

THE CITY OF MARQUETTE



Michigan Coastal Community Working Waterfronts

A CASE STUDY

THE CITY OF MARQUETTE

Michigan Coastal Community Working Waterfronts

This case study was compiled as part of a set of 11 working waterfront case studies in coastal communities. For more information on the series, please see the Introduction, Value and Context, Waterfront Land Use, Best Practices, and Recommendations and Next Steps sections.

OTHER CASE STUDIES IN THIS SERIES:

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Marquette from lower harbor. Elizabeth Durfee

INTRODUCTION

Many coastal communities have areas known as working waterfronts — waterfront lands, waterfront infrastructure and waterways that are used for water-dependent uses and activities. These uses may include ports, small recreational boat and fishing docks and other types of places or businesses where people use and access the water. Coastal communities' working waterfronts offer economic and cultural value, contribute to a community's identity and are intrinsically tied to a region's natural resources.

A number of factors — such as population change, competing land uses and development pressure, fluctuations in water levels, changes in

fish stocks and regulations, aging and inadequate infrastructure, decline in waterfront industry and economic recession — threaten the viability of water-dependent businesses and access to the public trust waters. Left unchecked, these threats can result in the slow loss of working waterfronts and permanent conversion of waterfront property to non-water-dependent uses.

Active waterfront planning and the sharing and implementation of tools, resources and strategies for maintaining and protecting working waterfronts can ensure access for water-dependent uses and activities, as well as preserve options for future waterfront uses.

This case study:

- Characterizes one of many working waterfronts found throughout Michigan's diverse coastal communities.
- Identifies existing waterfront amenities, waterfront history, waterfront zoning and land area occupied by water-related uses.
- Highlights examples of waterfront challenges, threats and opportunities as well as tools and strategies for maintaining the working waterfront.

SUMMARY

Marquette, Michigan was established in the mid-1800s along the southern shore of Lake Superior in the Upper Peninsula. The discovery of iron ore in the region led to the development of forges, rail and a shipping dock by 1860, and the city emerged as a shipping center.

Marquette has approximately
15 miles of frontage along Lake
Superior and the Dead River. With
a growing population of more than
21,000 people, Marquette is the
largest city in the Upper Peninsula.
The city is a regional center for higher
education, health care, recreation
and retail and a popular multi-season
tourist destination.

Marquette Harbor is a federally authorized deep draft commercial, cargo and recreational harbor. The harbor is a major regional receiving port of the Great Lakes for limestone, coal and iron ore with approximately 1.2 million tons of material passing through the harbor annually. The city's waterfront amenities include two public marinas, boat ramps, a yacht club and numerous waterfront parks and beaches. One of the city's greatest natural assets is Presque Isle Park, a 323-acre forested peninsula at the

northern tip of the city. There is one remaining commercial fishing business in Marquette.

Zoning adjacent to Lake Superior and the Dead River consists of approximately 65 percent open space, 17 percent industrial, 8 percent residential, 3 percent mixed uses and 7 percent other uses. Land use within a 1000-foot buffer of the waterfront is comprised of 35 percent open space, 22 percent industrial, 21 percent residential, 9 percent commercial, 5 percent mixed use and 7 percent other zoning districts.

Parcels that provide public access account for approximately 50 percent of the waterfront. Parcels with water-dependent uses and water-dependent industrial uses or utilities comprise 10 percent and 13 percent of the waterfront, respectively.

Marquette's waterfront has undergone significant transformation from an industry-dominated waterfront to one characterized by a mix of industrial and recreational uses. As industrial shipping declined and coal and rail yards closed, the city needed a new vision for its waterfront. In partnership with Michigan Sea Grant, Marquette

participated in an EPA/NOAA Smart Growth Implementation Assistance for Coastal Communities pilot program. The process prompted community visioning and led to the creation of two waterfront form-based code districts that reoriented and reconnected downtown Marquette to Lake Superior.

Additionally, the city has integrated waterfront planning into the its master plan and has commissioned marina and public waterfront access facilities master plans. Adaptive reuse of the industrial waterfront has come with some challenges, including aging infrastructure and restrictions on the redevelopment of the historic ore dock, for example.

Best practices for maintaining access to the waterfront for the public and water-dependent uses include:

- Establishing waterfront form-based code districts.
- Implementing smart growth.
- Regulating land use along waterfront roads to maintain access.
- Engaging the community in planning and visioning.
- Placemaking.



NOAA

FORM-BASED CODE IS AN ALTERNATIVE TO CONVENTIONAL ZONING THAT USES PHYSICAL FORM, RATHER THAN SEPARATION OF USES, TO REGULATE AND ESTABLISH STANDARDS FOR THE BUILT ENVIRONMENT.



