

Fox River Cleanup Update

Kiwanis Club
May 20, 2014



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Remedial Project Manager, Superfund

Photo from Wikipedia

Main topics

- **Intro & PCB problem**
- **Current work**
- **Results**
- **Shipwrecks**
- **Remaining work**

Fox River Cleanup

- **Monitoring to measure results**
 - Fish, and
 - Surface water
- **Largest EPA sediment cleanup – equal to 10 Lambeau Fields**
- **Cost: ~\$1 billion**

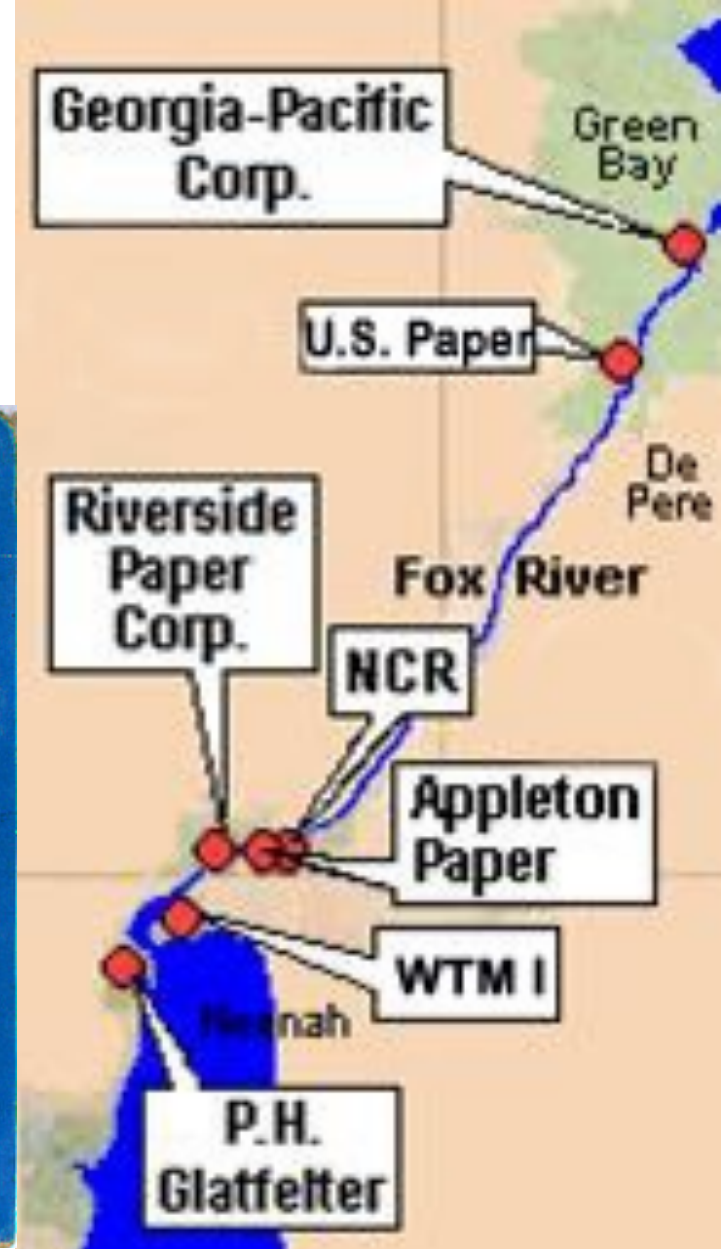
Agency Oversight Team

- Agency staff & contractors
- Technical lead: WDNR
- Funded by Responsible Parties



Photo courtesy of Boldt

PCBs: Paper Production 1954–1971



Modified from Green
Bay Press Gazette

Fish Advisories Since 1976



Black Crappie



Bluegill



Brown Trout



Carp



Channel Catfish



Chinook Salmon



Northern Pike



Rock Bass



Rainbow Trout



Smallmouth Bass



Splake



Sturgeon



Walleye



White Bass



White Fish



White Sucker



White Perch



Yellow Perch

PCB HEALTH ADVISORY

for Fox River-downstream from De Pere Dam

*Minimum size for Smallmouth Bass = 14 inches

Enjoy your day of fishing and have a tasty, healthy meal of fresh-water fish.
For the health of your kids, please follow this health advice. Eat the following fish with caution from this water. These fish contain PCBs.

1) Eat no more than 1 meal per week (52 meals per year) of...

