



A CASE STUDY

# THE CITY OF MANISTEE



Michigan Coastal Community Working Waterfronts

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## 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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## PREPARED BY

Elizabeth Durfee  
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North Pierhead Lighthouse from 1st Street Beach. *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

Manistee, Michigan developed in the early 1800's as logging, salt mining and manufacturing city at the mouth of the Manistee River on Lake Michigan in Lower Michigan.

The Manistee Harbor is a regionally important recreation, cargo, industrial and commercial Harbor of Refuge. Approximately half a million tons of material, including coal, sand, gravel and limestone pass through the Manistee's port. The city's waterfront has numerous waterfront amenities, including a riverwalk, beaches, public and private marinas and universal access sites, that provide residents and visitors with access to Lake Michigan, Manistee Lake and the Manistee River. Tourism, charter fishing and waterfront industry are important to Manistee's economy. The city has a harbor commission that oversees the marina, boat launch and related waterfront facilities in an advisory capacity.

Waterfront land use consists of a combination of residential, commercial and industrial uses as well as a golf course and waterfront district. Residential use (52%) is the dominant land use along the waterfront. Water-dependent uses such as shipping

facilities are permitted in the city's waterfront and industrial districts and marinas are permitted by special use permit in most districts, including residential districts. Waterfront parks and beaches and water-dependent uses account for approximately 22 percent and 40 percent, respectively, of the 11 miles of waterfront along Lake Michigan, Manistee Lake and the Manistee River. Nearly 60 percent of the frontage along these bodies of water is comprised of parcels with water-dependent uses (21%), water-dependent industrial uses (16%) and parcels that provide public access (22%).

Although the recession resulted in a loss of local jobs, over the last seven years the community's manufacturing base has restructured and Manistee companies have stabilized and grown. Recent infrastructure maintenance and adaptation to meet the needs of evolving industries include a new dock facility on Manistee Lake. The community has utilized many funding sources including Coastal Zone Management funds for waterfront improvements.

Manistee received FY2013 federal funding to dredge its harbor, however low lake levels and lack of funding for dredging continue to challenge the viability of the city's working waterfront. Inadequate harbor draft has significant impacts on local employment, launch sites and marinas, as well as implications for the tourism revenue the city is able to generate. The physical characteristics of the channel present an added challenge to commercial and cargo shipping and limit the harbor's ability to receive large of ocean going vessels.

The potential opportunity to divert and existing rail line and open up 7.5 miles of currently landlocked waterfront would improve the working waterfront and increase public access along Lake Manistee. Diverting the rail line would also increase public access, recreational opportunities and transportation safety. At a county-wide level, initiatives such as the Explore the Shores program, which provides barrier-free accessibility and educational opportunities and a connection to recreation and fishing, increases access to waterfront resources and draws visitors to the region.

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

- Providing universal access to waterfront amenities.
- Creating a riverwalk that provides recreational opportunities and connection between the waterfront and downtown.
- Permitting marinas as a special use in many zoning districts.
- Establishing a waterfront district and peninsula district.
- Installing amenities such as a state of the art fish cleaning station.



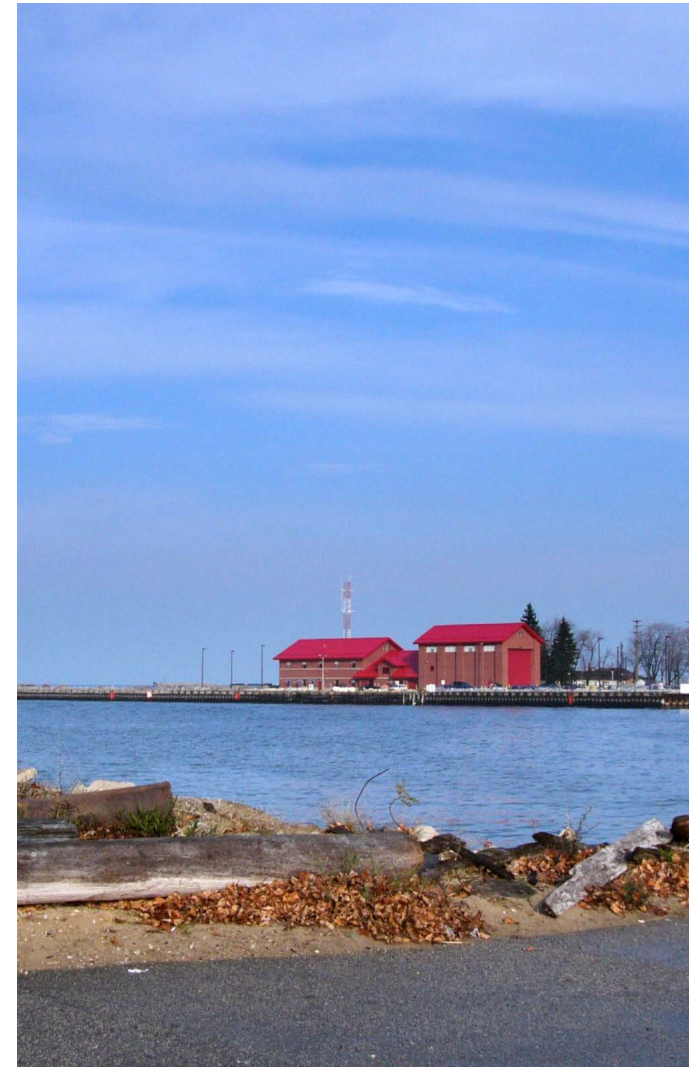
# MANISTEE, MI



FIGURE 1. STATE OF MICHIGAN AND MANISTEE COUNTY (LEFT) AND AERIAL IMAGE OF THE CITY OF MANISTEE WITH LAKE MICHIGAN, MANISTEE LAKE AND THE MANISTEE RIVER.

