

A CASE STUDY

# THE CITY OF CHARLEVOIX



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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*Cover photos: Charlevoix Lake Association, Elizabeth Durfee, National Oceanic and Atmospheric Administration, U.S. Army Corps of Engineers.*

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## 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

Charlevoix is in the Lower Peninsula of Michigan along the northeastern side of Lake Michigan and western edge of Lake Charlevoix. Charlevoix developed as lumber and fishing community in the early 1800s and grew into a popular resort destination. Today more than half of the city's residents are seasonal. Between 2000 and 2010 Charlevoix's population declined by 16 percent.

Charlevoix has approximately 7 miles of frontage on Lake Michigan, Round Lake and Lake Charlevoix. Round Lake and the Pine River Channel, which bisect the community, provide an important connection between Lake Michigan and inland lakes.

Charlevoix harbor is a busy, deep draft commercial, recreational, cargo and ferry port. The harbor is home to the Beaver Island ferry, which provides passenger and cargo transportation to Beaver Island in Lake Michigan. Over 1 million tons of commodities pass through the harbor annually including coal, slag, petroleum products, lime and cement. Charlevoix has one remaining commercial fishing business as well as numerous charter fishing businesses.

Charlevoix has a recently renovated marina and marine service and supply shop that are well connected to the downtown center via a waterfront park and walking paths. Boathouses and private docks dot much of the shoreline along Round Lake. The community has several pocket parks along the Pine River Channel as well as sandy beaches along Lake Michigan that provide visual and physical access to the waterfront.

Scenic reserve zoning districts comprise nearly 50 percent of the frontage along the city's approximately 7 miles of waterfront. Remaining waterfront land use consists of 28 percent residential, 20 percent commercial and 3 percent other zoning districts. Land use within a 1000-foot buffer of the waterfront consists of 64 percent residential, 16 percent open space, 11 percent commercial, 1 percent industrial and 5 percent other zoning districts. Parcels with water-dependent uses and parcels that provide public access comprise 8 percent and 12 percent of the frontage along Lake Michigan, Round Lake and Lake Charlevoix within the city.

Charlevoix has a marine commercial district located on the south side of Round Lake and adjacent to Lake Charlevoix. While this district accommodates water-dependent businesses including Cross Fisheries and Ward Brothers Boats, it is a mixed use district that permits non-water-dependent uses and contains many condominiums and private docks. If water-dependent businesses close or working waterfront property were converted to non-water-dependent uses, it is unlikely that this high value property would be converted back.

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

- Establishing a commercial waterfront zoning district.
- Permitting water-related uses and structures in many districts.
- Establishing a strong, walkable connection between downtown and the waterfront.
- Using pocket parks and rights-of-ways to provide visual access to the water.



View of municipal marina. *Elizabeth Durfee*



*Michigan Sea Grant*

# CHARLEVOIX, MI



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

# CONTEXT

Jurisdiction / Government	City
Region	Northwest
County	Charlevoix
Land Area	1,310 acres / 2.0 square miles
Watershed/Subwatershed	Lake Michigan / Boardman-Charlevoix
Dominant Land Use of Subwatershed	Forest, Agriculture
Adjacent Bodies of Water	Lake Michigan, Round Lake, Lake Charlevoix
Types of Water Body	Great Lake, Inland Lake
Percent of Land Area within the CZM	40%
Population (2010)	2,513
Percent of County's Population	9.7%
Percent of County's Land Area	<1%
Urban / Suburban / Rural	Urban
Federally Authorized Harbors/Projects	Charlevoix Harbor
Type of Port	Commercial, Recreational, Cargo, Ferry



Irish Boat Shop. Michigan Sea Grant

# COMMUNITY PROFILE

## POPULATION

- The population of Charlevoix declined 16 percent from 2000 to 2010. In 2010, the city's population density was 1,142 persons/square mile.
- The population of Charlevoix County decreased by 0.5 percent from 2000 to 2010.
- The median age in Charlevoix increased from 41 in 2000 to 48 in 2010.

## EDUCATION

- Of the city's population age 25 and older (76% of the city's total population), 40 percent have a high school degree or higher and 11 percent have a bachelor's degree or higher.
- Of the county's population age 25 and older (71% of the county's total population), 34 percent have a high school degree or higher and 14 percent have a bachelors degree or higher.

## INCOME

- The median household income between 2006 and 2010 in the City of Charlevoix was \$37,417, compared to the median household income in Charlevoix County of \$48,704.

## EMPLOYMENT

- Of the city's population over age 16:
- 53 percent are in the labor force and employed and 5 percent are unemployed.
  - 47 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 (22%); professional, scientific and management and administrative and waste management services (14%); and construction (11%).
  - 25 percent are employed in management, business, science and art occupations, 25 percent in sales and office occupations, 20 percent in production, transportation and material moving occupations, 16 percent in natural resources, construction and maintenance occupations, and 15 percent service occupations

### Charlevoix County Great Lakes Jobs Snapshot (NOAA)

- In 2009, Great Lakes related jobs accounted for 4.2 percent of total jobs in Charlevoix County, a decrease of 8 percent since 2005.
- Great Lakes related jobs provide employment for 382 people, \$7 million in wages and \$13 million in goods and services.



Michigan Sea Grant

## HOUSING

- From 2000 to 2010, the total number of housing units in Charlevoix increased by 5 percent and the occupancy percent of housing units decreased by 12 percent.
- Owner occupied housing units decreased by 16 percent and renter occupied housing units increased by 4 percent from 2000 to 2010.
- Residential construction in Charlevoix County increased from 267 buildings in 1990 to 371 buildings in 2000 and then declined to 104 buildings in 2010.



# COMMUNITY OVERVIEW

The City of Charlevoix is located on Lake Michigan on the west side of Charlevoix County in Northwestern Michigan. Charlevoix is the county seat of Charlevoix County and is one of three urban centers in the county. The city is characterized by compact urban downtown and diverse residential neighborhoods including waterfront condos and private residential clubs. The city lies within the Boardman-Charlevoix watershed, which covers 1,664 square miles and drains Northwest Michigan into Lake Michigan.

