

## COMMUNITY PROFILE: PENTWATER



The Sustainable Small Harbors project received funding from Michigan Sea Grant, Michigan Department of Natural Resources – Waterways Program, Michigan Department of Environmental Quality – Office of the Great Lakes, and Michigan State Housing Development Authority to engage stakeholders in waterfront communities around Michigan. In 2015-2016, through public workshops and design charrettes, the project team helped community leaders assess challenges and opportunities related to the economic and environmental sustainability of their waterfronts. This community profile captures the insights and future visions developed through that process. For more information, see: [sustainablesmallharbors.org](http://sustainablesmallharbors.org).



### Community Basics

**Waterfront:** Pentwater Lake, 0.4-mile channel to Lake Michigan

**County:** Oceana

**Area:** 1.62 square miles

**Population:** 857 people in 2010

**Median Household Income:** \$45,228 in 2013

**Median Age:** 60.3 (2010)

Source: U.S. Census, 2000, 2010, City Data

### COMMUNITY INVENTORY

The Village of Pentwater is located on Pentwater Lake at the edge of Lake Michigan. In 1853, lumber baron Charles Mears built a channel to Lake Michigan and placed a sawmill, pier, store, and boarding house on its north bank while also running a ferry across the channel. This development was absorbed into Pentwater when the village was formed in 1867. The village is home to shops, restaurants, inns, bed and breakfasts, a public library, the Charles Mears State Park and campground, several parks including a Village Green, Pentwater Wire (light industry), and a Friendship Center serving lunch to seniors. Many businesses operate seasonally to accommodate summer visitors. In addition to four marinas, Pentwater

is home to a marine services shop that showcases new technologies for ship-building, including 3-D printing, metal casting, and other computer-controlled machine and woodworking tools.

The level of Pentwater Lake fluctuates with the level of Lake Michigan. The entrance to the channel that connects Pentwater Lake to Lake Michigan is notoriously shallow and for many years has dictated the size of vessels that the village is able to accommodate. Dredging has been an ongoing issue and financial concern for the community. The Pentwater Harbor Research Committee formed as a citizen-led response to tracking channel depths and assessing dredging needs.

Pentwater is currently known as a vacation and retirement destination with many rental properties available throughout the year. Special annual events include a juried art show, fishing tournaments, a Memorial Day parade, and an annual Homecoming celebration featuring a sandcastle-building contest.

Pentwater has seen significant demographic changes. Between 1990 and 2010, the population decreased by approximately 20 percent. However, these population figures reflect only year-round residents and do not account for the considerable effects

of seasonal residents. In 2015, almost 49 percent of the housing stock was defined as seasonal. Sixty percent of the Pentwater population is over the age of 45.

Source: Village of Pentwater Master Plan (2015), Pentwater Historical Society

## PLANNING DOCUMENTS

- [Village of Pentwater Master Plan Update](#) (2015)
- Master Plan Update Community Survey (2008)
- [Pentwater Area 2013-2018 Recreation Plan](#) (2013; a collaborative plan adopted by Pentwater Village, Township, and Pentwater Public Schools)
- Pentwater Downtown Development Authority Long- and Short-Term Goals (2013)
- Amendment to the Pentwater Area Recreation Plan (2015)
- Pentwater Brand Collaborative: Pentwater Life Attributes (2015)
- [Downtown Development Authority District Map](#) (2006)
- Downtown Economic Enhancement Study (2005)



Figure 1: Pentwater municipal marina with a view of the fish cleaning station and interpretive signage (left). Pentwater municipal boat launch off of E. Lake Road (right). Source: Village of Pentwater

## WATERFRONT INVENTORY

**Pentwater Municipal Marina:** The municipal marina features floating docks with 44 slips equipped with 30-amp electrical service. Many modern boats require 50-amp service, so this has been cited as a limitation. The marina also provides water service, a pump-out station, a picnic shelter, restrooms, a bath house, kayak racks, and a fish cleaning station. The marina is open from May through October and does not provide fuel. Approximately 22 slips are reserved for transient use and 22 for seasonal use; reservations can be made via an MDNR online service.

### Pentwater Municipal Boat Launch:

The launch site includes public restrooms, a single launch ramp, a simple floating dock, and parking. Seasonal and daily boat launch permits are available from the village, starting in April of each year.