Elizabeth Durfee

PLACEMAKING IS PLANNING, DESIGNING AND MANAGING PUBLIC SPACES TO MEET THE NEEDS AND DESIRES OF RESIDENTS AND VISITORS AND ESTABLISH A COMMON VISION.

MARQUETTE, MI





FIGURE 1. STATE OF MICHIGAN AND MARQUETTE COUNTY (LEFT) AND AERIAL IMAGE OF THE CITY OF MARQUETTE WITH LAKE SUPERIOR AND THE DEAD RIVER.

1 mile N

CONTEXT

Jurisdiction / Government City

Region Upper Peninsula

County Marquette

Micropolitan Statistical Area Marquette Micropolitan Statistical Area

Land Area 7,292 acres / 11.4 square miles

Watershed/Subwatershed Lake Superior / Dead-Kelsey

Dominant Land Use of Subwatershed Forest

Adjacent Bodies of Water Lake Superior, Dead River

Types of Water Body Great Lake, River

Percent of Land Area within the CZM 19%

Population (2010) 21,355

Percent of County's Population 32%

Percent of County's Land Area <1%

Urban / Suburban / Rural Urban

Federally Authorized Harbors/Projects Marquette Harbor

Type of Port Commercial, Cargo, Recreation



Michigan Sea Grant

COMMUNITY PROFILE

POPULATION

- The population of Marquette declined 9 percent from 2000 to 2010. In 2010, the city's population density was 1,874 persons/square mile.
- The population of Marquette County, also decreased by 4 percent from 2000 to 2010.
- The median age in Marquette decreased from 31 in 2000 to 29 in 2010.

EDUCATION

- Of the city's population age 25 years and older (58% of the city's total population), 92 percent have a high school degree or higher and 39 percent have a bachelor's degree or higher.
- Of the county's population age 25 and older (65% of the county's total population), 92 percent have a high school degree or higher and 30 percent have a bachelors degree or higher.

INCOME

■ The median household income between 2006 and 2010 in the City of Marquette was \$36,797, compared to the median household income of \$45,130 in Marquette County.

EMPLOYMENT

Of the city's population over age 16:

- 59 percent are in the labor force and employed and 6 percent are unemployed.
- 68 percent are employed in the top 3 (of 13 total) industries classified in the American Community Survey: educational services and health care and social assistance (35%); retail trade (17%); and arts, entertainment and recreation and accommodation and food services (16%).
- 34 percent are employed in management, business, science and arts occupations, 28 percent in sales and office occupations, 26 percent in service occupations, 6 percent in production, transportation and material moving occupations and 6 percent in natural resources, construction and maintenance occupations.

Marquette County Great Lakes Jobs Snapshot (NOAA)

- In 2009, Great Lakes related jobs accounted for 10 percent of total jobs in Marquette County.
- Great Lakes related jobs provided employment for 2,598 people,
 \$29 million in wages and \$62 million in goods and services.

HOUSING

- From 2000 to 2010, the total number of housing units in Marquette increased by 7 percent and the percent occupancy of housing units decreased by 1 percent.
- Owner occupied housing units decreased by 1 percent and renter occupied housing units increased by 7 percent from 2000 to 2010.
- Residential construction in Marquette County increased from 220 buildings in 1990 to 480 buildings in 2000 and then declined to 180 buildings in 2010.



lave Stensaas

COMMUNITY OVERVIEW

The City of Marquette is located on the north coast of the Upper Peninsula along the southern shore of Lake Superior. The city is approximately 162 miles northwest of the Mackinac Bridge and 250 miles east of Duluth, Minn. Marquette is the county seat of Marquette County and is the largest city in the Upper Peninsula.

Marquette has an extensive waterfront characterized by a mix of industrial, recreational and commercial uses, open space and parks. Marquette's urban development extends along the eastern side of the city adjacent to Lake Superior and east-west along U.S. 41 and Route 28. The city's historical, commercial core is surrounded by residential development. Over the last 12 years, the city has undergone significant waterfront revitalization efforts to establish a stronger connection between the downtown and the waterfront, increase recreational opportunities and parks space along the waterfront and to protect its water resources.

Since the decline in the mining industry, the city's workforce has transitioned to service-oriented industries including Marquette General Hospital and Northern Michigan University. Today Marquette is a regional center for higher education, health care, recreation and retail.

The Presque Isle Power Plant, built in Marquette by the Cleveland-Cliffs Iron Company in 1955, generates 90 percent of the Upper Peninsula electricity and 12 percent of the electricity in the Wisconsin energy system.

