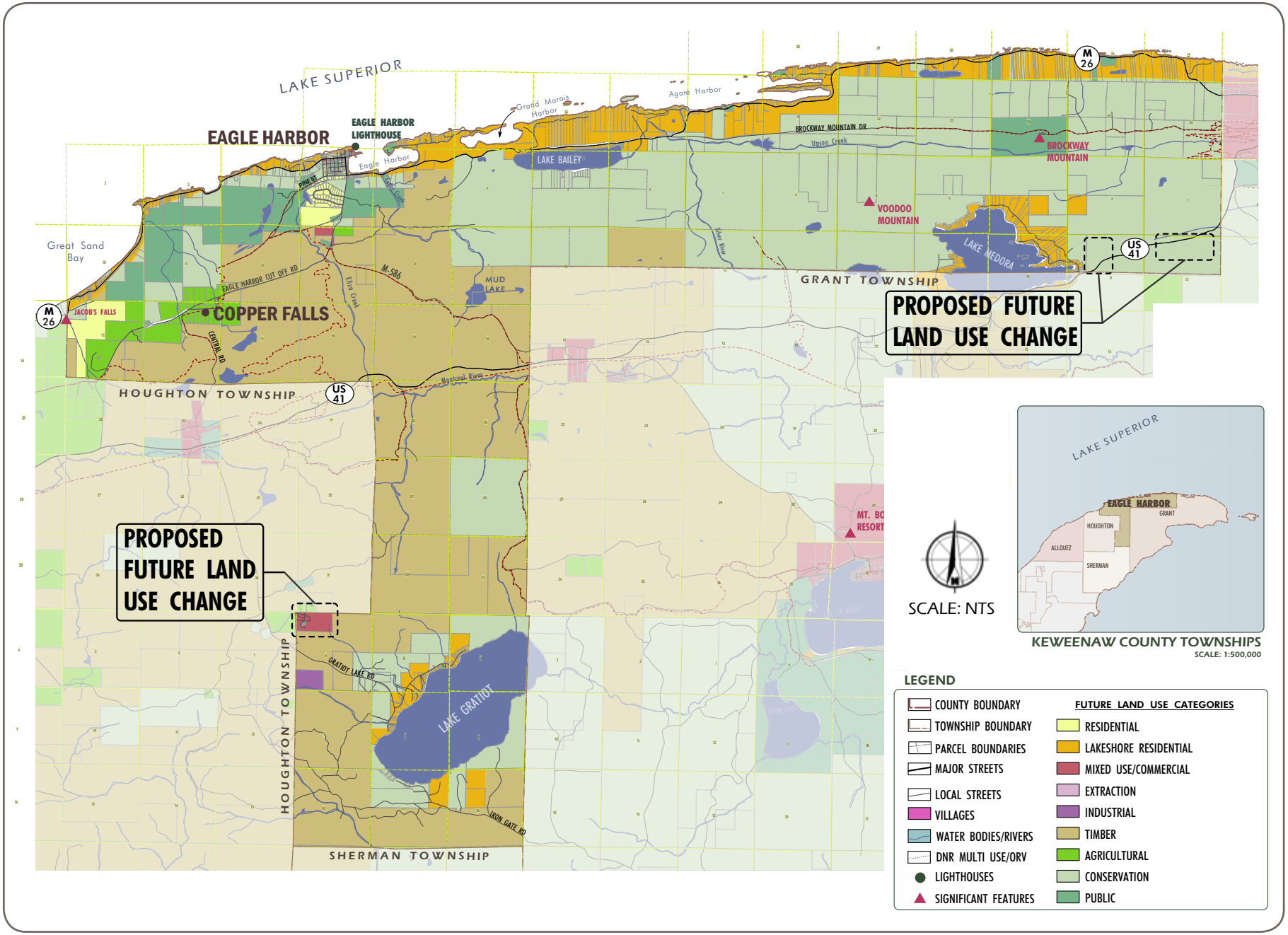


FIGURE 10.2 Existing Land Use with Proposed Future Land Use Changes, Eagle Harbor Township

The future land use of Eagle Harbor Township is expected to remain mostly unchanged. Any changes in land use are consistent and compatible with the existing land use pattern.

There is a great need to provide housing for employees of the tourism industry in Keweenaw County, and it makes sense to locate that where municipal services can provide support for that housing. South of the village of Eagle Harbor and within the area served by the municipal water system are several tracts of land that should be considered for development of medium to high-density housing. This area could also accommodate small scale commercial development to serve residents and visitors, which was identified in the Township's Community Survey as one of 4 priorities for their Master Plan. There may also be a need for housing for long-time residents who are unable to maintain their current residence, yet want to stay in the community.

The Nature Conservancy has conducted an analysis and public engagement process to consider options for the future land use of the recently acquired Keweenaw Heartlands tracts. Several sites have been identified as potential parcels for future community infrastructure and will soon be evaluated for mixed use development. One of these sites is in Eagle Harbor Township near Lake Medora.

The former Calumet Air Force Station, now known as the Open Skies Project is designated as Mixed Use, which may include workforce housing, a campground, tours and a museum. This project is discussed in more detail in Chapter 9: Economic Development.

Grant Township

Grant Township is home to two very distinct communities: Copper Harbor on the north shore and Lac La Belle on the south shore.

Existing Land Use

Existing Land Use in Grant Township includes the following.

Conservation/Public
With recent land acquisitions by the Nature Conservancy, the Michigan DNR, and several other non-profit conservancy groups, former privately held forest/timberlands are now protected and/or pubic. There are several remaining large tracts of privately-held timberlands located north of Bete Gris and on the west side of the Township.

Lakeshore Residential
With a few exceptions, most of the privately-held waterfront is developed on Lake Superior, Lac La Belle, Lake Medora, and Copper Harbor. West of Copper Harbor, the Harbor Coast subdivision is being built out. On Bete Gris, near Lac La Belle, a new subdivision with frontage on Lake Superior and the Lac La Belle lagoon is built out.

Mixed Use
Copper Harbor includes a mix of uses including residential, lodging, restaurants, gift shops, outfitters, a grocery store and several private campgrounds.

On the north side of Lac La Belle is a mixed-use district, comprised of residential land use along the lakeshore, the Mount Bohemia Ski Resort complex (ski hill, lodging, Nordic Spa, restaurant/bar), store with gas pumps, a privately-owned marina, and a State of Michigan public access site and marina. There are a number of rental cabins and a private campground in this area as well.

Future Land Use

The Future Land Use Plan for Grant Township is shown as Figure 10.3, and includes the following changes.

The privately-owned area east of Copper Harbor, known as the East Bluff, is being developed with mountain bike trails and a campground. This area is shown as Mixed Use on the Future Land Use Map.

The Nature Conservancy has conducted an analysis and public engagement process to consider options for the future land use of

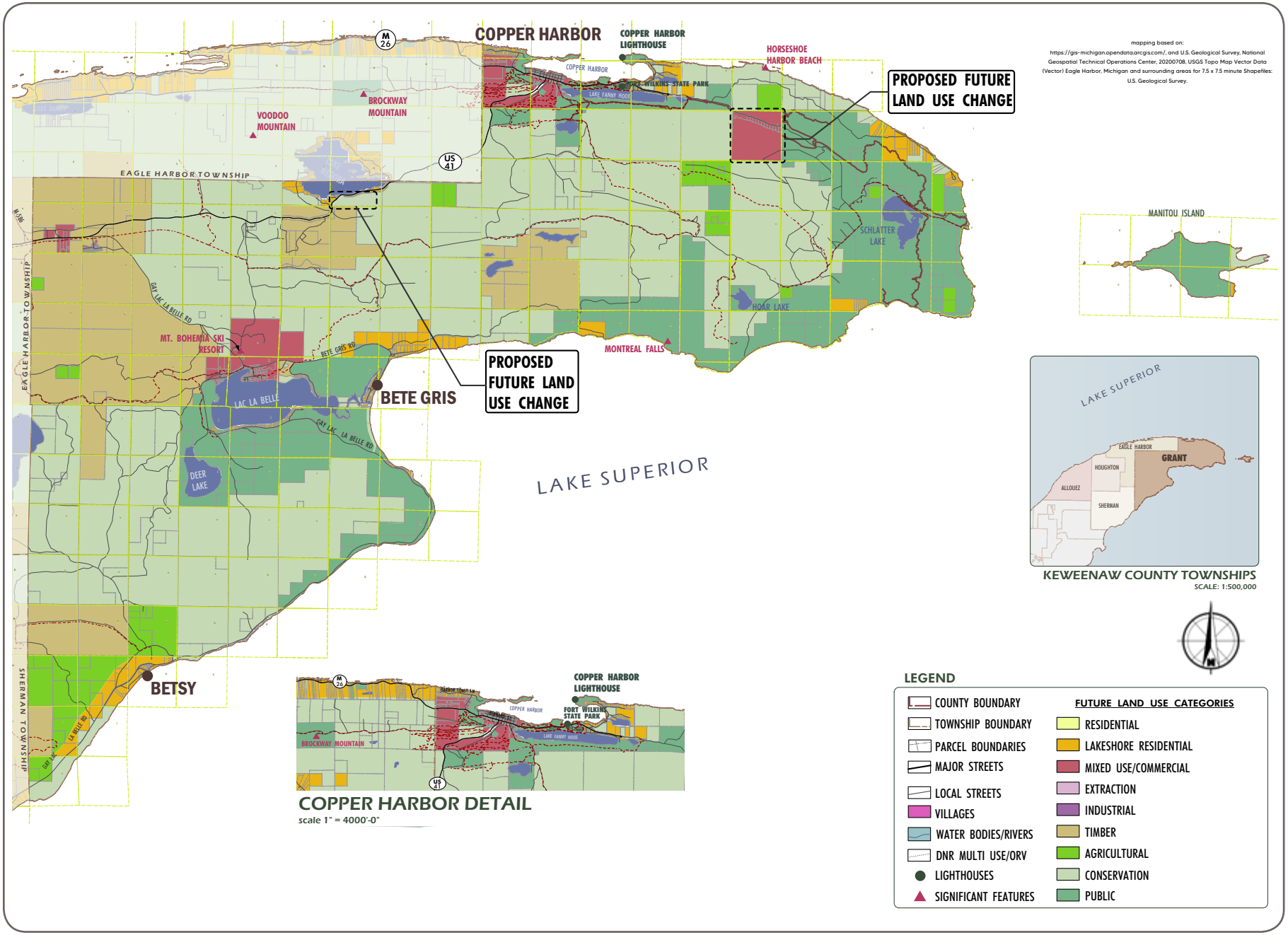


FIGURE 10.3 Existing Land Use with Proposed Future Land Use Changes, Grant Township

the recently acquired Keweenaw Heartlands tracts. Several sites have been identified as potential parcels for future community infrastructure and will soon be evaluated for mixed use development. One of these sites is in Grant Township near Lake Medora.

Houghton Township

Houghton Township includes the communities of Eagle River, Phoenix, and Central.

Existing Land Use

The Existing and Future Land Use of Houghton Township is included as Figure 10.5.

Forestands/Timber

Most of the land in Houghton Township remains undeveloped due to topography, challenging access, wetlands, and land ownership. Large tracts of undeveloped lands are owned by corporate forestry companies who harvest timber and have been designated as Commercial Forest. This designation allows public access specifically for hunting and fishing. Snowmobile and ATV trails use corridors through this property are through easements or by annual permits.

Lakeshore Residential

The three miles of land along Lake Superior is platted residential lots and built out. The community of Eagle River is platted land with seasonal and year-round homes, served by a municipal water system.

Commercial/Mixed Use

There are several commercial areas in Houghton Township, including the Fitzgerald's restaurant/motel in Eagle River, the Phoenix Store, and the Cliff View Bar and Cabins.