Charlevoix is located on an isthmus surrounded by Lake Michigan, Lake Charlevoix and Round Lake and bisected by the Pine River Channel. The city has over one mile of sandy Lake Michigan frontage. Land use along Lake Michigan is residential to the north of the Round Lake channel and zoned as scenic reserve to the south. Downtown land use south of Round Lake consists of a mix of commercial and residential uses. Residential uses dominate the north shore of Round Lake and northwest shore of Charlevoix Lake.

Seasonal residents comprise over half of Charlevoix's population and the city is a popular tourist and summer destination. In addition to water-related recreational tourism, visitors often stop to see the city's mushroom houses (stone homes with unique architecture) and watch the drawbridge opening for ships leaving Round Lake. Charlevoix has well established private residential clubs that have drawn people to the city since the 1800s.

The Beaver Island Ferry Company operates out of Charlevoix and provides passenger and freight transportation to Beaver Island, located 32 miles offshore in Lake Michigan. The Charlevoix harbor provides boaters with access to Lake Michigan from as far inland as East Jordan and Boyne City.

## CAPACITY

The city of Charlevoix operates under a council and manager form of government with a manager, nine City Council members and a Mayor. Charlevoix has a city planner, a nine member planning commission, a nine member Downtown Development Authority, as well as a five member Zoning Board of Appeals. The city marina is managed by a harbormaster and seasonal staff. In addition to a master land use plan, Charlevoix has a comprehensive 2012-2016 Parks and Recreation Master Plan.



East Park and municipal marina. *Elizabeth Durfee*



Lake Michigan Beach Park. *Elizabeth Durfee*

# WATERFRONT HISTORY

Charlevoix has a colorful history. Originally a Native American Community, it was known as the Village of Pine River. The area was settled by fishermen in the 1850s. However, there was conflict, particularly between the new settlers to the area and Jesse Strang, leader and namesake of the Strangite Mormons, and king of Beaver Island.

Relations between Charlevoix residents and the Strangites were often tense, resulting in a gun battle in 1853 and likely Strang's assassination in 1856. Soon after, a commercial fishing base was established and the port became one of the largest fishing ports on the Great Lakes. Lumber trade developed after the Charlevoix Lumber Company was founded in 1868.

Charlevoix was one of the nation's first tourist destinations. It became a passenger and freight port when Round Lake and Pine Lake were made accessible from Lake Michigan in 1869. The port received thousands of tourists and resort-goers as well as cargo and freight traffic from the Lumber Company and a mill on the Pine River.

In the late 1870's and early 1880's, resort destinations and clubs including the Chicago Club and the Belvedere Club and three great hotels were established to accommodate and attract visitors and seasonal residents.

While the city's manufacturing base fell after World War II, tourism remained relatively constant. In the 1960s the Big Rock Point Nuclear Plant went online (Michigan's first nuclear powerplant) and the Medusa Cement Plant opened just south of the city limits. The first condos were constructed on Round Lake in 1973.

Charlevoix harbor has been the primary port providing transportation for passengers and goods from the mainland to Beaver Island. Over 18 different ferries have run from Charlevoix to Beaver Island including the Stanford, which was the first ferry to transport a vehicle in 1920 and the Emerald Isle, which was the first ferry built exclusively for Beaver Island in 1955.

The history of the town is still felt today. For example, the Cross family started fishing the waters surrounding Charlevoix in 1945. The family continues to use trap nets to harvest Lake Michigan fish today. Tourism remains important and the interplay between the waterfront and the town remains at the heart of the charming city.



Charlevoix Lighthouse at the harbor entrance. *Elizabeth Durfee*



Lubow fire insurance map of 1889. *Lake Charlevoix Association*



John Cross Fish Market. *Elizabeth Durfee*

# WATERFRONT SUMMARY

Charlevoix's Lake Michigan waterfront consists of relatively undeveloped sandy beaches south of the Pine River Channel and beaches with residential development to the north of the channel. With the exception of Park Island, the shoreline of Round Lake is heavily built up with docks. Relatively undeveloped, private, parkland and beaches characterize Lake Charlevoix's waterfront immediately north and south of the channel from Round lake. Shoreline development increases north and south of the channel.

The downtown waterfront features a number of pocket and linear parks adjacent to the Pine River Channel that provide the public with a place to view boats passing under the drawbridge as they enter and leave the harbor. Sandwiched between the downtown core and Round Lake, East Park provides a connection between the downtown and the west side of Round Lake. The award-winning East Park was designed to reflect the importance of the environment, public access to the water and the preservation of views.

Charlevoix Harbor is one of the busiest harbors in the region. The harbor is a federally authorized deep draft harbor with project depths of 18 feet in Lake Michigan and in inner channels to Lake Charlevoix. The harbor is comprised of approximately one mile of maintained channel and over 4,100 feet of structures including piers and revetments (structures placed along wateredges and banks to absorb the energy of moving water).

The harbor requires dredging on a 10-15 year cycle. Charlevoix Harbor's major stakeholders include the U.S. Coast Guard, Lake Carrier's Association, St. Marys Cement and Beaver Island Ferry Service. In 2008 the harbor ranked 30th among Great Lakes harbors with 1.3 million tons of commerce.

Commodities that pass through the harbor include coal, slag, petroleum products, lime and cement. Bulk commodities that pass through Charlevoix Harbor annually generate \$38 million in direct revenue, \$15 million in personal income and more than 330 jobs. The harbor is a port for the Beaver Island Boat Company ferries and the U.S. Coast Guard.

Charlevoix's marinas and yacht basins include the city's municipal marina and the Northwest Marina Yacht Basin. The city's municipal marina was recently expanded to a 67-slip marina with floating docks and a number of amenities. The 2007 harbor expansion resulted in an increase of complimentary dock space, from 50 feet to 340 feet, offered to boaters visiting downtown shops and restaurants. Recreational water-dependent uses include charter fishing, sailing and watercraft rentals. Charlevoix has two large, private boathouses.

