

CASE STUDIES

Michigan Coastal Community Working Waterfronts INTRODUCTION

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WORKING WATERFRONTS OVERVIEW

Working waterfronts are coastal areas that support water-dependent uses while also providing for a mix of support industries, public access and other uses that benefit from the presence of the waterfront.

Working waterfronts are an essential element of one of Michigan's greatest assets: its 3,288 mile Great Lakes coastline. From supporting commercial fisheries to enabling waterborne commerce and trade, providing access for recreational boating or a walk along a riverfront boardwalk, working waterfronts have significant cultural and economic value and are inextricably linked to the history and identity of a community.

Vibrant working waterfronts create vibrant communities. For example, a dock that provides access for fishing and charter boats also attracts visitors, provides opportunities for recreation and social gathering along the waterfront and connects the public with natural resources.

While essential to the livelihood of charter and commercial businesses, this infrastructure also fosters a sense of place that contributes to quality of life in a community. This attracts people, new talent and opportunities for economic development.

The economic impact of ocean-and Great Lakes-related economic activity is significant. Nationally, ocean- and Great Lakes-related economic activity directly accounted for 130,855 businesses. These businesses employed 2.4 million employees, produced \$217.78 billion, and contributed to 3.41 percent of total GDP and 4.85 percent of total employment in 2008.⁽¹⁾

The decline of working waterfronts and waterways over the last decade has generated growing national attention around the need to preserve them. Nationally, working waterfronts are subject to a number of demographic, economic, environmental, regulatory and technological drivers of change. While population is increasing in most coastal areas around the country, the population of the Great Lakes Region and Michigan in particular has declined or experienced very little population growth since 2000.

The rising costs of coastal property and increases in real estate taxes is another national trend that affects the continued viability of working waterfronts.

In the Great Lakes, aging harbor infrastructure, cost of infrastructure maintenance, and dredging are a major threat to accessing water resources.

Environmental conditions such as lake levels, climate change, and storm events influence harbor draft and expose infrastructure, placing added stress on water-dependent uses. Regulations for waterfront development, discharge of dredged material and clean up of contaminated sites, and management of the coastal zone, bottomlands and fisheries, for example, impact waterfront use and activity. Finally, technological advances in offshore renewable energy production are an increasing driver of change to working waterfronts.⁽²⁾

CHALLENGES

The challenges that Michigan's working waterfronts face are similar to those encountered along the Atlantic and Pacific coasts. Maintaining public access, coping with low lake levels and inadequate harbor dredging and transforming former industry-dominated waterfronts to a more balanced, recreational-industrial coastal landscapes are among the challenges Michigan's working waterfronts currently face.

In this series of case studies, we explore working waterfronts found along Michigan's Great Lakes coasts.

(1) Hodges, A., Stevens, T., Rahmani, M, and Swett, R. (2013) The Sustainable Working Waterfronts Toolkit, Economic Analysis of Working Waterfronts in the United States. Retrieved from <http://www.wateraccessus.com/toolkit.html>

(2) Urban Harbors Institute (2013) The Sustainable Working Waterfronts Toolkit, History, Status, and Future Trends of Working Waterfronts. Retrieved from <http://www.wateraccessus.com/toolkit.html>

PURPOSE & OBJECTIVES

The purpose of this case study investigation is to gain an understanding of what uses occupy coastal land, how communities are supporting and planning for their working waterfronts, and to increase awareness of the importance of planning for and protecting water-dependent uses and public access.

Objectives:

- Identify common and unique challenges across communities with diverse working waterfronts.
- Serve as an informational and educational resource for community leaders and resource managers.
- Convey the importance of working waterfronts to the local economy, culture and quality of life.
- Conduct a geographic inventory of water-related uses.
- Estimate current percent of coastal land use occupied by water-dependent uses.
- Compile transferable best practices, strategies and tools for maintaining working waterfronts.

DEFINING TERMS

The terms below are defined as follows for the purpose of these case studies:

Coastal Community: City, township or village located all or partially within the Michigan Coastal Zone Management Boundary.

Non-Water-Dependent Use: A use or activity that does not require adjacency to the waterfront nor provide added value to the public because of the location. For example: residential home, law firm office.

Public Access (Site): Publicly owned site or facility that provides or is capable of providing access for water-dependent uses or passive use of the waterfront. For the purpose of the parcel inventory, public access includes parks, beaches and boat launches.

State of Michigan Coastal Zone Management (CZM) Boundary: Federally approved (1978) boundary that generally extends 1000 feet inland from the Great Lakes shoreline and up drowned river mouths.

Water-Dependent Use: An industry, business or activity that requires waterfront access or adjacency to the waterfront to be viable. For example: recreational marina, commercial or industrial port, boat service.

- **Water-Dependent Use-Industry:** Industrial use located within 1000 feet of navigable water that utilizes water and/or shipping. Ex: paper manufacturing plant.

- **Water-Dependent Use-Utility:** Utility located within 1000 feet of navigable water that utilizes water. For example: wastewater treatment plant.

Water-Enhanced Use: A use whose waterfront location adds to public value and use of water's edge but does not require adjacency to the waterfront. For the purpose of the parcel inventory these uses include hotels, inns, motels and restaurants located within 1000 feet of navigable water.

Water-Related Use: A business or use that supports water-dependent uses and requires proximity to the waterfront but does not require immediate adjacency to the waterfront. For example: bait and tackle supplies, winter boat storage, kayak sales.

IDENTIFYING WORKING WATERFRONTS

WORKING WATERFRONT COMMUNITIES

Coastal communities with a downtown or community center adjacent to the waterfront with a marina, port or federally authorized harbor were identified as working waterfront communities. Approximately 100 of the 250 minor civil divisions (MCDs) or county subdivisions (cities and townships in Michigan) that are adjacent to the Great Lakes met these criteria.

Challenges and limitations of identifying working waterfronts in Michigan:

- Length of shoreline in Michigan (3,288 miles).
- 250 cities and townships (MCDs) and 30 villages adjacent to the Great Lakes.
- 320 cities and townships (MCDs) and 30 villages within or partially within the CZM boundary.
- No official definition of what constitutes a working waterfront.
- Incomplete data on the number and location of ports and marinas in the state.
- Lack of adequate, publicly available economic data at the community level to identify working waterfronts using an economic approach where communities in which the percent of the economy (number of businesses, employees, GDP or income) is attributable to Great Lakes-related activity is over a certain threshold are considered working waterfronts.

CASE STUDY SELECTION

Eleven case study communities were selected based on the following factors:

- Geographic representation of four Great Lakes and Upper and Lower peninsulas.
- Range of type(s) of harbors (recreational, commercial, industrial, cargo).
- Diversity of size of land area, population and density of population.
- Type(s) of adjacent bodies of water (Great Lake, river mouth, inland lake).
- Diversity of challenges and level of waterfront planning.
- Input from Coastal Zone Management Program and Sea Grant staff.

These communities include:

Alpena	Marquette	Port Huron
Charlevoix	Monroe	Saugatuck
Manistee	Muskegon	Sault Ste. Marie
Manistique	Ontonagon	

MICHIGAN COASTAL ZONE MANAGEMENT BOUNDARY



CASE STUDY COMMUNITIES



FIGURE 2. CASE STUDY COMMUNITIES.