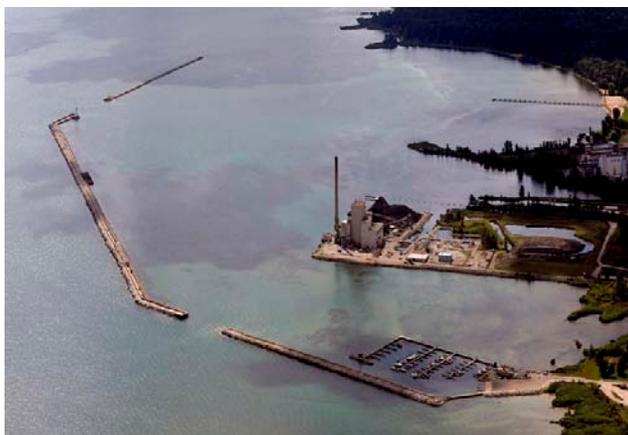




**US Army Corps
of Engineers**®
Detroit District

HARBOR INFRASTRUCTURE INVENTORIES

Harbor Beach Harbor, Michigan



Harbor Location: Harbor Beach Harbor is located on the west shore of Lake Huron about 60 miles north of Port Huron, MI.

Authority: Rivers & Harbors Acts of 3 Mar 1871, 8 Aug 1917, 21 Jan 1927.

Project Description: Harbor Beach Harbor is a deep draft commercial harbor with three breakwaters totaling approximately 7,900 feet in length. The harbor project consists of about one half mile of maintained channel.

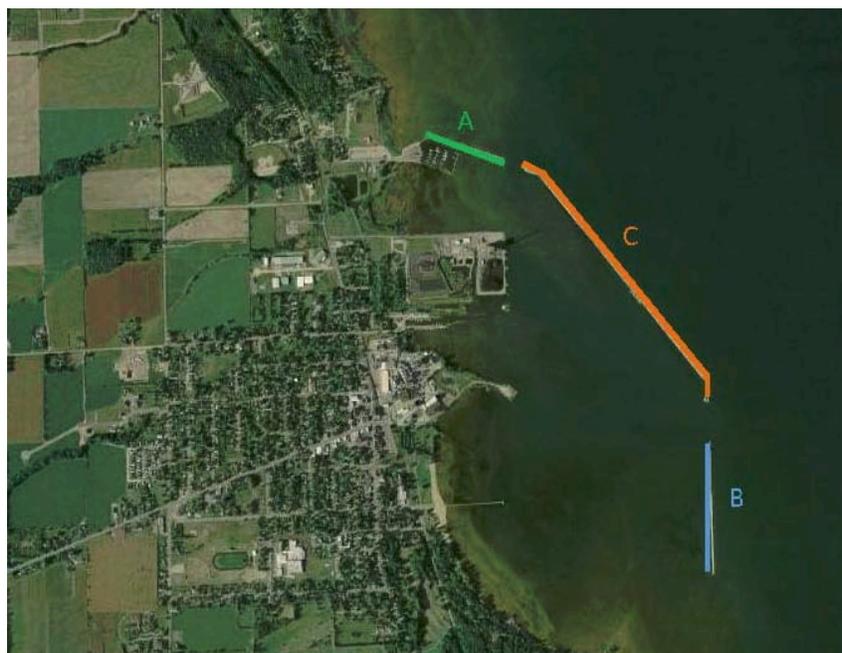
Traffic: 103,014 tons (5-Year average, 2004-2008)

Transportation Importance: Harbor Beach receives commodities including lignite and coal and is the only delivery option for fuel to the local coal fired power plant. The U.S. Fish and Wildlife Service uses the harbor to restock Trout populations in Lake Huron and the U.S. Coast Guard Station leases slips from the city owned marina and is responsible for the area between Port Sanilac and Caseville. Dive and fishing charters operate out of the city owned marina and there are 146 seasonal and transient slips available for recreational boater use.

