Cleveland Harbor, Ohio Management of Sediment Dredged from the Upper Cuyahoga River Navigation Channel

Public Hearing, Section 404 of the Clean Water Act
February 17, 2015

Agenda

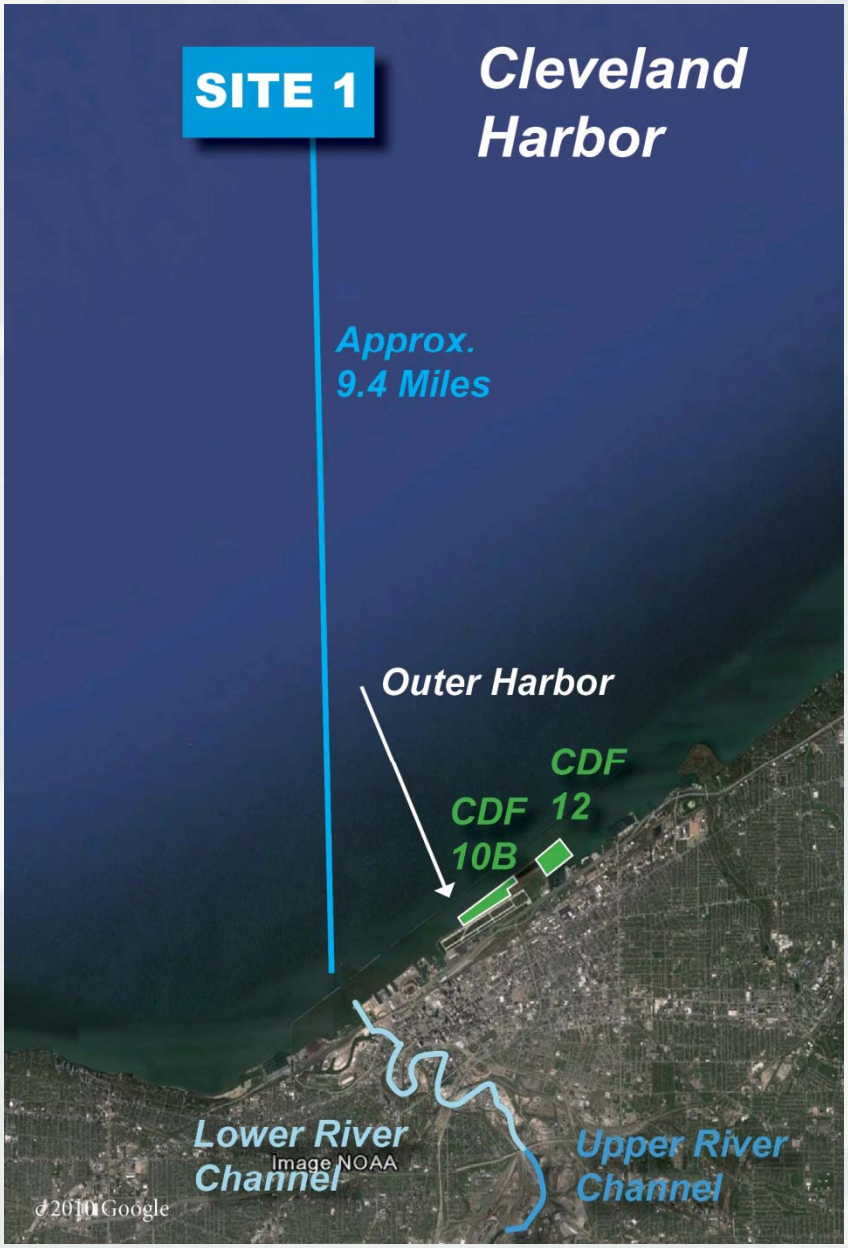
1. Introduction
2. Presentation
3. Public Hearing

