

Fox River Cleanup Update

Kiwanis Club
May 20, 2014



James Hahnenberg
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

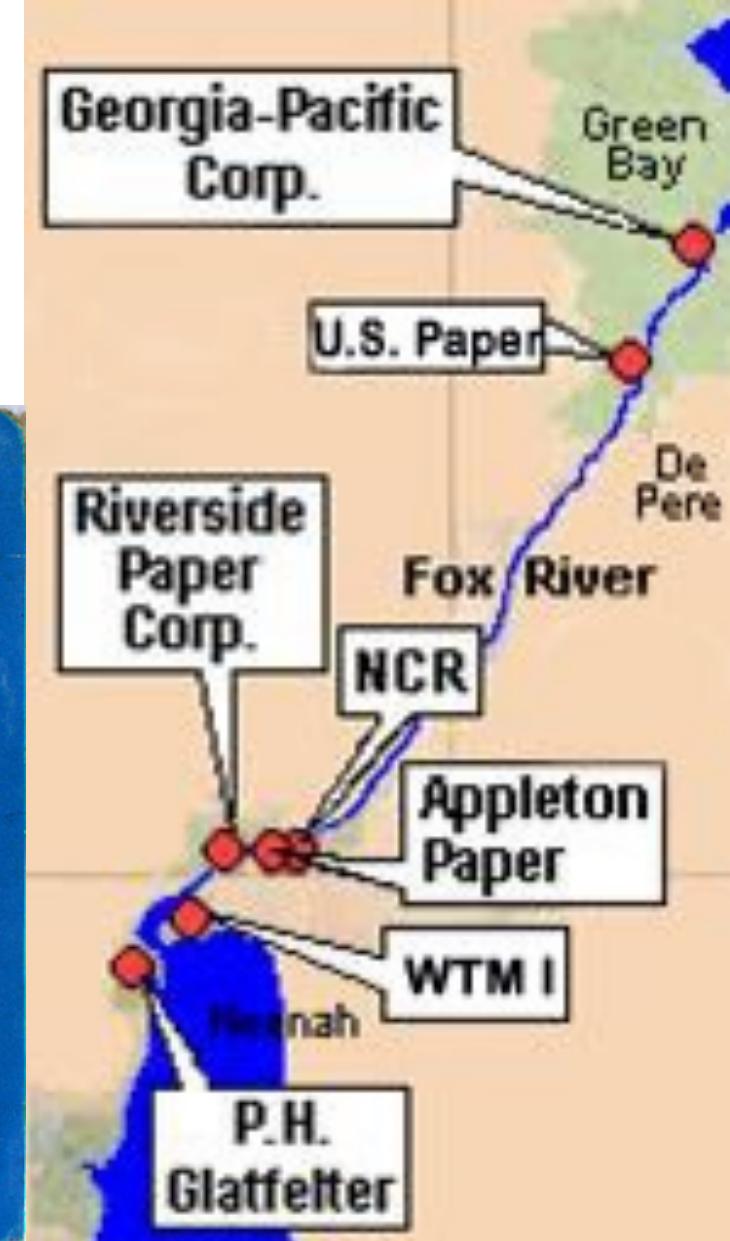
Agency Oversight Team