# CONTEXT

Jurisdiction / Government	City
Region	Northwest
County	Manistee
Land Area	2102 acres / 3.3 square miles
Watershed / Subwatershed	Lake Michigan / Manistee River
Dominant Land Use of Subwatershed	Forest
Adjacent Bodies of Water	Lake Michigan, Manistee River, Manistee Lake
Type of Water Body	Great Lake, River, Inland Lake
Percent of Land Area within the CZM	54%
Population (2010)	6,226
Percent of County's Population	25%
Percent of County's Land Area	<1%
Urban / Suburban / Rural	Urban
Federally Authorized Harbors/Projects	Manistee Harbor
Type of Port	Commercial, Recreational, Cargo, Industrial



Michigan Sea Grant

# COMMUNITY PROFILE

## POPULATION

- The population of Manistee declined 6 percent from 2000 to 2010. In 2010, the city's population density was 1,895 persons/square mile.
- The population of Manistee County decreased by 1 percent from 2000 to 2010.
- The median age in Manistee increased from 40 in 2000 to 44 in 2010.

## EDUCATION

- Of the city's population age 25 and older (70% of the city's total population), 90 percent have a high school degree or higher and 20 percent have a bachelor's degree or higher.
- Of the county's population age 25 and older (74% of the county's total population), 87 percent have a high school degree or higher and 17 percent have a bachelors degree or higher.

## INCOME

- The median household income between 2006 and 2010 in the City of Manistee was \$38,905, compared to the median household income in Manistee County of \$40,853.

## EMPLOYMENT

Of the city's population over age 16:

- 56 percent are in the labor force and employed and 11 percent are unemployed.
- 67 percent are employed in the top 4 (of 13 total) industries classified in the American Community Survey: educational services, health care and social assistance (23%); manufacturing (16%); arts, entertainment, recreation, accommodation and food services (16%); and public administration (12%).
- 36 percent are employed in management, business, science and art occupations, 23 percent service occupations, 22 percent in sales and office occupations, 13 percent in production, transportation and material moving occupations and 6 percent in natural resources, construction and maintenance occupations.

## Manistee County Great Lakes Jobs Snapshot (NOAA)

- In 2009, Great Lakes related jobs accounted for 6.7 percent of total jobs in Manistee County, a decrease of 20 percent since 2005.
- Great Lakes related jobs provide employment for 485 people, provide \$5 million in wages and provide \$10 million in goods and services.

## HOUSING

- From 2000 to 2010, the total number of housing units in Manistee increased by 5 percent and the percent occupancy of housing units decreased by 8 percent.
- Owner occupied housing units decreased by 9 percent and renter occupied housing units increased by 7 percent from 2000 to 2010.
- Residential construction in Manistee County declined from 442 buildings in 1990 to 60 buildings in 2000 and then to 20 buildings in 2010.



Boats docked on the Manistee River. *Elizabeth Durfee*



# COMMUNITY OVERVIEW

The city of Manistee is located on Lake Michigan at the mouth of the Manistee River in Northwest Lower Michigan. The city is approximately 180 northeast of Chicago and 120 miles north of Grand Rapids. Manistee is the largest city in and county seat of Manistee County. The city is characterized by an urban core with a traditional, main street feel, surrounding residential neighborhoods and industrial development along Manistee Lake.

Manistee's extensive Riverwalk connects the downtown with Lake Michigan and is a popular spot for walking and viewing freighters. The walkway follows Manistee River 1.5 miles from the US 31 bridge to the beach on the south side of the river. The city has a number of waterfront parks along Lake Michigan, Manistee Lake and the Manistee River.

Manistee is well known for its natural assets including beaches, forests and wetlands. Nearby natural resources and attractions include Orchard Beach State Park and the Manistee National Forest. The Manistee National Forest comprises almost one million acres of public lands and provides significant recreational opportunities, habitat for fish and wildlife and natural resources.

The city has many Victorian residences that date back to the late 1880s and the booming lumber industry.

Traditionally a logging, salt mining and manufacturing city, Manistee transitioned from industry in the mid-1980s. Today the region has a stable, diversified industrial base, fruit producing agricultural center and a well-developed tourism and recreation based economy.

## CAPACITY

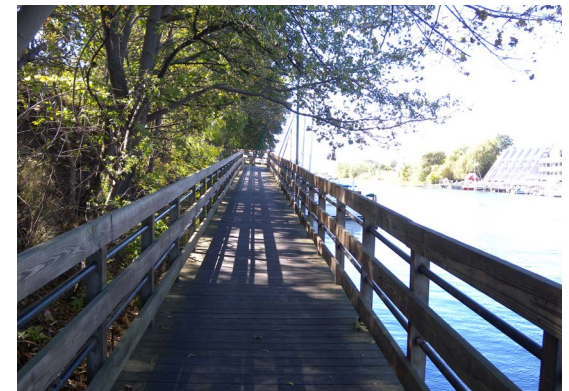
The city of Manistee operates under a city manager/ city council form of government with a city manager and seven council members. The city has a Planning and Zoning Department, Community Development Department and Parks and Recreation Department, among other departments. The Parks and Recreation Department, with staff including a Parks lead and summer crew, are responsible for maintaining city parks and facilities, the Riverwalk and beaches. Manistee has a seven member planning commission and an eight member harbor commission with a harbor master responsible for overseeing and advising the marina, boat launch and related waterfront facilities. The city's master plan and the Manistee County Recreational Plan provide guidance for future development and the regional park system.



North Pierhead Lighthouse from 1st Street Beach. Elizabeth Durfee



Manistee Riverwalk. Elizabeth Durfee



Manistee Riverwalk.. Elizabeth Durfee

# WATERFRONT HISTORY

The village of Manistee was an Ottawa village in 1830 and part of an Ottawa Reservation in the Manistee River Valley from 1836-1848 the Manistee River Valley. The area's first permanent Euro-American settlement was established in 1841 when the first sawmill was constructed. The city of Manistee was incorporated in 1869.

Manistee Harbor has been a major port since the 1850s and was at one time the third busiest port on Lake Michigan. The city's logging industry boomed until the early 1900s. By 1885 there were 40 sawmills operating in the region. During this time Manistee boasted more millionaires per capita than anywhere else in the U.S. In the late 1800s, there were over 30 shingle mills on the Manistee River at one time and Manistee was a leading shingle manufacturing city. In 1881, the discovery of salt beneath the city led to the development of a major salt industry in Manistee. The city is the home of salt factories including Morton Salt and Martin Marietta.