**Snug Harbor Marina:** Full-service marina with 54 slips (ranging from 20 feet to 75 feet in length, each with 30-50-amp electric service), 250 feet of broadside tie-up space, a gas dock, and a travel lift. A dock crew is available to assist with fueling and docking. Services include indoor and outdoor storage, pump-out, winterization, boat washing, body work (fiberglass,



Figure 2: USACE project area. Source: USACE

## Dredging and Federal Infrastructure

- Project depth is 11-12 feet; the project is currently maintained at 8-10 feet.
- Approximately 2,125 feet of maintained federal channel between Lake Michigan and Pentwater Lake.
- More than 4,000 feet of maintained piers and revetments.
- The north and south harbor piers and revetments, originally built in the late 1800s, were reconstructed in the late 1990s and wave attenuators were added.
- In 2012, the dredging spoils were placed in Lake Michigan. This will almost certainly be the case at the next dredging.
- Maintenance dredging is currently required. Historically, the channel has required maintenance dredging of approximately 12,500 cubic yards on a nearly annual basis; the harbor was last dredged by USACE in 2010. The community performed limited dredging in 2012 and is pursuing limited dredging in 2017 using state and local funds.

Source: [USACE, 2016](#)



woodworking, gel coat), sailboat rigging, and mechanical repair. Amenities include picnic areas with grills, wireless internet, restrooms, showers, and laundry facilities.

**Charlie's Marina:** A full-service marina with winter and summer storage, in-and-out service, jet ski ramps, gas, boat launch, repair shop, and boat sales. The dock has approximately 85 slips.

**Pentwater Yacht Club:** A membership-based not-for-profit organization that includes a restaurant, dining room, deck, kayak racks, broadside tie-up, and a few slips.

### LOCAL FUNDING FOR DREDGING

In July 2012, Pentwater undertook their own dredging efforts as federal funding was not available. Funding was provided as follows:

- Oceana County Community Foundation fund: \$45,000
- Pentwater Village: \$15,000
- Pentwater Lake Improvement Board: \$15,000

In December 2013, the Pentwater Harbor Research Committee predicted that approximately \$50,000 per year in non-federal funding will be required for the foreseeable future in order to keep the Pentwater channel clear for navigation. The committee proposed that this funding be offered by four sources: Village of Pentwater, Pentwater Township, Pentwater Lake Improvement Board, and "private funds under extraordinary conditions."

Source: Pentwater Harbor Research Committee (December 2012)

## VISIONING AND PLANNING

### COMMUNITY LIABILITIES

As part of the visioning process, the community self-identified the following economic, environmental, and social barriers:



Figure 3: Weaknesses or barriers reported by the community, where larger text size indicates a higher frequency of mentions. Source: Sustainable Small Harbors

### COLLABORATORS

To draw upon community expertise, the following technical meetings were convened:

- Pentwater Chamber of Commerce;
- Downtown Development Authority;
- Village Planning Commission; and
- Historical Society (via written summary).

To facilitate implementation support, the following initial state and regional partners were identified:

- Regional Prosperity Initiative field staff;
- Michigan Sea Grant staff; and
- Michigan State University Extension staff.

## PREFERRED ALTERNATIVE: “PENTWATER 2035”

“Pentwater 2035” represents a shared future vision of the community based on the charrette design process. The final design includes developing a Pentwater Marine Technology Institute, expanding marina facilities, and capitalizing on several redevelopment opportunities downtown and along the lakefront.

For the municipal boat launch focus area, the preferred alternative includes adding boat slips, moving the pavilion, adding an extended pier, and moving the sailing school sand launch to be adjacent to the boat ramp. As a potential site for the Pentwater Marine Technology Institute building, the site could be developed in phases to include additional structures as the institute expands. Fish habitat structures may be added to improve fish populations in Pentwater Lake.

For the downtown waterfront and municipal marina focus area, components from a prior marina improvement plan were incorporated, including additional slips and electrical upgrades. Bioswales and rain gardens were added to the municipal park design to help improve water quality in Pentwater Lake and serve as a demonstration project to educate residents about native plants, stormwater runoff, and actions residents can take to improve water quality in the lake. These green infrastructure components are in addition to existing stormwater infrastructure and could potentially be maintained by a volunteer garden/landscaping club to avoid adding maintenance work for the village staff. The design also suggests a destination restaurant on the Snug Harbor property. A “year-round” destination restaurant that would include banquet and meeting space with catering service could draw people from other communities into Pentwater.