- 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



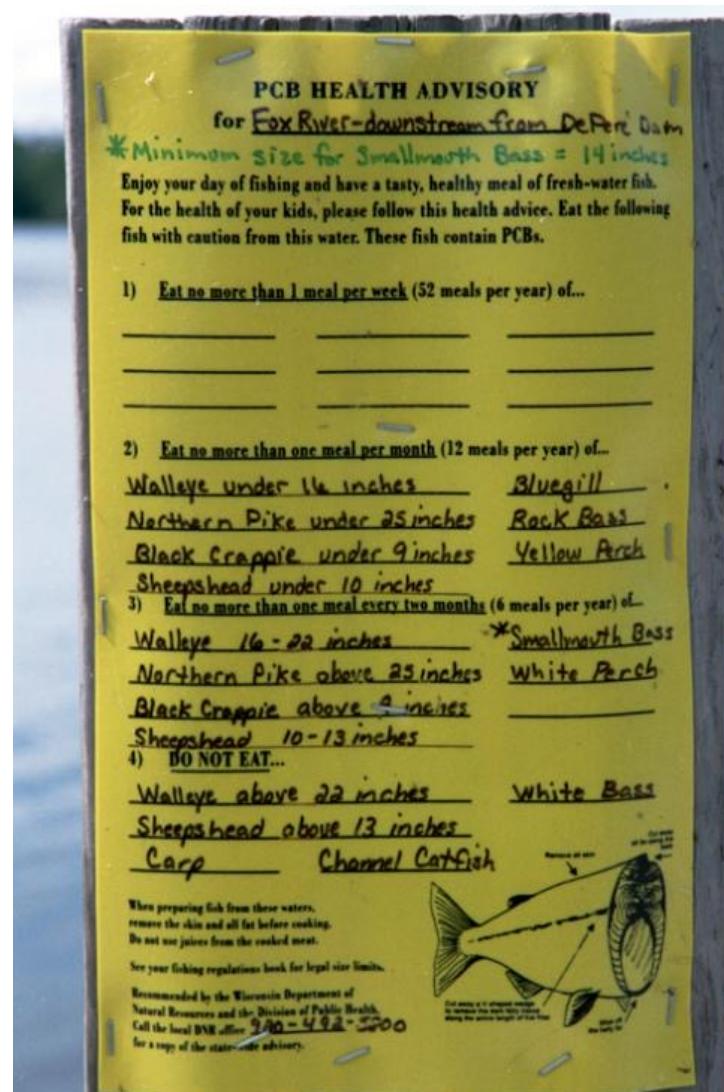
White Sucker



White Perch



Yellow Perch



River Work

1. Dredging/disposal

2. Capping