There are four beaches and seven waterfront parks, including Michigan Beach Park, Watertower Park, Hoffman Park, Robert Bridge Memorial Park, East Park, Depot Beach and Ferry Beach Park, that provide physical and visual access to the waterfront and an array of amenities and opportunities for recreation.



Cyclist next to Round Lake. *Elizabeth Durfee*



Catamaran passing under lifted drawbridge. *Elizabeth Durfee*



Docks at Irish Boat Shop. *Elizabeth Durfee*

# CHALLENGES AND ACTIONS

With regard to its working waterfront, Charlevoix faces two challenges: meeting demand in the municipal marina and creating a balance of land uses along Round Lake.

Recent improvements to the municipal marina and East Park have increased access to the waterfront. However, there is demand for additional slips as well as accommodations for larger vessels.

Land use surrounding Round Lake is dominated by non-water-dependent uses such as private residential condos and clubs. With the exception of the marina, there is little public access to Round Lake. Water-dependent uses are primarily limited to the east side of the lake with the marina, Ward Brothers and Beaver Island Ferry Company.

Cross Fisheries has been located in Charlevoix for generations. Today the fishery's harvested catch is processed, packaged and sold on a small parcel on Round Lake that is surrounded by condominiums. Although issues are minimal, condo owners can have a conflict with the smell from the fishery operation.

In addition, development in the Marine Commercial District has been controversial due to resident concerns over maintaining views of Round Lake from Hurlbut Ave., which runs parallel to the south side of the Lake.



Catamaran sailing out of the channel to Lake Michigan. *Elizabeth Durfee*



Fishing tug (left) and yacht on Round Lake. *Elizabeth Durfee*



Beaver Island Ferry Company's Emerald Isle. *Elizabeth Durfee*

# ZONING ORDINANCE

ZONING DISTRICT	INTENT OF DISTRICT	PERMITTED USES	SPECIAL USES
General Commercial	Purpose is to accommodate retail and service establishments, uses are intended to provide convenient and attractive retail, professional office and service establishments for the community	Public park/playground/beach, boat gasoline sales, boat service and repair, boat/marine sales and related retail	
Central Business District	Purpose is to support the central activity area of the city by accommodating a mix of retail, office, service, entertainment and residential uses	Fishing charter service, public dock/boat launch, public or private park/playground/beach, boat/marine sales and related retail	
Commercial Hospitality District	Provides for overnight lodging and complementary facilities and services	Public or private park/playground/beach	
Marine Commercial District	Established at locations with water frontage to protect and promote historic and unique heritage and fishing village feel, district is intended to accommodate a mix of land uses including single family, condos, marine-related commercial and professional offices	Dock/boat launch, fishing charter service, public dock/boat launch, private noncommercial dock, public or private marina, public or private park/playground/beach, boat service and repair, boat/marine sales and related retail, boat/marine construction and maintenance equipment and storage	Boat house, boat fuel/gasoline sales
Scenic Reserve	Purpose is to protect the scenic attributes of certain properties along the shore of the city's abutting lakes, provide visual connection to water and views from the lake, natural areas intended to be protected from future development, includes public and private lands that are also highly valued for recreational activities	Dock/boat launch, fishing charter service, public dock/boat launch, private noncommercial dock, public or private marina, public or private park/playground/beach, outdoor recreation	Boat house
Industrial	Intended to accommodate the industrial needs of the entire community	Private noncommercial dock, public park/playground/beach, boat/marine construction and maintenance, equipment and storage, indoor boat storage in a permanent structure, outdoor boat storage	
Public Facilities	Intended to accommodate municipal, county and federal government related buildings and uses	Public park/playground/beach, outdoor recreation	
Commercial Mixed Use	Intended as a transitional area, includes a mix of residential and homes that have been converted to offices or mixed use buildings	Public park/playground/beach, outdoor recreation, boat/marine sales and related retail	

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

# ZONING

The city of Charlevoix has 14 zoning districts. Each district falls within a 1000-foot buffer of Lake Michigan, Round Lake and Lake Charlevoix (Figure 4 displays zoning within this buffer). Nine zoning districts have frontage on Lake Michigan, Round Lake or Lake Charlevoix.

The breakdown:

- The marine commercial district is the primary district dedicated to marine-related activity.
- Charlevoix has a scenic reserve district intended for preservation of the viewshed and undeveloped land (Table 1).
- The mixed use marine commercial district accounts for approximately 17 percent of water frontage.
- Uses such as beaches, marinas, docks and boat launches and marine-related retail are permitted in most non-residential districts in the city (see Table 1).
- There are no industrial districts along the waterfront within city limits; however, the city's water treatment plant is located in the scenic reserve district along Lake Michigan.
- A majority of identified water-dependent uses are located in the marine commercial and scenic reserve zoning districts.