In 1883, Manistee's Waterworks was constructed and provided water for the city until 1947. In 1955 the Waterworks opened as the Manistee County Historical Museum. The city lighthouse, the Manistee North Pierhead Lighthouse, was transferred to the city

in 2011 and is currently undergoing restoration. The lighthouse was built on shore in 1869, moved to the south pier in 1875 and then to the north pier in 1893. It was completely rebuilt in 1920. The North Pierhead Lighthouse is listed on the National Registry of Historic Places and has one of the four remaining catwalks on Lake Michigan.

In 1980 the federal government recognized the Little River Band of Ottawa Indians and the Band formed its own government and Economic Development Corporation.

The historic landmarks the S.S. City of Milwaukee and U.S. Coast Guard Cutter Acacia are docked in Manistee Lake off of US-31. The S.S. City of Milwaukee is a preserved Lake Michigan car ferry that ran from 1942 and 1944. The Arcacia is one of 39 180-foot seagoing buy tenders built for the Coast Guard. The ships are now used for tours, overnight accommodations and as facility rentals.

Today the harbor economy is based on chemical, wood and wood-pulp and paper products manufacturing as well as agriculture products and shipping. The city continues to export salt and brine and import aggregate and liquid asphalt.



Coast Guard Vessel on the Manistee River. Elizabeth Durfee



Dock with lift on the Manistee River. Elizabeth Durfee



1st Street Beach and Lake Michigan. Elizabeth Durfee



# WATERFRONT SUMMARY

Land use along Lake Michigan consists of residential uses, public beaches and parks and a golf course. Land use along the Manistee River between Lake Michigan and Manistee Lake consists of a mix of commercial and residential uses. Commercial and industrial uses dominate the Manistee Lake waterfront.

Manistee Harbor is a deep draft commercial, recreational and cargo harbor. The harbor consists of approximately two miles of maintained channel with over 6,000 feet of structures including breakwaters, piers and revetments. The harbor requires dredging on a 2-3 year cycle. In 2008, 510,000 tons of material passed through the harbor. Bulk commodities including sand, gravel, limestone and coal that pass through Manistee harbor generate \$36 million annually in direct revenue, \$9 million annually in personal income and support over 200 jobs. Manistee harbor is a regionally significant industrial port, a Harbor of Refuge and is home to the U.S. Coast Guard Station Manistee. Failure to maintain the harbor has significant impacts including loss of jobs both locally and regionally, loss of access or required light loading

for five major industrial facilities, including shutdown of the Filer City Generating Station, a coal-fired power plant, which could impact electric grid stability in northern Michigan.

Manistee has a recently renovated municipal marina with slips and broadside mooring for transient and seasonal dockage. The marina is located within walking distance of downtown and along the Riverwalk to the beach. In 2009 the city installed a universal accessibility lift at the marina. The city operates three boat launches, the First Street, Arthur Street and Ninth Street launches. Manistee's private marinas include the Shipwatch Marina on the Manistee River and the Solberg and Seng's Marinas on Manistee Lake. The Manistee Inn and Marina and Little Riverside Motel and Marina, Cedar Street Marina and Harbor Village Marina also provide dockage on the Manistee River.

There are over 180 acres of parks and recreational facilities in the city of Manistee, including three world class beaches, seven waterfront parks and a Riverwalk. The Douglas Recreation Area/First Street Beach/Lighthouse Park, located along Lake

Michigan on the south side of the Manistee River mouth has amenities including a boat launch, fish cleaning station, fishing pier and pavilions along the Lake Michigan beach front. On the north side of the river, Fifth Ave Beach, Man-Made Lake and the North Beach Access Park comprise over 1.25 miles of publicly owned beach with a number of park amenities and fishing areas. The Riverwalk, Memorial Park and Ninth Street Boat Launch provide access on the Lake Manistee and Manistee River. Most of the city's facilities are universally accessible. The South Riverwalk extends 1.5 miles from the US-31 bridge to Lake Michigan along the Manistee River behind the Central Business District. The South Riverwalk has benches, fishing areas, historical markers and a Net Shed Museum. On the north side of the river, a universally accessible boardwalk provides additional opportunities for fishing and viewing freighters.

Manistee is a fishing capital of the Midwest. The city has been ranked as the number one salmon and trout fishing destination on the Michigan shores of Lake Michigan. There are numerous opportunities to fish from fishing docks and piers scattered



1st Street Beach. *Elizabeth Durfee*



Fishing Charter on the Manistee River. *Elizabeth Durfee*

throughout the city's waterfront parks on Lake Michigan, Manistee Lake and the Manistee River. Nearly 30 charter fishing businesses operate out of Manistee.

Historic landmarks the S.S. City of Milwaukee and U.S. Coast Guard Cutter Acacia are docked in Manistee Lake and available for tours, rental facilities, marina slips and accommodations.

# CHALLENGES AND ACTIONS

## WATERFRONT ACCESSIBILITY

In Manistee County was one of two communities selected nationally by Easter Seals for implementation of its Rural Solutions Project to address accessibility. In late 2007, the Alliance for Economic Success, in partnership with Easter Seals, produced an 'Envision Accessible Manistee County' report with recommendations related to accessibility that included: 1) increasing understanding, 2) creating solutions, 3) forming partnerships and 4) promoting a vision to become a destination accessible to everyone. The Alliance for Economic Success, Community Foundation and Easter Seals worked to create a leadership team with over 60 partners. The goal of the initiative was to make Manistee a premiere destination for all and to bring one million more people to the network Explore the Shores sites designed to provide barrier-free accessibility, educational opportunities and a connection to recreation and fishing in the county. A number of accessible sites, including the fishing and multi-use pier on Lake Manistee and Lake Michigan beach walkways, are located in the city. A \$650,000 pavilion and universal design fish cleaning station are among the current waterfront improvements being made in the city.

## INDUSTRY

The recession had a significant impact on manufacturing on Manistee Lake and many local jobs were lost. Over the last seven years, however, manufacturing has been restructured and companies in the city have stabilized and are growing. Over \$1 million has been invested in plant and capital improvements around the lake, including a new dock facility at the Reith-Riley construction company.



