

USACE Baltimore District

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Commander and District Engineer

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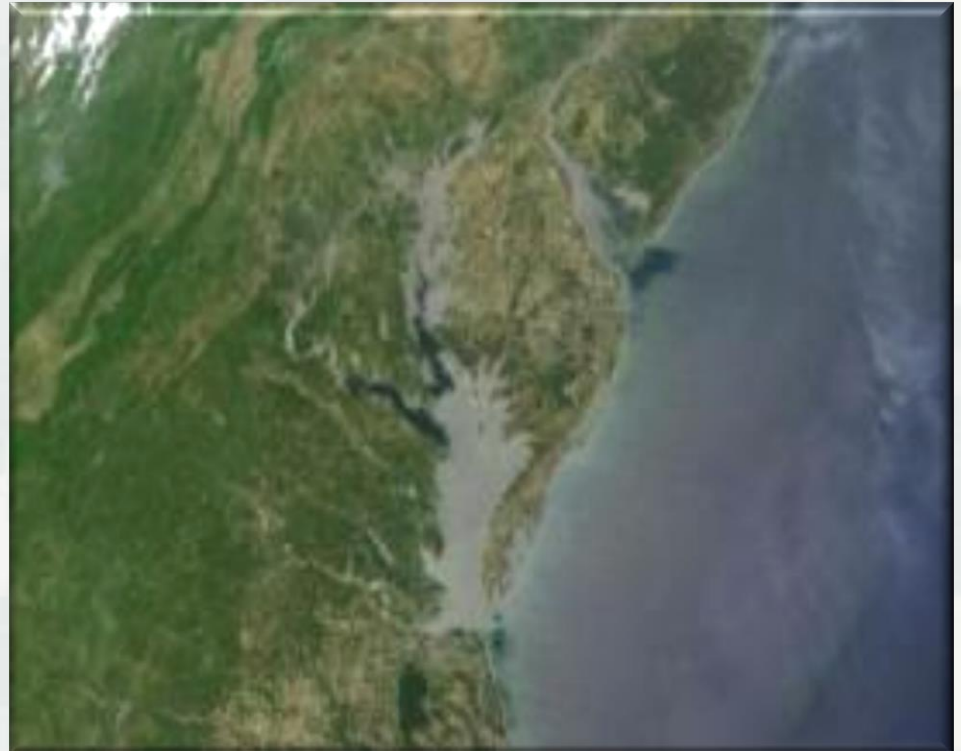


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US Army Corps of Engineers
BUILDING STRONG®

Agenda

- USACE Overview
- Technical Services
- Civil Works
- Summary



Take Away

USACE is unique from other federal agencies in its ability to partner through planning, design, construction and technical services



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USACE Overview



USACE Overview

Key Mission Areas

Development & Management of
Water Resources Infrastructure



Protection, Restoration & Management
of Environmental Resources



Engineering & Technical Services



Disaster Response & Recovery



HQUSACE

Typical Military Program

\$ 20 B

11,000 personnel

Military Construction

Contingency Operations

Installation Support

International and

Interagency Support

Civil Works Program

\$ 6.7 B

23,000 personnel

Navigation

Hydropower

Flood Damage Reduction

Shore Protection

Water Supply

Regulatory

8 Divisions

(Direct Funded)

38 Districts

(Project Funded)