_____	_____	_____
_____	_____	_____
_____	_____	_____

2) Eat no more than one meal per month (12 meals per year) of...

<u>Walleye under 16 inches</u>	<u>Bluegill</u>
<u>Northern Pike under 25 inches</u>	<u>Rock Bass</u>
<u>Black Crappie under 9 inches</u>	<u>Yellow Perch</u>
<u>Sheepshead under 10 inches</u>	

3) Eat no more than one meal every two months (6 meals per year) of...

<u>Walleye 16-22 inches</u>	* <u>Smallmouth Bass</u>
<u>Northern Pike above 25 inches</u>	<u>White Perch</u>
<u>Black Crappie above 9 inches</u>	
<u>Sheepshead 10-13 inches</u>	

4) DO NOT EAT...

<u>Walleye above 22 inches</u>	<u>White Bass</u>
<u>Sheepshead above 13 inches</u>	
<u>Carp</u>	<u>Channel Catfish</u>

When preparing fish from these waters, remove the skin and all fat before cooking. Do not use juices from the cooked meat.

See your fishing regulations book for legal size limits.

Recommended by the Wisconsin Department of Natural Resources and the Division of Public Health. Call the local DNR office 920-492-3200 for a copy of the state-wide advisory.



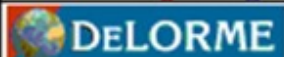
River Work

1. Dredging/disposal

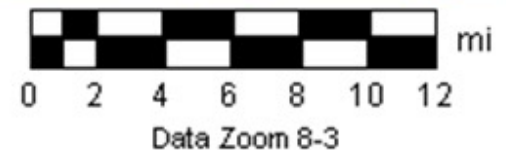
2. Capping

Lower River
2007 - 2017

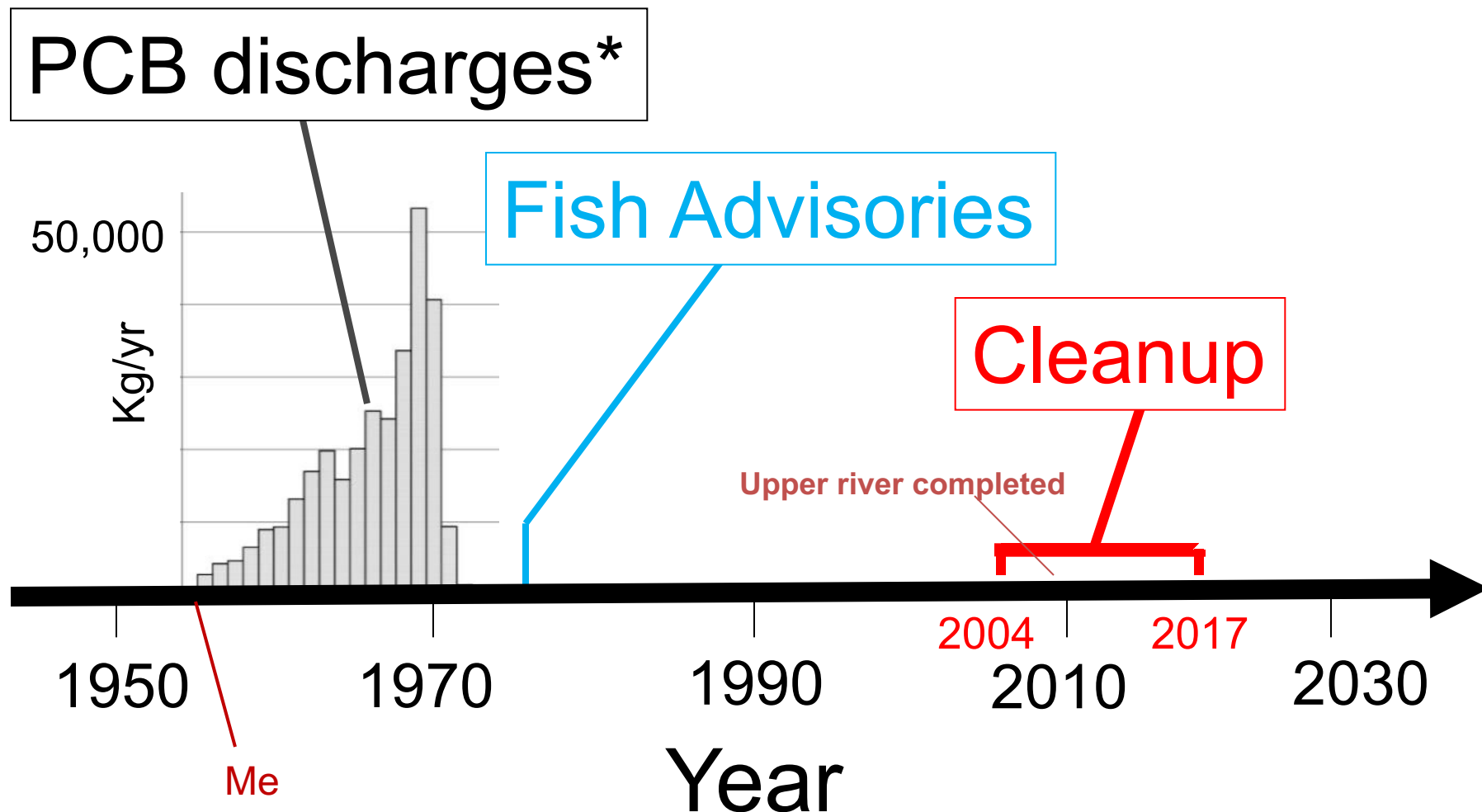
Little Lake Butte des Morts
2004 - 2009



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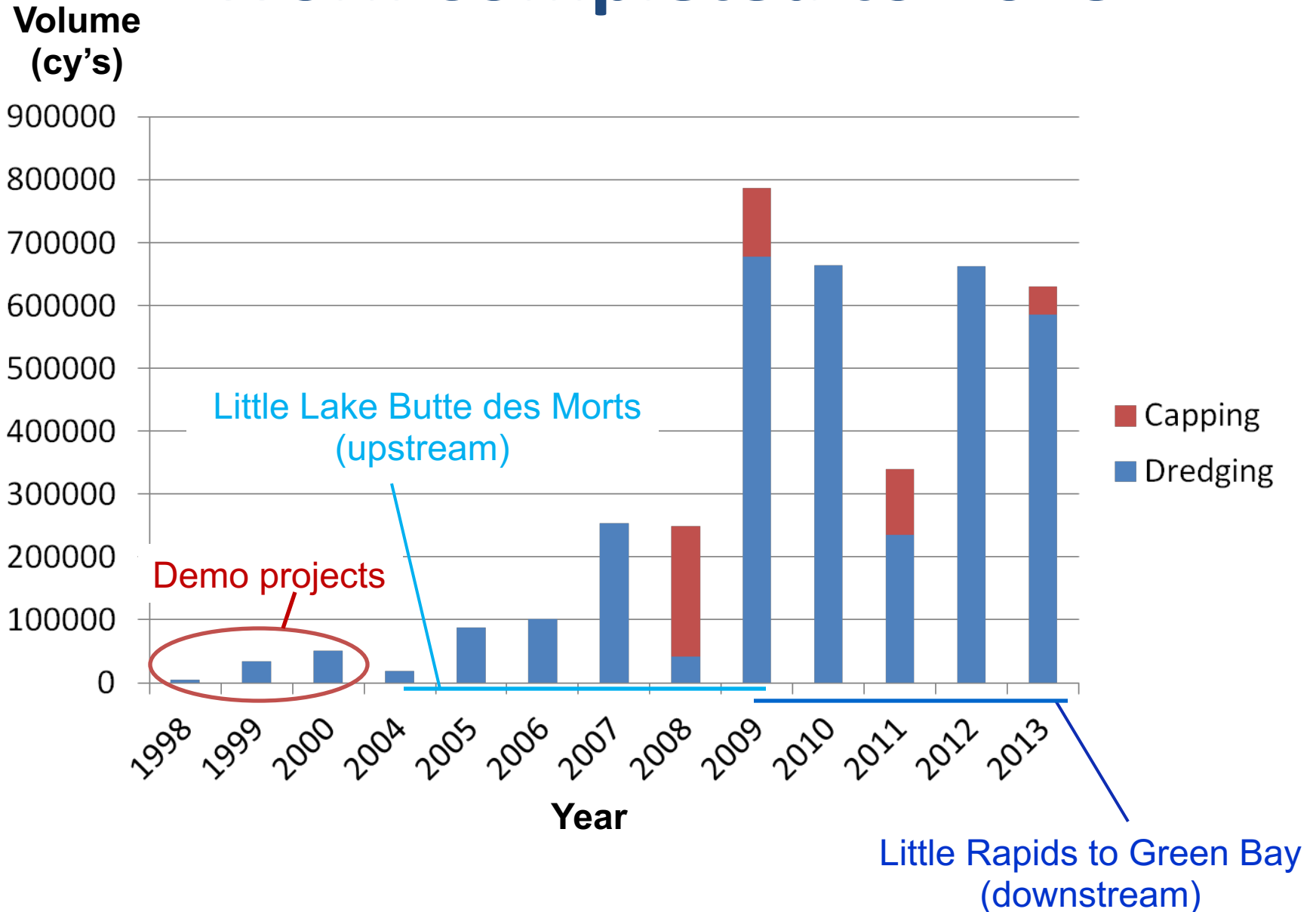