Charter fishing boats. Elizabeth Durfee



Riverwalk. Elizabeth Durfee



Low water level. Elizabeth Durfee



# ZONING ORDINANCE

ZONING DISTRICT	INTENT OF DISTRICT	PERMITTED USE	SPECIAL USE
Peninsula District	Intended to establish a mixed-use district incorporating a variety of recreational, residential, business or service uses on or near the waterfront, host a variety of land uses and promote sustainable development and expanded public use	Outdoor recreation/park	Marina
Golf Course District	Intended to provide for and regulate development in association with a golf course	Outdoor recreation/park	
R-1 Low Density Residential	Intended to establish and protect residential areas consisting primarily of low density, single-family neighborhoods and to protect the Lake Michigan shoreline environment in portions of the district near Lake Michigan	Outdoor recreation/park	Marina
R-2 Medium Density Residential	Intended to establish and protect residential areas consisting primarily of medium density, single-family neighborhoods and multi-family communities and incorporate some retail and personal service land uses	Outdoor recreation/park	Marina
R-3 High Density Residential	Intended to establish and protect urban residential areas and incorporate convenience retail, services, dining and entertainment	Outdoor recreation/park	Marina
Waterfront District	Intended to establish a mixed-use district that incorporates a variety of recreational, residential, business or service uses on or near the waterfront and to promote sustainable, environmentally and aesthetically compatible developments that use or compliment the shoreline, while promoting and expanding the use of the shoreline by the public	Outdoor recreation/park, shipping facility	Marina
Neighborhood Commercial	Provides areas of commercial and mixed uses. Intended to serve nearby residential neighborhood and the larger community	Outdoor recreation/park	Marina
Central Business District	Intended to protect and strengthen the commercial core of the city as a regional and specialty, service and entertainment area	Outdoor recreation/park	Marina
Light Industrial District	Intended to protect and buffer adjacent residential areas from the negative effects of the Industrial District.	Outdoor recreation/park	Mine, sand and gravel, processing and manufacturing
General Industrial District	Intended to protect adjacent residential areas from the negative effects of the district, allow traditionally heavier uses, provide protection to Manistee Lake including its water quality and protect its shoreline from erosion, instability or other negative effects	Outdoor recreation/park, shipping facility	Marina, mine, sand and gravel, power generating facility

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

# ZONING

The city of Manistee has 11 zoning districts. Each of these districts falls within a 1000-foot buffer of Lake Michigan, Manistee Lake and/or the Manistee River. Figure 4 displays zoning within the 1000-foot buffer of these bodies of water. Nine zoning districts abut Lake Michigan, Manistee Lake and/or the Manistee River.

The city of Manistee permits uses that provide public access including outdoor recreation and parks in all zoning districts. Marinas are permitted by special use permit in most districts, including residential districts. Other water-dependent uses such as shipping facilities are permitted by right or by special use permit in the waterfront and industrial districts (Table 1).

A majority of identified water-dependent uses are located in the general industrial, peninsula, central business district and parks in low density residential districts (Figure 4.)

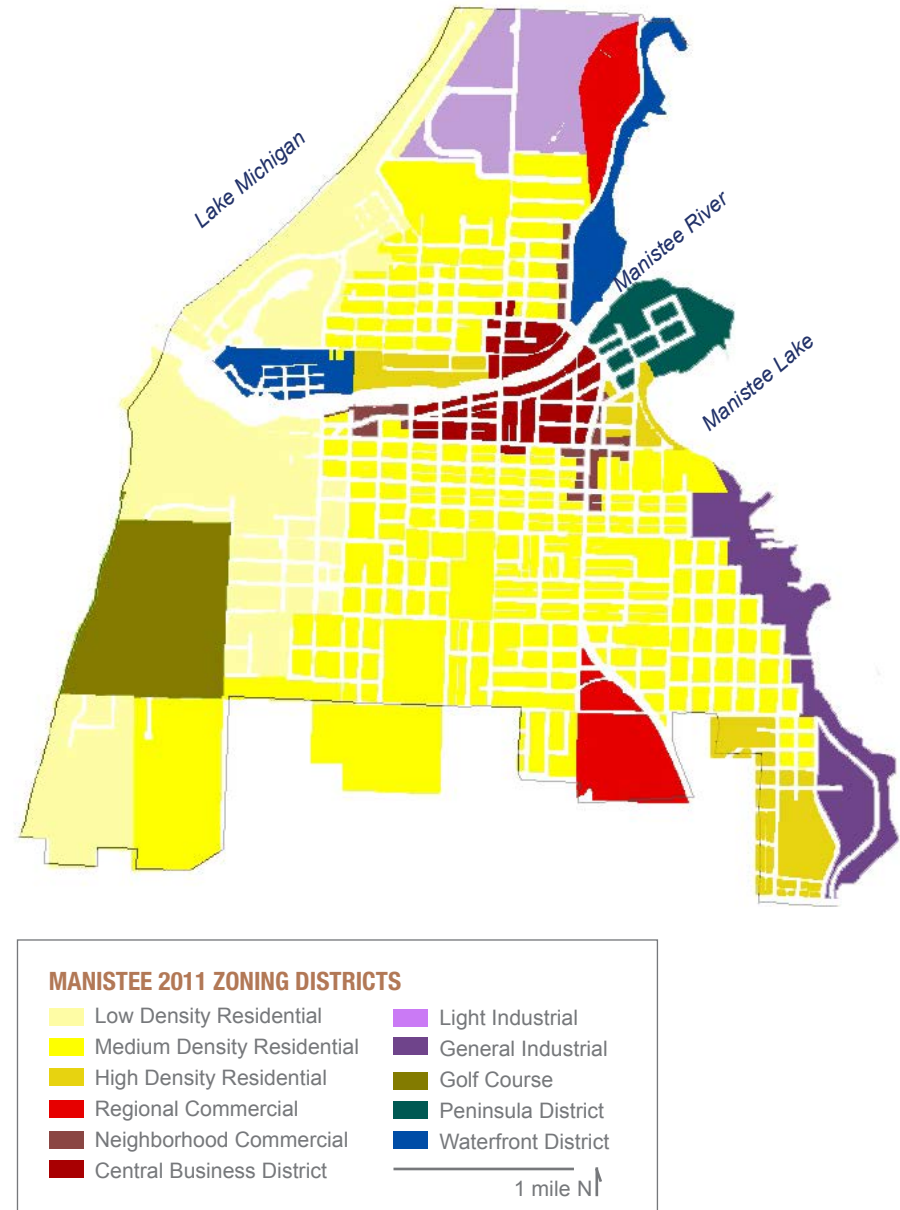


FIGURE 2. CITY OF MANISTEE 2011 ZONING DISTRICTS.