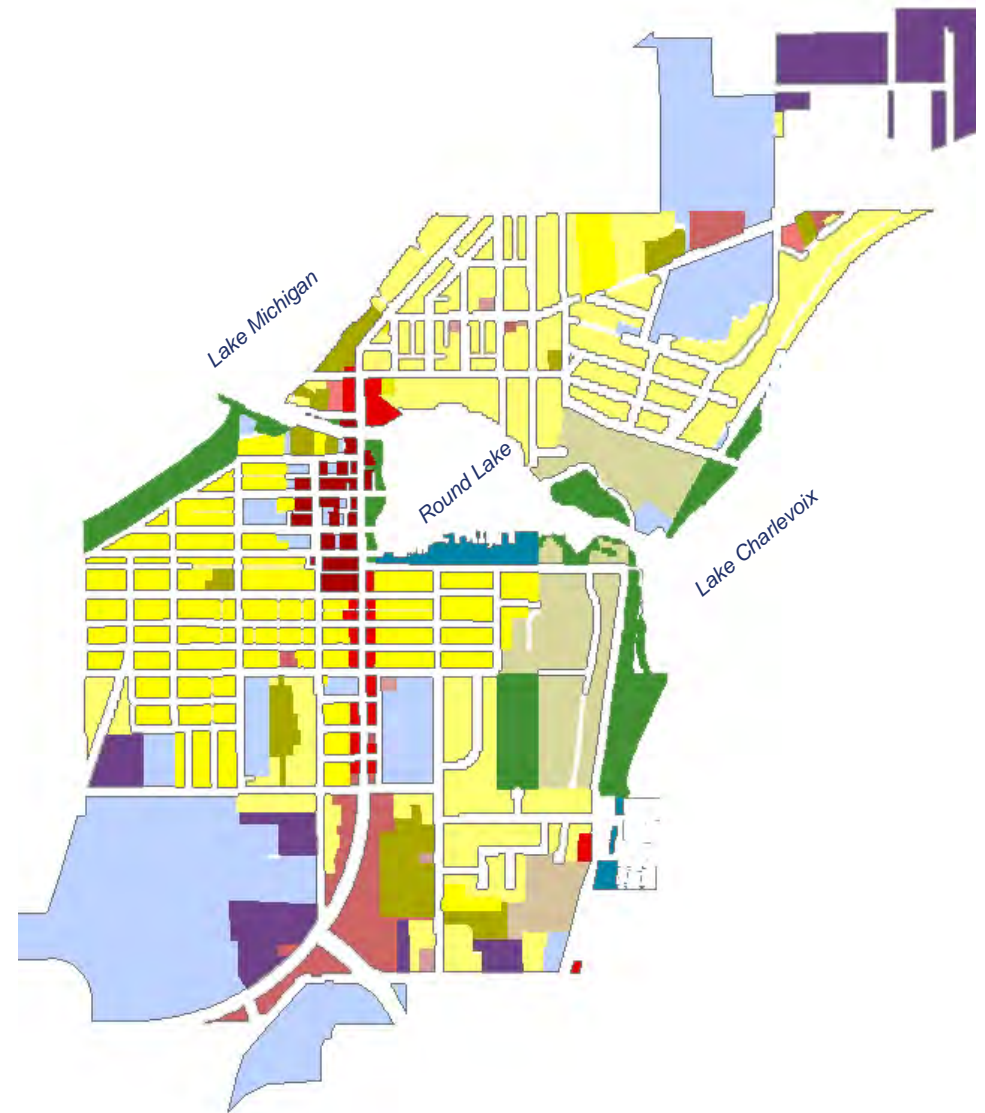
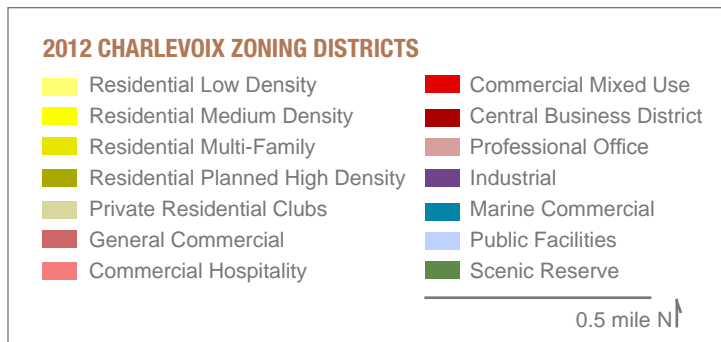


FIGURE 2. CITY OF CHARLEVOIX 2012 ZONING DISTRICTS.

# ZONING ADJACENT TO WATERFRONT

Open space accounts for 49 percent of the total frontage along Lake Michigan, Round Lake and Lake Charlevoix. Remaining land use along these bodies of water consists of: 28 percent residential uses, 20 percent commercial uses and 3 percent other uses including public facilities.

Figure 3 displays zoning along water bodies (right) and frontage length by generalize zoning category.