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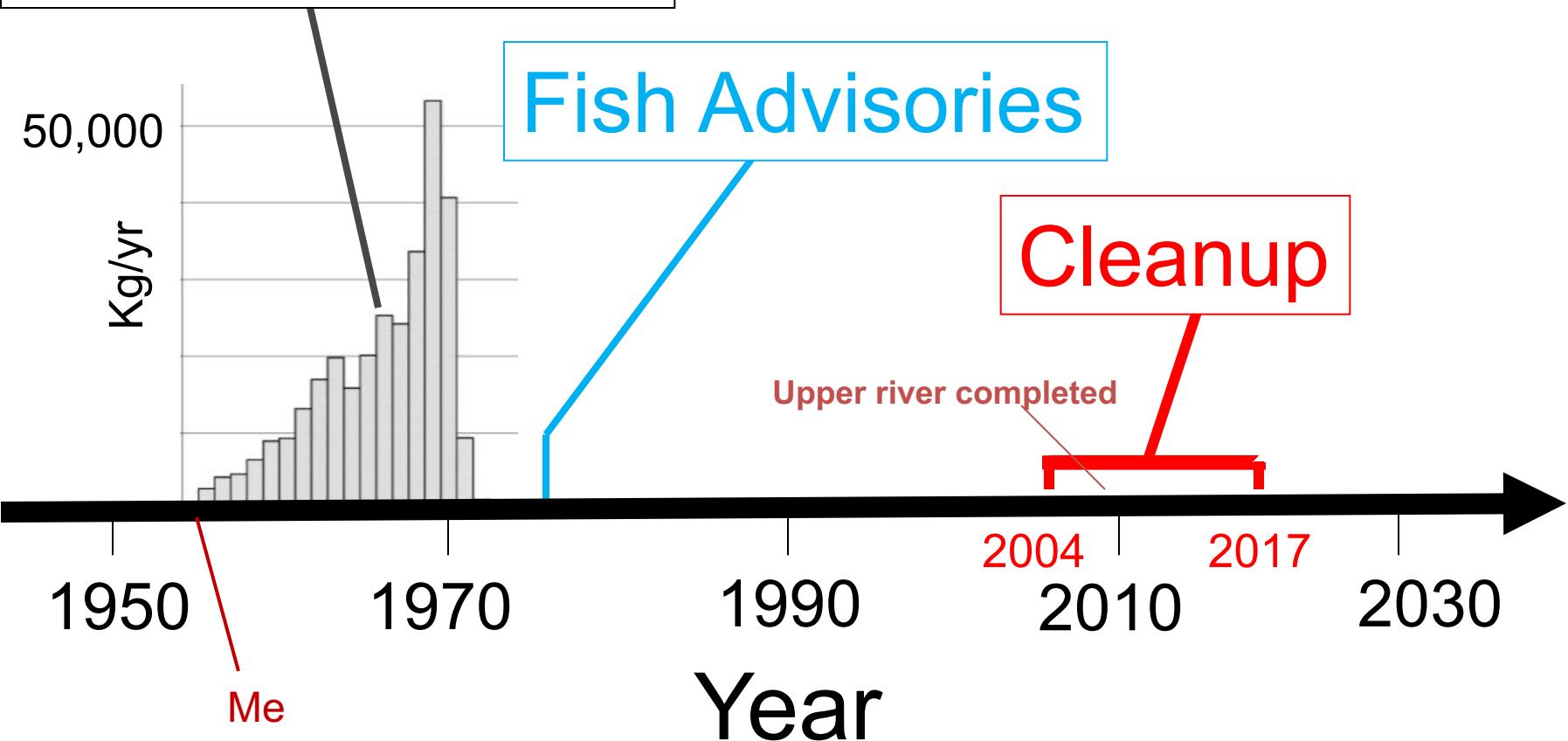
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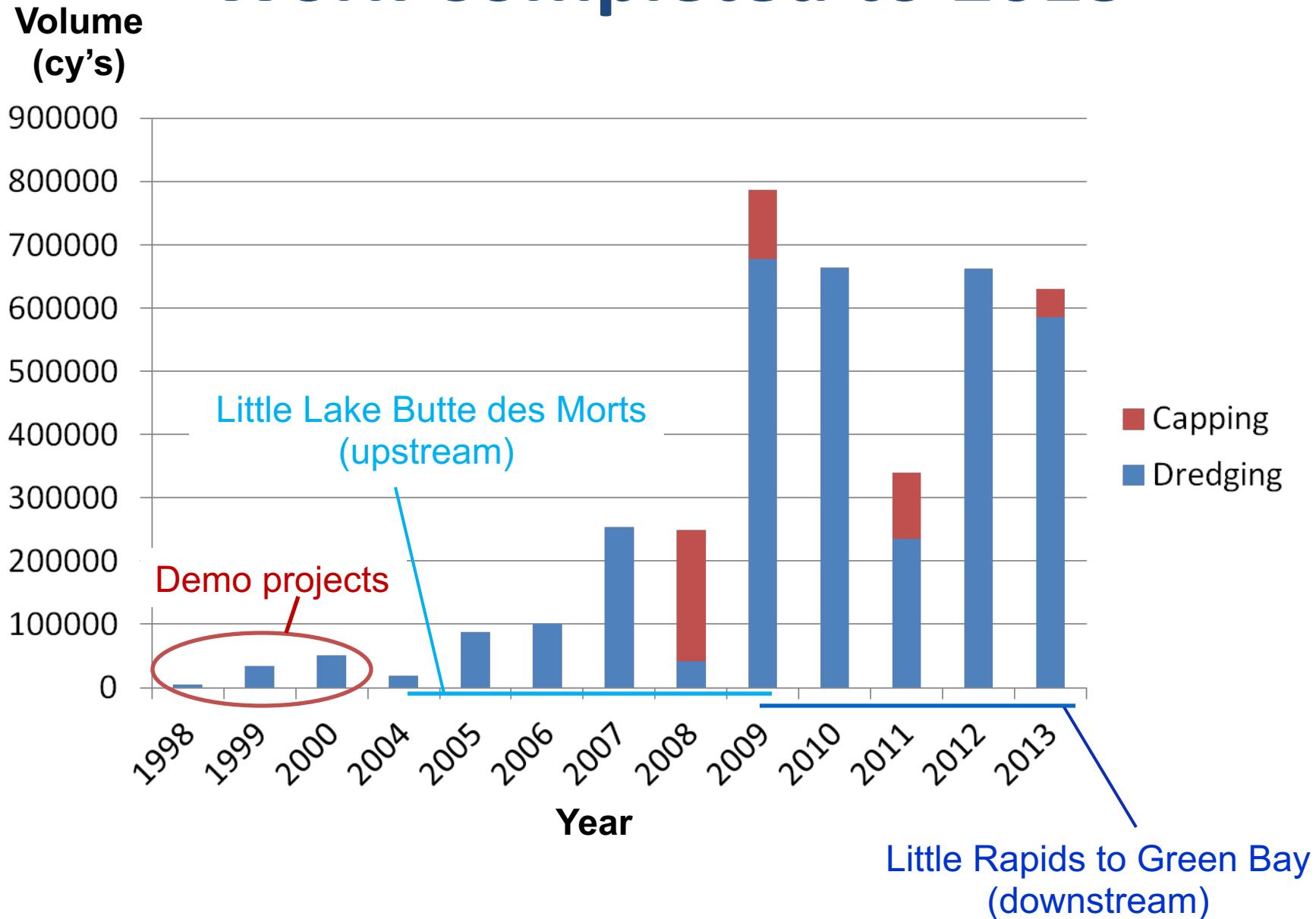
Site History