Agriculture/Rural Residential

These areas encompass smaller, road-accessible, privately held parcels used for hobby farming and rural residential.

Historic Districts

Houghton Township includes two districts listed on the State and National Registers of Historic Places.

The ***Eagle River Historic District*** was listed on the National Register of Historic Places in 1984 and preserves a 19th-century copper mining boomtown on the Keweenaw Peninsula. The District covers areas around Front, Main, and 2nd-5th Streets, refer to Figure 10.4. The earliest buildings, dating from the 1840s and 1850s, are located along East

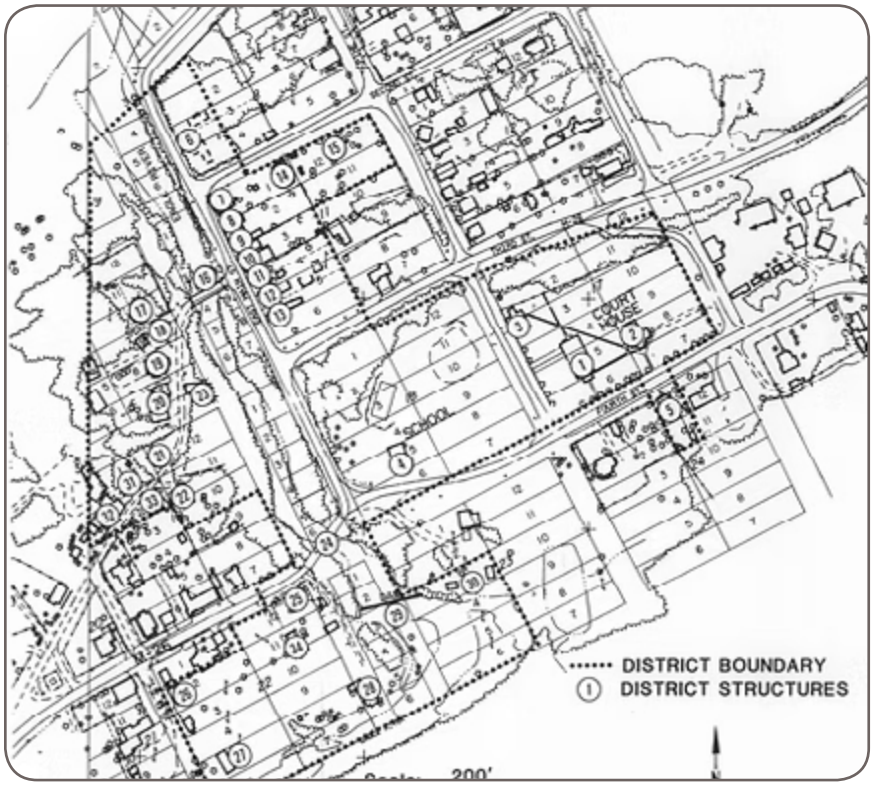


FIGURE 10.4 Eagle River Historic District

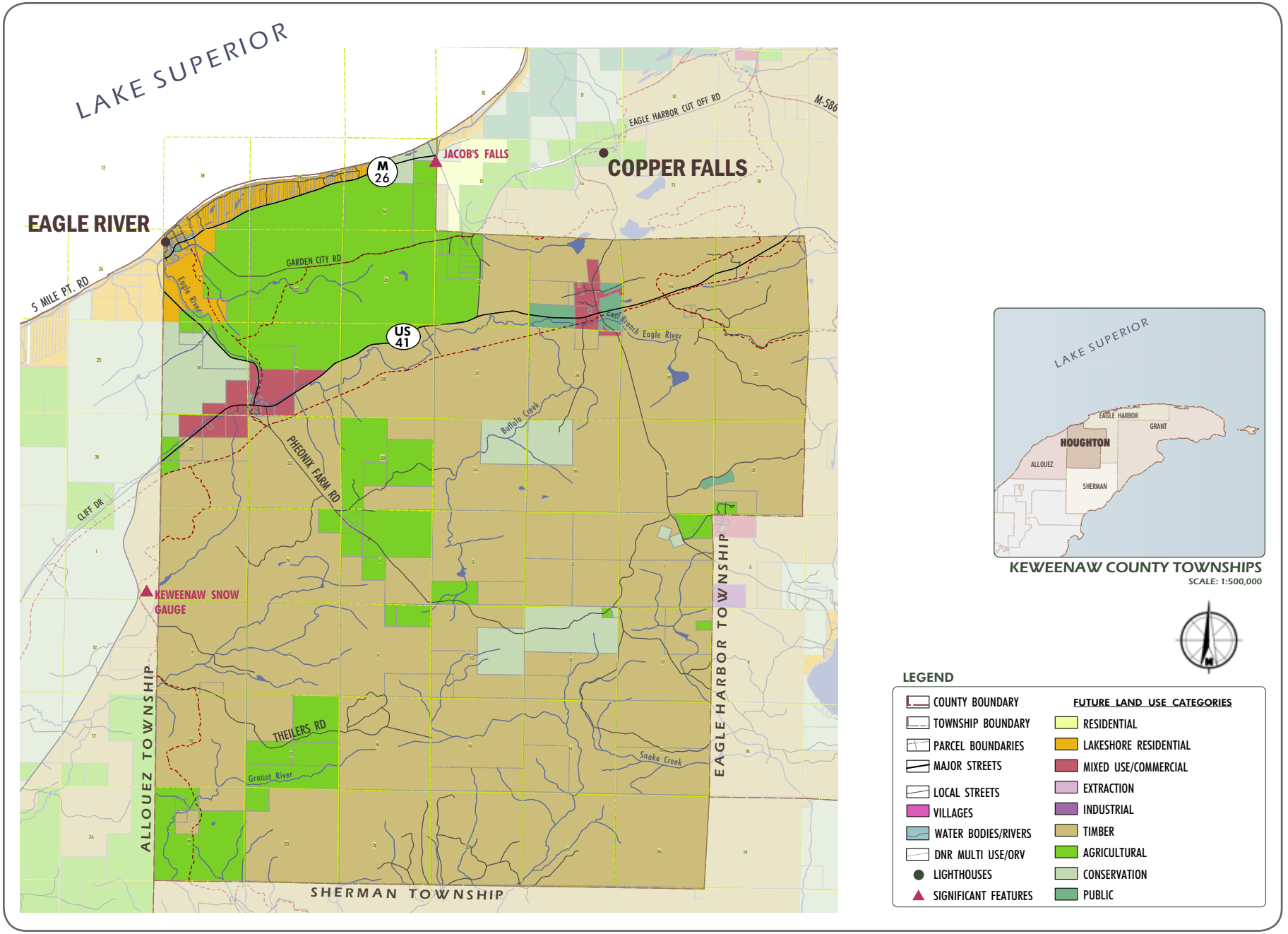


FIGURE 10.5 Existing Land Use with Proposed Future Land Use Changes, Houghton Township

Main Street. These buildings, both commercial and residential, are simple rectangular structures, typically with symmetrical facades, gable roofs, and rear extensions. Other significant buildings include the town hall/school; the Keweenaw County Courthouse, Sheriff's residence, and jail; and the Eagle River Lighthouse. The district also includes stone and frame buildings structures that were once a fuse factory and brewery.

The ***Central Mine Historic District*** covers the remains of the nearly abandoned mining town of Central. The district includes around 20 frame structures from an original 130, as well as scattered ruins. Most remaining structures are frame, two-story company houses on stone foundations. These houses all have gable roofs, porches, and lean-to additions. The district also contains the well-maintained Central Mine Methodist Church, which is in nearly original condition. The mine itself was designated a Michigan State Historic Site in 1958, while the surrounding district was designated a Michigan State Historic Site in 1973 and listed on the National Register of Historic Places in 1974.

Future Land Use

The Future Land Use of Houghton Township is expected to remain mostly unchanged. Figure 10.8 shows Future Land Use of the Township.

At the Master Plan Open House Workshop, township residents expressed concerns about the small population of year-round residents and the impact this has on their ability to attract Township officials. The Township has studied the possibility of combining with another township in the County.

Sherman Township

Sherman Township includes vast tracts of commercial forestlands. The only community in Sherman Township is the small historic copper milling community of Gay, where copper ore bearing rock was crushed to remove the metal. The byproduct of the mining operation (stamp sand) was deposited along the shore of Lake Superior from the Tobacco River to Little Traverse. The vast stamp sand deposits have been the subject of major environmental studies and are currently being remediated.

Existing Land Use

The Existing Land Use of Sherman Township is described below.

Timber

Sherman Township is primarily timberland with a majority of the lands falling under CFA designation. Timber harvesting is the primary industry.

Residential

The community of Gay is mostly older, single-family residential, including both year-round and seasonal homes. Most of these housing units were constructed when the community was processing copper ore.

Lakeshore Residential

The Lake Superior shoreline north of Gay is characterized by year-round and seasonal single-family residential units. Most, if not all of the available lakeshore land parcels have been built on.

Mixed-Use

There is a resort on Lake Superior including cabins and adjoining land used as a junk yard.

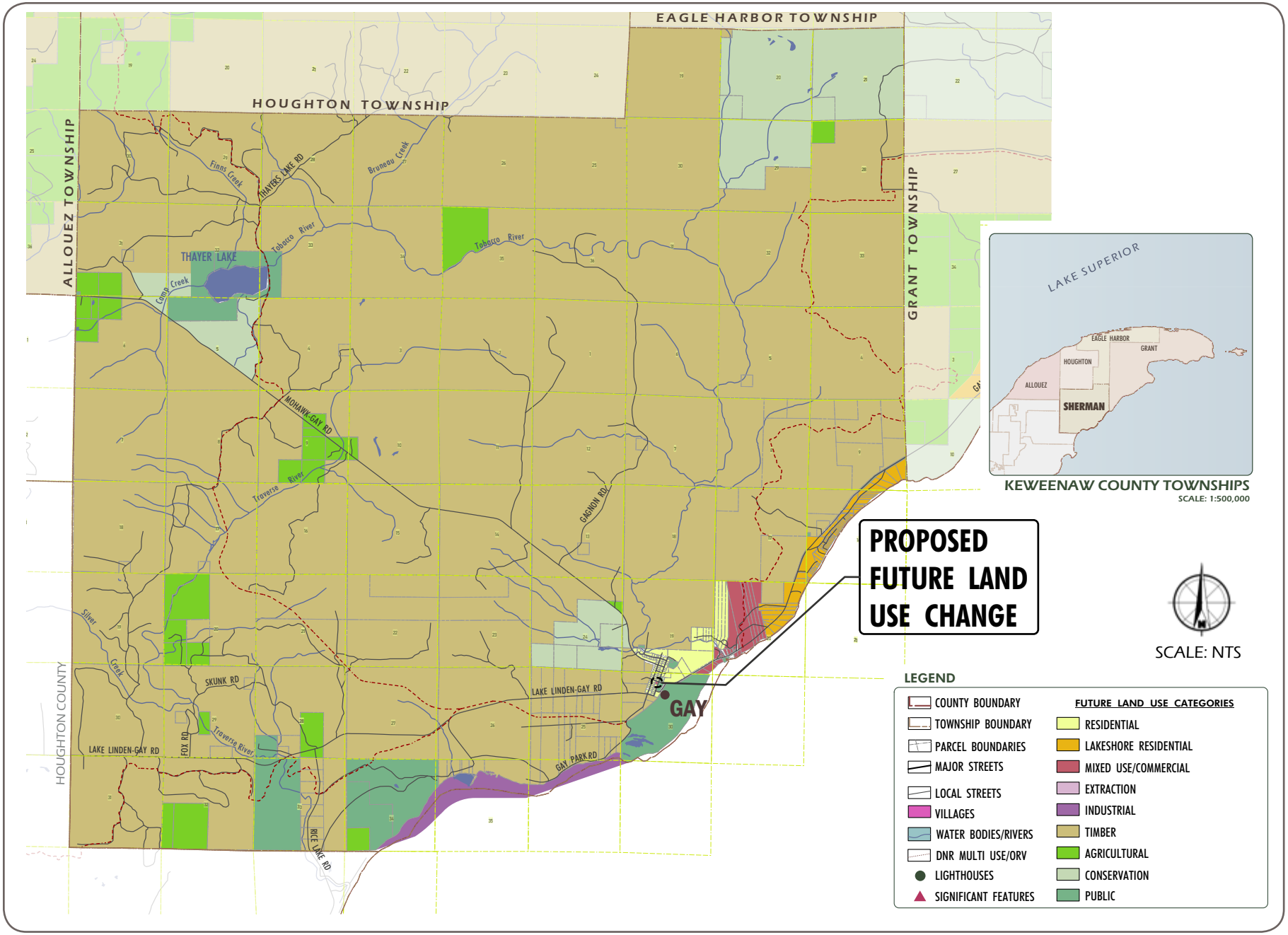


FIGURE 10.6 Existing Land Use with Proposed Future Land Use Changes, Sherman Township

Future Land Use

The Future Land Use of Sherman Township is not expected to change. A Future Land Use Map is shown as Figure 10.6.