# ZONING ADJACENT TO WATERFRONT

The bar graph below displays the percent of the approximately 11.2 mile shoreline by generalized zoning category. Residential uses account for 41 percent of the frontage along Lake Michigan, Manistee Lake and the Manistee River. Remaining land use along the waterfront consists of approximately 24 percent mixed uses including the waterfront and peninsula districts, 20 percent industrial, 10 percent commercial and 5 percent other uses.

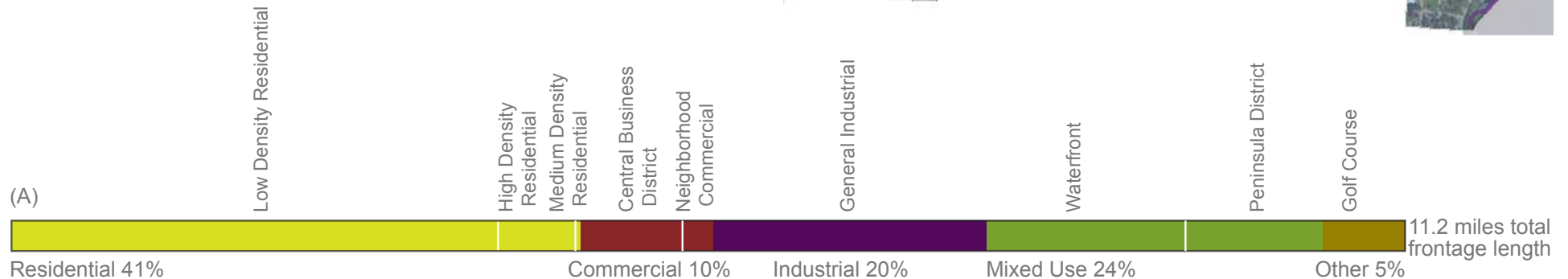
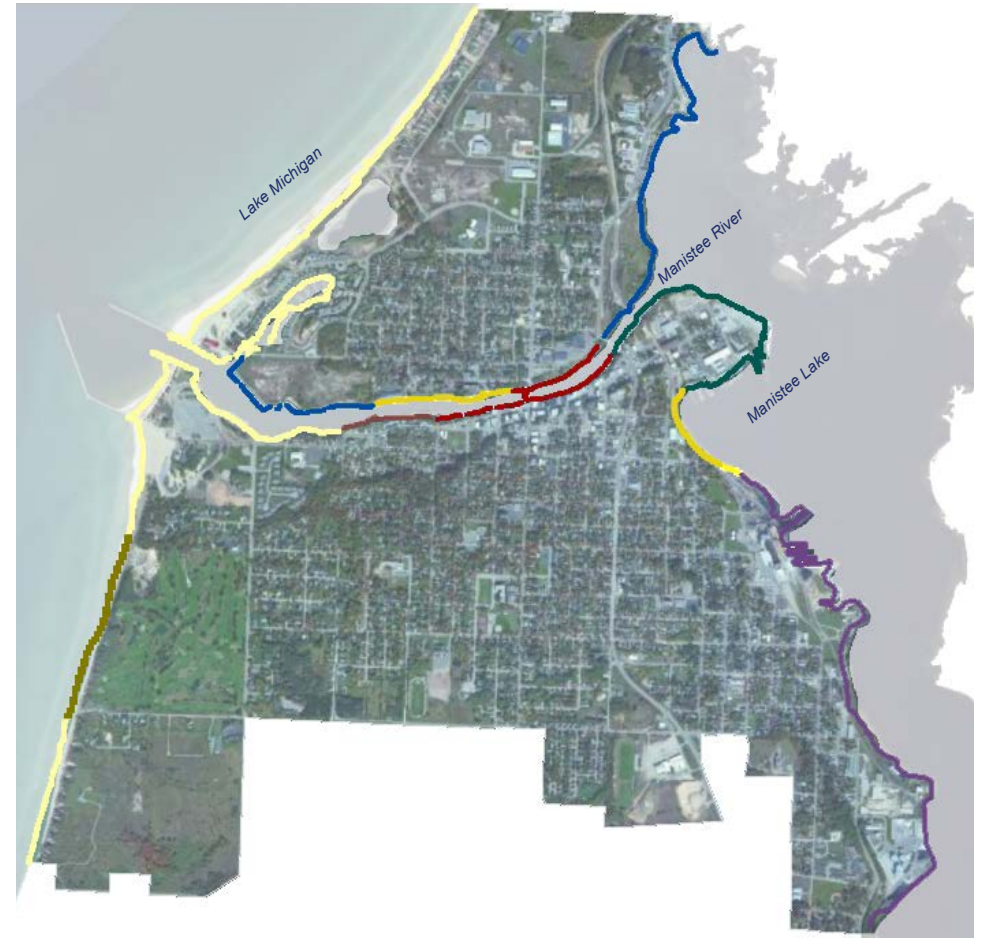


FIGURE 3. MAP OF ZONING ADJACENT TO WATERFRONT (RIGHT) AND FRONTAGE BY ZONING CATEGORY (BELOW).

# ZONING WITHIN 1000 FEET OF WATERFRONT

Land use within a 1000-foot buffer of Lake Michigan, Manistee Lake and the Manistee River is dominated by residential land use, followed by industrial and commercial land uses (Figure 4).