Marquette is a popular multi-season tourist destination with recreational opportunities such as fishing, kayaking and skiing, and attractions including museums, galleries, fall foliage and the annual UP200 sled dog race. One of the city's greatest resources is Presque Isle Park, a 323-acre forested peninsula at the northern tip of the city on Lake Superior.

CAPACITY

Marquette operates under a commission and city manager form of government with a city manager and seven commissioners. Marquette has a Planning Department, a city planner and a Parks and Recreation Department that manages and maintains the Cinder Pond Marina and Presque Isle Marina.

The city has a number of boards and authorities including a Harbor Advisory Committee, Parks and Recreation Advisory Board, Presque Isle Park Advisory Committee, Brownfield Redevelopment Authority, Downtown Development Authority and a nine-member Planning Commission. In addition to a Community Master Plan, the city has a Downtown Development Authority Plan, Parks and Recreation Plan, a Marinas Report and multiple harbor studies.



Elizabeth Durfee



Dave Stensaas



ave Stensaas

WATERFRONT HISTORY

In 1849, the Village of Worcester was established as a port in the area that is now Marquette. The village was renamed Marquette in honor of Father Jacques Marquette in 1850. Marquette was incorporated as a village in 1859 and as a city in 1871.

The Ottawa, Potawatomi and Chippewa tribes lived in the region long before the first Europeans arrived in 1622. Early Europeans recognized the potential for fur trading and established trading posts with companies including the Company of New France and Hudson's Bay Company. Fur trading continued through the early 1800s.

Deposits of iron were discovered in the region in the 1840s and a forge was constructed at the mouth of the Carp River. In 1847 the Jackson Mining Company formed, followed by the Marquette Iron Company and the Cleveland Iron Mining Company (later named Cleveland-Cliffs). In 1855 an American Standard locomotive arrived in the Marquette Harbor, enabling the shipment of iron ore by rail. This led to the construction of the world's first pocket ore dock in 1857. In 1858 the Lake Superior Foundry Company opened. By this time, there was major iron ore extraction in the region. The first dock for shipping U.P. iron ore from the Marquette Range opened in Marquette in 1859. With water and rail transportation connections to the Great Lakes Region, Marquette emerged as a shipping center.

Marquette Harbor Lighthouse, built in 1853 and replaced in 1866, is the oldest significant structure in the city. In 1882 the Stannard Rock Lighthouse was completed and replaced a day beacon placed on the reef in 1868 after the Soo Locks opened.

Shipping and the iron ore industry dominated Marquette's economy until the 1880s when the city sought to diversify its economy and opened Northern Michigan University.

The city's Lower Harbor ore dock was built in 1932 and operated until 1971. Portions of the dock have since been dismantled and removed. In early 2000, a boardwalk called the Rosewood Walkway was constructed allowing pedestrians to walk along the waterfront and view the dock. On the north side of the city, The Lake Superior and Ishpeming Railroad ore dock in Upper Harbor began loading iron ore into Great Lakes freighters in 1912 and remains active today. The ore dock has 200 pockets, a capacity of 50,000 tons and loads approximately 400 times a year. Though the city continues to ship ore, industry no longer dominates its Lake Superior shore and the city's waterfront has transformed dramatically in recent decades.

Commercial fishing in Marquette peaked in the 1940s. Today, Thill's Fish House is the city's only remaining commercial fishing business.



Anchor Line Dock, Marquette, MI c1908. Library of Congress American Memory



What was then the coal dock, is now the location of Mattson Lower Harbor Park (2004). Marguette Community Master Plan



The ore dock ceased operating in 1971. Michigan Sea Grant

WATERFRONT SUMMARY

Waterfront land use on the north and south sides of Marquette consists of open space and parks along with residential and industrial uses. A mix of form-based code districts comprises the waterfront adjacent to the downtown. Land use along the Dead River within the Coastal Zone Management Boundary is primarily industrial.

Marquette Harbor is a federally authorized deep draft commercial, cargo and recreational harbor. The harbor consists of over 4,500 feet of maintained breakwater structure and a half mile long navigation channel with a project depth of 27 feet at the channel entrance and inner basins. Dredging is required on an infrequent basis. The harbor is a major regional receiving port on the Great Lakes for commodities including limestone, coal and iron ore. In 2008, over 1.2 million tons of material passed through the harbor. Shipping supports more than 260 jobs and generates an excess of \$41 million in direct revenue and \$12 million in personal income annually. Marquette Harbor is a Harbor of Refuge and home to the U.S. Coast Guard Station Marquette.