During the Master Plan Community Workshop in the Township, some participants were in favor of relaxed zoning requirements in the community of Gay to allow for limited commercial development that could include using parts of a dwelling unit for retail, a coffee house or other compatible uses.

The Gay Bar property is shown as Commercial.

The Future Land Use of Sherman Township may include an upland disposal site for the vast stamp sand deposits in Lake Superior along the shore from Gay south to Big Traverse in Houghton County. This mitigation alternative was selected by the Buffalo Reef Task Force (BRTF). See Chapter 11 for more information about this project.

Relationship of Future Land Use Categories to the Zoning Ordinance

Future Land Use Maps are not regulatory, they are a generalized guide to inform decisions on land use and zoning. The table below illustrates the relationship between future land use categories and current zoning designations in the County.

Future Land Use Category	Zoning Category
Residential	R-1A SF Residential R-1 B SF Residential R-2 Two-Family & MF Residential CE Country Estate
Lakeshore Residential	RRA Rural Residential RRB Rural Residential RRC Rural Residential
Mixed Use / Commercial	RS-1 Resort Services 1 RS-2 Resort Services 2 B-1 Business
Industrial	M-1 Manufacturing Light M-2 Manufacturing General ED Extraction
Timber	TR Timber Resource
Agricultural	AG Agriculture
Conservation	CEP Conservation Environment Protection

Table 10.0 Relationship between future land use and zoning

Zoning Plan

The Zoning Plan is a required Master Plan element by the Michigan Planning Enabling Act (PA 33 of 2008) and describes changes to the Keweenaw County Zoning Ordinance to implement the desired Future Land Use of the County. This section describes recommended changes to be made.

Zoning Ordinance Changes

Keweenaw County has had a zoning ordinance in effect since 1975. In 2006, a new, comprehensive zoning ordinance was adopted, and has been amended several times since then in order to keep current and respond to changing conditions. The County Planning Commission should continuously monitor changing conditions and needs, as well as identify administrative issues that need correcting. The Master Plan recommends the following Zoning Ordinance updates.

1. Create standards for small-scale solar and wind energy projects for residential and small commercial uses.

2. Update current industrial-scale wind energy regulations and consider including these in a workable Compatible Renewable Energy Ordinance (CREO) to be in compliance with State Law and ensure that the County and its citizens have opportunities to review and comment on any proposed industrial-scale renewable energy projects, including wind, solar and battery storage.

3. Create standards for data centers, commercial cryptocurrency mining facilities, AI centers, cloud storage, and other similar uses to ensure adequate review, full disclosure of all aspects of this type of development, and environmental protection.

4. In order to expand housing opportunity, consider permitting duplexes and Accessory Dwelling Units (ADU) by right in all residential districts, provided the proposed units are not used for short-term rentals (STR).

5. Review residential/housing density standards and requirements in all districts.

6. Review existing multi-family housing, PUD and Rural Cluster Housing standards to ensure they are not too restrictive, while ensuring the protection of the environment and surrounding land uses.

7. Develop updated short-term rental standards and permitting process regulations.

8. Review current definitions and revise as needed.

9. Review and revise sign regulations.

10. Review all permitted uses in all zoning districts.

11. In order to protect the natural landscape and viewsheds in the County, consider establishing a formal Scenic Heritage Highway Overlay District on all major roads in the County, especially US 41. Current zoning regulations for this are guidelines and not mandatory. (Section 6.4)

Zoning Map Changes

The Future Land Use Plan recommends a number of changes to the Zoning Map, as discussed below:

An updated Zoning Map is needed to show zoning map changes since 2021. An updated Zoning Map should include parcel data so that zoning district boundaries correspond with actual property lines and parcels,

Allouez Township

- Review all zoning districts, boundaries and uses in Allouez Township
- Expansion of the Residential Land Use District west of Ahmeek, west of Mohawk and south of Fulton to allow for orderly expansion of higher density housing where utilities are available.
- A Mixed-use District along US 41 between Ahmeek and Mohawk to allow for limited commercial development and multi-family housing.
- An Industrial/Manufacturing District north of Mohawk at the former LP Sawmill site.
- In the Agricultural/Rural Residential District, reducing the required 5-acre minimum lot size will allow for more rural housing sites.
- A large tract of timberland north of Ahmeek and Mohawk was recently acquired from TRG by a non-profit organization and is likely to become protected land. The zoning for this land should reflect the intent of the acquisition.

Eagle Harbor Township

Eagle Harbor Township has its own Zoning Ordinance which has been recently updated to incorporate their Master Plan recommendations.

Grant Township

- The East Bluff private land parcels should be zoned RS 2.
- The Keweenaw Heartlands Community Infrastructure parcel in Grant Township near Lake Medora should be rezoned appropriately, based on the outcome of the feasibility study when that is completed.

Houghton Township

- No Zoning Map changes are recommended in Houghton Township.

Sherman Township

- The Gay Bar is an iconic and famous commercial establishment in Keweenaw County and should be zoned RS 2 to make this use conforming and permanent.
- As details emerge for the creation of an upland disposal site for stamp sand, the Planning Commission should consider treating this use as a Special District under Zoning Ordinance Article 6. In this way, an environmental landfill use is confined to one site and not listed as a Permitted or Special Use in an entire Zoning District. The Special District can establish strict standards and performance requirements.
- Consider conditional use standards for expanding small-scale commercial development in Gay.



FIGURE 10.7 Eagle River Deer Yard

Goals and Strategies

Goal 1: Provide opportunities for limited and controlled development that does not change the essential character of the land or exceed the carrying capacity of the County.

Strategy 1.1
Identify properties suitable in the Allouez Township developed area for future residential land use and explore opportunities for developing a variety of housing options in this area.

Strategy 1.2
Locate new development in or near existing developed areas and communities to promote an efficient and compact pattern of development, reduce the negative effects of sprawl, and reduce infrastructure and service costs.

Strategy 1.3
Carry out a comprehensive review and update of the Keweenaw County Zoning Ordinance.

Goal 2: Foster a distinctive, attractive community with a strong sense of place.

Strategy 2.1
Ensure that new development or redevelopment is compatible with the scale and architecture of existing properties, while preserving existing natural features as much as possible throughout the County.

Goal 3: New development must be consistent with the vision of the County.

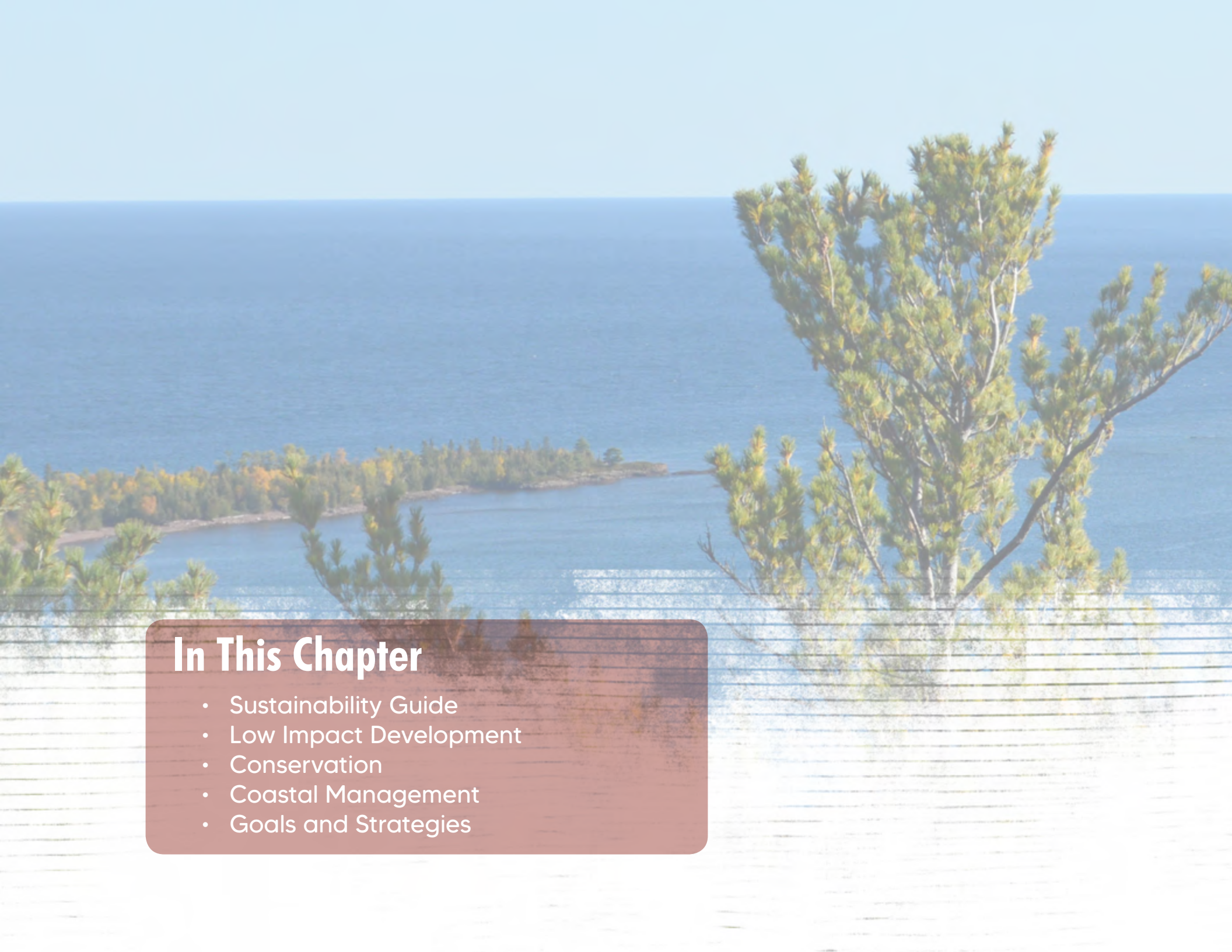
Strategy 3.1
Continue to commit to the protection and preservation of the County natural resources such as clean air, open space, woodlands, water resources, and environmentally sensitive areas while maintaining a balance between economic opportunity, quality-of-life, natural biodiversity, and sustainability of life support systems.

Strategy 3.2
Continue to enforce regulations to restrict and control inappropriate development in areas where there are steep slopes, soil erosion possibilities, and shorelines.

Strategy 3.3
Preserve the rural and scenic character of the County by discouraging land splits and encouraging rural residential cluster/conservation development where possible.