Homeland Security

Environmental

Real Estate

•Private

•Industry

•Partners

Engineer Research and Development Center

\$1 B

Seven diverse research laboratories

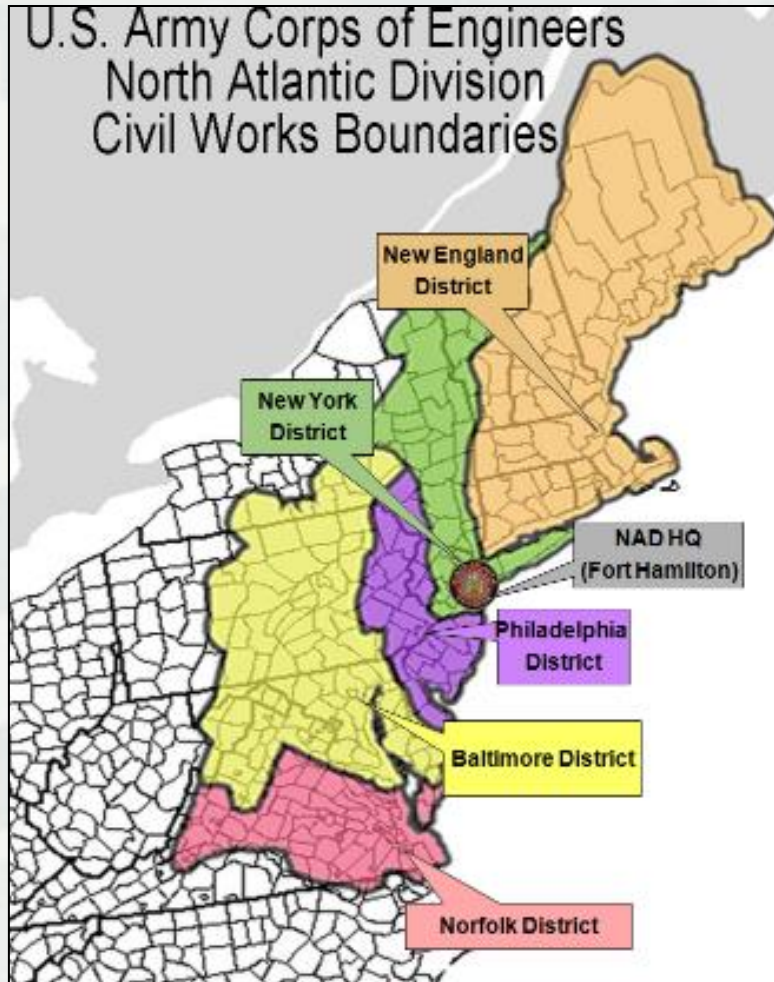
Key Program Areas



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Technical Services

USACE provides Technical Services to counties, states and DoD across the Chesapeake Bay Watershed



- Flood Risk Management Surveys for Prince George's County, MD
- Hydraulic Modeling for St. Mary's County, MD
- Stormwater Management Planning in Charles County, MD
- Best Management Practices Database for Virginia Department of Transportation and Stafford County, VA
- Flood Risk Maps for Federal Emergency Management Agency (FEMA)
- LID training to Army engineers and designers
- Total maximum daily load water quality modeling, GIS and best management practice plans for Army installations



Civil Works

USACE Actions

Chesapeake Bay Goals

USACE Actions



Accomplishments To Date

✓ Oyster Restoration	MD: 503 acres of substrate & started 30 acres in Harris Creek; VA: 389 acres of substrate
✓ Lower Susquehanna River Watershed Assessment (LSRWA)	Completed data collection and modeling
✓ Anacostia River	Completed Anacostia Restoration Plan in 2011
✓ Chesapeake Bay Restoration/Protection Authority	Completed Environmental Infrastructure projects (WWTP, trash racks, etc)
✓ Poplar Island	Created 176 wetland acres
✓ Mid Bay Island	Completed USACE Chief's report
✓ Craney Island	Began design expansion in 2010; Mitigation: Created 11.3 wetland acres in 2011
✓ Streamgaging	Partner with USGS on Gages to monitor flooding throughout Susquehanna River



Civil Works

USACE Actions

Chesapeake Bay Goals

USACE Actions



Planned for FY14

✓ Oyster Restoration	Complete oyster construction of 30 acres
✓ Lower Susquehanna River Watershed Assessment (LSRWA)	Complete 2014 Watershed Assessment
✓ Anacostia River	Complete environmental restoration feasibility studies in Montgomery and Prince George's Counties
✓ Chesapeake Bay Restoration/Protection Authority	Award contracts for North Beach and Sligo Creek
✓ Poplar Island	Continue Design Expansion
✓ Mid Bay Island	Align future island restoration with EO 13508 goals/funding
✓ Craney Island	Mitigation includes 16 acres of oyster reef construction currently underway
✓ Streamgaging	Utilize O&M funding for continued monitoring



Civil Works

USACE Actions

Chesapeake Bay Goals

USACE Actions



Future Challenges

✓ Oyster Restoration

Current Limit \$50M – Funding \$5M/yr = cannot budget beyond 2015

✓ Lower Susquehanna River Watershed Assessment (LSRWA)

