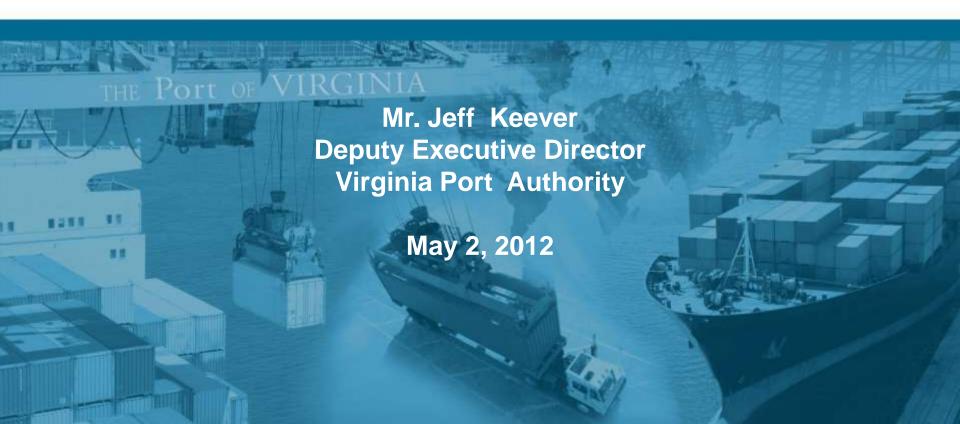
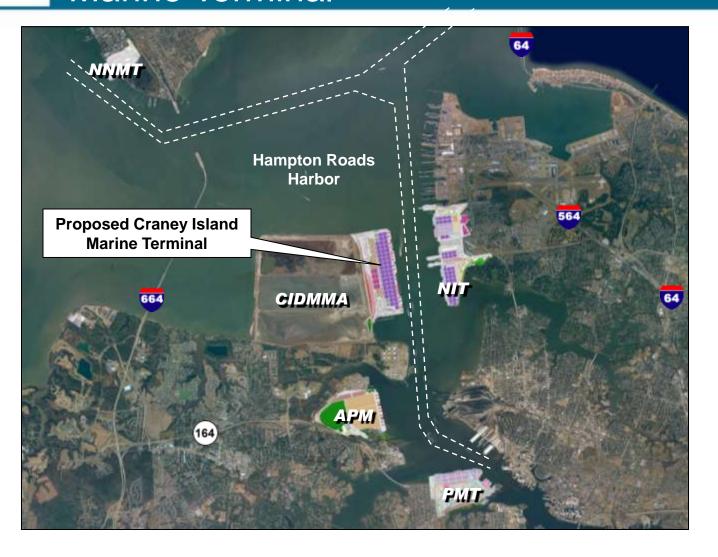


Management of Dredged Materials: Challenges and Opportunities





Craney Island Eastward Expansion and Marine Terminal





History

- Authorized by Rivers and Harbors Act of 1946
 - Constructed1956 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

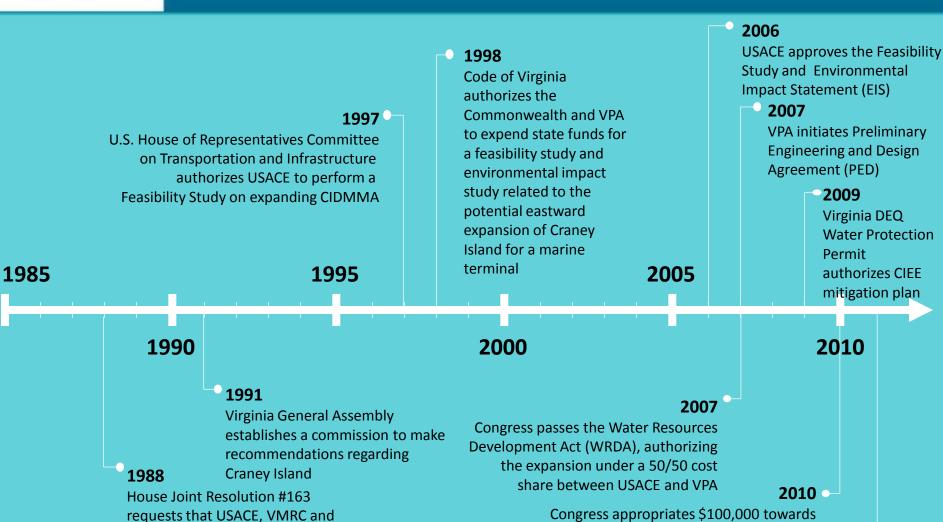


VIMS consider and make

Craney Island

recommendations with respect to

Craney Legislative Milestones



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



Congressional Action

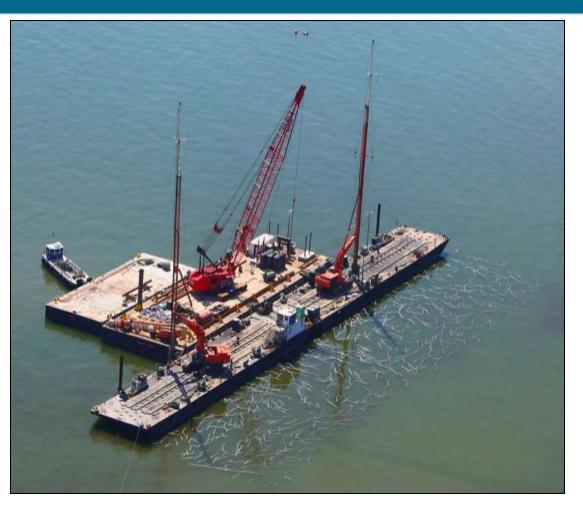
- \$26.852 million in President Obama's 2012 budget
- Will fund cross dike construction
- Virginia's Congressional delegation has been vital in securing project funding





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

	Project Phase	Time Frame
Eastward Expansion	Engineering & Design	2007 – 2010
	Dike Construction	2010 – 2022
Marine Terminal Construction	Filling	2014 – 2035
	Phase I	2022 – 2026
	Phases II, III, IV	2028 – 2038



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



WRGINIA 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





VIRGINIA 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



Management of Dredged Materials: Challenges and Opportunities