Strategy 3.4
Enforce existing zoning regulations to preserve and enhance riparian buffers along water bodies in the County to protect water quality, aquatic and wildlife habitat, slow runoff, and allow a greater percentage of water to return to groundwater.

Strategy 3.5
Consider an overlay or stand-alone **Archaeological Protection Ordinance** regulations to protect known or discovered archaeological sites.

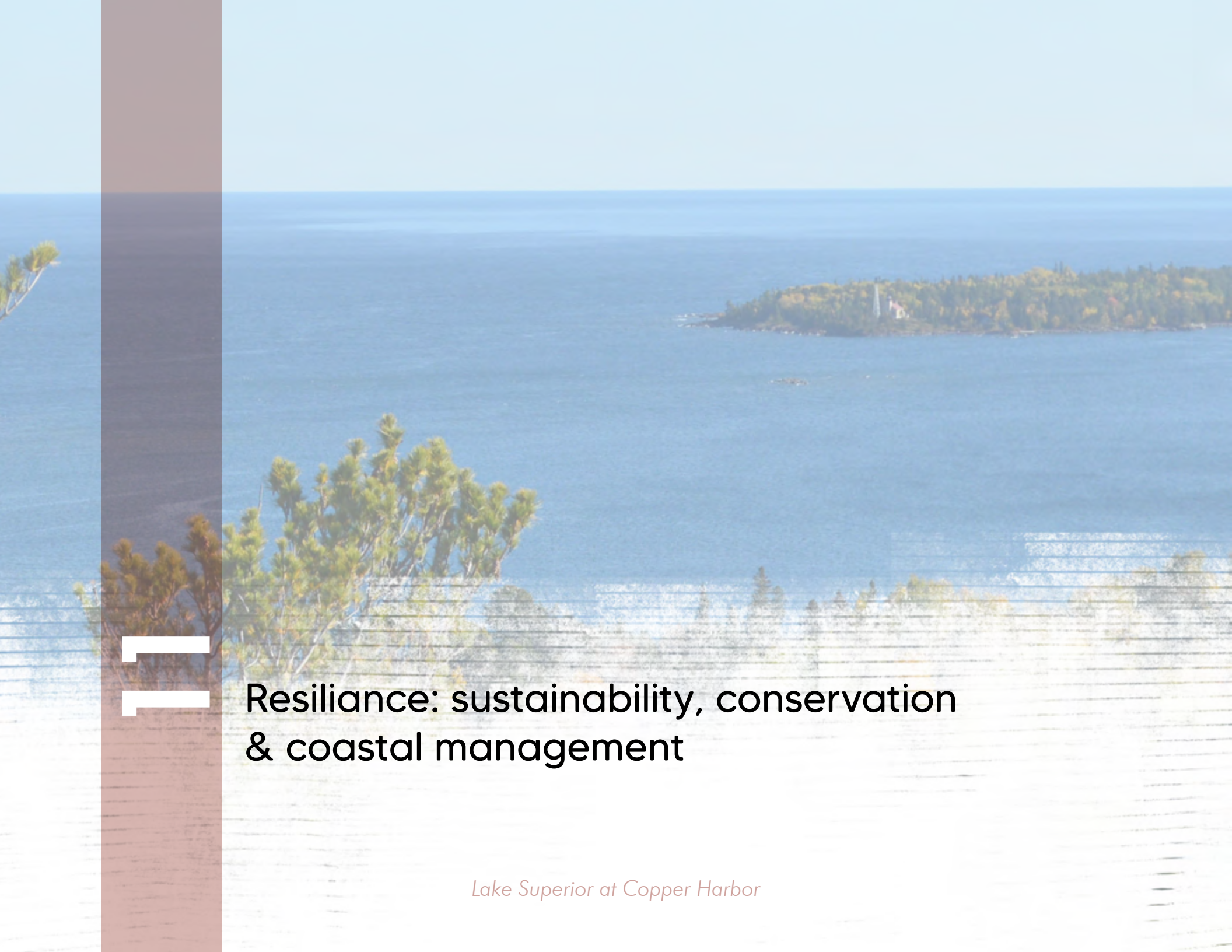


In This Chapter

- Sustainability Guide
- Low Impact Development
- Conservation
- Coastal Management
- Goals and Strategies

11

Resiliance: sustainability, conservation & coastal management



Lake Superior at Copper Harbor

Resilience: Sustainability, Conservation & Coastal Management

Keweenaw County has many spectacular natural features that provide great value and enjoyment to residents and tourists. This chapter will focus on sustaining, conserving and managing those natural features, especially in high-risk areas that are important for Keweenaw County and its communities to consider as they make future planning decisions. When communities make small, incremental changes towards improved environmental sustainability today, it can have a big impact for future generations.

Some ways to achieve this are through regulatory improvements, including ordinance or policy changes, and the use of special districts that designate an area for extra protection. Where this Master Plan provides the vision for land and shore use, it will be ordinance, policy, and special districts that do the work of regulation. Some examples of special districts or provisions used in a typical zoning ordinance are:

- Floodplains and Flood Plain Areas
- Natural Shoreline Districts.
- Inland Lakes
- Historic Preservation District
- Steep Slopes
- Wellhead Protection
- Tree Protection Requirements

In the future there may be increased development pressures, changes in housing or other development patterns, or new technologies. These factors may require Keweenaw communities to examine whether additional special districts or provisions need to be added to the zoning ordinance or other special policies created to help protect its natural resources.

The following are some resources that will help guide future growth and planning decisions to encourage and help maintain these natural areas and environmental protections for the community.

Sustainability Guide

The following is a general guide for sustainable best practices. These should be referenced and/or required where applicable in any future zoning ordinance revisions or in the creation of any future design standards or operating policies for the County.

Regulations based on these general principles should provide a strong foundation for future growth, conserve limited resources, and protect the natural environment for the long-term health of our planet and future generations.

Protect and Enhance the Site

- Protect ecologically sensitive sites
- Minimize the development footprint
- Integrate buildings with site topography
- Site homes and developments in a way that celebrates natural habitats

Improve Energy Efficiency

- Incorporate passive solar design strategies (proper orientation of structures, placement of windows, etc.)
- Use proper insulating techniques for the building envelope
- Design for efficient use of space (i.e. bigger isn't always better)
- Install high-performance windows and place to take advantage of natural light and cross ventilation
- Consider active solar or wind systems for energy or water heating

Use Environmentally Responsible Building Materials

- Select materials that are appropriate and durable for harsh winter climates
- Select products that support local manufacturers and local economies
- Select materials with recycled content or that are recyclable
- Avoid materials that unduly deplete natural resources
- Avoid materials that generate excess pollution during manufacturing

Create Safe Indoor Environments

- Avoid materials with high VOC (volatile organic compounds) such as some carpets, adhesives, paints, etc.
- Provide for proper ventilation in all buildings
- Maximize the control of indoor environments with proper window placement, lighting, and temperature controls

Provide Efficient Water Usage

- Use low-flow plumbing fixtures
- Incorporate efficient hot-water delivery systems
- Consider gray water usage, provide for water storage for landscape use
- Incorporate water efficient landscaping

Reduce Generation of Solid Waste

- Provide for both construction and home waste recycling
- Purchase building materials so as to minimize waste
- Utilize recycled materials in new construction
- Continue to provide recycling areas for residents at transfer stations.



Photo Credit: https://sustainablesites.org/colby-college-athletic-fields

FIGURE 11.0 Protecting the Site, Integrating Facilities into the Natural Topography

Create a Healthy Living Environment

- Encourage home or community gardening
- Incorporate walking trails, especially nature trails with educational opportunities.
- Incorporate alternative forms of transportation as options (walking, biking, bus, etc.)

Low Impact Development

In order to protect vital and important natural water resources (including drinking water) in the region it should be required for all new developments to incorporate low impact development (LID) practices in the construction of any projects. These are also known as: Green Infrastructure or Stormwater Best Management Practices, (BMPs).



FIGURE 11.1 Incorporating A Raingarden And Porous Pavement At A Munising Bus Station

Best Management Practices (BMPs) Non-Structural

- Conservation Easements/Open Space Protection
- Cluster development
- Minimize soil compaction
- Minimize total disturbed area
- Protect natural flows/drainageways
- Protect sensitive areas
- Reduce impervious surfaces
- Stormwater disconnection

Best Management Practices (BMPs) Structural

- Bioretention (rain gardens)
- Planter Boxes or Tree Wells
- Depressed Tree/Planter Islands in Parking Lots
- Vegetated Swales
- Infiltration Trenches
- Permeable (pervious) Pavements
- Green Roofs
- Rainwater Collection/Reuse
- Native Vegetation Requirements

There are a number of good resources available in the State of Michigan that give more information about LID practices. One of the greatest and most referenced resources is The Southeast Michigan Council of Government's, "Low Impact Development Manual for Michigan" (2008). The information remains relevant and is a great resource for all Michigan communities. The Michigan Department of Environment Great Lakes and Energy (EGLE) also has a great list of resources on their website under the "EGLE Non-point Source Best Management Practices Manual" web-page. There are individual BMPs listed with additional references and resources.

The BMPs listed on the previous page are just some of the techniques that would be suitable to incorporate into development projects in the County, however creativity and ingenuity should be encouraged as stormwater solutions can be incredibly varied across different sites.

Sustainable Design Rating Programs

There are several well known and accepted sustainable design rating programs for the development of building and site plans. Developers should be encouraged to utilize these programs (or at least follow their criteria even if they don't become fully certified) for all new projects. An incentive program or reduced permitting fees or time lines for projects that use one of these metrics and become certified projects could also be considered. Projects that use these rating systems bring an additional level of recognition and marketing power to the community.

Leadership in Energy and Environmental Design (LEED)

The U.S. Green Building Council (USGBC) administers the LEED program. It is the most widely used green building rating system in the world. LEED provides a framework to create healthy, highly efficient and cost-saving green buildings.

Refer to www.usgbc.org for more detail.

Sustainable SITES Initiative (SITES)

SITES certification is available for a wide range of development projects, with or without buildings. SITES supports landscape architects, planners, and others in implementing nature-based solutions. SITES projects enhance biodiversity and mitigate climate change, while conserving resources, improving public health and protecting critical ecosystems.

Refer to www.sustainablesites.org for more detail.

The National Green Building Standard ™

The National Green Building Standard™ provides independent, third-party verification that a home, apartment building, or land development is designed and built to achieve high performance in six key areas: Site Design, Resource Efficiency, Water Efficiency, Energy Efficiency, Indoor

Environmental Quality, and Building Operation & Maintenance.

Refer to www.nahb.com for more detail.

Energy Star

Energy Star Certified homes are designed and constructed to be significantly more energy efficient than those built to standard codes while lowering homeowner utility bills and providing superior comfort, quality, and durability.

Refer to www.energystar.gov for more detail.

The Living Building Challenge ™

This is a building certification program, and just one program that is a part of the International Living Future Institute (ILFI). There are additional programs that are explained in detail on their website that may be of interest to Keweenaw communities, including The Living Community Challenge.

Refer to https://living-future.org/lbc/ for more detail.

Michigan Green Communities

Established in 2009, Michigan Green Communities (MGC) is a statewide sustainability benchmarking, networking, and technical assistance program. MGC is the product of collaboration and partnership among the Michigan Economic Development Corporation (MEDC), the Michigan Department of Environment, Great Lakes, and Energy (EGLE), the Michigan Department of Health and Human Services (MDHHS), the Michigan Department of Transportation (MDOT), the Michigan Department of Natural Resources (MDNR), the Michigan Association of Counties (MAC), the Michigan Municipal League (MML), and the Michigan Townships Association (MTA).