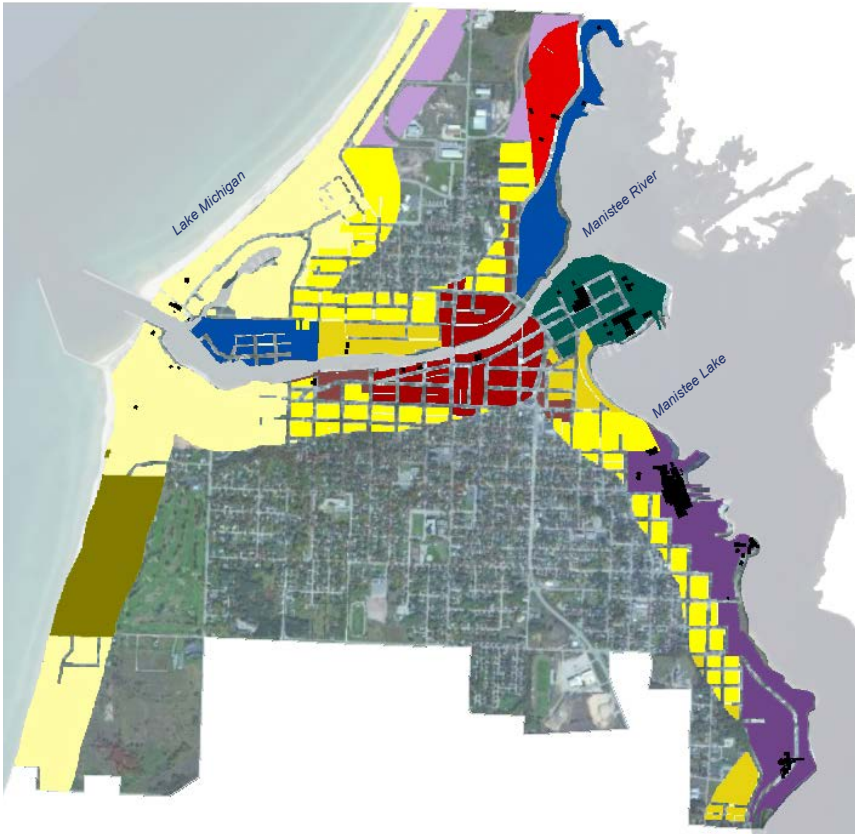
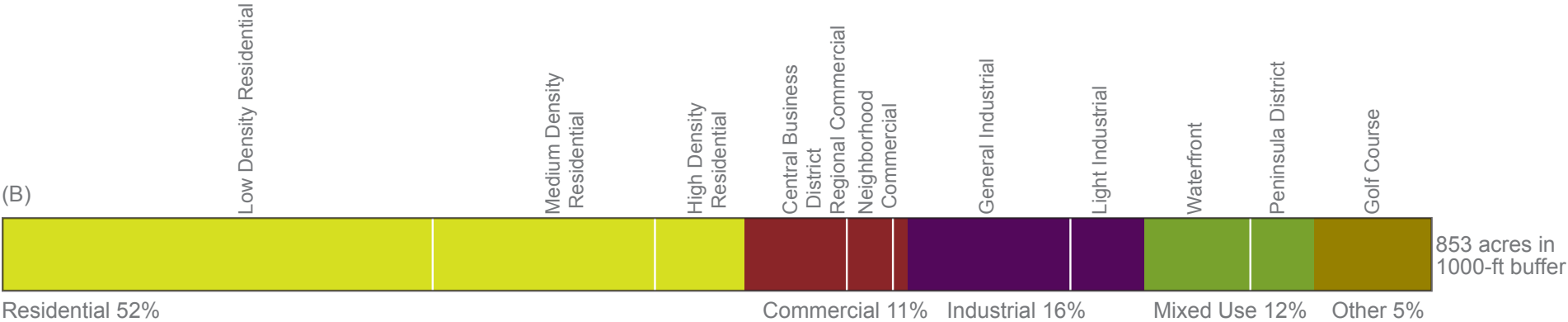


FIGURE 4. MAP OF ZONING AND LOCATION OF WATER-DEPENDENT USES WITHIN A 1000-FOOT BUFFER OF WATER BODIES (RIGHT) AND WATERFRONT LAND AREA BY ZONING CATEGORY (BELOW).