Figure 4: Current view of boat launch (top) and artistic rendering (bottom) of the expanded dock and Pentwater Marine Technology Institute building. Source: Sustainable Small Harbors



Figure 5: Artistic rendering of proposed destination restaurant and municipal park modifications. Source: Sustainable Small Harbors

### Full Charrette Report

For additional information on the three alternatives the community evaluated and the development of the “preferred alternative,” please see the full charrette report, [available for download on the website](#).

Its waterfront location would make it unique in the region.

For the harbor and channel focus area, design recommendations address Pentwater’s ongoing dredging needs.

Sedimentation control was suggested, including the identification of potential dune revegetation areas along Mears State Park and at the edge of the channel; this restoration will stabilize areas of soil and help to control sand



blowing away from the beach and further support prior temporary fencing efforts to slow air transport of sand. The preferred alternative suggests an expanded dredging area to prolong the dredging cycle, which could ultimately save in mobilization costs.

At the end of Bridge Street, a new pocket park, referred to as Bedstead Park, is designed as a connection point between downtown and the channel. The site was the location of the Bedstead Factory until 1900. This park would have a kayak launch and additional storage racks that the Village could rent to people, following the process used for current kayak storage service. The park would be located at the end of the channel, so it could support a boat crossing between there and the opposite side of the channel. A chain ferry, reminiscent of Pentwater's historic ferry crossing, is included in the design with landings on each side.

## CONNECTIVITY

The harbor connections via car, bike, foot, and boat are all important in Pentwater. Lowell Street, 6th Street, and Hancock Street are key connections for pedestrians and vehicles. These streets should be designed as "Complete Streets," which are defined by their ability to be accessible to all transportation modes and abilities.

## VALUE CAPTURE – INITIAL EFFORTS

As a part of the engagement process, the team encouraged the community to consider ways to increase year-round residency in Pentwater, namely by engaging in development of an educational institute to draw youth to the area and to capitalize on resident expertise. Value capture on the suggested improvements can occur through existing taxes and consideration of waterfront-specific financing options, including marine investment funds or water resources tax increment financing. The team

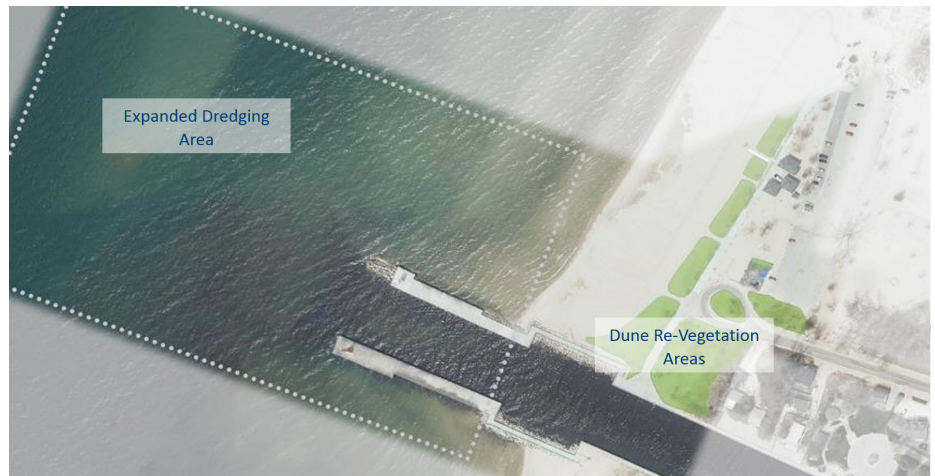


Figure 6: Expanded dredging area and dune restoration. Source: Sustainable Small Harbors



Figure 7: Artistic rendering of proposed "Bedstead Park," featuring a chain ferry landing, kayak storage racks, kayak launch, and bike share station. Source: Sustainable Small Harbors



Figure 7: Complete Street section of Lowell Street. The design is based on current right-of-ways and infrastructure. A six-foot designated bike path is designed on one side of the street and parking on the other. Source: Sustainable Small Harbors

outlined opportunities to incorporate the overall design vision into existing planning documents and provided an overview of potential funding sources.