PCB discharges*

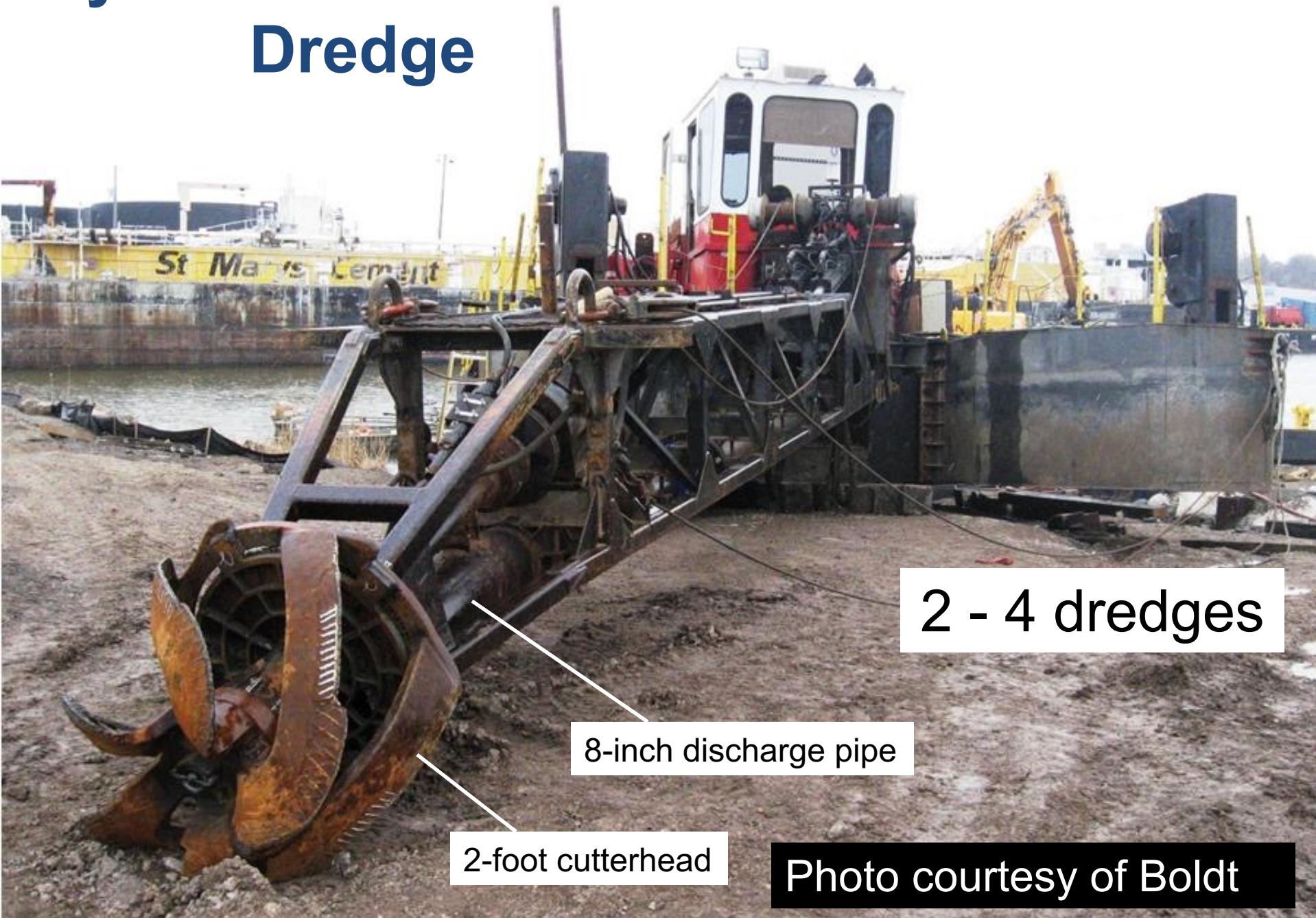


* From: WDNR, 1999, Technical Memorandum 2d.

Work Completed to 2013



Hydraulic Cutterhead Dredge





Geotextile Tubes
(dewatering)

On-land Facility
(Little Lake Buttes
des Morts)

Afterwards



Photos courtesy of Boldt

Plate & Frame Presses (dewatering)



Courtesy of the Fox River LLC.