# PARCEL CLASSIFICATION AND INVENTORY

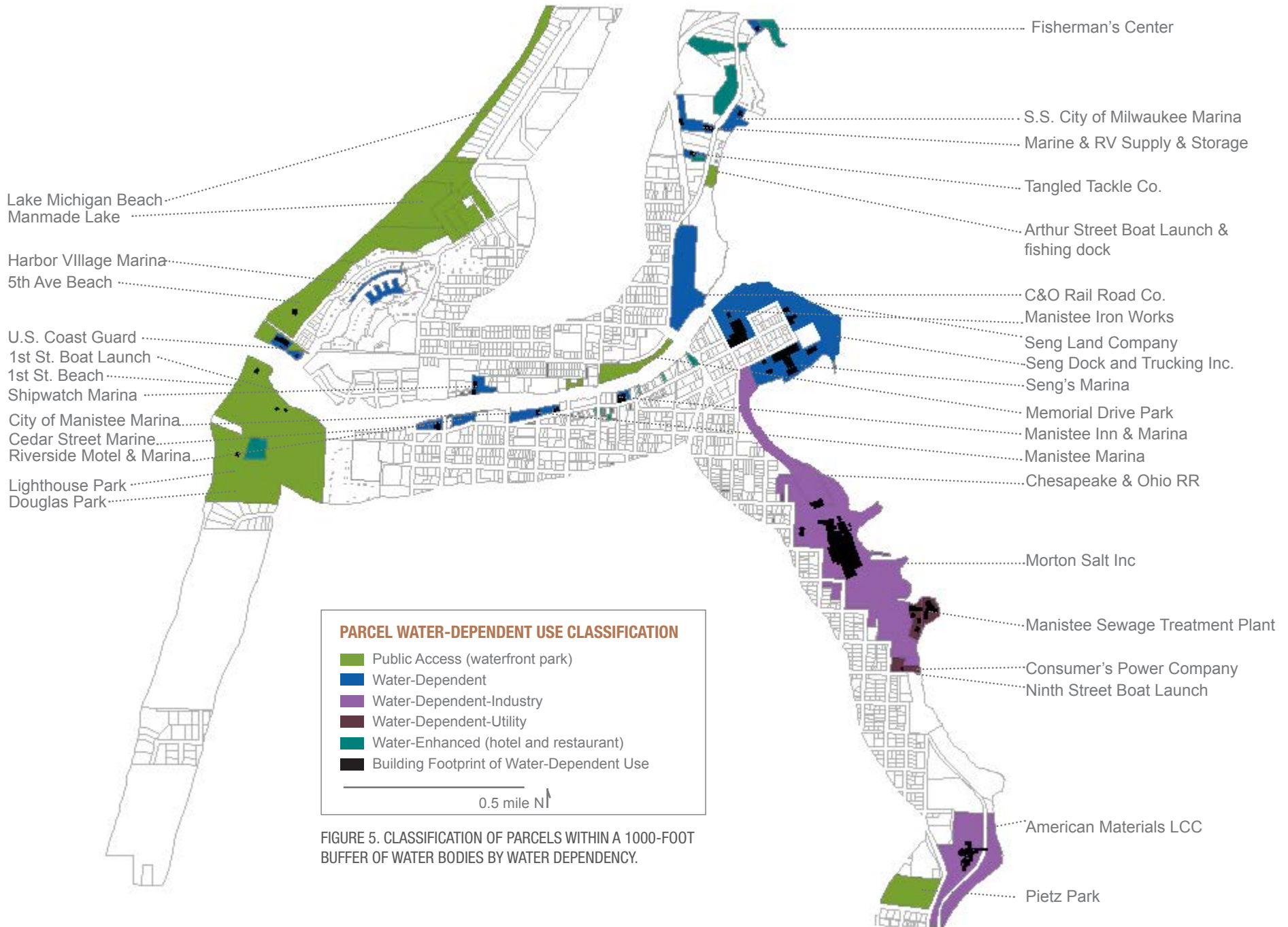


FIGURE 5. CLASSIFICATION OF PARCELS WITHIN A 1000-FOOT BUFFER OF WATER BODIES BY WATER DEPENDENCY.



# PARCEL CLASSIFICATION

Parcels that provide public access to the waterfront account for approximately 22 percent of the total frontage (approximately 11 miles) along Lake Michigan, Manistee Lake and the Manistee River and approximately 14 percent of the total area (approximately 870 acres) within a 1000-foot buffer of these bodies of water. Parcels that have identified water-dependent uses account for 21 percent of frontage and 7 percent of the area within a 1000-foot buffer of Lake Michigan, Manistee Lake and the Manistee River (Figure 6). Figure 7 displays an inventory of identified water-related uses along with classification of associated parcels of land as public access or water-dependent, enhanced, or non-water-dependent.

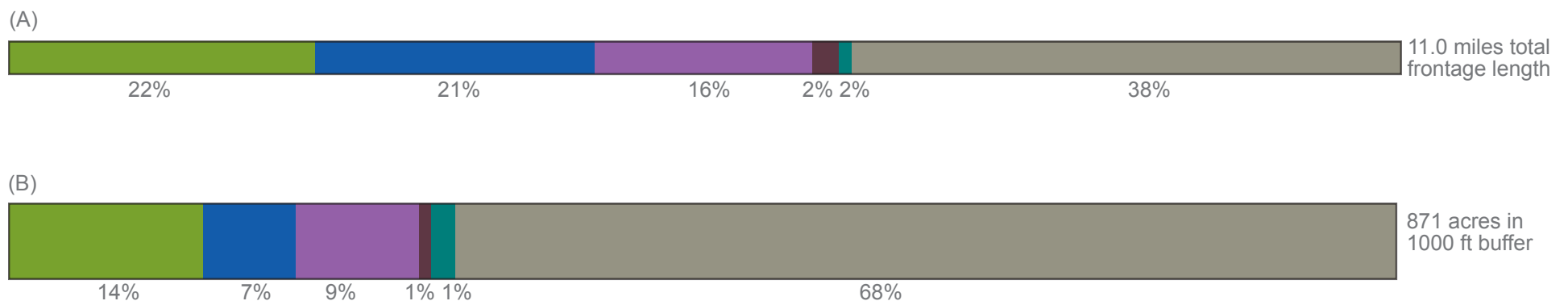


FIGURE 6. PARCEL FRONTAGE (A) AND AREA WITHIN 1000-FOOT BUFFER BY WATER DEPENDENCY CLASSIFICATION (B).

# INFRASTRUCTURE AND ACCESS

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



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

# 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 Manistee's waterfront as a place that provides public access and supports and is well integrated within the community from a planning and physical perspective. A SWAT 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.

<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>■ Extensive, accessible riverwalk along Manistee River that connects the central business district with the river and Lake Michigan</li> <li>■ Variety of access sites to Lake Michigan, Manistee Lake and the Manistee River, numerous amenities at city waterfront parks and beaches</li> <li>■ Tourist destination, viewing freighters a tourist attraction</li> <li>■ Leader in universal design</li> <li>■ Providing access to the water a priority for the city</li> <li>■ Industry along the waterfront</li> <li>■ Only port in NW Lower MI to receive FY2013 federal dollars for dredging</li> <li>■ County economic development invested in waterfront</li> <li>■ Marina a special use in most districts</li> <li>■ Uses many funding sources for waterfront improvements</li> <li>■ Fish cleaning station -partnership to use fish waste</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>■ Physical characteristics of the channel limit the harbor's ability to receive large vessels, without massive infrastructure changes the narrow, steep channel cannot accommodate ocean going vessels</li> <li>■ County lacks trails</li> <li>■ No watershed plan for Manistee River, need for plan especially because of significant fisheries, increased use, and historic contamination</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>■ Reassess study on rail line to open up 7.5 miles of waterfront along Lake Manistee that is landlocked by a rail line, potential to increase rails to trails, increase safety, and provide additional access to the Lake</li> <li>■ USACE received funding for the harbor under the Low Use Navigation Pilot Program for non-federally funded dredging of the channel</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>■ Low water levels: over 800 jobs depend on commercial navigation in the channel, loss of slips and launches at the municipal marina, launch sites on Lake Michigan and Lake Manistee has significant implications for the tourism revenue the city is able to generate</li> </ul>

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



# TOOLS, STRATEGIES AND BEST PRACTICE FOR MAINTAINING WORKING WATERFRONTS

## UNIVERSAL ACCESS

Provide access to a variety of waterfront resources in a variety of ways. Walkways along beaches that allow visitors and residents to get down to the Great Lakes and accessible fishing piers, for example, are significant assets in a community. A network of universally accessible sites that provides all people with the opportunity to experience the waterfront such as the Explore the Shores initiative is a regional destination that can attract visitors, education the community and increase appreciation of water resources.