Congressional Interest:

- Representative Candice S. Miller R-MI-10
- Senator Carl Levin D-MI
- Senator Debbie Stabenow D-MI

Current Condition Assessment: **C**



Date of Site Visit: 14 August 2009

Summary of Impact: Prevailing waves come from a northerly and a southerly direction. The immediate impact of a break or overtopping of the breakwaters would be upon the power plant coal delivery operations. Significant wave activity within the harbor could damage any vessel moored at the power plant and prevent coal unloading operations. Additionally, any breach in the breakwater could potentially increase the rate of shoaling within the federal and private channels, resulting in added transportation costs due to light loading. The two marinas within the harbor are sufficiently protected, but could be exposed to greater wave heights under the right conditions. In both cases, an increased wave climate would result in damage to docked vessels and the docks themselves. The Coast Guard operates out of the city owned marina, which would be impacted if the marina was damaged. The shore structure with the greatest exposure is the power plant. Other shore structures subject to potential inundation are the Coast Guard Station, the city water treatment plant, the Dow and Sensient Facilities, a city park, and a resort area.

Examples of Protected Infrastructure:



1. DTE Harbor Beach Power Plant: A 103 MW coal fired power plant, which is connected into the East Center grid generates electricity and provides critical voltage stability to Michigan's Thumb communities. Fuel is unloaded on the western bank of the power plant area. Slag and ash are shipped out via water and are not stored on site. Plant maintains at least two months worth of fuel on hand, however, no nearby rail head exists. Fuel delivery options are solely waterborne. Plant was originally built in 1957. U.S. Fish and Wildlife Service uses dock facilities to service trout restocking vessels for Lake Huron.



2. Harbor Beach Marina: City owned marina consisting of 114 seasonal and transient slips. Rates vary from \$1,182 to \$3,714 a season depending on the size of the vessel, and \$24 to \$177 a day for transient. Marina consists of floating docks. The shore immediately adjacent to the structure consists of four boat ramps, a parking lot, and the harbor administration building. Water to land interface consists of sheet piles. Marina supports two charter vessels.



3. Coast Guard Station: 14 sailor coast guard station with two vessels. Coast Guard leases slips in the Harbor Beach Marina for docking its vessels. Responsible for waters from Port Sanilac to Caseville, MI. Structures include a small brick façade administration building and a metal storage barn.



4. Harbor Beach Municipal Water Treatment Plant: Provides drinking water from Huron City to the north to Forestville in the south. Area surrounding facility is a public park that consists of open space, disc golf, picnic tables, and a pavilion.



5. Dow Agro Sciences, LLC Facility: Heavy industrial chemical plant.



6. Sensient Chemical Plant: Heavy industrial plant that produces food dyes.



7. Public Park: City owned beachfront park with playground and bathroom facilities. The park also consists of a 1,000 foot pedestrian pier. Pier consists of steel pile enclosed sheet piling. Immediately west of the park is a granary which appears to no longer be in operation, and Veterans of Foreign Wars local chapter building, and a residential area consisting of single family homes.



8. Harbor Beach Resort Association. Large resort area consisting of beach front cottages, a main administration building, and a golf course.



9. Harbor Beach Municipal Waste Water Treatment Plant. Services the city limits of Harbor Beach.

10. Offshore Marina. Privately owned marina. Estimate 25 slips and two boat launches. Piers consist of wooden piles with wooden cross members. Area also includes open camp ground for RVs.



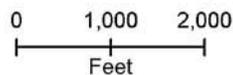
Potential Impact Area: The following graphic displays property parcels that could be impacted within various zones defined by different setbacks from the shoreline behind existing Federal coastal structures. A power plant, Coast Guard Station, Water treatment plant, chemical facilities, marinas and parks would all be affected within 1,000 feet from the shoreline.



HARBOR BEACH HARBOR

Harbor Beach, MI

-  Federal Structure
-  Shoreline_1000_ft_buffer
-  Shoreline_1500_ft_buffer
-  Shoreline_2000_ft_buffer



Imagery Source- NAIP 2012



Created August 2012- by T. Crockett- Buffalo District