Not a Design/Construction Authority

✓ Anacostia River

Not a USACE Mission area: Environmental Infrastructure and Stormwater Mgmt

✓ Chesapeake Bay Restoration/Protection Authority

Not a USACE Mission area: Environmental Infrastructure and Stormwater Mgmt

✓ Poplar Island

Current Island Limit \$606,360M; Expansion Limit \$432,800M - Reach authorization limit ~2021

✓ Mid Bay Island

Thus far, driven by Dredge Material Management Need

✓ Craney Island

Current Project Limit \$42M

✓ Streamgaging

Low Budget Priority; Piecemeal efforts



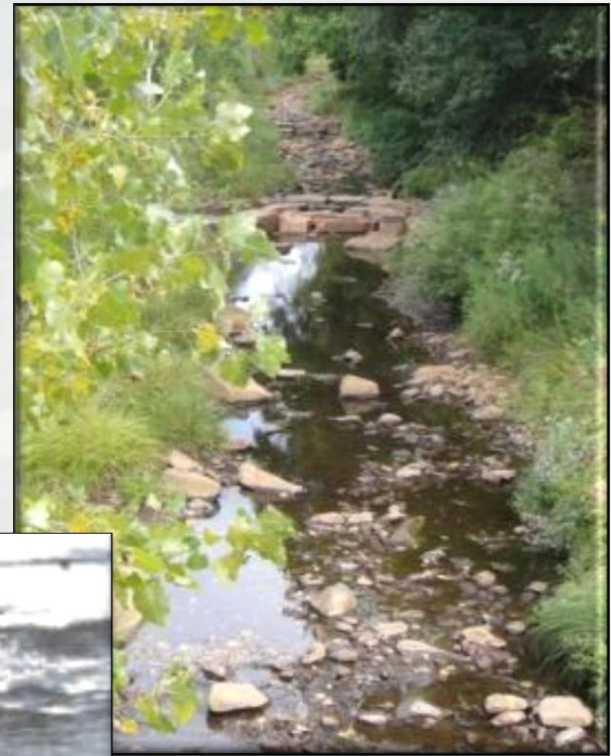
Summary

USACE is unique from other federal agencies:

- Planning, Design and Construction
- Technical Services
- Cost-Share and Reimbursable Programs
- Partners include Federal, States, Counties and DoD



Questions?



Back Up



Technical Services

- Low Impact Development (LID) implementation
 - Watershed Implementations Plans
 - Stormwater Surveys and Mapping
 - Dyke marsh
 - BMP Inventory database
 - Flood Risk Management
 - Wetlands Mitigation and Delineation
 - Stream Restoration
 - Environmental Assessments
 - GIS Support to Installations
 - Water Resources Modeling
 - Natural/Cultural Resources Management Plans
- 
- An aerial photograph showing a winding waterway, likely a stream or small river, flowing through a vast, flat landscape. The land is covered in dense vegetation, appearing as a mix of green and brown, suggesting a wetland or marsh environment. The waterway is a light blue-grey color, contrasting with the surrounding land. The overall scene is a natural, undeveloped landscape.



Wetland Delineation



Army Low Impact Development

Planning, Design and Construction

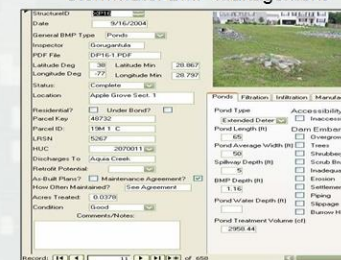
Environmental Support to DoD



GIS Support to Bay Installations



Stormwater BMP Management



Civil Works

2 Types of General Investigation (GI) Studies

- Specifically authorized studies
 - ▶ Construction authority – Water Resources Development Acts
 - ▶ Resolution from Congress
 - ▶ Cost Share (typical)
 - Study = 50% Federal/50% non-Federal
 - Design = 75% Federal/25% non-Federal
 - Construction = 65% Federal/35% non-Federal
- Watershed and River Basin Assessments (Section 729 studies)
 - ▶ Conceptual designs of recommendations
 - ▶ Recommendations for USACE and others
 - ▶ Does not lead to USACE construction directly



Civil Works

Continuing Authorities Program (CAP)

- Nine Different Authorities Congressionally authorized through construction
 - ▶ Resolution of Congress not required
 - ▶ Group of nine legislative authorities approved to plan, design, and implement water resource projects
 - ▶ Congressional “Namings” prioritize funding/appropriations