The Michigan Green Communities Challenge is an annual program that serves as a guide to help communities measure their progress towards sustainability. The Challenge includes several categories and each is comprised of several action items. Communities earn points by completing these action items. Participation is free and open to any local government in Michigan.

Recognition Awards: Track your sustainability progress, see how you compare to other Michigan communities, and earn certification as a bronze, silver, or gold community. Challenge participants earn a logo to display on your website and in print materials, are publicized at the annual awards conference and on the MGC website, and are included in a press release.

Refer to https://migreencommunities.com/ for more detail.

Conservation

Conservation and land preservation are key instruments in shaping and directing future growth and should be part of a comprehensive planning effort. Land conservation and preservation involves protecting natural resources and maintaining ecological balance through a variety of methods. As mentioned in the natural resources chapter there are extensive conservation efforts already underway across the Keweenaw Peninsula. Components of conservation and land preservation planning include:

Donation of Land or Conservation Easements: Donating land or conservation easements to land trusts or nonprofits can offer tax benefits while ensuring long-term protection.

Community-Based Planning: Using tools like GIS mapping to identify and protect natural areas, forests and farmland in land-use planning to avoid fragmentation.

Farmland Preservation Programs: Utilizing programs that incentivize farmers to maintain agricultural land and avoid development.



FIGURE 11.2 Keweenaw Peninsula from Brockway Mountain

Conservation Easements: Legally binding agreements that permanently restrict development, allowing landowners to protect property in perpetuity while retaining ownership.

Land Trusts and Conservation Partnerships: Collaborating with local land trusts and government agencies to identify and protect critical areas, such as forests, wetlands, and wetlands.

Habitat Restoration & Management: Restoring wetlands, planting native vegetation, removing invasive species, and maintaining wildlife corridors.

Water Conservation: Creating riparian buffers (vegetated areas near water) and using grassed waterways to protect water quality, manage runoff, and reduce erosion.

Responsible Forestry: Implementing sustainable forest management practices that maintain forest health, biodiversity, and ecosystem services.

Balancing land conservation with public access requires a multi-use approach where recreational activities are managed to minimize their impact on the ecosystem. Some ways that this can be achieved are though the creation of partnerships such as, "Friends Of" groups or opportunities for the public to assist with land maintenance (invasive species days, etc.), through public educational outreach programs or during the county-wide recreation planning process.

Coastal Management

The Great Lakes represent one of the most unique and precious environmental systems in the world. The Great Lakes basin contains more than 20% of the world's surface freshwater and that water is always

changing, acted on by gravity, wind, sun, and ice; forces that affect the ability of the community to build, live and play on the coast.

Planning for coastal management and hazards at the local level requires knowledge of local conditions as well as state and federal regulations. While state and federal programs provide a wealth of resources and support, they cannot be informed of the specific local conditions for all the communities along the Great Lakes. This master plan provides a unique vision and goals for Keweenaw communities that should utilize state and federal programs to help guide their implementation.

Keweenaw communities have a great opportunity to exercise their planning and zoning authority towards improved coastal management. Realizing a future coast that aligns with the vision of residents and reducing impacts from coastal erosion and flooding is possible using these powers. In fact, such action is explicitly endorsed in the Michigan Zoning Enabling Act (MZEA) as it states, "A local unit of government may provide under the zoning ordinance for the regulation of land development… including the regulation of land development and the establishment of districts in areas subject to damage from flooding or beach erosion (MCL 125.3201(3))."

Planning with an eye to shoreline management helps a coastal community understand its vulnerability to coastal hazards and look forward in a holistic way, rather than reacting to environmental emergencies as they happen. Adopting practices to compensate for these vulnerabilities is a first step to improving resiliency.

- **The Master Plan** is a visionary document that helps communities decide where and when development should occur.
- **The Zoning Ordinance** creates enforceable policy that regulates how land is developed, including defining how properties are used and how much development can occur.
- **Shoreline Management** refers to actions a community takes to reduce risk. By evaluating the potential hazards and making plans



FIGURE 11.3 Course Sediment or Cobble Beach at Hunter's Point Park

to both enhance safety and recover quickly, a community can reduce damage to life and property.

- **Coastal Resilience** is the ability of a shoreline-adjacent community to "bounce back" after a natural disaster, ideally by planning, rather than reacting, to environmental conditions.

The Master Plan

This master plan addresses the general location, character, and extent of waterways and natural features as discussed in previous chapters. Additional shoreline management planning may consider including the following analysis items:

- Identification of constraints on building within coastal areas.
- Identification of High-Risk Erosion areas and other areas subject to erosion.
- Identification of mapped floodplains and other areas subject to flooding.
- Identification of coastal natural resource features, such as wetlands, dunes, and beaches.

This forms the basis of a land-use plan which is grounded in spatial data. In turn, the master plan then lays out the policies from which zoning regulations are developed.

The Keweenaw Peninsula has a number of unique shoreline features, they are:

Elevated Shorelines: these include high bluff and low bank coasts. The geology in both cases is dominated by deposits from the last glaciation. A wide range of sediment sizes and relatively low amount of sand means that these coasts will tend to be more erosive. The lower volumes of sand results in generally narrow beaches that tend not to widen significantly, even during low-water periods. Development along these coasts have less concern about flooding; however, erosion may be a critical concern for development near the bluff edge.

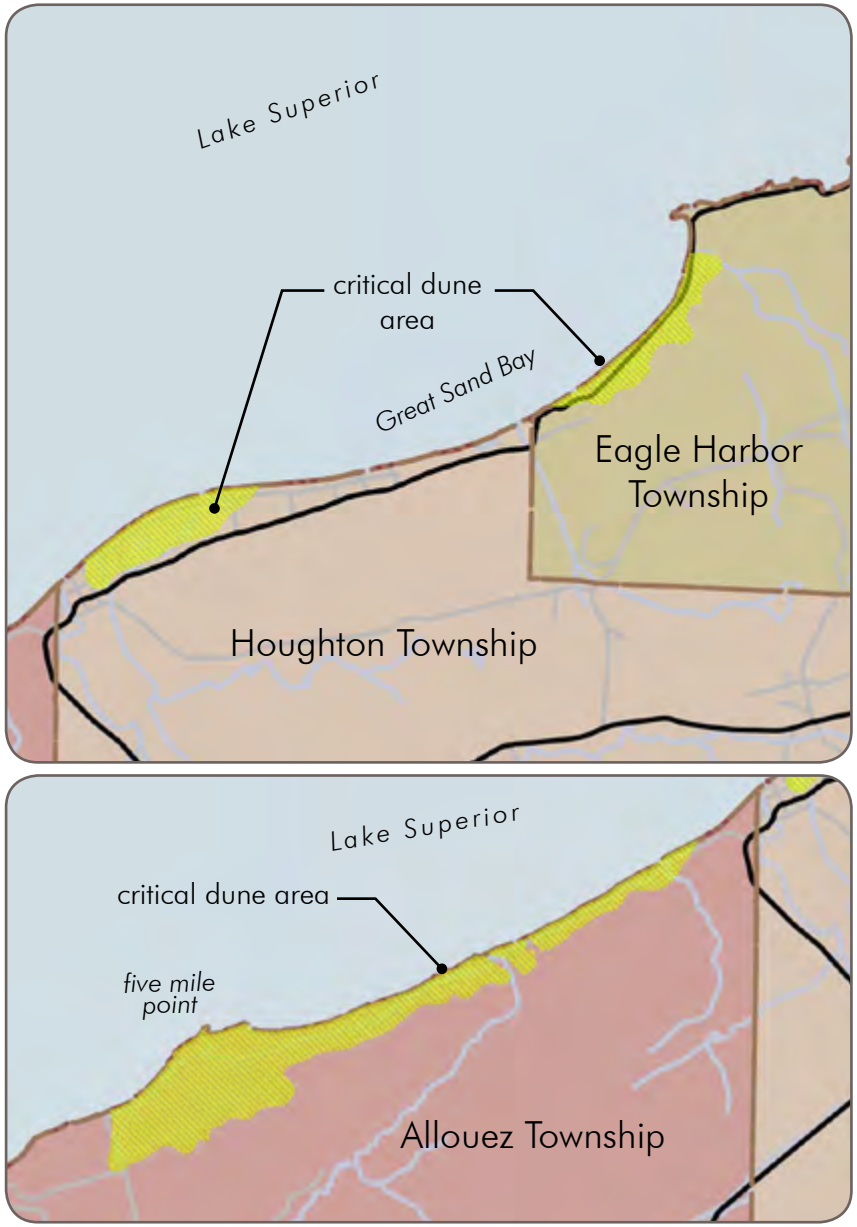
Sandy Beach / Dunes: Approximately 21% of Michigan's coast is sandy beach or dune. Most are along Lake Michigan. Sandy beaches, such as those that typify the western Lower Peninsula coast, are considered "intermediate" in nature. Between one and three rows of submerged sand bars typically exist just offshore. These sand bars, especially those closer to shore, tend to migrate and will "weld" to the beach at times. Sandy beaches have more shallow slopes than gravel or cobble shores; however, are not as gentle as the silt and mud-dominated "dissipative" beaches of wetland coasts.

Coarse Sediment Beaches: Gravel or cobble beaches are steeply sloping with relatively deep water near the shoreline. Shoreline position is fairly stable through time and will not change as much as sandy or wetland beaches when water levels change. Examples exist near Seven Mile Point along the Keweenaw County coast of Lake Superior, and Hunters Point Park, (refer to Figure 11.3).

Bedrock Coasts: Bedrock coasts may still erode or flood depending on the type of rock and elevation of the coast but are relatively stable compared to other shore types. Approximately 13% of Michigan's coast is bedrock – mostly along Lake Superior in the Upper Peninsula.

Wetland Coasts: Wetland coasts are the most common shore type in Michigan and are said to be "dissipative" as they are wide and flat with very gentle slopes. Incoming waves tend to break far from the shoreline. Flooding and inundation are the largest management concern. A foot of water level rise may cause the shoreline to move landward hundreds of feet due to the gentle slope. Wetland coasts provide critical habitat and ecosystem services which should be incorporated into coastal management planning efforts

Artificial: Approximately 13% of Michigan's coast is artificial, meaning that it has been altered by the addition of structures in an attempt to prevent erosion or flooding. Armoring takes different forms, may utilize different materials (including rock, wood, and steel), and is applied along different geologies. Therefore, effects and management considerations are quite variable. Deep water near the shoreline of steeply sloped or armored



Source: Michigan Department of Natrual Resources

FIGURE 11.4 Critical Dune Areas in Eagle Harbor, Houghton and Allouez Townships

coasts allow higher wave energies to impact the shoreline, because the waves do not lose energy until they are nearly at the shoreline. The existence of artificial shorelines often indicates areas where significant erosion has occurred and/or development has occurred too close to the water.

Natural: Natural shorelines support coastal resilience by allowing the process of re-balance between the water's force and the land's accommodation of it to proceed unhindered. In a sense, the land is an active partner here, offering up responses that range from reconfiguring its shape to sprouting up vegetation, depending on conditions.

Critical Dune Areas: The Great Lake coastlines have extensive coastal dunes on Lakes Michigan and Superior. In the 1980's it became apparent that development pressures had potential to impact the future of Michigan's dunes as they became increasingly popular sites for recreation and residential development. In 1989, approximately 74,000 acres of dunes along 265 miles of coastline were identified as needing protection from developmental pressures and designated as Critical Dunes. In Keweenaw County these include dune areas in Eagle Harbor (134.6 ac.), Houghton (158.87 ac.) and Allouez Township (629.84 ac.), (refer to Figure 11.4).

