Management of Dredged Materials: Challenges and Opportunities

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History

- Authorized by Rivers and Harbors Act of 1946
  - Constructed 1956 - 1958
  - 2,500 acres (1,011 hectares)

Construction of Craney Island’s Main Dike, 1950’s
History

• Owned and operated by the U.S. Army Corps of Engineers
• Low-cost placement area for material dredged from Hampton Roads’ shipping channel
  – Benefits military, port, maritime industries
  – Advantage over other ports
Craney Island Eastward Expansion and Marine Terminal

- Unique dual-purpose project
- Partnership between VPA and USACE
- Extends life of Craney Island as a dredged material management area
  - CIDMMA will reach capacity in 2025
- Provides land for construction of a new marine terminal
  - Global cargo volumes are increasing
  - VPA terminals will reach capacity
Craney Legislative Milestones

1988
House Joint Resolution #163 requests that USACE, VMRC and VIMS consider and make recommendations with respect to Craney Island

1990


1991
Virginia General Assembly establishes a commission to make recommendations regarding Craney Island

1995


1997
U.S. House of Representatives Committee on Transportation and Infrastructure authorizes USACE to perform a Feasibility Study on expanding CIDMMA

1998


1998
Code of Virginia authorizes the Commonwealth and VPA to expend state funds for a feasibility study and environmental impact study related to the potential eastward expansion of Craney Island for a marine terminal

2000


2005


2006
USACE approves the Feasibility Study and Environmental Impact Statement (EIS)

2007
VPA initiates Preliminary Engineering and Design Agreement (PED)

2007
Congress passes the Water Resources Development Act (WRDA), authorizing the expansion under a 50/50 cost share between USACE and VPA

2009
Virginia DEQ Water Protection Permit authorizes CIEE mitigation plan

2010


2010
Congress appropriates $100,000 towards the eastward expansion in the 2010 Energy and Water Appropriations Bill

2011
Congress appropriates $1 million towards the eastward expansion in the 2011 Energy and Water Appropriations Bill
$26.852 million in President Obama’s 2012 budget
Will fund cross dike construction
Virginia’s Congressional delegation has been vital in securing project funding
Project Status

- Dike construction began in 2010
- Stage 2A of dike construction in progress
- Land visible by Spring 2013

Wick drains in south and division cross dikes
# Project Schedule

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<td>Phases II, III, IV</td>
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Craney Island Aerial
Placement Costs

• Low-cost placement area for material dredged from Hampton Roads’ shipping channel
  – Disposal costs:
    • Direct pump: $1.38/CY
    • Re-handling basin: $6.81/CY

Dredged Material Being Pumped into Craney

Source: USACE
Craney Island Construction Stages
Long-Term Project Benefits and Growth Opportunities
Economic Benefits*

- 54,000+ direct, indirect, and induced jobs
  - Terminal design and construction
  - Terminal and transportation operations
  - Logistics and distribution center operations
- $1.7 billion in annual wages
- $155 million in annual state and local tax revenue

*Craney Island Marine Terminal (CIMT) Economic Impact Study, Moffatt & Nichol, 2004
Economic Benefits

• 5 million TEU capacity
• ≈ 446 employees
  – 285 ILA; 161 terminal operations & admin
Economic Development

• Capitalize on long-term growth and business opportunities
  – Ports attract businesses and industries operating “outside the gate”
Economic Development

- Port support industry is large and diverse
  - Material suppliers
  - Equipment maintenance
  - Ship lines
  - Trucking companies
  - Maritime insurance
  - Maritime law
  - Engineering firms
  - Customs brokers
  - Freight forwarders
  - Purchasing agents
  - Supply chain management firms
  - Amenity businesses (restaurants, stores, employee support)
Summary

- Low cost placement of dredge material
- Economic benefits
  - Jobs
  - Annual wages
  - Tax revenue
  - Support industries locating near terminal
- Growth opportunities for economic development
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