## ECONOMIC ANALYSIS

A summer tourist destination, Pentwater has historically relied on federal funding to keep the passage

to its harbor dredged to a navigable depth. The recent loss of that funding has resulted in a precarious situation with respect to harbor access, which could threaten the town's long-term economic sustainability. However, Pentwater residents and leaders may not choose to support development that would lead to larger summer

crowds. Thus, enhancing economic sustainability through development and traditional tax increment financing, which would be used to fund dredging, may not be a socially desirable solution.

The charrette designs include developing a Pentwater Marine Technology Institute (PMTI). One vision for the PMTI involves focusing on 3D design and automated manufacture of wooden boats. The institute would coordinate with colleges and universities to attract students and faculty, as well as relying on local engineering and fabricating talent. The PMTI would be consistent with the character of Pentwater, and it would provide year-round economic activity estimated at \$500,000 in goods and services. About \$25,000 per year would go toward funding dredging activities.

## IMPLEMENTATION

### USE OF DESIGN AND VISIONING PRODUCTS.

The “Pentwater 2035” Sustainable Small Harbor Study Report, Final Presentation, and funding opportunities documents are all posted to the Village Planning Commission webpage. In July 2015, all Planning Commissioners were advised to review the harbor study documents.

Pentwater Planning Commission Meeting Minutes (July 2015)

**INITIAL IMPACTS.** The planning commission updated their bylaws to include the goal to create and maintain a vision and long-term plan for village sustainability. In July 2015, a member of the Downtown Development Authority proposed an “Initiative – Entity/ Advocacy Matrix” to keep track of the progress of recommendations in the Sustainable Harbor Report. The matrix was suggested for review in August 2015, but there was no indication of this review in the minutes. A Village Councilor concurred that the Village needs a way to measure objectives and timeframes. He also stated that as a result of the Studies report, the Village

is already looking at making Lowell Street a “Complete Street.” Another planning commissioner noted the limits of what the village as a governing body can take action on. In June 2015, the Village Manager noted that a capital improvements plan was in progress.

Source: Pentwater Planning Commission Meeting Minutes (February 2016); Pentwater Planning Commission Meeting Minutes (July 2015)

**CHALLENGES.** Dredging continues to be a pressing concern in the community. Through the Pentwater Harbor Research Committee ([pentwaterchannel.org](http://pentwaterchannel.org)), citizen volunteers have gathered information and communications about channel dredging. In support of the “citizen champion” model, one community member noted: “If it weren’t for [the committee], I’m not sure the channel would be open for larger boats.” The citizen-led funding structure for dredging is a new chapter for Pentwater.

In June 2016, Pentwater rallied local funds to conduct dredging in the channel. Funding was provided in part by the Pentwater Lake Improvement Board. However, dredging did not happen as planned. Locally reported channel depth in the spring of 2016 was 7 feet on the north side of the channel, forcing larger boats to enter Pentwater Lake only via the south side.

**PRIORITIZATION AND FUNDING.** In March 2015, the Village prepared and submitted an MDNR Michigan Waterways Grant Application for a Preliminary Engineering Study at the marina to upgrade 10 slips to 50-amp service. The application was approved in April 2015 and an engineering survey was conducted to inform the upgrade. While the work was planned for the spring of 2016, the upgrade was delayed due to a more pressing, unexpected infrastructural failure. In September 2015, Dockside Restaurant on Hancock Street was destroyed in

a fire. The extreme volume of water applied to the fire drained to the marina and washed out the wall on the north end of the marina. After the fire, the wall repair was given higher priority, so the electrical upgrade will be re-proposed for 2017.

**MOMENTUM.** Several participants have noted a resistance to change within the community, as many are very fond of Pentwater as it is. One community member reflected that Pentwater is big on “free enterprise,” suggesting that local government may be less likely to lead activities otherwise championed by private groups or individuals. There is also a reported sense that “I worked hard for 40 years, and I picked this place to lay back and relax.”

The “Pentwater Branding” initiative continues striving to “promote Pentwater as not only a year-round tourist destination, but as an exceptional place to live, work, grow a business, and retire” while also “preserving and promoting what is best about village life in the extended Pentwater community.” Based on findings that indicate 60 percent of visits to western Michigan are to visit a friend or relative, the branding initiative coined the tagline: “Discover Pentwater. Come for a day, a week, a life!”

Source: Pentwater Brand Collaborative (April 2015)