High Risk Erosion Areas (HREA): Currently around 250 miles of shoreline are designated as high risk erosion areas along the shorelines of Lakes Michigan, Superior and Huron. Local townships provided the property tax identification numbers at the time of the high risk erosion area designation. Due to parcel splits and combinations the property tax identification numbers may change yet the designation runs with the land so the resulting parcels are also designated and will require a permit for regulated structures. There are 5 parcels identified in Houghton Township and 6 parcels identified in Grant Township.

The Zoning Ordinance

Zoning techniques can be used to mitigate the impacts of coastal flooding, coastal erosion, and other hazards, such as risks of building too close to coastal bluffs and steep slopes by creating location-specific building placement standards. Zoning helps define how properties are used, and how much development can occur. Keweenaw's shoreline communities should consider including the following specific criteria in their zoning ordinances:

- Establish shoreline protection setbacks - vegetative buffers along waterways, wetlands, and other sensitive areas to prevent shoreline erosion, provide flood control, and protect waterway ecosystems. Local governments can require development to maintain this buffer in a number of ways, including preventing its removal, or requiring that it be re-planted after construction.
- Limit shoreline structures (breakwalls, revetments, piers) - the installation of seawalls or other protective mechanisms can, over time, cause increased erosion and lowering of the beach, which weakens the ability of the coast to handle storm impacts. Local governments can block entirely or limit what percentage of the beach is reinforced with solid structures.
- Create overlay districts that offer protection to critical areas - areas in the overlay are subject to additional regulations and protections. Local governments can use this to protect areas of special concern by requiring additional site plan review or design standards within the overlay area.
- Require environmental studies prior to construction - these are typically completed by an engineer and provide a full picture of the environmental impact of the development project, from drainage and runoff to effect on sensitive species. Local government can enforce that projects with hazardous environmental impacts may not be permitted.

Shoreline Management Planning

A shoreline management plan should provide guidance on management of coastal flooding and erosion risks associated with coastal processes against the need of a community to live and play near the water. It then aims to present a policy framework to address the risks to people and the developed, historic and natural environment in a sustainable manner over the next 100 years.

Shoreline Management Planning:

1. Always begins with collecting data. There is a wealth of data available from organizations like the National Oceanic and Atmospheric

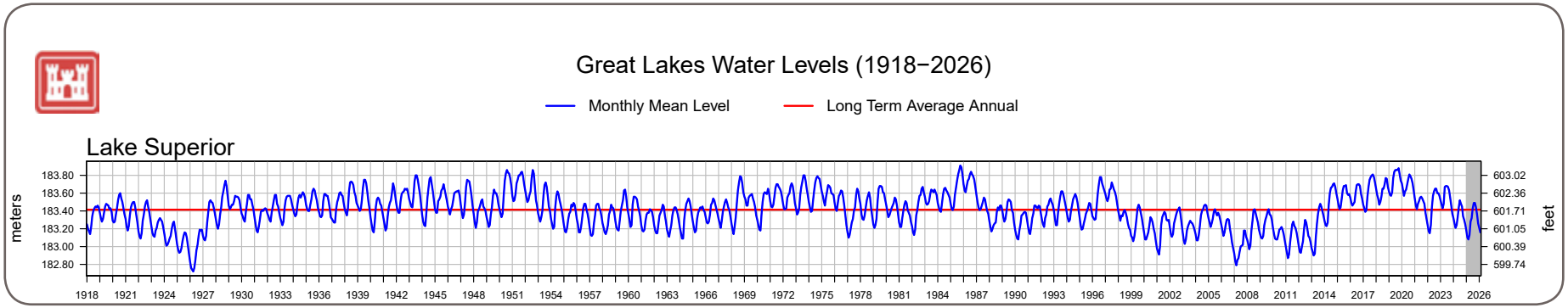


FIGURE 11.5 Lake Superior Water Levels

Source: https://water.usace.army.mil/office/lre/waterleveldata/waterLevelData

Association (NOAA), Michigan Department of Environment, Great Lakes and Energy (EGLE) and the U.S. Army Corps of Engineers.
2. Creates a plan for the shoreline. This is the vision, the "why" - why take action? why change? why not change? Consider recreation, safety, and environmental impact.
3. Uses policy and zoning to support the plan. Clear guidelines and resources help both established residents and developers make informed decisions

The inclusion of data on local climate and water level trends is an important consideration when planning for resilient coastal communities. Using this data as a framework, a shoreline management plan should include an understanding of sustainability and potential threats to resiliency.

Some regularly-occurring lake phenomenon that are well documented can be used as a starting point for data collection.

- **A seiche** is caused by a large fluctuation in lake water level due to high winds. Typically a large lake experiences 1-2 seiche per year and they are not severe, though once every few years they can be strong enough to cause damaging waves.
- Annual **shifts in water level** have been tracked by the U.S. Army Corps of Engineers since 1918. Shifts are typically measured in feet per year, but from year to year the high and low water mark can vary significantly. A high water mark may be considered "normal" in the overall picture of the lake even though it causes flooding in a single year, (refer to Figure 11.5).
- Documentation of **ice cover on the lakes** is relatively new (since the 1970's) but considered important because of ice's impact on everything from hydroelectric generation to fishing to commercial shipping. When winters are more frigid a sheet of ice protects lake waters from evaporation. However, a freeze-thaw cycle can act as a bevel that scours out sand, forcing it to move away from the shore.
- **Littoral drift,** also known as longshore drift, is a geological process that consists of the transportation of sediments (sand, shingle, pebbles) along a coast parallel to the shoreline. This drift can relocate significant square footage of beach in a single generation.

For as long as these phenomenon on the lakes have been recorded, humans have used engineering to take actions to prevent these conditions from damaging private property and beloved shoreline features, like beaches and marinas. A community's vision for the shoreline may include these techniques commonly used to control the effects of the lake.

- **Revetment -** a man-made barrier placed on the shore to protect the beach from erosion and wave damage. The most common of these is sheet pile, sheets of corrugated metal driven into the ground.
- **Rock Armor** - boulders piled on the shore to absorb wave energy and protect the beach from erosion
- **Flood wall/flood gate -** a barrier erected to stop the movement of water past a certain point (or release it, through opening the gate)
- **Beach nourishment -** dredging of sediment from offshore and depositing it back on the shore to extend usable beach or replenish beach lost due to erosion

Recently, the environmental impacts of these man-made features has been questioned. Research has shown that revetments and rock armor absorb wave energy by transferring it back into the water, where it can scour deep holes at the base of the revetment, lead to more severe drop-offs, and deposit sediment in inconvenient locations. Dams and flood walls prevent sediment from streams and creeks from reaching the natural system of littoral drift and can limit beach replacement.

"Nature-based solutions" and "green infrastructure" are two terms that refer to alignment of human goals with processes that are occurring in the natural world independently of human investment. A body of research beginning in the late 1990s demonstrates the effectiveness of this approach, and its applications have been increasing over time. **As the benefits of conserving and restoring natural systems and designing new systems to mimic their processes**

are increasingly measured and quantified, it becomes possible to encourage or require a preference for this approach over the engineering approach.

Coastal Resilience

Because there are so many angles to consider, any successful resilient planning process should include the basics of coastal processes, assessment of vulnerable coastal areas, the role of sand supply and beach management, and the desire for development of recreation. The community should pull together a technical advisory team to review the master plan, which may include environmental experts, engineers, public works departments and emergency managers. It is important to engage the community and get comments from local citizens, usually through a citizens advisory committee. It is also important to give coastal private landowners, including commercial, industrial, and residential, a chance to provide input. Making this information available, and including citizens in the process, helps create a community making informed decisions.

Resilience includes adaptive capacity. Communities that are resilient are able to learn from adversity and adapt quickly to change. Adaptation is a critically important characteristic of resilience because it allows us to prevent further harm from disasters and disruptions while making the most of the new conditions. By adapting rapidly to

Further Review:
Water Levels

- In 2013 the Great Lakes water levels hit record lows. Most thought this would be the "new normal."[1]
- But when water levels hit near-record highs in 2020, property owners scrambled to build seawalls and protect what they'd built in the previous seven years. In 2019 and 2020, the Michigan Department of Environment, Great Lakes and Energy (EGLE) processed 3,337 permits and temporary permits for shoreline protection projects. That's about five times the amount EGLE has processed in a normal two-year period.[1]
- The water treatment plant in Ludington, Michigan, once 100 feet from the shoreline, is now just 8 feet from the breaking waves of Lake Michigan. If the plant is swamped, the city would lose its water supply. The city also needs to repair an intersection that's flooded so frequently it's been closed for a year, and there are several private properties that are threatened.[2]
- "It would be a third of our total budget for the year just to deal with the issues we know of right now," said city manager Mitch Foster. "That's not realistic. We're assuming the worst, that these [water] cycles are going to be short, aggressive and extreme, but at the same time these immediate issues are so massive that trying to figure out the ancillary impacts is a tough chore."[2]

Sources:
[1]https://water.msu.edu/feature/building-resilience-coastal-communities
[2]https://stateline.org/2020/09/30/rising-waters-threaten-great-lakes-communities/

Further Review:
Gay Stamp Sands

- In the early 20th century approximately 22 million metric tons of "stamp sands", a bi-product of copper mining, were deposited on the shore of Lake Superior near the Village of Gay.
- In 1938 the beach of stamp sand extended nearly half a mile into the lake.
- Michigan Technical University investigators (Kerfoot et al., 2012) [1] have estimated that more than 85 percent of the original pile of stamp sand has been eroded. Movement of that sediment has caused progradation of the beach and damming of stream outlets downdrift of the pile. (usgs.gov) [3]
- Offshore from Gay to the south sits Buffalo Reef, where migrating stamp sands pose a serious threat to the whitefish and lake trout spawning grounds. Composed of various sized stones and boulders deposited by glaciers, the reef has been filling up with copper-rich sands for years. With high concentrations of copper, the stamp sands cover up and diminish the food system. Full coverage of the reef with the sands will eliminate this fishery within just sixty years. (Keweenaw Historical Society)[2.]
- The Buffalo Reef Task Force (BRTF) was formed at the direction of the Environmental Protection Agency (EPA) and tasked with identifying long-term alternatives to protect Buffalo Reef and surrounding habitats. The BRTF, with representatives from the Great Lakes National Program Office (GLNPO); State of Michigan Department of Natural Resources (DNR); State of Michigan Department of Environment, Great Lakes, and Energy(EGLE); Keweenaw Bay Indian Community (KBIC); Great Lakes Indian Fish and Wildlife Commission (GLIFWC); U.S. Geological Survey (USGS); and US Army Corps of Engineers (USACE) has recommended that the Upland Placement Alternative be considered as the BRTF's Potential Plan to protect Buffalo Reef.[4.]
- The Upland Placement Site will be located on an upland site several miles from Gay. The project is regulated as a Type 3 landfill and is proposed to be constructed in phases as funds become available. Phase 1 is proposed for 16 acres.[4.]



Aerial view of large bermed-ponds on the Gay stamp sands. Credit: W. C. Kerfoot, Michigan Tech University, GLR [1]

Sources:
[1.] https://www.mtu.edu/mtri/research/project-areas/environmental/water/stamp-sands/ [2.] https://www.keweenawhistory.org/legacy-effects
[3.] https://www.usgs.gov/programs/cmhrp/news/mapping-stamp-sands-lake-superior
[4.]Buffalo Reef – Final Alternatives Analysis, https://www.michigan.gov/dnr/-/media/Project/Websites/dnr/Documents/Fisheries/Archive/BuffaloReef/00-Buffalo-Reef-Main-Report-2024-ADA.pdf?rev=f-c52182f32224b4ba37357d065abf7b8&hash=E843E3F8C3E-B1313E2331101F5510DC4

changing climate circumstances, communities may not only survive challenges, but thrive.