## RIVERWALK

Create a riverwalk to provide public access to the waterfront and opportunities for fishing and recreation. Utilize a riverwalk to connect downtown to various areas of the waterfront and to link amenities such as charter fishing docks, fishing piers, beaches and historical sites.

## ZONING

Designate marinas as a special use in zoning districts allow marina to be appropriately sited and to create districts with mixed uses.

## FISH CLEANING STATION

Create public fish cleaning station viewing areas and incorporate universal design to increase the value and public benefit of a fish cleaning station. An innovative method for dealing with fish waste is to establish a public private partnership between the municipality and a private entity that will freeze, transport and process byproducts as pet food.



Boats along the riverwalk. Elizabeth Durfee



Boats docked in the Manistee River. Elizabeth Durfee



Boating on the Manistee River. 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 MANISTEE

- ✓+ Preserve visual and physical access to water resources.
- ✓+ Balance waterfront land uses meet the needs of residents, visitors and water-dependent uses.
- ✓+ Emphasize the economic and cultural value of local water-dependent uses.

**How does your community stand up?**

# REFERENCES AND RESOURCES

- City of Manistee (2006) City of Manistee Zoning Ordinance. Retrieved from <http://www.manisteemi.gov/DocumentCenter/Home/View/356>
- City of Manistee (2010). [GIS data]. Zoning 2010.
- City of Manistee (2012) History of Manistee. Retrieved from <http://www.manisteemi.gov/index.aspx?NID=248>
- City of Manistee (2012) Marina. Retrieved from <http://www.manisteemi.gov/index.aspx?NID=257>
- City of Manistee (2012) Parks. Retrieved from <http://www.manisteemi.gov/index.aspx?NID=139>
- City of Manistee (2012) Riverwalk. Retrieved from <http://www.manisteemi.gov/index.aspx?NID=140>
- City of Manistee (2012). [GIS data]. City Parcels.
- Collaborative Dredging/Harbor Solutions meeting. Onkama, Michigan. December 18, 2012. {Mitch Deisch, city Manager}
- Digital Coast NOAA Coastal Services Center (2010) Manistee County, Michigan Snapshot. Retrieved from <http://www.csc.noaa.gov/snapshots/#ocean%2626101>
- Easter Seals Rural Solutions Community Engagement and Accessibility Project, Easter Seals Michigan and Manistee Alliance for Economic Success (October 2007). Envision Accessible Manistee County! Final Report and Recommendations. Retrieved from [http://www.easterseals.com/site/DocServer/FINAL\\_REPORT\\_Envision\\_Accessible\\_Manistee\\_County\\_11\\_6\\_07.pdf?docID=53183](http://www.easterseals.com/site/DocServer/FINAL_REPORT_Envision_Accessible_Manistee_County_11_6_07.pdf?docID=53183)
- Historic Naval Ships Association (2012). SS City of Milwaukee <http://www.hnsa.org/ships/com.htm>
- Manistee City Planning Commission (2002) Master Plan City of Manistee, Manistee County, Michigan. Retrieved from <http://www.manisteemi.gov/index.aspx?NID=292>
- Manistee County Historical Museum (2012) The Waterworks Museum. Retrieved from <http://www.manisteeemuseum.org/waterworks.html>
- Manistee County Planning Commission and the Alliance for Economic Success (2007) Manistee County Recreation Plan: 2008-2013.
- Manistee County Planning Commission, Alliance for Economic Success, Spicer Group, Inc. (2008) Manistee County Recreational Plan: 2008-2013. Retrieved from <http://manisteecorecreation.wordpress.com/>
- Manistee County Retrieved from <http://www.manisteecountymi.gov/>
- Michigan Charter Boat Association (2013). Lake Michigan Fishing Charters. Retrieved from <http://www.michigancharterboats.com/page.php?lake=MICHIGAN&port=MANISTEE>
- Ocean and Great Lakes Jobs Snapshot Manistee County, Michigan. NOAA Coastal Services Center. Retrieved from <http://www.csc.noaa.gov/snapshots>
- Personal Communication Denise Blakeslee, City of Manistee Planning and Zoning Department (September 26, 2012)
- Personal Communication Jon Rose, City of Manistee Community Development Department (September 26, 2012)
- Personal Communication Tim Ervin, Alliance for Economic Success (January 30, 2013)
- U.S. Census Bureau (2000). Profile of General Population and Housing Characteristics, City of Manistee. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Educational Attainment 2006-2010 American Community Survey 5-year Estimates, City of Manistee. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Profile of General Population and Housing Characteristics, City of Manistee. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Profile of General Population and Housing Characteristics, Manistee County. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Profile of General Population and Housing Characteristics, Manistee County. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Selected Economic Characteristics 2006-2010 American Community Survey 5-year Estimates, Manistee County. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2010). Selected Economic Characteristics 2006-2010 American Community Survey 5-year Estimates, City of Manistee. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- US Army Corps of Engineers (2012). Manistee Harbor, MI Fact Sheet. Retrieved from [http://www.lre.usace.army.mil/who/operationsofficehomepage/project\\_overview/manistee/](http://www.lre.usace.army.mil/who/operationsofficehomepage/project_overview/manistee/)
- World Port Source (2013) Manistee Harbor. Retrieved from [http://www.worldportsource.com/ports/review/USA\\_MI\\_Manistee\\_Harbor\\_3597.php](http://www.worldportsource.com/ports/review/USA_MI_Manistee_Harbor_3597.php)