Sediment Disposal



Photo courtesy of Boldt

Caps

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

Clean
Sand Cap

Contaminated
Sediment

Photo courtesy of Boldt oversight team



**Cap
Armor Stone
(over sand)**

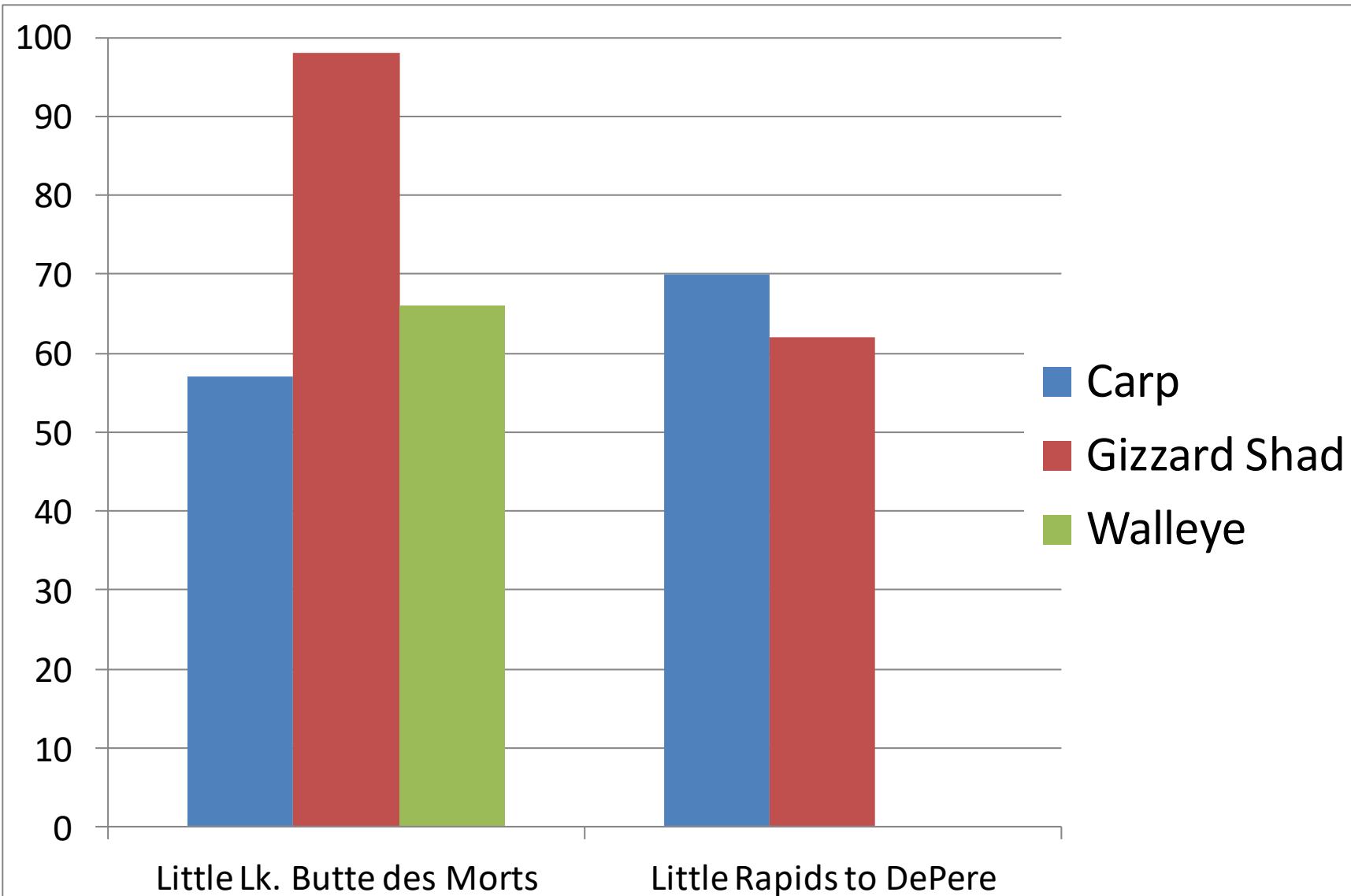