Site History

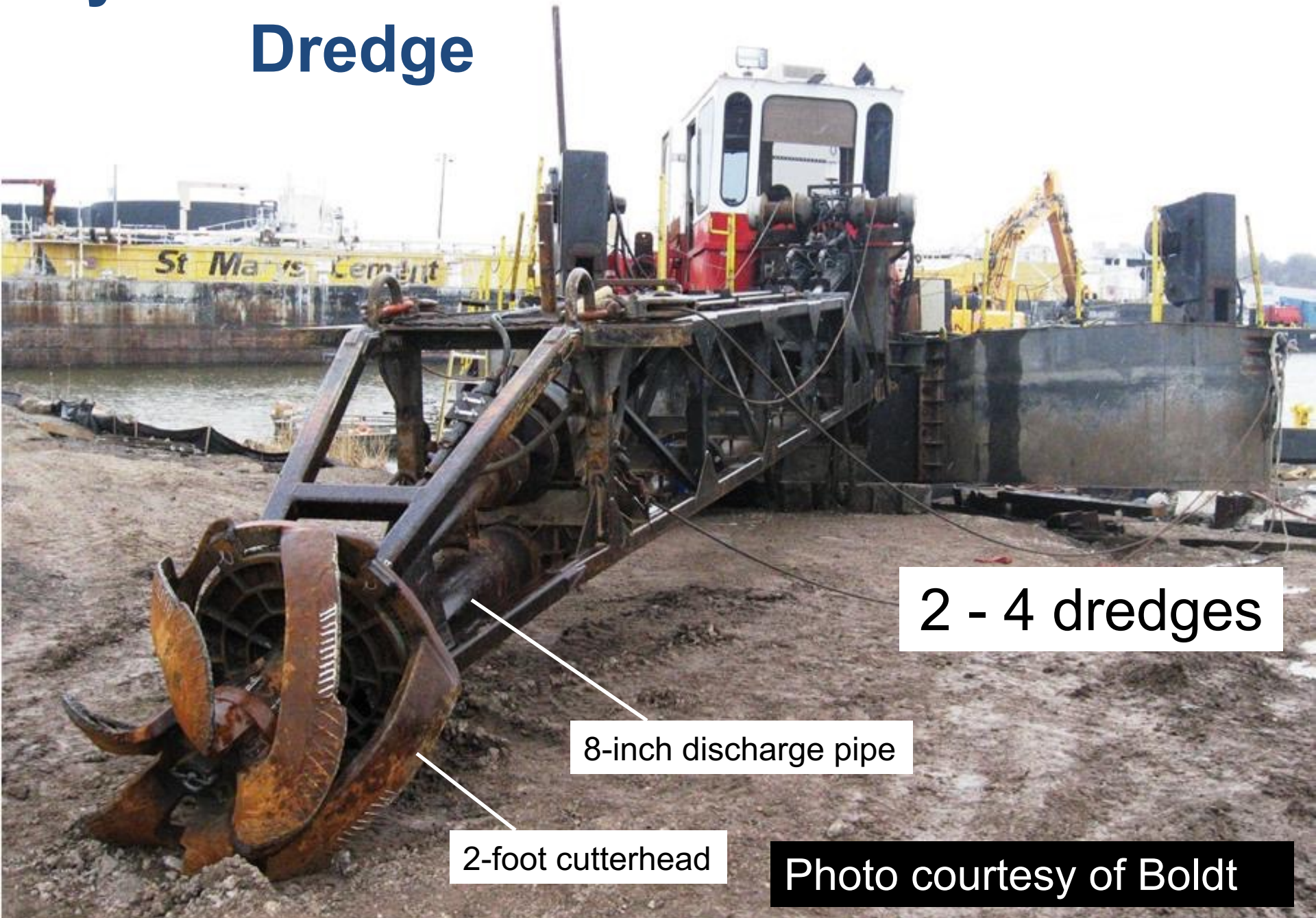


* From: WDNR, 1999, Technical Memorandum 2d.