The city of Marquette has two public marinas: Cinder Pond Marina, which is located in the Lower Harbor and has 101 seasonal and transient slips; and the Upper Harbor's Presque Isle Marina with 97 slips. Both marinas provide fuel, launching, docking and additional support facilities for recreational boats. Boaters can also launch at Ellwood A. Mattson Lower Harbor Park, a 22-acre park with a boat ramp, illuminated waterfront walkway and fishing area located north of the ore dock.

Additional waterfront parks in the city include Shiras Park, McCarty's Cove, South Beach Park and Presque Isle Park. Both McCarty's Cove and South Beach Park feature sandy shores and swimming beaches. Presque Isle Park at the northern tip of the city is one of the city's greatest natural assets. Originally a government lighthouse reservation, the park was deeded to the city in 1886 and is now accessible to the public by bike, automobile and foot. The Holly S. Greer Shoreline Bike Path and greenspaces including Lakeside Park and Father Marquette Park provide additional opportunities to view the waterfront. Camping along the Dead River is offered in Tourist Park.

Marquette's commercial fishing business, Thill's Fish House, operates two trap net boats and a small retail market at the docks at Founders Landing.

Waterfront recreational opportunities in Marquette include charter fishing, Marquette Harbor cruises, boat rentals and sea kayak instruction. The Lake Superior Hiawatha Water Trail runs from Munising to Marquette.



Marquette Yatch Club. Elizabeth Durfee



LS&I ore dock in Marquette's Upper Harbor. Elizabeth Durfee



Thill's Fish House. Elizabeth Durfee

CHALLENGES AND ACTIONS

In spite of the integral connection between Marquette's waterfront, economy and identity, the city's downtown was physically oriented away from the waterfront. As industrial shipping declined and coal and rail yards closed, the disconnect between the waterfront, and the nearby downtown and the vacant land between the buildings and the water became more apparent. The city's waterfront — characterized in part by inadequate public access, abandoned industrial land and infrastructure, brownfields and outdated facilities — was underutilized and added little value to the nearby downtown business district. Marguette's Lower Harbor was an eyesore. Additionally, development that was occurring near the waterfront was characteristic of that of cities in transition: haphazard and failing to blend with surrounding uses. City leaders realized that without a concerted revitalization effort, the city's waterfront would continue to slowly deteriorate.

In the late 1990's the city initiated a long-term planning effort with a Lakeshore Taskforce of community members and property owners that sought to identify a vision and strategic plan for the waterfront. In 2000, the city acquired and prepared a planned unit development (PUD) plan to redevelop the 25-acre Founders Landing property. Following this, the city commissioned a Lower Harbor study and made improvements to public open space in 2002. In 2003, Marquette planners engaged the community to define a vision for the future of the city's waterfront. In partnership with Michigan Sea Grant, the city participated in the EPA/NOAA Smart Growth Implementation Assistance for Coastal Communities pilot program in 2006. The program

provided the city with technical assistance to produce a draft form-based code (regulations that are adopted into city or county law that use physical form rather than the separation of uses as in conventional zoning). The form-based code guided downtown and waterfront redevelopment to create a more economically viable place to live, work and visit as well as to protect water resources in Marquette. Form-based code allowed the city to open up the downtown to the waterfront, address the scale and orientation of buildings, minimize sprawl, reduce environmental impacts and create a pedestrian-friendly downtown and waterfront.

In 2008 the city commissioned a Marina and Public Waterfront Access Facilities Master Plan and initiated multi-year reconstruction and redevelopment projects. A portion of Founders Landing was sold to local developers for a new hotel in 2009. In 2011, the city prepared a five-year Recreation Master Plan and hosted a Smart Growth Readiness Assessment Tool workshop with Michigan State University Extension. The city is currently updating its master plan and continues to implement the harbor master study plan.