Sand and Stone Cap Placement



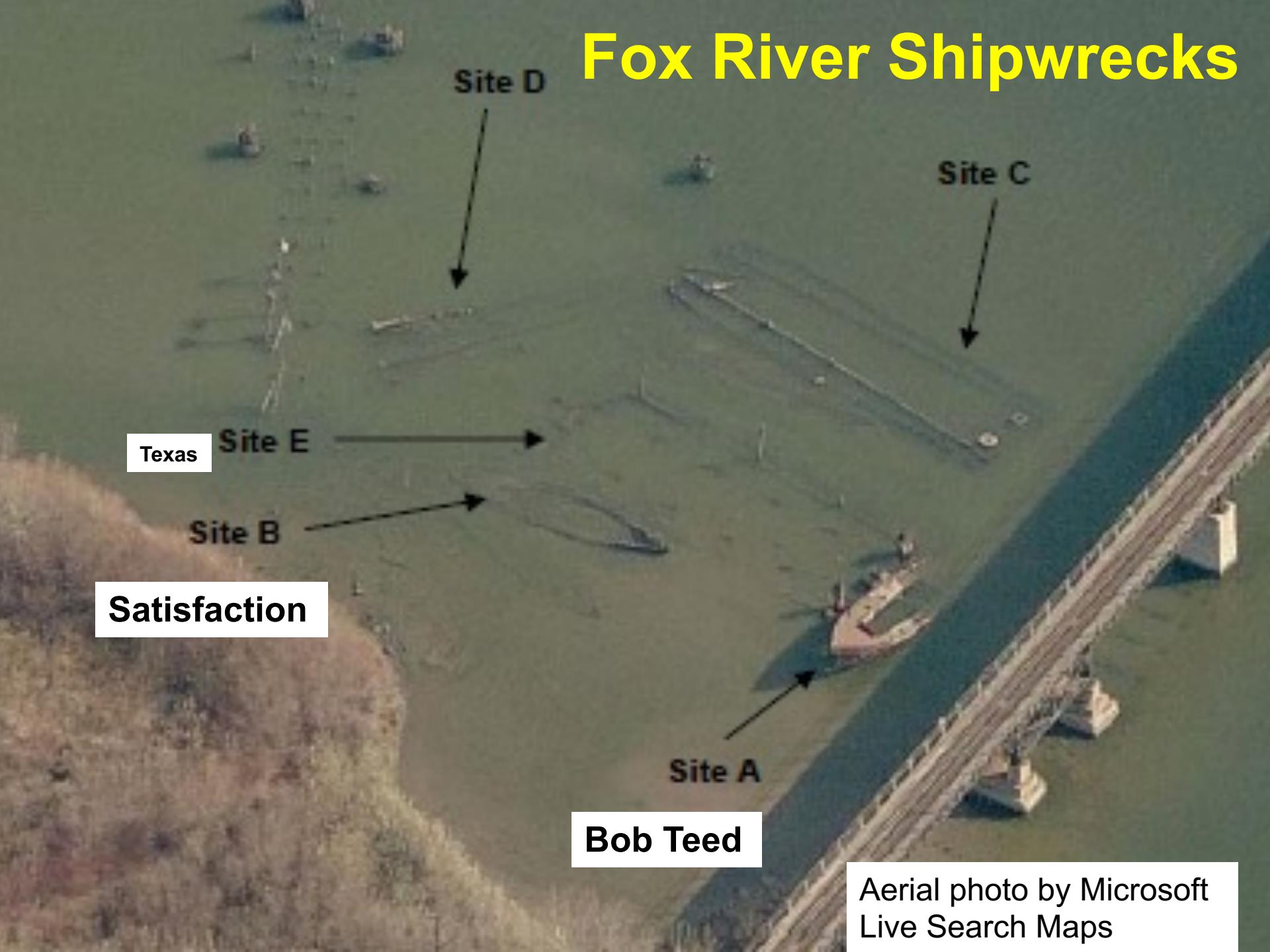
Photo courtesy of Boldt oversight team

Results: PCB Fish Concentration Reductions 2006 vs. 2012

% Reduction



Fox River Shipwrecks



Aerial photo by Microsoft
Live Search Maps