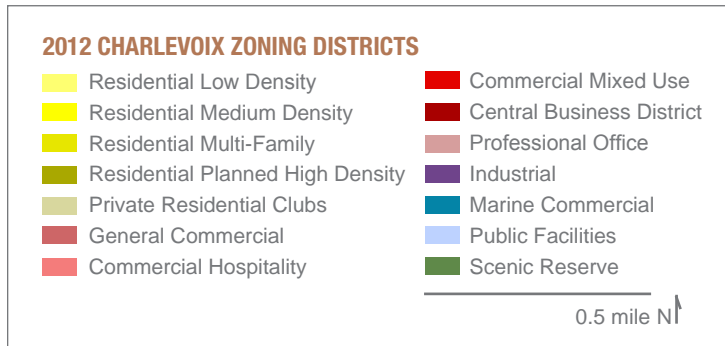
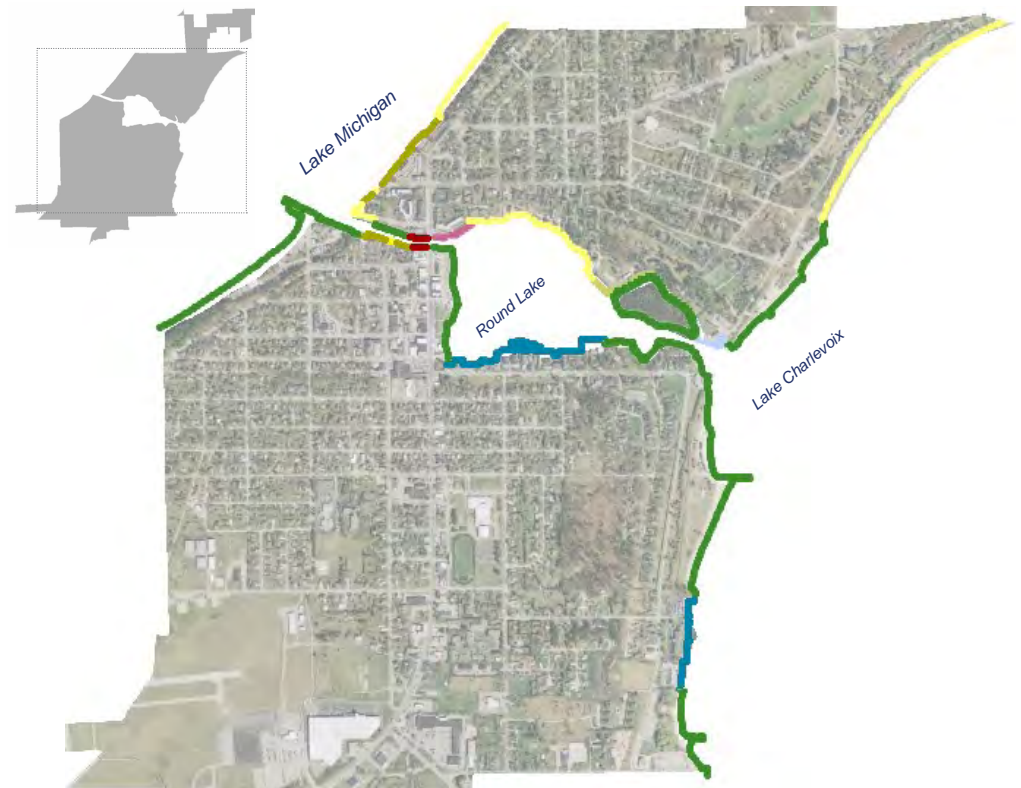
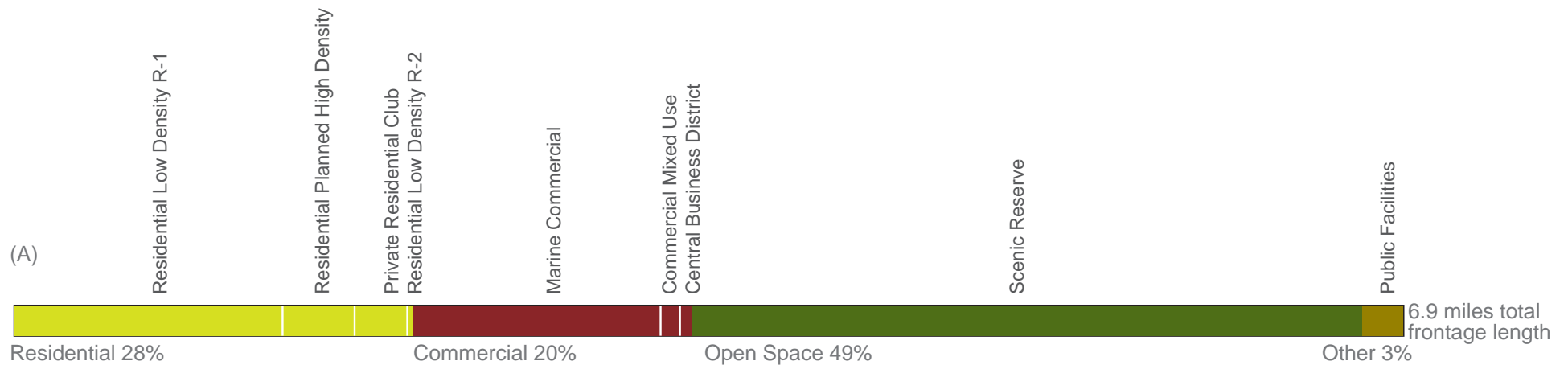


FIGURE 3. MAP OF ZONING ADJACENT TO WATERFRONT (ABOVE) AND FRONTAGE BY ZONING CATEGORY (BELOW).



# ZONING WITHIN 1000 FEET OF WATERFRONT

Land use within a 1000-foot buffer of Lake Michigan, Round Lake and Lake Charlevoix consists of: 64 percent residential, 16 percent open space, 11 percent commercial, 5 percent other, 4 percent mixed uses and 1 percent industrial uses.

Figure 4 displays zoning within this buffer (right) and waterfront land area within this buffer by generalized zoning category.