View of historic ore dock from boardwalk. Elizabeth Durfee



New development along Lake Superior. Elizabeth Durfee



Marquette Dock Association docks. Elizabeth Durfee

ZONING ORDINANCE

ZONING DISTRICT	INTENT OF DISTRICT	PRINCIPLE USE	CONDITIONAL USE
Industrial	Intended to regulate the establishment of industrial uses in the city to prevent the deterioration of the environment to protect the desired qualities of adjoining districts and to exert a minimum nuisance on adjacent uses within this district	All general business uses with the exception of residential and day care, wholesaling operations, warehousing and distributing, light manufacturing	Heavy manufacturing, major repair and maintenance operations, bulk storage
Conservation and Recreation	Intended to preserve the character of land in the city which have outstanding scenic and/or recreational qualities, to prevent development of land which has great ecological value or where there are natural hazards to development to preserve open areas for forestry, agriculture and recreation and to control the construction of structures along the shoreline of Lake Superior	Agriculture, including forestry, land, water and wildlife conservation and/ or education activities	Land intensive recreational uses, port facilities and docks excluding warehousing and outdoor storage of materials, goods, or products, natural resources extraction operations, structures between the lake shoreline and pavement of the nearest public street or highway
Deferred Development	Intended to reserve large undeveloped areas of the city for future development by prohibiting unplanned, scattered development which would tend to divide these areas into smaller, more difficult to develop parcels	Agriculture, including forestry, land, water and wildlife conservation and/ or education activities	
DISTRICT	INTENT OF DISTRICT DESIGN	PERMITTED USES IN SUB-DISTRICTS	*AS DEFINED BY THE FBC:
Downtown Waterfront Form-Based Code (DWFBC)	Designed to foster infill redevelopment in a sustainable mixed-use pattern as part of a vibrant, diverse urban and working waterfront district; Intended to promote traditional urban form and a lively mix of uses, allowing for shop fronts, sidewalk cafes and other commercial uses at the street level, with wide sidewalks and canopy shade trees, overlooked by upper story residences and offices, while maintaining a working waterfront; Intended to provide physical access and a sense of connection to Lake Superior in the historic downtown	DWFBC general 3, general 5, working waterfront zone, workshop flex, founders 5: residential, commerce and light manufacturing* DWFBC north lakeshore frontages: residential*	Light industrial uses: light manufacturing, waterfront related repair and maintenance, mooring and docking of boats, winter storage of watercraft between the dates of October 1st and May 30th
DISTRICT	INTENT OF DISTRICT DESIGN	INTENT OF WATERFRONT-RECREATION CONSERVATION SUB-DISTRICT	
South Marquette Waterfront Form-Based Code (SMWFBC)	Designed to foster sustainable infill redevelopment in a vibrant, mixed-use, pedestrian-friendly pattern that encourages diverse and compact development	Intended for the preservation of public access to the Lake Superior waterfront and to provide for recreation and conservation activities	

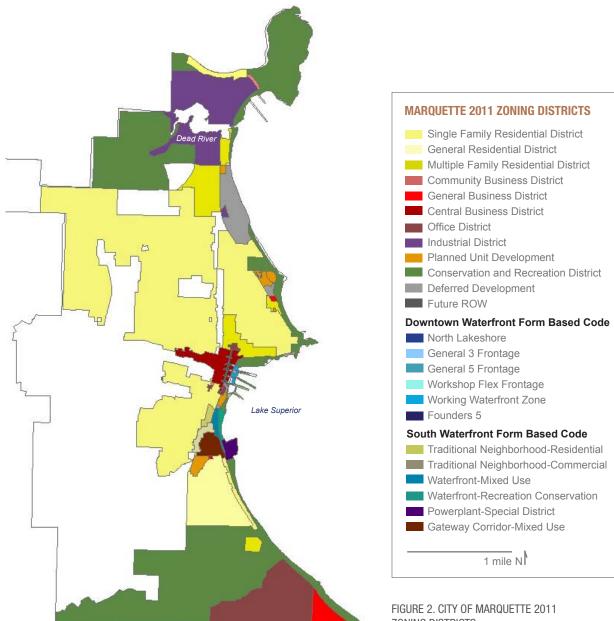
TABLE 1. INTENT, PERMITTED USES AND SPECIAL USES OF ZONING DISTRICTS AND FORM-BASED CODE SUB-DISTRICTS THAT ACCOMMODATE WATER-DEPENDENT USES AND/OR PUBLIC ACCESS.

ZONING

The city of Marquette has 10 traditional zoning districts, a planned unit development (PUD) district and two waterfront form-based code districts. The downtown waterfront form-based code and the south waterfront form-based code districts have six subdistricts. The city also has a shoreline erosion overlay district and designated future right-of-way zone.

The city's waterfront form-based code districts are designed to support sustainable mixed use, infill and redevelopment as part of a vibrant, diverse, urban and working waterfront district and promote public access, enjoyment and protection of water resources (Table 1).

A majority of identified water-dependent uses are located in the industrial, conservation and recreation and waterfront form-base code subdistricts (Figure 4).



ZONING DISTRICTS.