Discovered during 2013 excavation

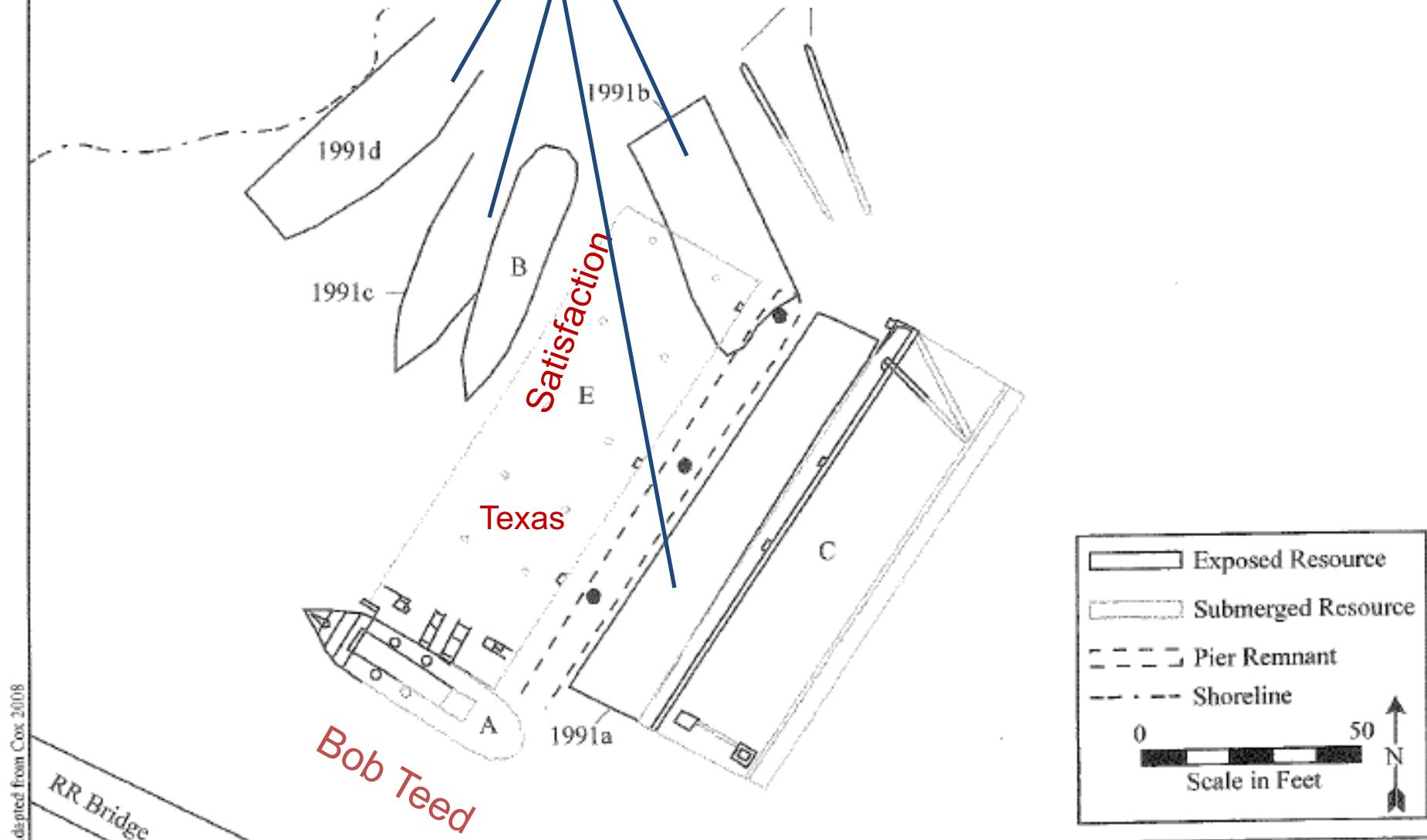


Figure 1. Site Sketch Map

Shipyard – Early 1900's



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

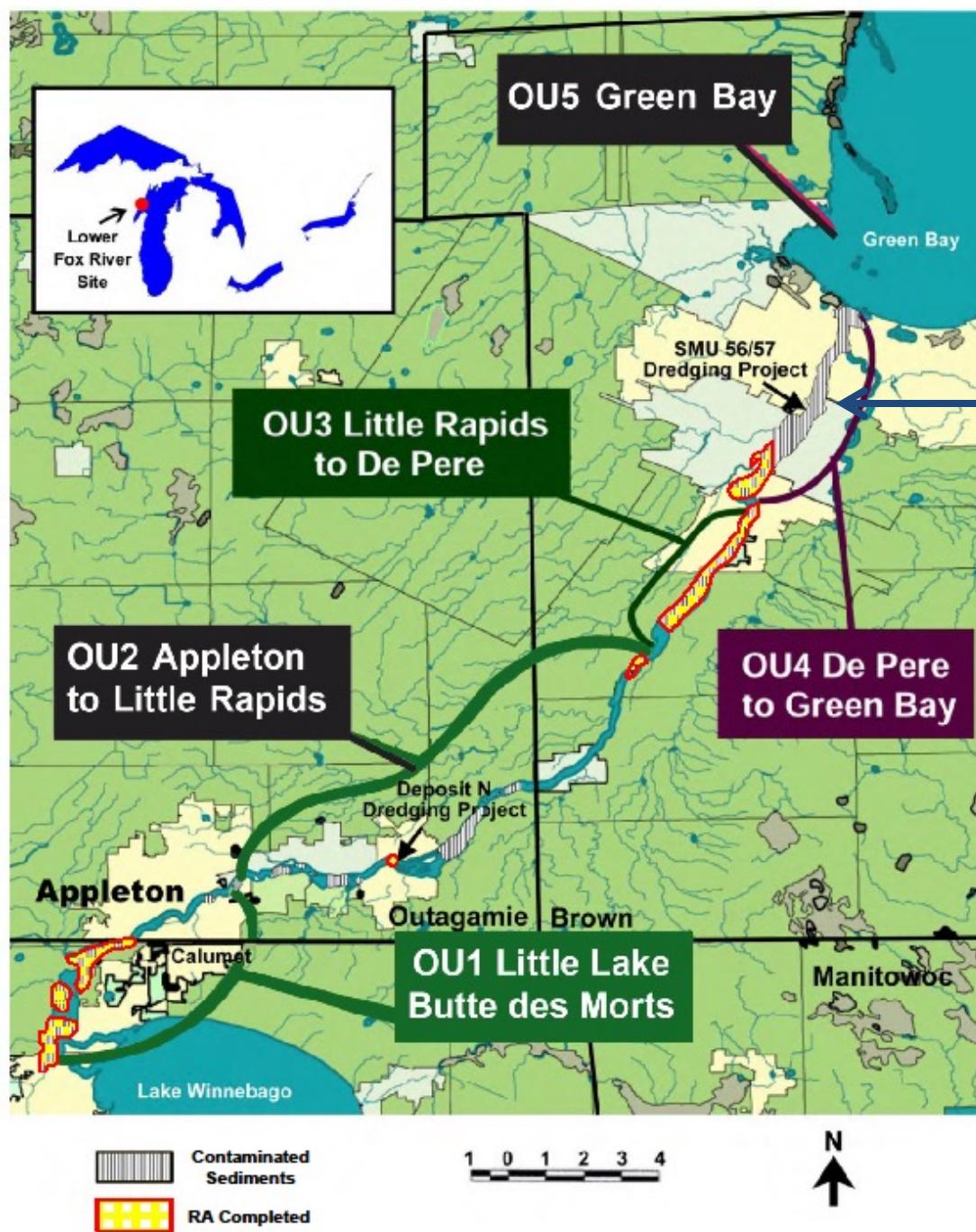
Note: Likely identities of vessels are annotated.