Work Completed to 2013



Hydraulic Cutterhead Dredge



2 - 4 dredges

8-inch discharge pipe

2-foot cutterhead

Photo courtesy of Boldt

On-land Facility (Little Lake Buttes des Morts)

Geotextile Tubes
(dewatering)

Afterwards

Photos courtesy of Boldt



Plate & Frame Presses (dewatering)



Courtesy of the Fox River LLC.

Sediment Disposal



Photo courtesy of Boldt

Caps

1-RA-08-SP-A-4 N-6"-RS

Clean
Sand Cap

Contaminated
Sediment

Photo courtesy of Boldt oversight team



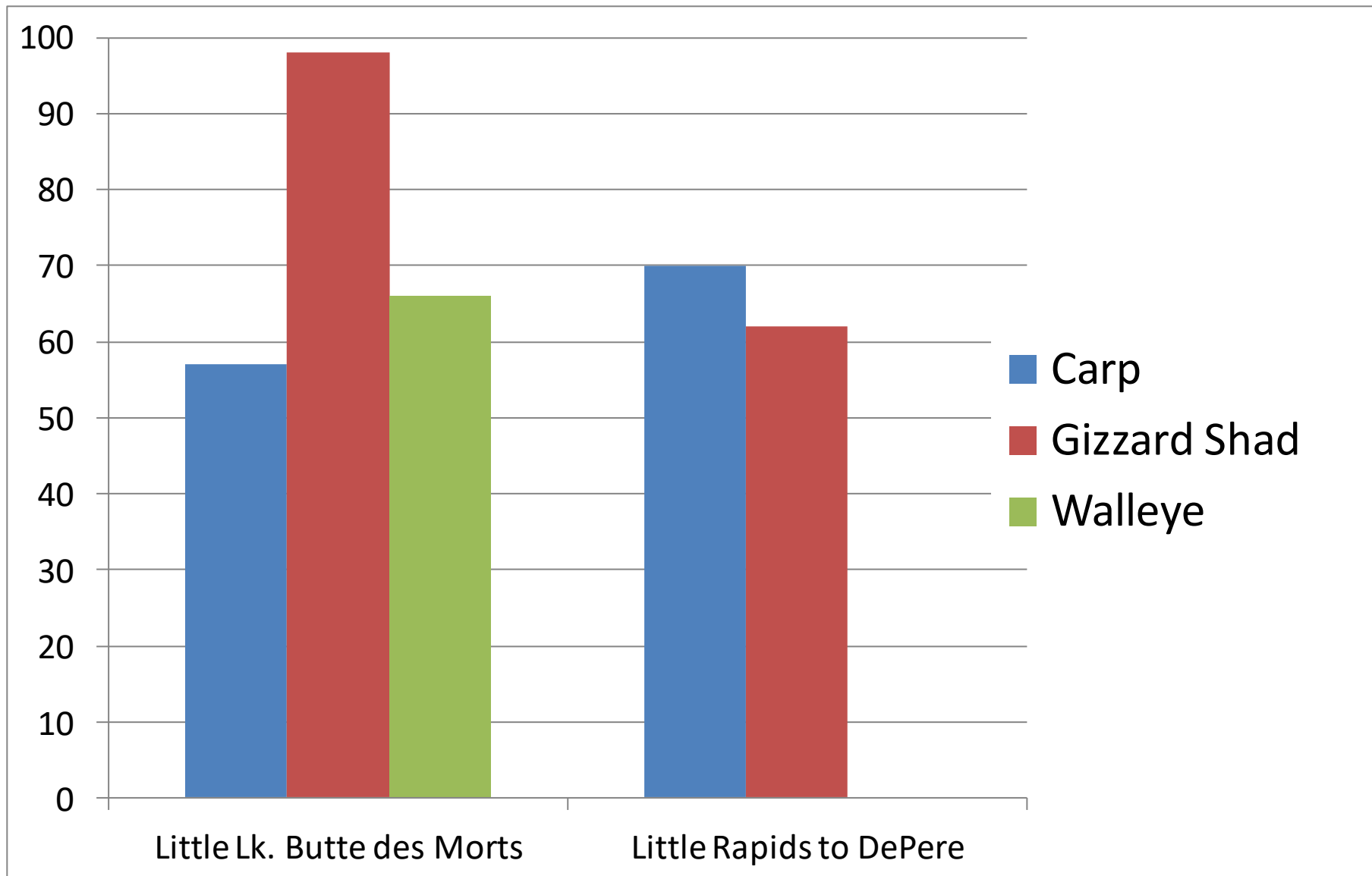
**Cap
Armor Stone
(over sand)**

Sand and Stone Cap Placement

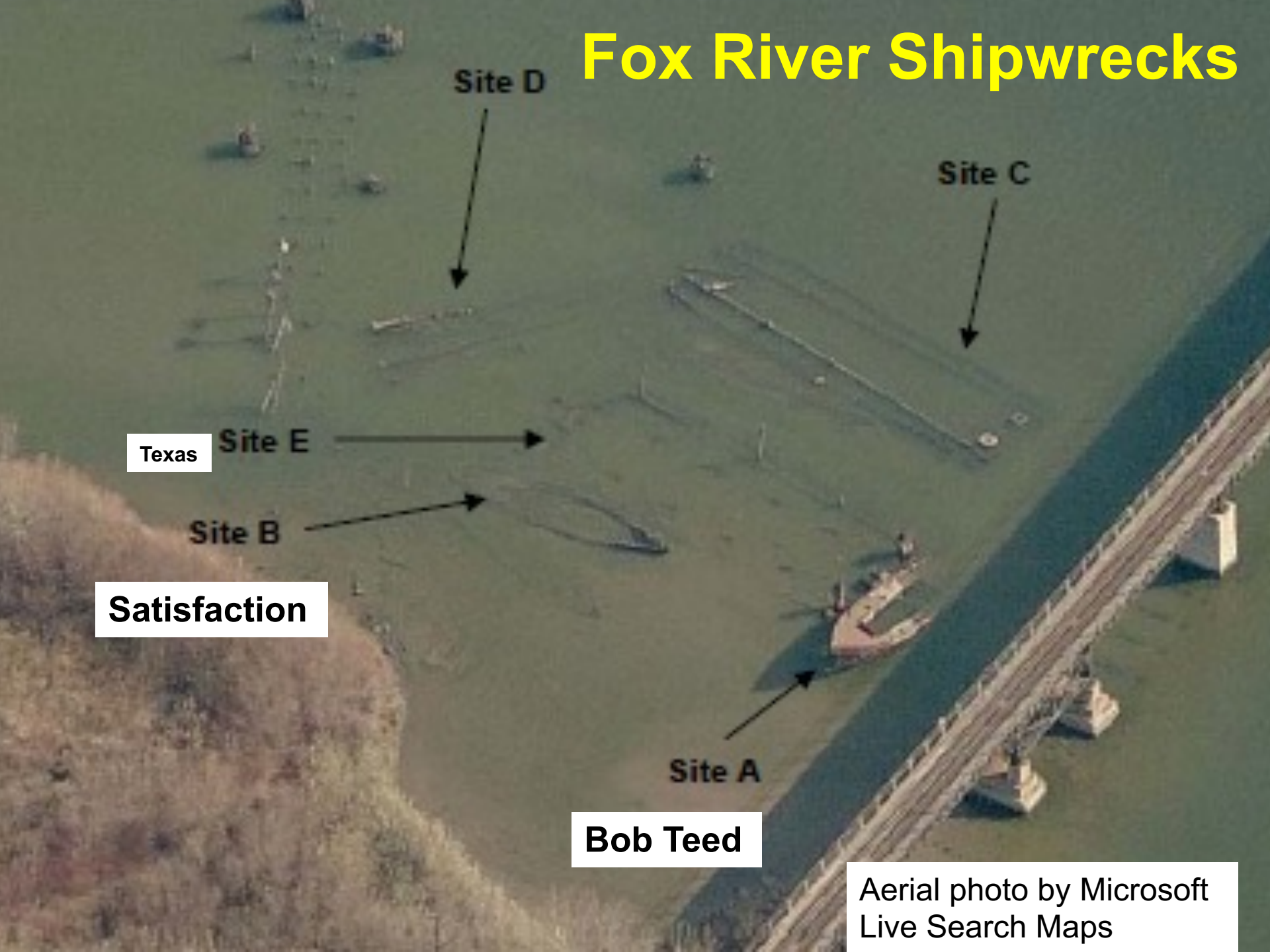


Photo courtesy of Boldt oversight team

Results: PCB Fish Concentration Reductions 2006 vs. 2012



Fox River Shipwrecks



Site D

Site C

Texas

Site E

Site B

Satisfaction

Site A