ZONING ADJACENT TO WATERFRONT

Eleven zoning districts abut Lake Superior or the Dead River. Open space accounts for 66 percent of the total frontage along Lake Superior and the Dead River. Remaining land use along the waterfront includes industrial (17%); residential (9%); other (7%); and mixed (3%) uses (Figure 3). **MARQUETTE 2011 ZONING DISTRICTS** Single Family Residential District Office District General Residential District Industrial District Multiple Family Residential District Planned Unit Development Community Business District Conservation and Recreation District General Business District Deferred Development Central Business District Future ROW **Downtown Waterfront** South Waterfront Form-Based Code Form-Based Code Traditional Neighborhood-Residential North Lakeshore Traditional Neighborhood-Commercial General 3 Frontage Waterfront-Mixed Use General 5 Frontage Waterfront-Recreation Conservation Workshop Flex Frontage Lake Superior Powerplant-Special District Working Waterfront Zone Gateway Corridor-Mixed Use Founders 5 1 mile N Waterfront Recreation Conservation Conservation and Recreation Power Plant Special District Multiple Family Residential Single Family Residential Working Waterfront Zone Workshop Flex Frontage Deferred Development Public use Area Future ROW Industrial 14.7 miles total frontage length

Open Space 65%

FIGURE 3. MAP OF ZONING ADJACENT TO WATERFRONT AND FRONTAGE BY ZONING CATEGORY.

Mixed Use 3%

Residential 8% Industrial 17%

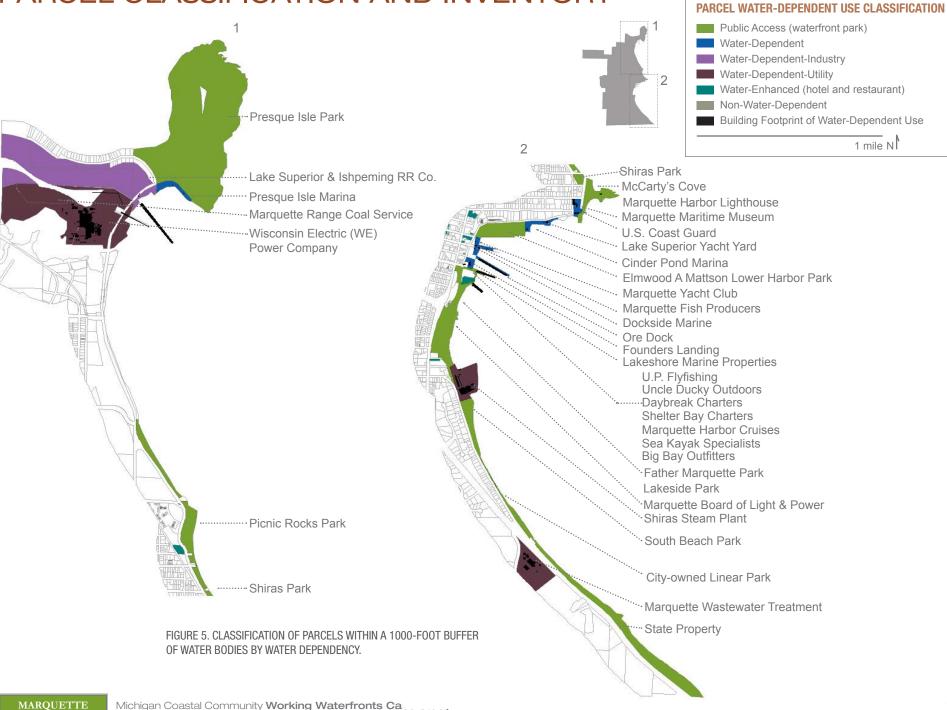
Other 7%

ZONING WITHIN 1000 FEET OF WATERFRONT

There are 24 zoning districts within a 1000-foot buffer of Lake Superior and the Dead River (Figure 4). Land use within the buffer consists of 35 percent open space, 22 percent industrial, 21 percent residential, 9 percent commercial, 7 percent other and 5 percent mixed uses (Figure 4)

9 percent commercial, 7 percent other and 5 percent mixed uses (Figure 4). **MARQUETTE 2011 ZONING DISTRICTS** Single Family Residential District Office District General Residential District Industrial District Multiple Family Residential District Planned Unit Development Community Business District Conservation and Recreation District General Business District Deferred Development Central Business District Future ROW **Downtown Waterfront** South Waterfront Form-Based Code Form-Based Code Traditional Neighborhood-Residential North Lakeshore Traditional Neighborhood-Commercial General 3 Frontage Waterfront-Mixed Use General 5 Frontage Waterfront-Recreation Conservation Lake Superior Lake Superior Workshop Flex Frontage Powerplant-Special District Working Waterfront Zone Gateway Corridor-Mixed Use Founders 5 1 mile N Building Footprint of Water Dependent Use FIGURE 4. MAP OF ZONING AND LOCATION OF WATER-Fraditional Neighborhood Residential DEPENDENT USES WITHIN A 1000-FOOT BUFFER OF WATER BODIES (RIGHT) AND WATERFRONT LAND AREA BY ZONING CATEGORY (BELOW). Recreation Multiple Family Residential Single Family Residential Waterfront Recreation Conservation Community Business General Residential Conservation and General Business Central Business Industrial Office 1.382 acres in 1000-ft buffer Industrial 22% Open Space 35% Residential 21% Commercial 9% Mixed Use 5% Other 7%