Improving resilience through anticipating, preparing for, responding to, and adapting to changing conditions, and recovering rapidly from hazardous events with minimal damage, is a key objective for communities that want to reduce the vulnerability and risks associated with coastal areas. Coastal communities and property owners can improve resilience through a variety of techniques, which can be generally categorized into three approaches:

1. Structural interventions - like seawalls and breakwaters reduce coastal risks by decreasing shoreline erosion.
2. Natural or nature-based - such as natural or engineered wetlands and dunes, can reduce the impact of waves and provide ecosystem benefits.
3. Non-structural interventions - including local land use policies and building codes that regulate development in coastal areas, along with emergency response plans and systems designed to mitigate impacts from coastal disasters.

Planning with an eye to coastal resiliency helps a community understand where and how that community is vulnerable to coastal hazards. Adopting planning and development practices to compensate for these vulnerabilities is a first step to improving resiliency and reducing risk to lives, property and ecosystem.

TOOLS FOR COASTAL PLANNING & ZONING

The following is a list of tools and data sources that can assist Keweenaw County's coastal communities as they address coastal conditions in their planning efforts.

- **Michigan's Resilient Coast (EGLE)** Information for coastal communities from the Michigan Department of Environment, Great Lakes, and Energy
- **Northwest Lower Michigan Coastal Resilience Atlas -** Developed by the Land Information Access Association (LIAA), to foster and support community-wide planning efforts that promote community resilience in the face of rapid economic changes and increasing climate variability.
- **USACE Water Level Data** Water level data and charts from the USACE (United State Army Corps of Engineers), Detroit District.
- **Great Lakes Dashboard** provided by NOAA's Great Lakes Environmental Research Laboratory (GLERL) is available for communities wanting to explore water level variations in greater detail.
- **Michigan's Great Lakes Coast Through Time** The easy-to-use web-based viewer, developed by Michigan Technological University, includes coastal aerial photography dating back as far as 1938.
- **Rural Water Quality Protection: A Planning & Zoning Guidebook for Local Officials** The Guidebook offers a simple and straightforward approach that is uniquely suited to enable small rural communities with limited staff and resources with the crafting, updating and implementing of their master plans and zoning ordinances.

Goals and Strategies

Goal 1: Protect and enhance the existing natural resources.

Strategy 1.1 Annually review environmental provisions (floodplains, wellhead protection, shoreline buffers, steep slopes, etc.) in the existing zoning ordinance and update as needed.

Strategy 1.2 Support adding/improving tree protection and/or tree replacement requirements in the existing zoning ordinance.

Strategy 1.3 Encourage the use of natural features like rain gardens, vegetated swales, and native vegetation to manage runoff, reduce flooding, and clean water.

Strategy 1.4 Collaborate with the Keweenaw Bay Indian Community to incorporate sustainable land management practices and tribal lifeways, such as mapping and protecting traditional hunting, fishing, and gathering spaces, cultural and heritage sites, and protecting critical fish spawning grounds like those impacted by stamp sands, in order to create a more robust ecological framework.

Goal 2: Promote and raise awareness for sustainable design practices.

Strategy 2.1 Support requirements for sustainable design and low-impact development (LID) practices in the zoning ordinance. Consider innovative stormwater techniques and green building technologies as discussed in this chapter.

Strategy 2.2 Seek and promote funding opportunities for sustainable development practices.

Strategy 2.3 Incorporate sustainable design and low-impact development (LID) practices into all public improvement projects; such as public parking facilities, right-of-ways, parks or structures.

Strategy 2.4 Integrate green stormwater infrastructure into parks or other public projects.

GOAL 3: Conserve energy resources.

Strategy 3.1 Work so that all public lighting (street lights, building lights, etc.) are converted to LED, where possible.

Strategy 3.2 Utilize more robust architectural standards for both new construction and renovations to include building features that save energy.

Goal 4: Support and continue conservation efforts.

Strategy 4.1 Continually identify and maintain maps of environmentally sensitive areas, conserved areas and other natural resources.

Strategy 4.2 Restore functioning wetland, forest areas, lake and streams to provide connected habitats and waterways to increase resiliency, particularly in areas altered by past disturbances.

Strategy 4.3 Enhance public access and awareness to nature by creating, supporting and promoting accessible nature preserves and improved trail infrastructure.

Goal 5: Develop a County-wide coastal management plan.

Strategy 5.1 Prepare a coastal (shoreline) assessment in Keweenaw County by collecting data

Strategy 5.2 Develop a mission statement and vision for the Keweenaw coast that includes low-impact development, setbacks, overlay zones and environmental studies.

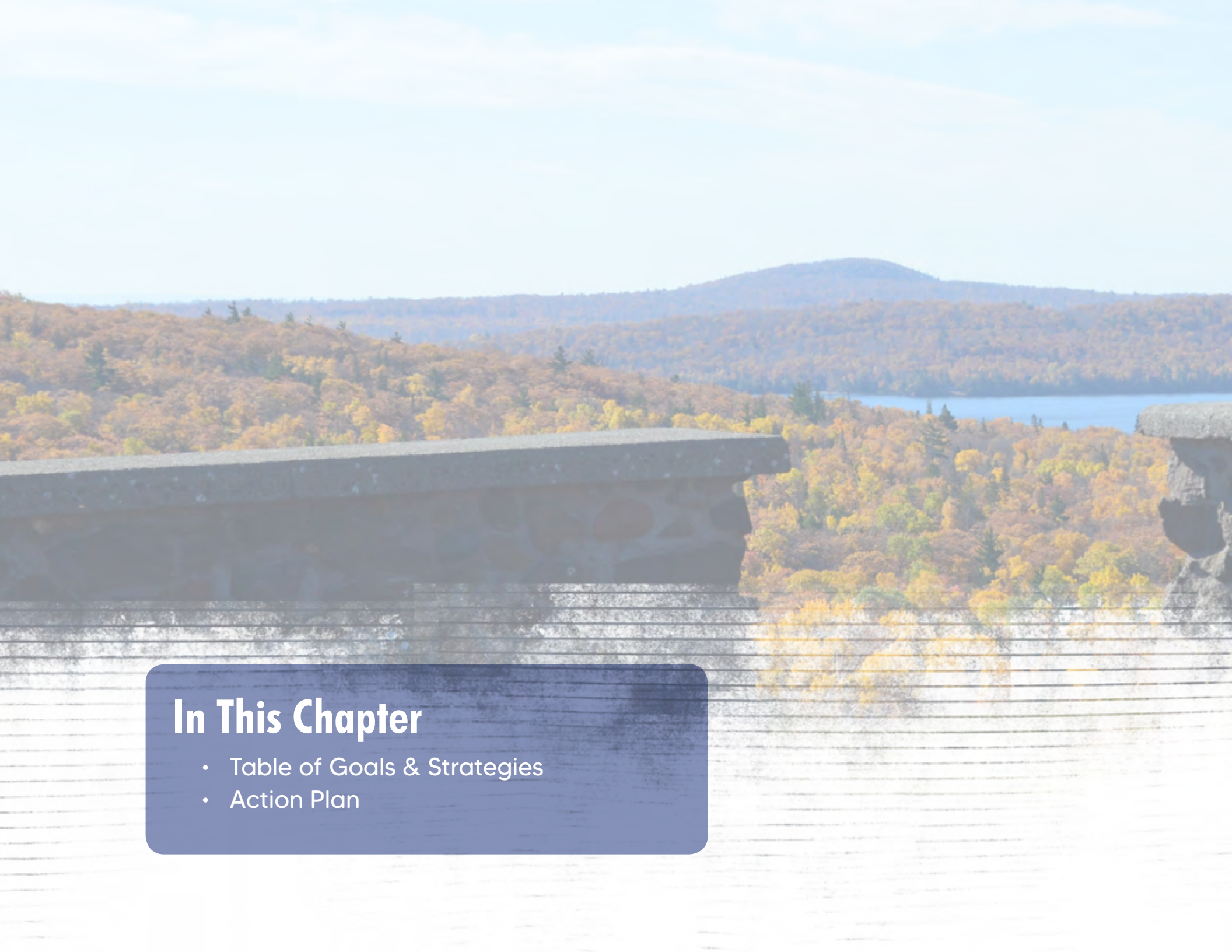
Strategy 5.3 Prioritize restoration and protection of natural/ nature based infrastructure like wetlands, dunes and coastal forests to promote a resilient coast.

Strategy 5.4 Review the current zoning ordinance and consider updates per the criteria for coastal communities strategies; consider setbacks to prevent development in high-risk zones, prevent erosion and protect natural areas.

Strategy 5.5 Create an Online (or other) reporting tool for shoreline property owners to "self check" their shoreline health and report hazards to the local government.



FIGURE 11.6 Overlook at Brockway Mountain



In This Chapter

- Table of Goals & Strategies
- Action Plan



12 implementation

Brockway Mountain Overlook

Implementation & Action Plan

The Master Plan is a guide for the Keweenaw County elected and appointed officials to follow. The Plan presents many Goals and Strategies to implement. Some strategies require funding, others are policy related and low cost. Implementation will require time, patience and perseverance. The Master Plan should be referred to for all County decisions.

The Michigan Planning Enabling Act, PA 33 of 2008, requires the Master Plan to be reviewed and updated as follows: At least every 5 years after adoption of a master plan, a planning commission shall review the master plan and determine whether to commence the procedure to amend the master plan or adopt a new master plan. The review and its findings shall be recorded in the minutes of the relevant meeting or meetings of the planning
commission. Master Plan updates must follow the same procedures as preparing and adopting a Master Plan.

The tables below list the Master Plan strategies, identify responsibility for implementation and suggest a timeframe for accomplishing the strategy.

Housing

GOAL 1: Address Housing Supply		
STRATEGY	**PRIMARY RESPONSIBILITY**	**SUGGESTED TIME FRAME**
1.1 Explore opportunities to expand housing opportunities and consider alternate housing formats/types on vacant lands where community water and sewer services are available.	Planning Commission	On-going
1.2 Continue to work with and encourage broadband providers to expand the availability of quality broadband in the County to encourage remote workers to live in the County year-round.	County Board	On-going
1.3 Monitor STR activity, and enact new appropriate STR standards and regulations through the Zoning Ordinance, and enforce the regulations.	Planning Commission	On-going
1.4 Consider opportunities to modify the Zoning Ordinance to encourage duplex and multi-family housing, as well as accessory dwelling units on larger residential properties for long-term workforce rentals.	Planning Commission	1-2 Years
1.5 Activate the Brownfield Redevelopment Authority and consider coupling it with a Land Bank program to facilitate the elimination of blight, strengthening of older neighborhoods and create more housing opportunities.	County Board	1-2 Years

Natural Features/Parks & Recreation Facilities/Public Lands/County Owned Recreational Facilities

GOAL 1: Maintain Keweenaw County parks and recreation facilities to provide the public with safe, usable, and attractive recreational opportunities.		
STRATEGY	**PRIMARY RESPONSIBILITY**	**SUGGESTED TIME FRAME**
1.1 Replace/upgrade aging facilities and equipment.	County Board and Road Commission	On-going
1.2 Provide and maintain appropriate signage for each park or facility.	County Board and Road Commission	On-going
GOAL 2: Engage the community when planning for improving parks and adding new park facilities.		
2.1 Promote citizen input when making decisions related to recreation facilities.	County Board	On-going
2.2 Continue to collaborate with the County's recreation partners, stakeholders and community groups who volunteer to assist the County maintaining, creating, or improving recreation facilities and programs.	County Board	On-going
2.3 Continue to seek grants from the State of Michigan and continue to ask local groups and individuals to fund the local match requirements for those grants.	County Board	On-going
GOAL 3: Improve existing recreation facilities to increase ADA and Universal Access where appropriate.		
3.1 Make accessibility improvements so that all facilities meet ADA and Universal Access requirements.	County Board and Road Commission	On-going
GOAL 4: Promote recreational programming and recreation facilities that help people overcome social isolation, especially in the winter season, as people who are fit and socially engaged are healthier, happier, and live longer.		
STRATEGY	**PRIMARY RESPONSIBILITY**	**SUGGESTED TIME FRAME**
4.1 Continue to work with community groups and individuals who promote activities that encourage social engagement near where people live.	County Board	On-going
4.2 Consider opportunities for development of an indoor fitness and recreation facility.	Planning Commission	3-5 years