Barge Removal



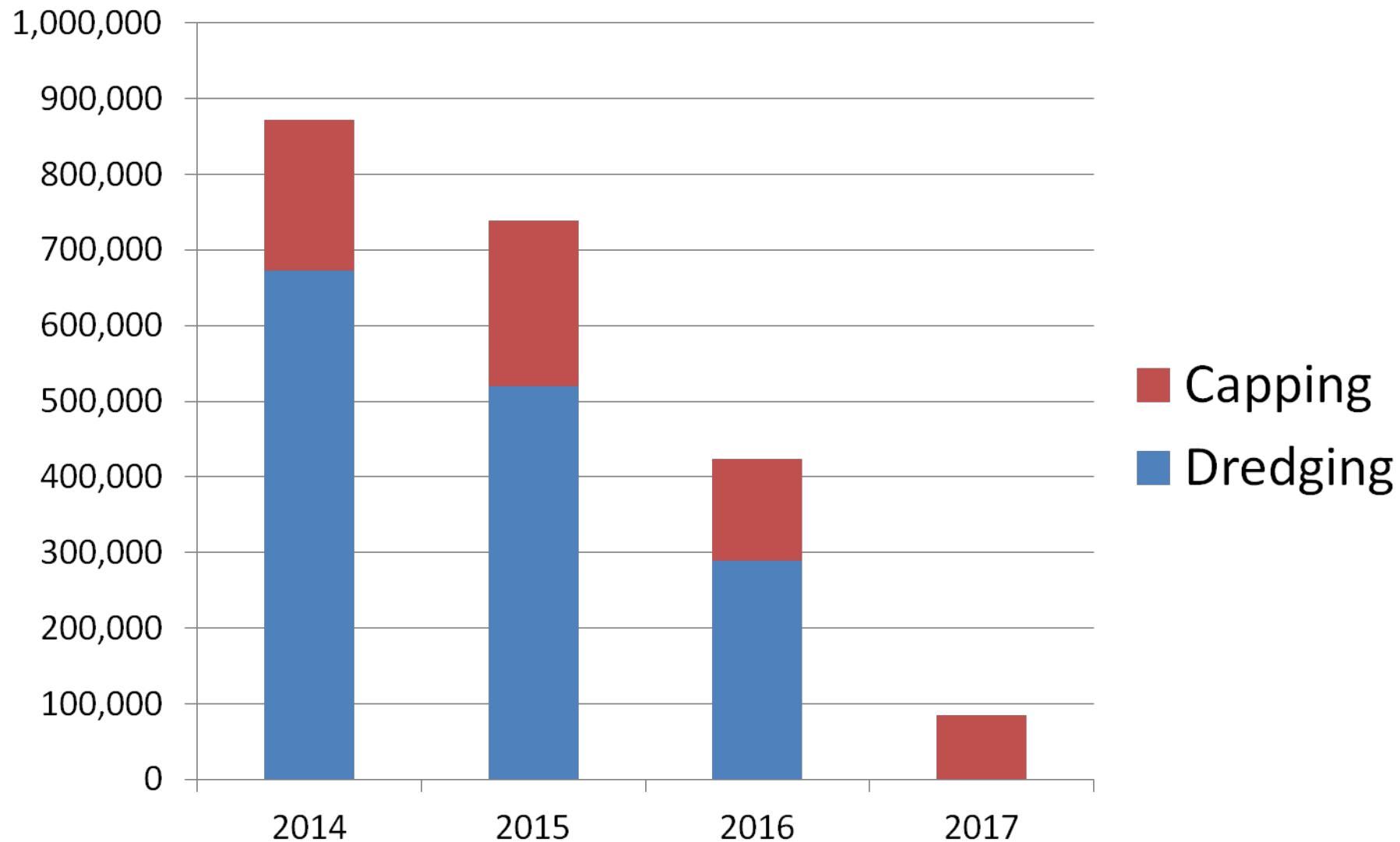
Remaining Work

Completion date: 2017



Remaining Work

Volume
(cy's)



T h a n k y o u



Photo courtesy of Boldt oversight team