Introduction

Lieutenant Colonel Karl D. Jansen

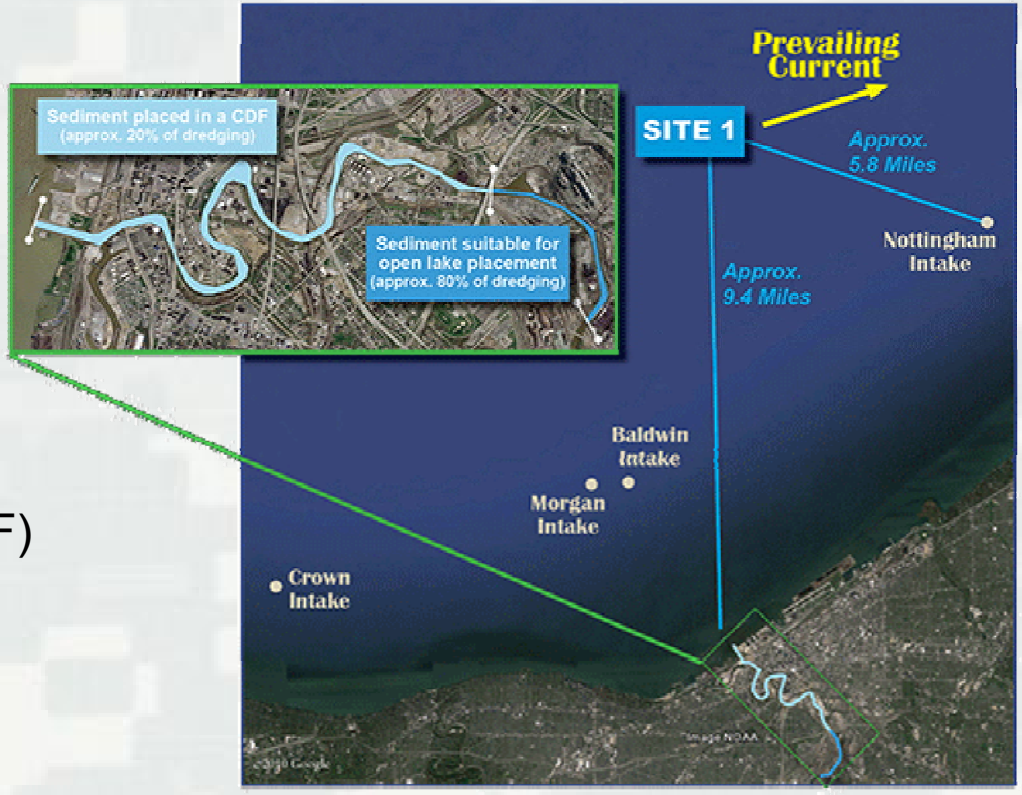
District Commander

U.S. Army Corps of Engineers, Buffalo

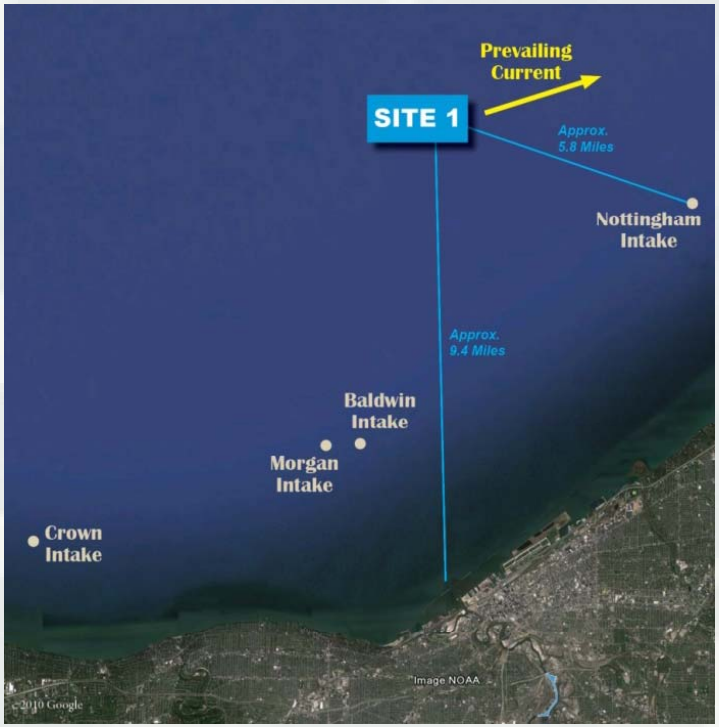

SITE 1
Cleveland Harbor
Approx. 9.4 Miles
Outer Harbor
CDF 12
CDF 10B
Lower River Channel
Image NOAA
©2010 Google
Upper River Channel

Alternative Involving Open Lake Placement

- Proposed 2015 dredging project plan
  - Dredge 180,000 cubic yards (CY) from Upper Cuyahoga River Channel with open lake placement at “Site 1”
  - Dredge 45,000 CY from remaining portions of harbor channels with placement in confined disposal facility (CDF)
- Source and nature of Upper Cuyahoga River Channel sediment



Open Lake Placement is Safe for Our Drinking Water



- Channel sediment vs. lake sediments
- Site 1 location
- Model studies show that placement at Site 1 would:
  - Have no measurable influence on water quality at drinking water intakes
  - Readily meet all drinking water quality standards

Open Lake Placement is Safe for Lake Erie

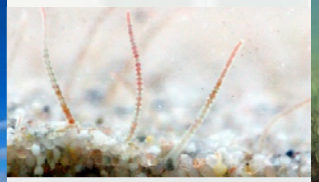
- Channel sediment is not toxic to sensitive lab test species
- Would not violate applicable Ohio water quality standards (water concentration limits)
- Would not induce harmful algal blooms (HABs)
- What about PCBs?