Bob Teed

Aerial photo by Microsoft
Live Search Maps

Satisfaction

Texas

Bob Teed

RR Bridge

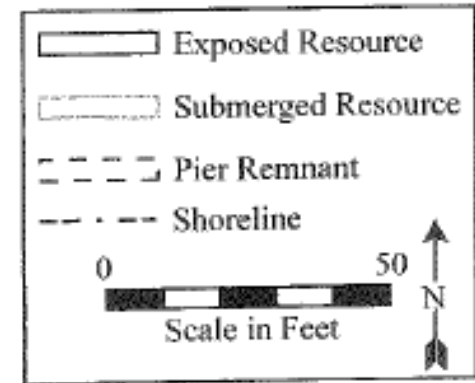


Figure 1. Site Sketch Map

Shipyard – Early 1900's



Figure 3 . View of Waterways Engineering Corporation Property. (undated)
(Courtesy: Wisconsin Maritime Museum Collection)

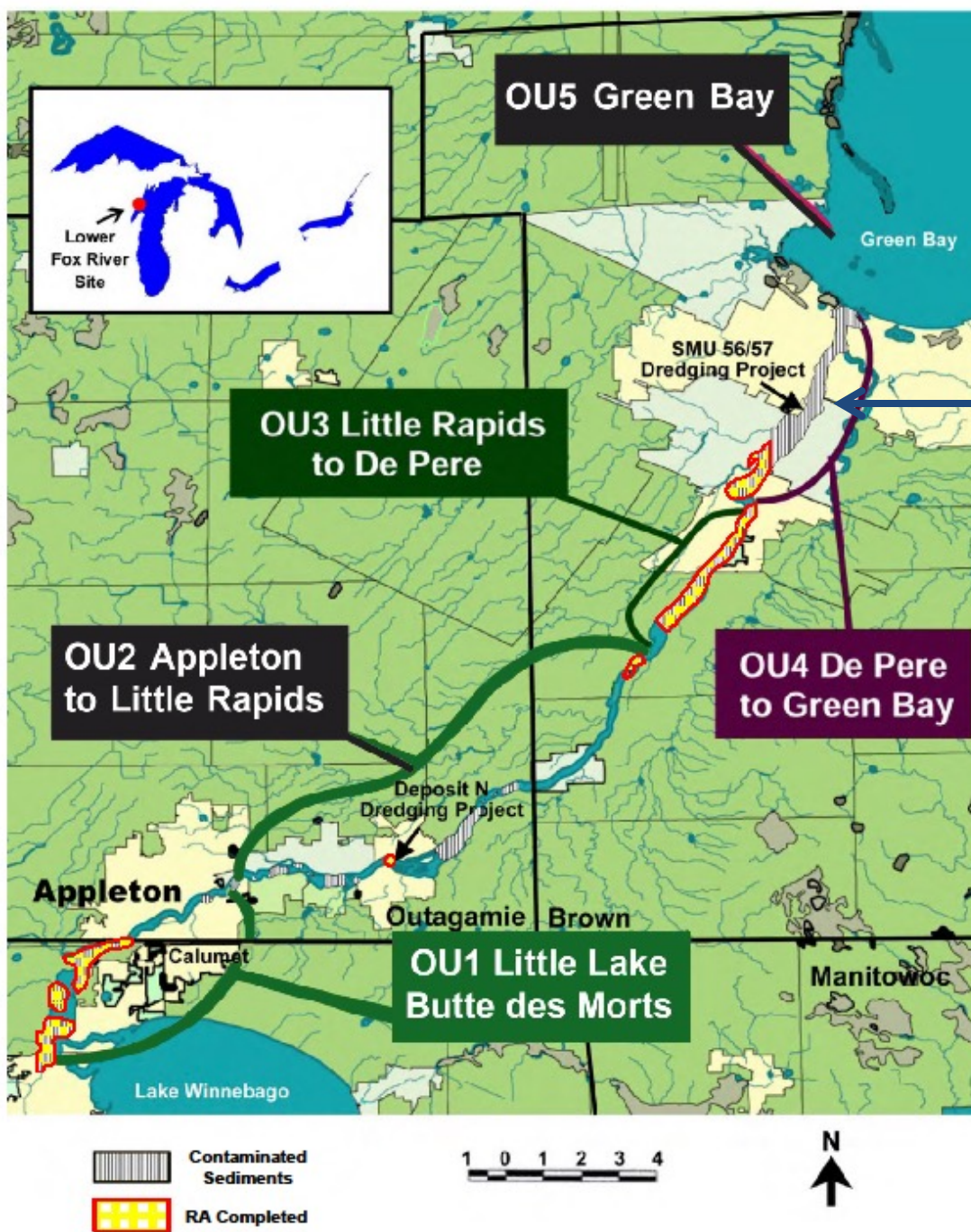
Note: Likely identities of vessels are annotated.