GOAL 5: Collaborate with other local units of government, stakeholders and special interest groups to offer improved recreational opportunities.		
STRATEGY	**PRIMARY RESPONSIBILITY**	**SUGGESTED TIME FRAME**
5.1 Be open to any local government and organized group that seeks partners to jointly develop new recreation trails or facilities.	County Board	On-going
5.2 Cooperate with KORC efforts to establish a new trailhead, parking, and trail to access Bare Bluff and the Mouth of the Montreal River.	County Board	1-5 years
5.3 Collaborate with the Keweenaw Bay Indian Community (KBIC) to develop co-management agreements, traditional ecological knowledge (TEK), and the protection of specific cultural landscapes or archaeological sites.	Planning Commission and County Board	2-5 years
GOAL 6: Implement the Keweenaw County Recreation Plan projects identified in the Recreation Plan 2025-2029.		
6.1 Appoint a permanent Recreation Committee or Commission as recommended in the Recreation Plan. Or, consider making the proposed Heartlands Recreation and Natural Resources Authority responsible for all County parks and recreation facilities.	County Board	2 years

County Infrastructure, Public Facilities, Safety & Emergency Services

GOAL 1: Work with the Keweenaw County Sheriff's Department and the Michigan State Police to encourage adequate police protection, and maintain/fund local capacity for fire protection and first responders.		
STRATEGY	**PRIMARY RESPONSIBILITY**	**SUGGESTED TIME FRAME**
1.1 Continue to recruit and train Volunteer Firefighters and Medical First Responders.	County Sheriff	On-going
1.2 Support the 911 Emergency System.	County Board	On-going
1.3 Continue to support an effective emergency response to all areas of the County by Keweenaw Search and Rescue, Emergency Medical Responders, Firefighters, Sheriff's Department, and State Police.	County Sheriff	On-going
1.4 Require that all access roads to residences and businesses be accessible to emergency vehicles.	Planning Commission	1-2 years
1.5 Complete the Emergency Services Building in Mohawk.	County Sheriff	1-2 years

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
1.6 Continue to explore and pursue options for financing, including federal and state grants, foundations, and special assessments.	County Board	On-going
1.7 Continue to collaborate with regional jurisdictions for mutual aid services, such as fire and police protection.	County Sheriff	On-going
1.8 Work with Michigan State legislators to create a tourism taxing tool like Wisconsin's ***Premier Resort Area Tax***, which allows local units of government to impose a sales tax on goods, services, and lodging, and then use the revenues to pay for infrastructure and public safety costs.	County Board	On-going
GOAL 2: Work to improve collaboration and cooperation between the County and Townships		
2.1 Lead an effort to identify and study opportunities to cooperate by hosting a regular regional meeting of Township and County elected officials, Planning Commissions, other boards, and staff.	Planning Commission	1-2 years
GOAL 3: Resiliency		
3.1 Plan for and coordinate emergency response and relief activities in the face of man-made or natural disasters.	County Sheriff	On-going
GOAL 4: Preserve the Keweenaw County Courthouse		
4.1 Continue to seek funding opportunities to preserve and improve the Courthouse, including appropriate window replacement and a fire suppression system.	County Board	On-going
4.2 Keweenaw County should develop a Capital Improvements Plan that identifies needed major expenditures and funding sources for projects for the next six (6) years, to be updated annually.	Planning Commission and County Board	On-going

Transportation

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
GOAL 1: Maintain and upgrade existing roads		
1.1 Continue to implement road and street paving in the County.	Road Commission	On-going
1.2 Review current zoning standards for private roads to ensure they meet minimum requirements for public safety.	Planning Commission	1-2 years
GOAL 2: Improve non-motorized/pedestrian facilities.		
2.1 Continue the policy of widening shoulders on County roads for non-motorized transportation.	Road Commission	On-going
2.2 Identify opportunities to create non-motorized trails in and around the urbanized areas of Allouez Township.	Planning Commission & Township	3-5 years
2.3 Look for opportunities to create pedestrian facilities in along M-26 in the Eagle Harbor village area, and along US 41 in Copper Harbor.	Planning Commission & Township	On-going
GOAL 3: Improve Brockway Mountain Drive		
3.1 Look for non-traditional transportation, economic development, and legislative funding for improving Brockway Mountain Drive.	Road Commission & County Board	On-going
GOAL 4: Maintain highway traffic capacity and scenic resources in Keweenaw County		
4.1 Consider the access management standards in the Zoning Ordinance when reviewing site plans and zoning approvals.	Planning Commission	On-going
4.2 Consider adopting overlay zoning regulations to preserve scenic, historic and cultural resources along the US 41 corridor.	Planning Commission	1-2 years
4.3 Continue and expand the unique wayfinding signage system in Keweenaw County.	Road Commission	On-going

Economic Development

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
GOAL 1: Embrace tourism as the primary economic driver in the County.		
1.1Focus new commercial and mixed use development in existing developed areas, or adjacent lands, where utilities infrastructure is available or suitable soils allow for on-site infrastructure.	Planning Commission	On-going
1.2 Partner with organizations to improve access, trailheads and public facilities that support tourism.	County Board	On-going
GOAL 2: Participate in and support area-wide economic development activities.		
2.1 Keweenaw County should continue to support the Keweenaw Economic Development Alliance.	County Board	On-going
GOAL 3: Encourage and participate in local redevelopment efforts		
3.1 Re-activate the County Brownfield Redevelopment Authority and establish a County Land Bank to encourage redevelopment, infill development, and community revitalization.	County Board	1-2 years
3.2 Support efforts to revitalize the Former Calumet Air Force Base at Mount Horace Greeley for a variety of uses.	County Board	On-going
3.3 When updating the County Zoning Map, consider expanding areas for manufacturing and business development in the developed area of Allouez Township.	Planning Commission	1-2 years
GOAL 4: Enhance quality of life opportunities.		
4.1Continue work to strengthen neighborhoods, eliminate blight, improve recreation opportunities, foster the development of new housing, and support business district improvements in communities.	Planning Commission & County Board	On-going
4.2 Encourage community beautification and placemaking projects.	Planning Commission	On-going

Future Land Use & Zoning Plan

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
GOAL 1: Provide opportunities for limited and controlled development that does not change the essential character of the land or exceed the carrying capacity of the County.		
1.1 Identify properties suitable in the Allouez Township developed area for future residential land use and explore opportunities for developing a variety of housing options in this area.	Planning Commission	1-2 Years
1.2 Locate new development in or near existing developed areas and communities to promote an efficient and compact pattern of development, reduce the negative effects of sprawl, and reduce infrastructure and service costs.	County Board	On-going
1.3 Carry out a comprehensive review and update of the Keweenaw County Zoning Ordinance.	Planning Commission	1-2 Years
GOAL 2: Foster a distinctive, attractive community with a strong sense of place.		
2.1 Ensure that new development or redevelopment is compatible with the scale and architecture of existing properties, while preserving existing natural features as much as possible throughout the County.	Planning Commission	On-going
GOAL 3: New development must be consistent with the vision of the County.		
3.1 Continue to commit to the protection and preservation of the County natural resources such as clean air, open space, woodlands, water resources, and environmentally sensitive areas while maintaining a balance between economic opportunity, quality-of-life, natural biodiversity, and sustainability of life support systems.	Planning Commission	On-going
3.2 Continue to enforce regulations to restrict and control inappropriate development in areas where there are steep slopes, soil erosion possibilities, and shorelines.	Planning Commission	On-going

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
3.3 Preserve the rural and scenic character of the County by discouraging land splits and encouraging rural residential cluster/conservation development where possible.	Planning Commission	On-going
3.4 Enforce existing zoning regulations to preserve and enhance riparian buffers along water bodies in the County to protect water quality, aquatic and wildlife habitat, slow runoff, and allow a greater percentage of water to return to groundwater.	Planning Commission	On-going
3.5 Consider an overlay or stand-alone **Archaeological Protection Ordinance** regulations to protect known or discovered archaeological sites.	Planning Commission	3-5 Years

Resiliance: sustainability, conservation & coastal management

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
GOAL 1: Protect and enhance the existing natural resources.		
1.1 Annually review environmental provisions (floodplains, wellhead protection, shoreline buffers, steep slopes, etc.) in the existing zoning ordinance and update as needed.	Planning Commission	1-2 Years
1.2 Support adding/improving tree protection and/or tree replacement requirements in the existing zoning ordinance.	Planning Commission	On-going
1.3 Encourage the use of natural features like rain gardens, vegetated swales, and native vegetation to manage runoff, reduce flooding, and clean water.	Planning Commission	On-going
1.4 Collaborate with the Keweenaw Bay Indian Community to incorporate sustainable land management practices and tribal lifeways, such as mapping and protecting traditional hunting, fishing, and gathering spaces, cultural and heritage sites, and protecting critical fish spawning grounds like those impacted by stamp sands, in order to create a more robust ecological framework.	Planning Commission	On-going
GOAL 2: Promote and raise awareness for sustainable design practices.		
2.1 Support requirements for sustainable design and low-impact development (LID) practices in the zoning ordinance. Consider innovative stormwater techniques and green building technologies as discussed in this chapter 11.	Planning Commission	On-going
2.2 Seek and promote funding opportunities for sustainable development practices.	Planning Commission	On-going
2.3 Incorporate sustainable design and low-impact development (LID) practices into all public improvement projects; such as public parking facilities, right-of-ways, parks or structures.	County Board & Road Commission	On-going
2.4 Integrate green stormwater infrastructure into parks or other public projects.	County Board & Planning Commission	On-going
GOAL 3: Conserve Energy Resources.		
3.1 Work so that all public lighting (street lights, building lights, etc.) are converted to LED, where possible.	County Board & Planning Commission	On-going

STRATEGY	PRIMARY RESPONSIBILITY	SUGGESTED TIME FRAME
3.2 Utilize more robust architectural standards for both new construction and renovations to include building features that save energy.	Building Department	On-going
GOAL 4: Support and continue conservation efforts.		
4.1 Continually identify and maintain maps of environmentally sensitive areas, conserved areas and other natural resources.	County Board & Planning Commission	On-going
4.2 Restore functioning wetland, forest areas, lake and streams to provide connected habitats and waterways to increase resiliency, particularly in areas altered by past disturbances.	County Board & Planning Commission	On-going
4.4 Enhance public access and awareness to nature by creating, supporting and promoting accessible nature preserves and improved trail infrastructure.	Planning Commission	On-going
GOAL 5: Develop a County-wide coastal management plan		
5.1 Prepare a coastal (shoreline) assessment in Keweenaw County by collecting data	Planning Commission	3-5 years
5.2 Develop a mission statement and vision for the Keweenaw coast that includes low-impact development, setbacks, overlay zones and environmental studies.	Planning Commission	3-5 years
5.3 Prioritize restoration and protection of natural/nature based infrastructure like wetlands, dunes and coastal forests to promote a resilient coast.	Planning Commission	3-5 years
5.4 Review the current zoning ordinance and consider updates per the criteria for coastal communities strategies; consider setbacks to prevent development in high-risk zones, prevent erosion and protect natural areas.	Planning Commission	1-5 years
5.5 Create an Online (or other) reporting tool for shoreline property owners to "self check" their shoreline health and report hazards to the local government.	Planning Commission	3-5 years