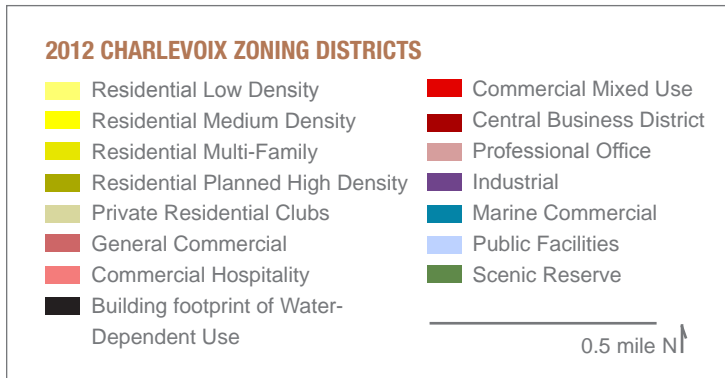
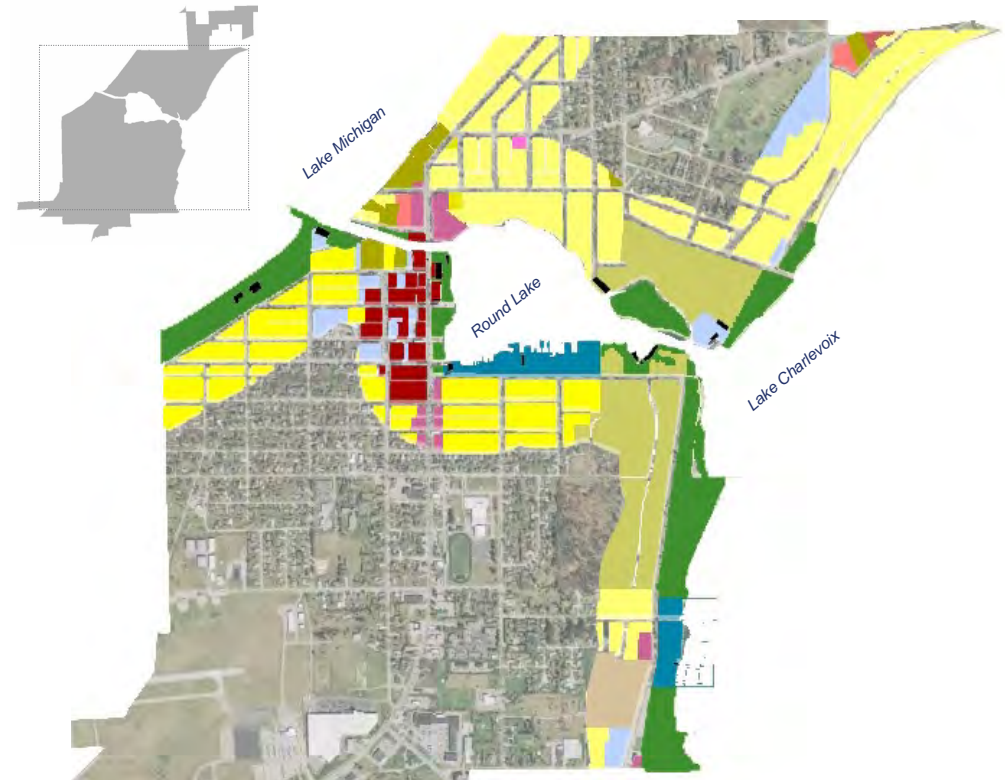
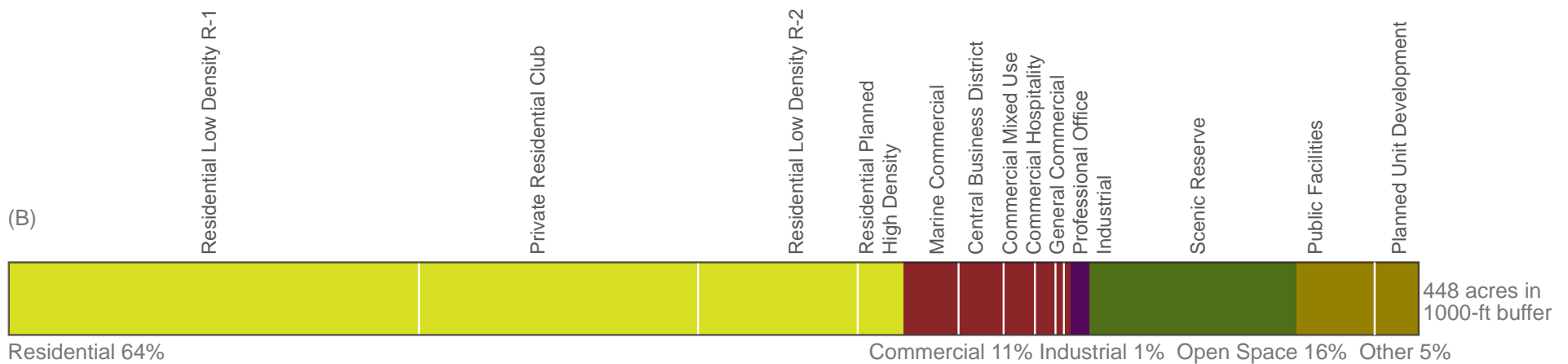


FIGURE 4. MAP OF ZONING AND LOCATION OF WATER-DEPENDENT USES WITHIN A 1000-FOOT BUFFER OF WATER BODIES (RIGHT) AND WATERFRONT LAND AREA BY ZONING CATEGORY (BELOW).





# PARCEL CLASSIFICATION AND INVENTORY

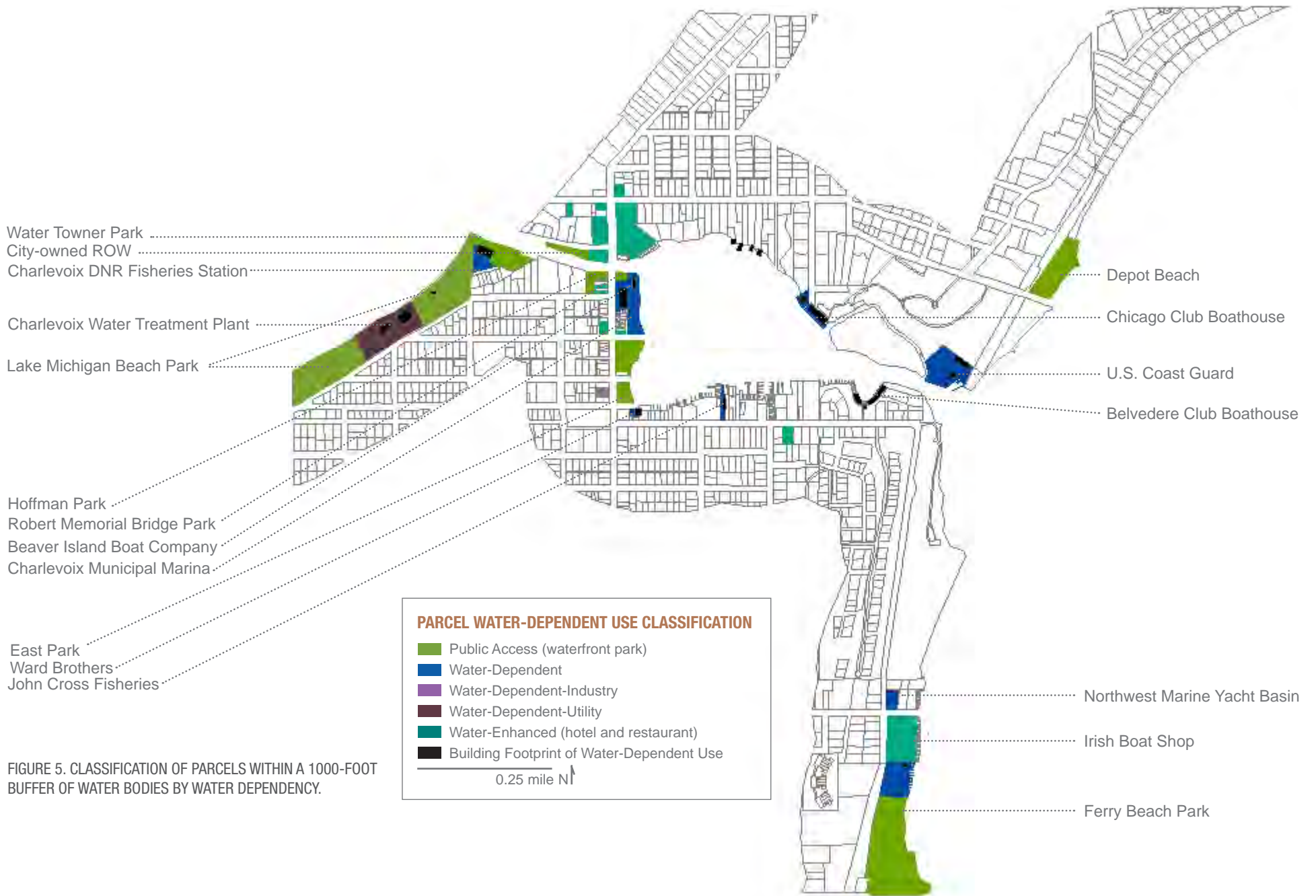


FIGURE 5. CLASSIFICATION OF PARCELS WITHIN A 1000-FOOT BUFFER OF WATER BODIES BY WATER DEPENDENCY.