Background PCB Levels in Ohio's Lake Erie

Sediment	PCB Level
Toledo offshore background	0.24 parts per million (ppm)
Cleveland offshore background	0.12 ppm
Ashtabula offshore background	0.10 ppm
THIS CHANNEL SEDIMENT	**0.12 ppm**

PCBs, Fish, and Human Health

- Fish already accumulate PCBs through the lake water and bottom sediments ("background effect")
- Placement of this channel sediment in Lake Erie would not measurably increase PCB levels in fish
  - Lab test results using freshwater worms (channel sediment net uptake ~0.05 to 0.07 ppm; reference sediment net uptake ~0.05 ppm)
  - Conservative modeling demonstrates no perceptible increased risk to fish or human health

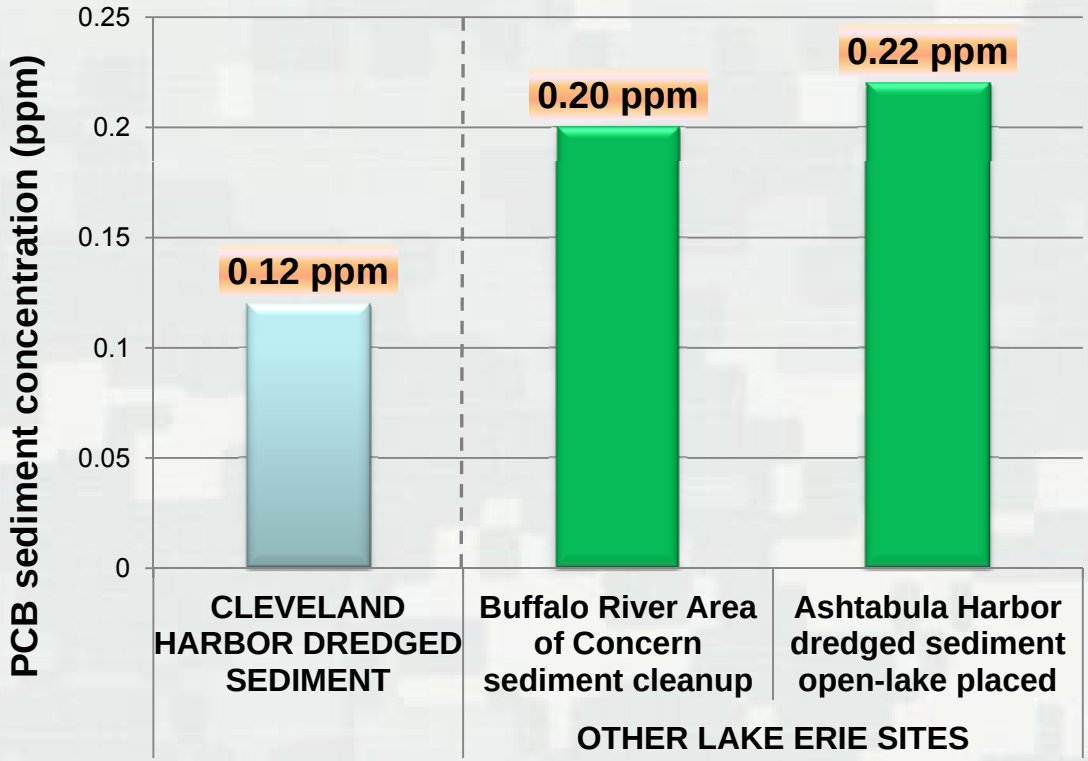




PCBs, Fish, and Human Health

- Concentrations of PCBs released from channel sediment are predicted to be much lower than Ohio's Lake Erie water quality standard concentration requirements after placement.