Technical Services

LID Examples



Parking Lot Infiltration Retrofit



Recharge Gardens

Army Policy for Sustainable Design and Development and Energy Independence Security Act Section 438:

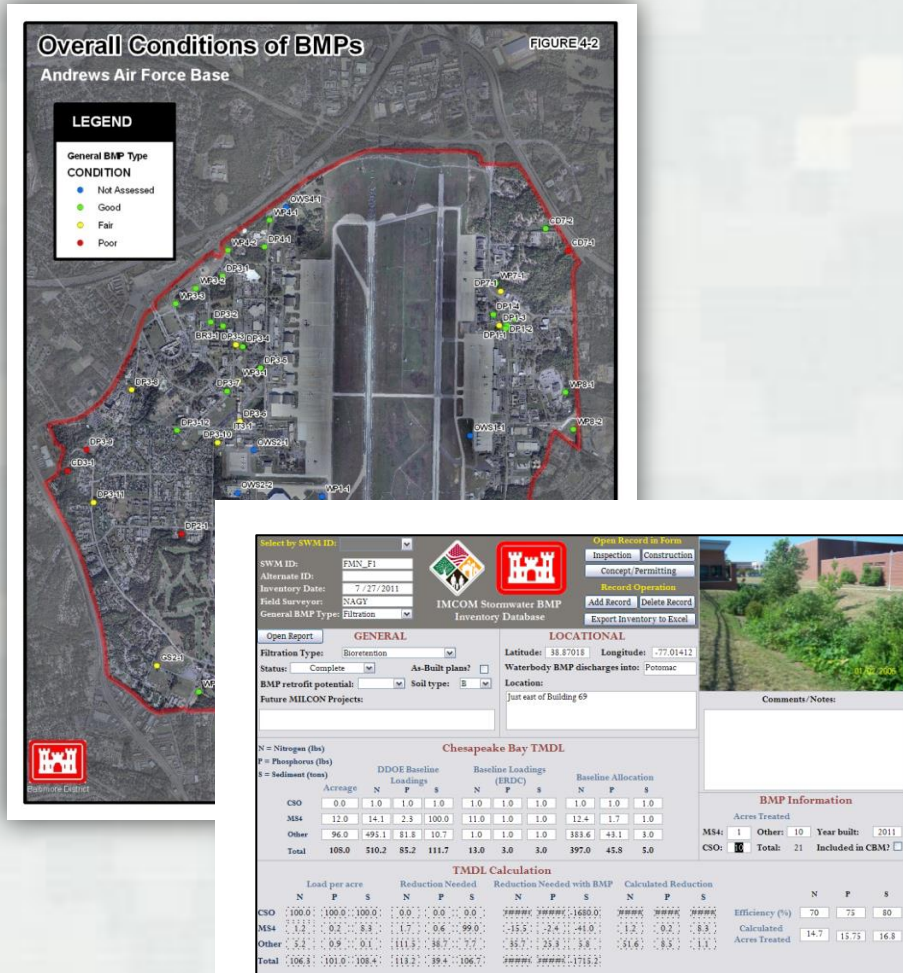
- Low Impact Development Technical User Guide
- Design and Specs Manual
- Nationwide Training Curriculum to ensure the implementation and compliance



Technical Services

TMDL Support to Army

- Conducted stormwater infrastructure- best management practices (BMPs) field assessments
- Calculated baseline loadings using advanced modeling techniques
- Conducted BMP condition assessments
- Developed a BMP database
- Preparing BMP opportunity assessment plans