PARCEL CLASSIFICATION AND INVENTORY



PARCEL CLASSIFICATION

Parcels that provide public access to the waterfront account for approximately 52 percent of

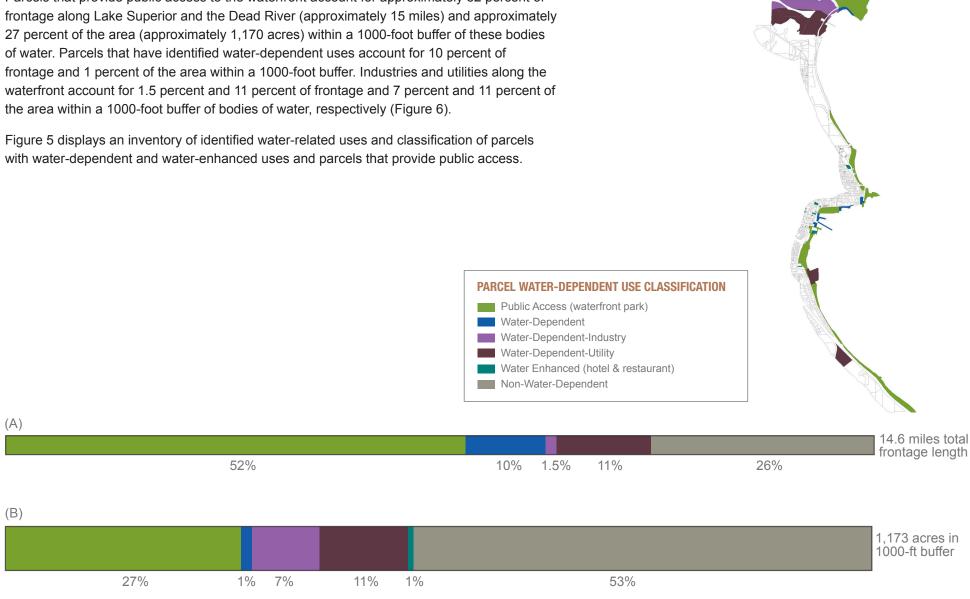
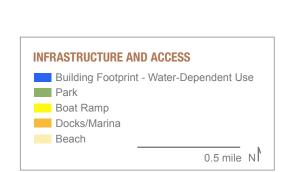


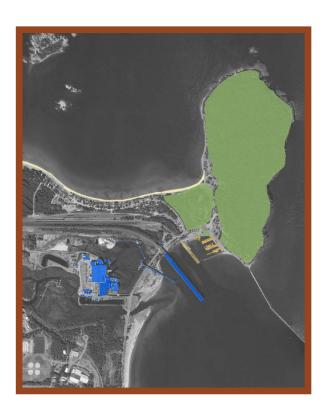
FIGURE 6. PARCEL FRONTAGE (A) AND AREA WITHIN 1000-FOOT BUFFER BY WATER DEPENDENCY CLASSIFICATION (B).

INFRASTRUCTURE AND ACCESS

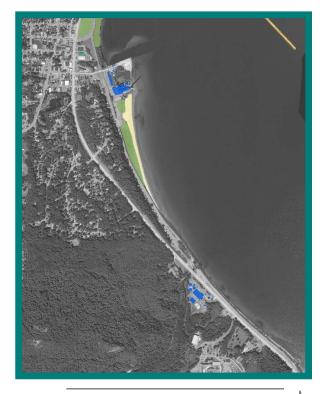
Figure 7 displays aerial imagery with waterfront infrastructure within a 1000-foot boundary of Lake Superior and the Dead River that have identified water-related uses and highlights parks and beaches that provide public access.











1 mile N

FIGURE 7. WATER-DEPENDENT AND ENHANCED USES, DOCKS AND WATERFRONT PARKS ALONG THE WATERFRONT AND WITHIN 1000 FEET OF WATER.

WORKING WATERFRONT SWOT ANALYSIS

There are a number of factors that influence a community's ability to maintain a robust working waterfront. The strengths, weaknesses, opportunities and threats (SWOT) analysis below (Table 2) provides examples of the challenges and opportunities associated with maintaining Marquette's waterfront as a place that provides public access and is well integrated within the community from a planning and physical perspective. A SWOT analysis is a strategic planning tool with four elements: strengths, weaknesses, opportunities and threats.