Channel sediment PCB result (parts per billion [ppb])	Ohio PCB testing requirement for protection of water quality (ppb)
<0.04 (not detectable)	≤0.5

PCB Levels Accepted at Other Lake Erie Sites

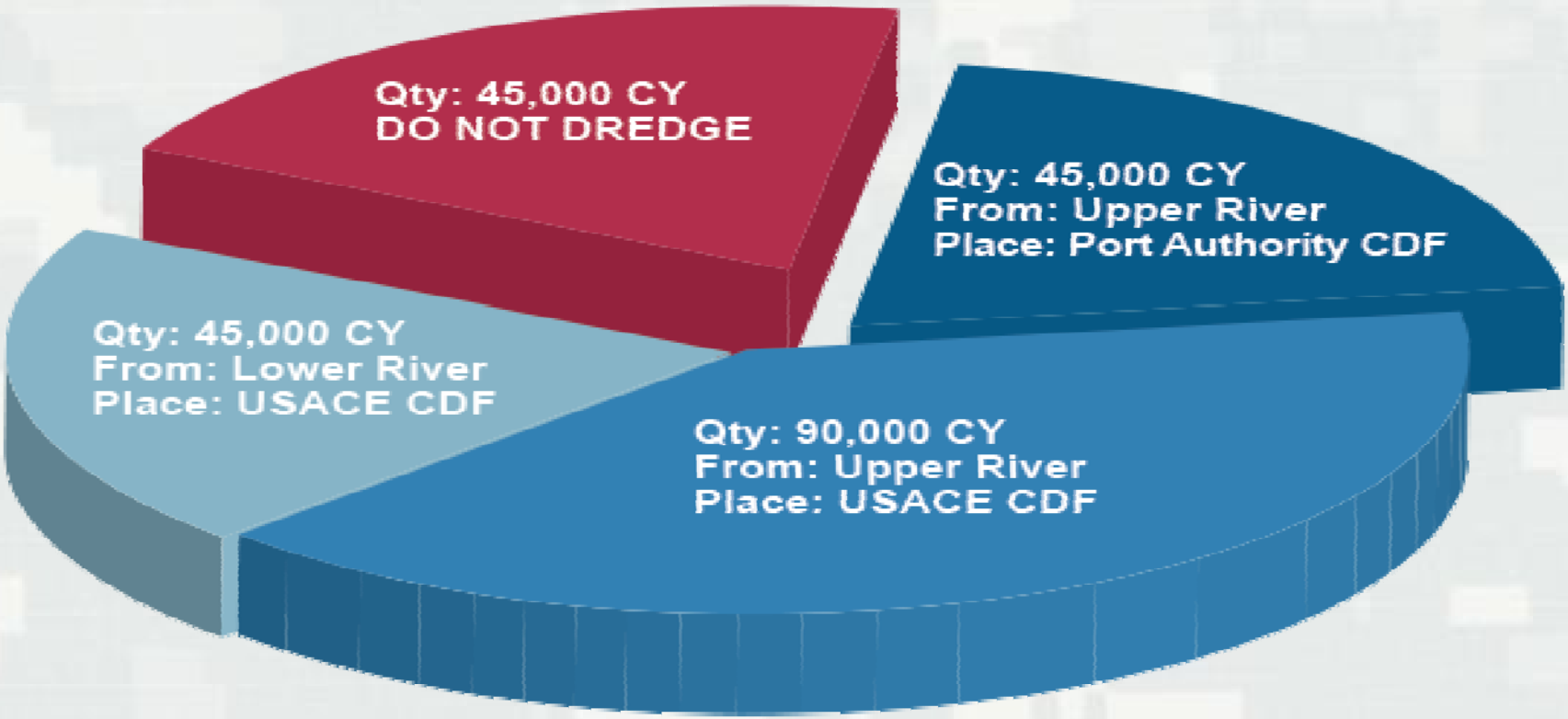


SUMMARY

- Scientific testing and evaluation has demonstrated that open lake placement of channel sediments from the Upper Cuyahoga River Channel is safe for Lake Erie and will not impact our drinking water
- USACE has established that open lake placement is the “Federal Standard” for this channel sediment
  - The Federal Standard is a national requirement that establishes what the Federal Government will pay for dredged material management
  - Other alternatives can be implemented with non-Federal sponsorship and funding
- Stakeholder collaboration through 2014 has resulted in a strategy for 2015 (and beyond) that will not require open lake placement (subject to continued sponsor support)

2015 Strategy

(subject to continued local sponsor support)



Public Hearing

Listening to hear
not listening to speak

Submit Written Testimony

- Dated by February 24, 2015
  - Postal Service:

    U.S. Army Corps of Engineers, Buffalo District
    Attn: Environmental Analysis Team
    1776 Niagara Street
    Buffalo, NY 14207-3199

  - E-mail: Clevelanddredging@usace.army.mil
  - Fax: 716-879-4225