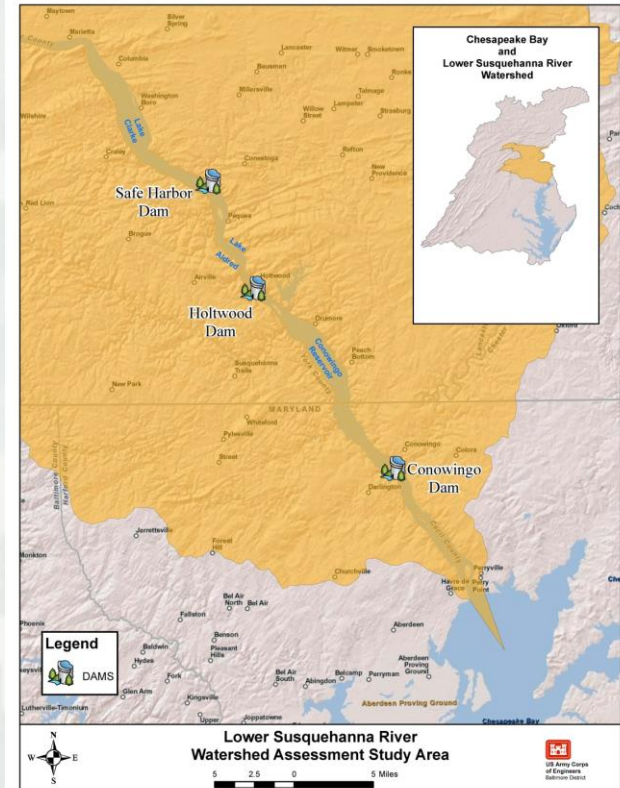


Lower Susquehanna River Watershed Assessment

Authority: River Basin Assessment
(Sec 729 of Water Resources Development Act of 1986)

Non Federal Partner: Maryland Department of the Environment

- Cost: \$1.4 million
- Cost share: 75 Federal/25 Non-Federal Cost Share
- Looks at impacts to habitat across three dams –throughout the watershed
- Study Duration: 3 Years (assuming funding availability)
- Not in FY13 or FY14 Pres Budget

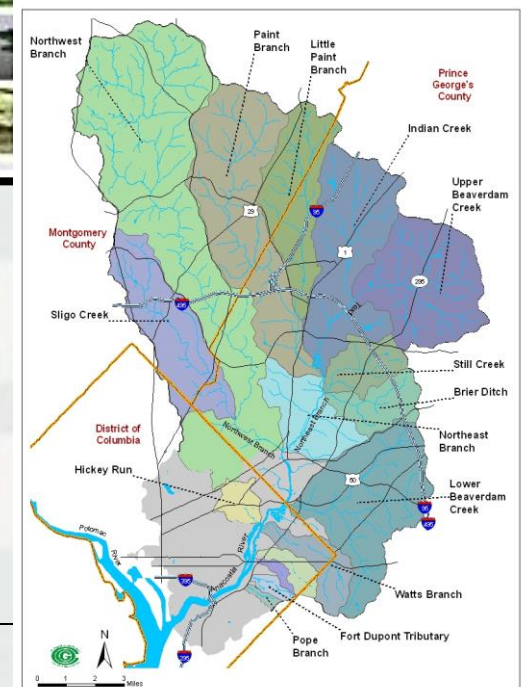
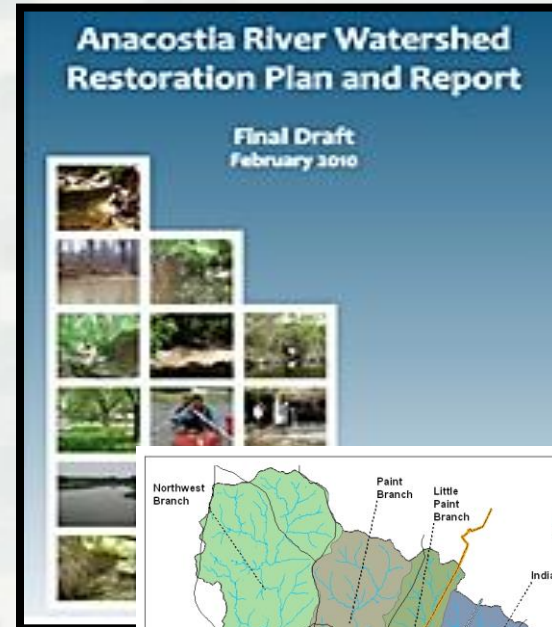


Anacostia Restoration Plan

Authorization: House Committee on Public Works and Transportation resolution, dated September 8

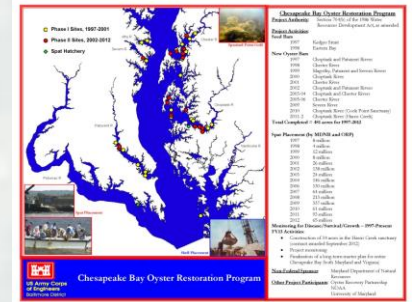
Non Federal Partners: Montgomery County Department of Environmental Protection and Prince Georges County; Prince George's County Department of Environmental Restoration

- Two separate projects- developing feasibility study including data collection, problem identification, hydrologic and hydraulic modeling, and development of existing conditions narrative





Oyster Restoration



- Authority:** Section 704(b) of the WRDA 1986, as amended
- Non Federal Partner:** Partners with Maryland DNR since 1997 to construct oyster bars in the Chesapeake Bay
- Authority capped at \$40M – received \$5M/year
 - Placed substrate (both shell and alternative substrate) in the Severn, Magothy, Patuxent, Chester, and Choptank Rivers, as well as Eastern Bay and Kedges Strait, currently doing construction in Harris Creek
 - USACE mission focused on ecosystem restoration to maximize aquatic habitat benefits.