# PARCEL CLASSIFICATION

Parcels that provide public access to the waterfront account for approximately 12 percent of the total frontage (approximately 8 miles) along Lake Michigan, Round Lake and Lake Charlevoix and approximately 4 percent of the area (approximately 440 acres) within a 1000-foot buffer of these bodies of water. Parcels that have identified water-dependent uses account for 8 percent of frontage and 2 percent of the area within the buffer (Figure 6).

Figure 5 displays an inventory of identified water-related uses and classification of parcels with water-dependent and water-enhanced uses and parcels that provide public access.

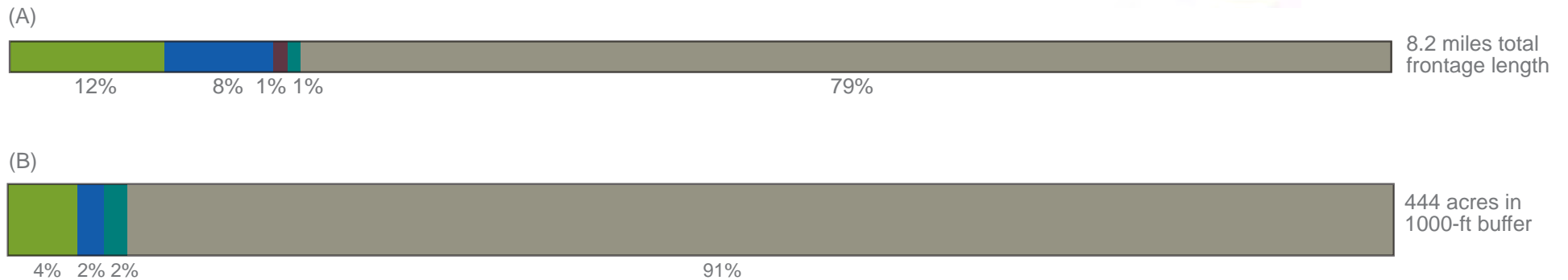


FIGURE 6. PARCEL FRONTAGE (A) AND AREA WITHIN 1000-FOOT BUFFER BY WATER DEPENDENCY CLASSIFICATION (B).

# INFRASTRUCTURE AND ACCESS

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

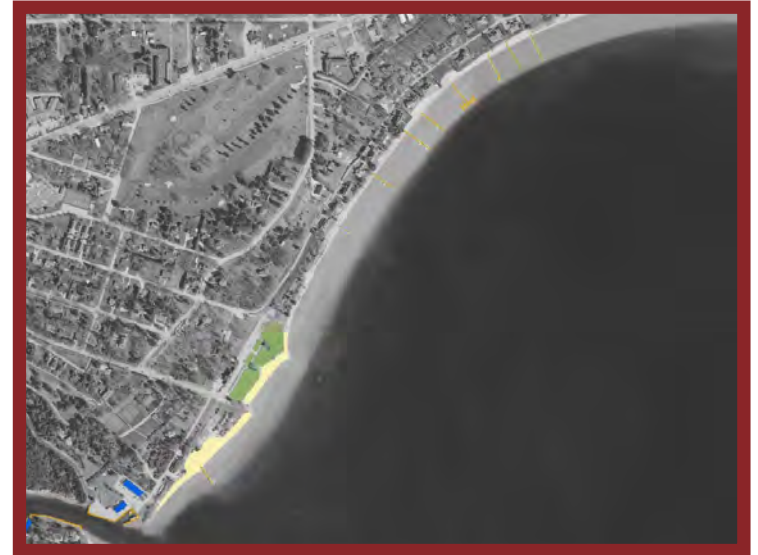
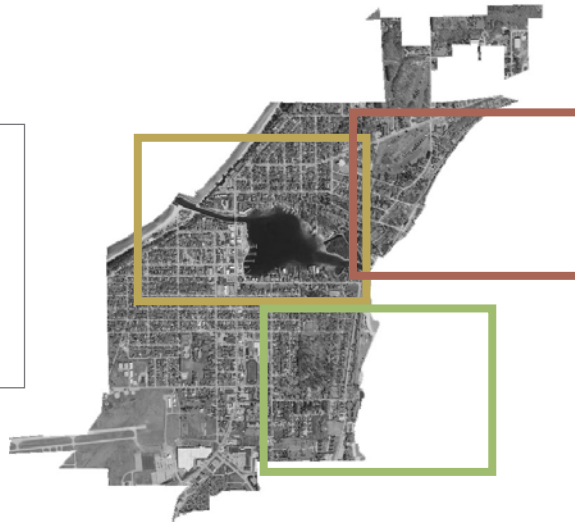
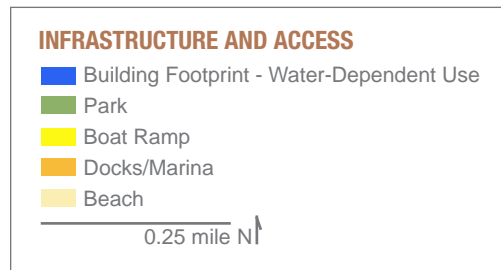


FIGURE 7. WATER-DEPENDENT AND ENHANCED USES, DOCKS AND WATERFRONT PARKS ALONG THE WATERFRONT AND WITHIN 1000 FEET OF WATER BODIES.

