



US Army Corps  
of Engineers

Buffalo District



Great Lakes  
Navigation System

## Cleveland Harbor, OH

### Harbor Features

- Located on Lake Erie in the city of Cleveland, Cuyahoga County, Ohio
- Authorization: River & Harbor Acts of 1875, 1886, 1888, 1896, 1899, 1902, 1907, 1910, 1916, 1917, 1935, 1937, 1945, 1946, 1958, 1960, 1962, Water Resources Development Acts of 1976 and 1986, Supplemental Appropriations Act of 1987 and the Energy & Water Appropriations Act of 1988
- Deep draft commercial harbor
- Authorized depths are 25-29 feet in the outer harbor and 18-27 feet in the river
- Five year average (2008-2012) tonnage of 10.1M tons of material shipped and received
- Ranked 7<sup>th</sup> among the Great Lakes Harbors based on five year average (2008-2012) tonnage
- 50<sup>th</sup> leading U.S. port in 2012
- Interconnected with 54 commercial ports: ships to 25 ports, and receives from 29 ports.
- Over 5.5 miles of breakwater structures
- 5.8 miles of Federal channel on the Cuyahoga River and 1 mile of Federal channel on the Old River
- Confined disposal facilities (CDFs) are located to the east of the harbor entrance
- Major stakeholders include Cleveland-Cuyahoga County Port Authority, Burke Lakefront Airport, ArcelorMittal, U.S. Coast Guard, Lake Carriers' Association, and Cargill

### Project Requirements

- Approximately, 225,000 cubic yards (CY) of material from the Federal Channel must be dredged each year. Dredging was last completed in Fall 2014 and is scheduled for Spring 2015



- 
- The sediment backlog within the Cuyahoga River channel was approximately 600,000 CY in 2012
- Severely deteriorated sections of the east and west breakwaters, arrowheads and finger pier must be repaired. Additional damage/deterioration was observed following Superstorm Sandy
- Sandy supplemental funded repairs to storm damaged sections of the East Breakwater, and the East and West Arrowhead Breakwaters are scheduled to be completed in 2014-15
- USACE is required to manage dredged sediment in accordance with the Federal Standard (33 CFR Parts 335-337), which requires implementation of the least costly alternative consistent with sound engineering practices and selected through the Section 404(b)(1) Guidelines - including compliance with applicable Ohio water quality standards.

➤ The 2013 evaluation of sediment quality indicated most of the dredged sediment is suitable for placement in the open lake and no longer requires confinement in a CDF. An operational placement site nine miles offshore in the open-lake was proposed in the 2015 application to the state for a water quality certification .

- It is critical that limited remaining CDF capacity be reserved for placement of contaminated sediment in the future
- USACE recently approved a Short-Term Decision Document recommending an alternative proposed by the Port of Cleveland in which the Port would create additional confinement capacity at its existing CDF and take over disposal operations under a Section 217 tipping fee arrangement. If an agreement can be reached with the Port for 2016 and beyond, costs could be recouped for construction, operations and maintenance through a tipping fee for confinement of any material not suitable for placement in the open lake. A tipping fee agreement with the Port must be approved by the ASA(CW).
- Local stakeholders have been working diligently in 2014/15 to identify a feasible alternative to open lake placement and a local sponsor to pay for any increased costs.
- The Buffalo District continues to support beneficial use of dredged sediment at Cleveland Harbor.

### **Consequences of Not Maintaining the Project**

- Reduction of bulk commodities that pass through the harbor and generate \$1.7B annually in direct revenue while supporting 15,003 direct, indirect, and induced jobs that produce over \$1B per year in personal income
- If the harbor was closed to commercial traffic, commodities would have to be transported by rail and truck. This would increase annual emission rates by over 311,079

tons of harmful particulate matter (PM-10) and increase costs by \$4,667,000 due to increased railroad related accidents, and \$7,643,000 due to increased trucking related accidents

- Light loading; losses of between 1 and 2 feet of channel depth would result in increased transportation costs of between \$1.6M and \$4.0M annually

### **Transportation Importance**

- Major receiving and shipping port on the Great Lakes; and Critical Harbor of Refuge
- Commodities shipped or received include iron ore, limestone, sand and gravel, salt, cement and concrete, general cargo and liquid bulk
- Major iron ore transshipment facility located at Cleveland's Outer Harbor. This facility provides iron ore to inland steel mills at lower delivery costs when compared to truck or direct rail delivery

### **The Way Ahead**

- The Cleveland Harbor Dredged Material Management Task Force is the primary means for Cleveland Harbor stakeholders to collaborate to create long term sustainable solutions for disposal of dredged material
- The Task Force membership includes USACE, the Port Authority of Cleveland and Ohio EPA , plus other stakeholders representing community and economic interests
- USACE is committed to partnering with the Cleveland Harbor stakeholders to ensure navigation is maintained to support economic activity in balance with environmental concerns.

**U.S. Army Corps of Engineers Fiscal Year (FY) 2014, 2015 and 2016  
Cleveland Harbor, Ohio - Project Requirements and President's Budget (\$1,000)**

<b>Work Package</b>	<b>FY14 Requirement</b>	<b>FY14 Appropriation</b>	<b>FY15 Requirement</b>	<b>FY15 Appropriation</b>	<b>FY16 Requirement</b>	<b>FY16 President's Budget</b>
Maintenance Dredging – Primary	4,775	4,702	2,230	2,230	6,700	6,700
DMMP/CDF Beneficial Use Activities						
E&D Long Term Management Plan	400	400			600	600
E&D, Wharf and Utility Repair	300					
Interim CDF Operation (formerly Maint.)	365	365			375	375
Snagging & Clearing Floating Plant (F/P)		50				
Critical Maintenance of Coastal Navigation Structures and Obstruction Removal	1,040	990			1,070	1,070
Structure Repair. – E & W Arrowhead Breakwaters (Stone)	450					
Structure Repair – Dike 10B (F/P)	300					
Structure Repair – West Spur Breakwater (F/P)					500	
E&D, West Breakwater Repair					300	
Project Condition Surveys	515	515			545	545
Regional Economic Data Collection	250	250			250	250
Sandy Supplemental East Breakwater Repair			7,100*	7,100*		
Sandy Supplemental East Breakwater Repair – Dolosse					36,847*	36,847*
Sandy Supplemental E&W Arrowhead Repair	6,160*	6,160*				
<b>TOTALS</b>	<b>14,555</b>	<b>13,432</b>	<b>9,330</b>	<b>9,330</b>	<b>47,187</b>	<b>46,387</b>

\*Funds allocated through Public Law 113-2 Disaster Relief Appropriations Act, 2013

**Congressional Interests**

- Representative Marcia Fudge D-OH-11
- Senator Rob Portman R-OH
- Senator Sherrod Brown D-OH