Construction Summary Maryland 1997-2013

- 503 acres of substrate placed ; includes 30 acres to be constructed this spring
- Locations:
 - Magothy, Severn, and Patuxent, Chester and Choptank Rivers (includes Harris Creek), Eastern Bay, and Kedges Strait
- Material Used:
 - Dredged fossil shell (1997-2006)
 - Alternate substrate (2009-2013)
- Periodic project monitoring

Construction Summary Virginia 2001-2013

- 389 acres of substrate placed
- Locations:
 - Rappahannock (Section 510 authority)
 - Tangier/ Pocomoke Sounds
 - Great Wicomico and Lynnhaven Rivers
- Material Used:
 - Dredged fossil shell
- Periodic project monitoring

Poplar Island

Authority: Section 537 of (WRDA) 1996, P.L. 104-303, as amended by Section 318 of WRDA 2000, Section 3087 of WRDA 2007, P.L. 110-114

Non Federal Partner: Maryland Department of Transportation
(Maryland Port Administration)

- Design/construction for wetlands, streams, oysters, SAV, environmental infrastructure, shoreline protection, beneficial use of dredged material, etc.
- Total inflow of dredged material through FY12 is 21.4 million cubic yards (MCY). To date, 176 acres of tidal marsh have been created
- Establish Black Duck population
- Valuable nesting and nursery area for many species of wildlife, including eagles, osprey, heron, egrets and terrapins

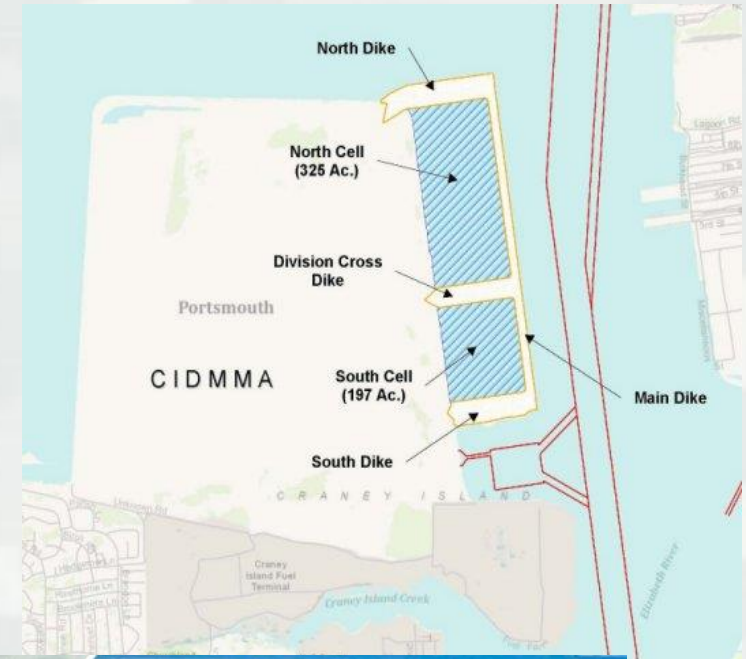


Craney Island Eastward Expansion

Authority: River and Harbors
Act of 1946

Non Federal Partner: Virginia
Port Authority

- 522 Acre Footprint Expansion
- Provide Suitable Platform to Construct a Container Handling Terminal
- Oyster, wetland and habitat restoration benefits from mitigation



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Section 510

Chesapeake Bay specific authority that is underutilized (NOT FUNDED)

- Development Act (WRDA) 1996, as amended by Section 5020 of WRDA 2007
- Environmental (Ecosystem Restoration and Protection) for Chesapeake Bay
- Directly contributes to Executive Order 13508 goals to restore clean water, recover habitat, and sustain fish and wildlife
- Design/Construction Program
- 75-25 cost share