# WORKING WATERFRONT SWOT ANALYSIS

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.

There are a number of factors that influence a community's ability to maintain a robust working waterfront. The SWOT analysis below provides examples of the challenges and opportunities associated with maintaining Charlevoix waterfront as a place that provides public access and supports and is well integrated within the community from a planning and physical perspective.

<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>■ Deep draft commercial/cargo/ferry/recreational harbor</li> <li>■ Municipal marina</li> <li>■ Ferry to Beaver Island</li> <li>■ East Park - award winning design and significant asset</li> <li>■ Cross Fisheries, multi-generational commercial fishing</li> <li>■ Lake Michigan beach</li> <li>■ Numerous pocket and linear parks along the Round Lake channel near the draw bridge</li> <li>■ Coast Guard Station, DNR Research lab/station</li> <li>■ Strong tourism industry, waterfront festival</li> <li>■ Frontage on three bodies of water, connection to inland lakes</li> <li>■ Downtown well connected to Round Lake and Lake Michigan</li> <li>■ Zoning ordinance permits water related uses in multiple districts</li> <li>■ Complimentary dock space for visitors</li> <li>■ Dredging not a major issue</li> </ul>	<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>■ Round Lake waterfront very built up</li> <li>■ East Park provides only major public access to Round Lake</li> <li>■ Marine Commercial district on south side of Round Lake dominated by condos</li> <li>■ Demand for marina can exceed capacity</li> <li>■ 65-75% of residents do not live year round</li> <li>■ New condo owners near fishery occasionally have conflict with smell</li> <li>■ Residential and/or private clubs occupy a large portion of the waterfront</li> </ul>
<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>■ Exploring the potential for a larger dock at East Park</li> <li>■ Potential to accommodate more boaters visiting with ferry or other transit service from marinas on Lake Charlevoix to downtown marina</li> </ul>	<p><b>THREATS</b></p> <ul style="list-style-type: none"> <li>■ Potential for loss of commercial fishing in Charlevoix and little in place to prevent the only commercial fishery property from being redeveloped if the family-owned business were to close</li> <li>■ Cargo boom in the 1980s, not immediate demand for more</li> <li>■ Decline in tourism would have significant impacts on the local economy</li> <li>■ Decline in fish catch influences viability of fishery</li> </ul>

TABLE 2. STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) RELATED TO MAINTAINING CHARLEVOIX'S WORKING WATERFRONT.

# TOOLS, STRATEGIES AND BEST PRACTICE FOR MAINTAINING WORKING WATERFRONTS

## ZONING

Permit uses that rely on access to the waterfront in many zoning districts. General commercial and industrial districts, for example, can accommodate uses such as public/private docks and boat launches, charter fishing, and marine service and repair facilities if a community's ordinance does not have a zoning district that specifically accommodate uses that require adjacency to the waterfront.

## ESTABLISH STRONG CONNECTIVITY BETWEEN THE WATERFRONT AND DOWNTOWN

Redevelop a downtown waterfront park to establish a stronger connection between water resources and the downtown. Expand and enhance a downtown municipal marina through the addition of amenities such as an overlook platform, trout stream, music shell and greenspace and pedestrian paths that provide more options for residents and visitors, a greater mix of uses and more opportunities to attract people to the waterfront.

## PROVIDE VISUAL ACCESS TO THE WATERFRONT

Use pocket parks and public right-of-ways to provide physical and visual access to the water and an opportunity to view boats and ships passing through. A waterfront park system promotes walkability and recreation along the water.



Michigan Sea Grant



Beaver Island Ferry Company cargo loading station. Elizabeth Durfee



Boats docked at the municipal marina. 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 CHARLEVOIX

- ✓+ Maximize the public benefit of working waterfronts through visual and physical access.
- ✓+ Preserve visual and physical access to water resources.
- ✓+ Permit compatible mixed uses along the waterfront.

**How does your community stand up?**

# REFERENCES AND RESOURCES

- Beaver Island Boat Company (2013) About Us. Retrieved from [http://www.bibco.com/about\\_us-7/](http://www.bibco.com/about_us-7/)
- City of Charlevoix (2012) Marina. Retrieved from <http://www.cityofcharlevoix.org/city-departments/marina.html>
- City of Charlevoix (2011) City of Charlevoix Master Plan. Retrieved from <http://www.cityofcharlevoix.org/city-departments/planning-department.html>
- City of Charlevoix (2011) City of Charlevoix 2012-2016 Parks and Recreation Master Plan. Retrieved from <http://www.cityofcharlevoix.org/city-departments/parks-recreation.html>
- City of Charlevoix (2012) City of Charlevoix Zoning Ordinance. Retrieved from <http://www.cityofcharlevoix.org/city-departments/documents/5TitleV-ZoningandPlanning071411-for-web.pdf>.
- Digital Coast NOAA Coastal Services Center (2010) Charlevoix County, Michigan Snapshot. Retrieved from <http://www.csc.noaa.gov/snapshots/#ocean%2626153>
- Lake Charlevoix Association (2012) The Guardian of Lake Charlevoix. Retrieved from <http://www.lakecharlevoixassociation.org/FunontheLake/funontheLake.htm>
- Personal Communication Mike Spencer, City Planning Director, City of Charlevoix (September 26, 2012)
- U.S. Army Corps of Engineers (2012). Charlevoix Harbor, MI Fact Sheet. Retrieved from [http://www.lre.usace.army.mil/\\_kd/go.cfm?destination=Page&pge\\_id=2199&dialog=0](http://www.lre.usace.army.mil/_kd/go.cfm?destination=Page&pge_id=2199&dialog=0)
- U.S. Census Bureau (2010). Educational Attainment 2006-2010 American Community Survey 5-year Estimates, City of Charlevoix. Retrieved 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, Charlevoix County. 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 Charlevoix. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>
- U.S. Census Bureau (2000). Profile of General Population and Housing Characteristics, City of Charlevoix. 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, Charlevoix 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, Charlevoix 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, Charlevoix County. Retrieved July 2012 from <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>