The analysis identifies the positive, negative, internal and external factors that influence an individual, business, organization or place's ability to achieve an objective. For example, internal factors may include human, physical or financial resources and past activities or programs. External factors may include future trends, the economy, or the physical environment.

STRENGTHS

- Innovative and progressive planning, waterfront form-based code zoning districts
- Waterfront redevelopment and revitalization
- Waterfront parks, Presque Isle Park
- Public access to waterfront
- Harbor and marina plans and studies
- Waterfront industry in the north of the city
- Waterfront Smart Growth workshop and technical assistance grant and workshop
- Waterfront trails
- 2 major harbor areas
- Infrequent dredging needed
- The Lake Superior and Ishpeming Railroad still active
- Tourism, tall ships

WEAKNESSES

- Decline in commercial fishing since the 1940s
- Loss of industry
- Redevelopment/reuse of the ore dock somewhat limited by State Bottomlands Agreement; development of site requires public benefit

OPPORTUNITIES

- Ore dock redevelopment
- Continue partnering with CZPM, Sea Grant, EPA, NOAA
- Superior Watershed Partnership
- Provide guidance on waterfront development for other communities
- Protect existing success with continuous investment
- Continue implementing harbor plans

THREATS

- Aging/damaged infrastructure, loss of critical armor stone protection and loss of core timber cribbing structure
- Residential development pressure along coast

TABLE 2. STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS RELATED TO MAINTAINING MARQUETTE'S WORKING WATERFRONT.

TOOLS, STRATEGIES AND BEST PRACTICE FOR MAINTAINING WORKING WATERFRONTS

ESTABLISH INNOVATIVE ZONING DISTRICTS

Form-based code districts that regulate structure, design and form over land use provide greater flexibility with regard to creating a pedestrian-oriented, mixed-use waterfront district that protects waterfront uses, public access and views of the water. Consider amending zoning ordinances if conventional, use-based zoning is not conducive to meeting the community vision for a walkable, well connected waterfront and downtown.

REGULATE LAND USE ALONG WATERFRONT ROADS

Use the a road as a divider between the public and private realm along a waterfront. Permit public use on the waterside of the road and private development on the inland side.

ENGAGE COMMUNITY IN PLANNING AND VISIONING

Engage the community in planning exercises in advance. Engaging citizens and professionals together can lead to an effective waterfront visioning and strategic planning process.

INCORPORATE PLACEMAKING

Capitalize on the economic value of placemaking — planning, designing and managing public spaces to establish a common vision and meet the needs and desires of residents — to increase both private development and public access to the waterfront as well as create a more walkable downtown that embraces water resources.

ENGAGE IN SMART GROWTH PLANNING

Incorporate Smart Growth planning into community master plans. EPA/NOAA's waterfront Smart Growth planning principles can help guide future development that protects water resources, supports diverse, mixed-used waterfront land uses and promotes visual and physical access to the waterfront. Resources such as EPA/NOAA's Smart Growth Implementation Assistance for Coastal Communities pilot program provide technical assistance for creating form-based code. Participate in Michigan's Smart Growth Readiness Assessment Tool workshop to self-evaluate community planning through the lens of Smart Growth planning.



Boats in the Lower Harbor. Elizabeth Durfee



Bike and walking path along Lake Superior. Elizabeth Durfee



Presque Isle Lighthouse. Elizabeth Durfee

GUIDING PRINCIPLES

MANAGING WATERFRONTS AND WATER-DEPENDENT USES AS AN IMPORTANT ELEMENT OF A SUSTAINABLE COASTAL COMMUNITY

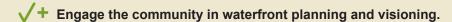
PROCESS-BASED

- Engage diverse stakeholders and local, regional and state partners in waterfront planning.
- Integrate waterfront planning with local and regional master and comprehensive planning.
- Incorporate adaptation planning into waterfront planning.
- Articulate the community's vision for future of the waterfront.

OUTCOME-BASED

- Protect the natural resources that working waterfronts uses are intrinsically tied to and dependent upon.
- Maximize the public benefit of working waterfronts through visual and physical access and amenities.
- Permit compatible mixed uses along the waterfront.
- Emphasize the economic and cultural value of local water-dependent uses.
- Preserve visual and physical access to water resources.
- Balance waterfront land uses to meet the needs of residents, visitors, water-dependent uses and ecological communities.
- Increase resiliency by promoting diverse and flexible water-dependent uses.

CITY OF MARQUETTE



✓+ Preserve access to the waterfront.

✓+ Protect natural resources.

Permit compatible mixed uses along the waterfront.

How does your community stand up?

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