Barge Removal

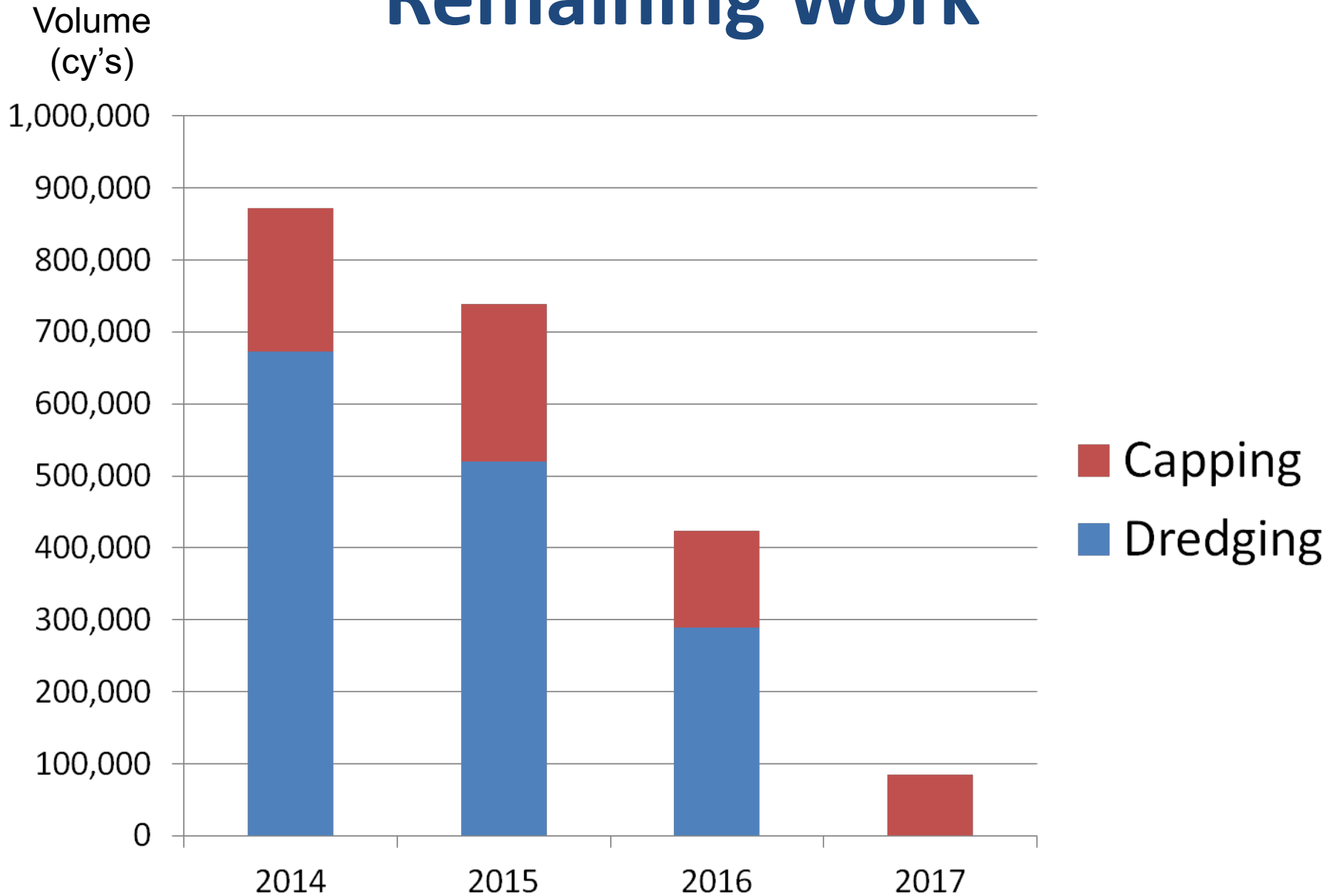


Remaining Work

Completion date: 2017



Remaining Work



Thank you



Photo courtesy of Boldt oversight team