

Chicago District Navigation Program Overview

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US Army Corps of Engineers
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FY14 PLANNED DREDGING

Project	Location	FY14 Assume	FY14 Est. Qty	Annual Accumulation Rate	Last Dredged	Comments
Calumet Harbor, IL	OUTER HARBOR	\$1,600K	25,000 CY + Rock area	50,000 CY	2013	CDF nearly full; working with stakeholders in developing new CDF, Dredged 30,000 cy
Indiana Harbor, IN	HARBOR ENTRANCE	\$4,600K	225,000 CY	100,000 CY	2013	Dredged 400,000 cy in FY13
Burns Waterway Harbor, IN	HARBOR APPROACH & BOTH ARMS	\$2,000K	183,000 CY	86,000 CY	2013	Dredged 73,000 cy in FY w/ Sandy funds
Waukegan Harbor, IL	HARBOR APPROACH	\$1,600K	127,000 CY	80,000 CY	2013	Dredged 71,000 cy in FY 13 w/ Sandy funds

FUNDED

UNFUNDED



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FY15 DREDGING NEEDS

Project	Location	FY15 Request	FY15 Est. Qty	Annual Req'd.	Last Dredged	Comments
Indiana Harbor, IN	CANAL	\$7,000.K	240,000 CY	100,000 CY	2014	TSCA dredging (80,000 CY) requires 160,000 CY minimum volume of cover mat'l. for disposal into CDF.
Burns Waterway Harbor, IN	HARBOR APPROACH	\$1,000.K	50,000 CY	86,000 CY	2014	Request made prior to determination of annual requirement by ERDC.
Waukegan Harbor, IL	HARBOR APPROACH	\$1,400.K	80,000 CY	80,000 CY	2012	Without annual dredging, harbor shoaling conditions force closures every year.



INDIANA HARBOR

13.2M tons shipped or received in 2012.

Interconnected with 83 commercial ports: ships to 41, receives from 42.

Loss of 4-5' of channel depth due to shoaling results in light loading.
Increased transportation costs range between \$9.7M and \$13.1M annually.



2013 dredging completed: 300,000 CY Fed & 100,000 CY Non-Fed channel areas, from Reaches 2 & 3, located in the harbor entrance

2014 dredging (planned): 225,000 CY Fed & Non-Fed channel areas, from Reaches 1 & 4, located in the harbor entrance and turning basin

2015 dredging (planned): 240,000 CY Fed (TSCA sediment + cover) from Reaches 5, 6, & 13.



CALUMET HARBOR

11.8M tons shipped or received in 2012.

Interconnected with 154 commercial ports: ships to 74, receives from 80.

Loss of 1.5-2.5' of channel depth due to shoaling results in light loading.
Increased transportation costs range between \$0.5M and \$1.0M annually.



2013 dredging completed: 30,000 CY in Fed channel areas, from outer harbor and entrance

2014 dredging (planned): 25,000 CY from Fed channel areas in outer harbor, plus lakebed rock removal to achieve full authorized depth.

2015 : No funding requested for dredging.



CALUMET HARBOR

CHICAGO CDF CURRENT ACTIVITIES:

- **Dredged Material Management Plan**
- **Closure Plan and Life-Extension Measures**



DMMP completion is scheduled in 2015, but future disposal solution is 7-10 years away.

Sediment management efforts will focus on grading, and trenching to accelerate sediment drying, and piling to optimize available space.

All future material dredged from the Outer Harbor will be segregated and stockpiled outside of the CDF for beneficial uses, such as the future site closure cap.



BURNS WATERWAY

8.4M tons shipped or received in 2012.

Interconnected with 65 commercial ports: ships to 27, receives from 38.

Loss of 2.5-3.5' of channel depth due to shoaling results in light loading.
Increased transportation costs range between \$0.5M and \$1.0M annually.



2013 dredging completed: 72,000 CY in Fed approach channel area.
Funded by Hurricane Sandy Restoration program.

2014 dredging (planned): 195,000 CY in Fed approach channel and both harbor arms. Funded by Hurricane Sandy Restoration program and regular O&M.

2015 dredging (planned): 50,000 CY in Fed approach channel.



WAUKEGAN HARBOR

282K tons shipped or received in 2012.

Interconnected with 13 commercial ports: ships to six, receives from seven.

Loss of 3.5-4.5' of channel depth due to shoaling results in light loading.
Increased transportation costs range between \$2.7M and \$4.7M annually.



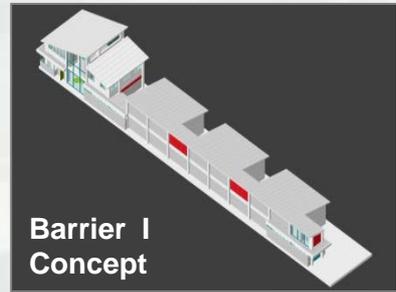
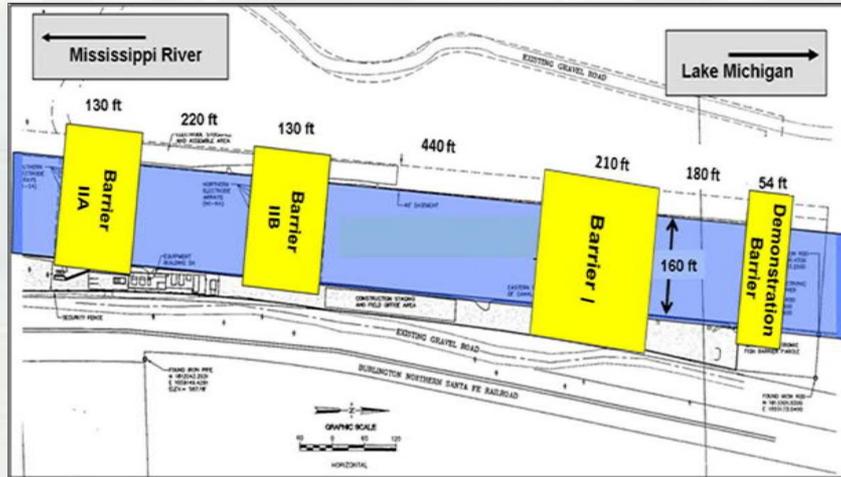
2013 dredging completed: 71,168 CY in harbor approach channel.
Funded by Hurricane Sandy Restoration program.

2014 dredging (planned): 125,000 CY in harbor approach channel.
Funded by Hurricane Sandy Restoration program and regular O&M.

2015 : No funding expected. The port will close to commercial traffic by the end of 2016.



CSSC Barriers



Barrier	Date of Activation	Construction Cost	Voltage (volts/inch)	Frequency (Hz)	Pulse Duration (ms)
Demo	2002	\$2M	1.0	5	4
I	2016*	TBD	2.3	30	2.5
IIA	2009	\$7M	2.3	30	2.5
IIB	2011	\$21M	2.3	30	2.5

* Planned