

# FUN FACTS ABOUT THE CRANEY ISLAND EASTWARD EXPANSION



The Craney Island Eastward Expansion will stretch 8,500 ft long, which is equal to 28 football fields. When constructed, the expansion will be only 500 feet shorter than the Norfolk International Airport runway.



During the fill phase of construction, 87.4 million cubic yards (MCY) of dirt will be moved. The great Pyramids at Giza could only hold about 3.2 MCY of material and Sears Tower only around 2.7 MCY. In fact, you could fill the Washington Redskins FedEx field around 20 times and Harbor Park over 50 times with the amount of material that will be moved over the project life of the eastward expansion.



Dump Truck can hold 12 Cubic Yards of material. It would take 7,283,333 dump trucks to carry the amount of dirt that will be used over the construction life of the project. If lined up, the dump trucks could span across 218,500,000 ft and circle the earth over 1 and half times.



THE CRANEY ISLAND CONNECTION  
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VOLUME 2 ISSUE 1

JULY 2008



# THE CRANEY ISLAND CONNECTION

CRANEY ISLAND EASTWARD EXPANSION NEWS AND INFORMATION

VOLUME 2 ISSUE 1

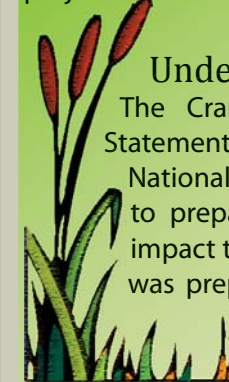
JULY 2008



## Craney Island Eastward Expansion Environmental Permitting Responsible Development in Hampton Roads

The environment is considered in each phase of Craney Island Eastward Expansion project development. The Virginia Port Authority (VPA) and the U.S. Army Corps of Engineers (USACE) are working with professional engineers, designers, public agencies, and environmental groups to minimize the project's environmental impacts. The October 2008 Craney Island Connection detailed both organizations' commitment to responsible development, providing an overview of the project's \$50 million dollar environmental mitigation program. The Craney Island mitigation plan will improve the overall condition of the Elizabeth River. The plan uses a landscape approach and encourages the preservation of diverse life forms within Hampton Roads. While mitigation allows engineers to avoid, minimize, and compensate for the project's unavoidable impacts, regulatory permitting provides additional safeguards towards monitoring the environment.

The Craney Island Eastward Expansion project team is seeking the environmental permits required to begin project construction in July 2009. Regulatory permitting supports environmental protection by ensuring impacts on aquatic resources are avoided, minimized, or mitigated to the appropriate level. Acquiring environmental permits is a broad and complex process requiring significant research, modeling, analysis, design and documentation. To successfully obtain an environmental permit, project engineers must identify and closely examine project need, alternatives, impacts, design details, and mitigation. Accordingly, experts have conducted a series of in depth analyses examining each of these areas, as part of the project's environmental program.



### Understanding Project Impact

The Craney Island Eastward Expansion Environmental Impact Statement (EIS) is central to the project permitting process. The National Environmental Policy Act, or NEPA, requires Federal agencies to prepare a detailed EIS for any actions that could potentially impact the environment. The Craney Island Eastward Expansion EIS was prepared, in accordance with NEPA requirements and USACE procedures for implementing NEPA, to assess a range of alternatives and to evaluate the potential environmental

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THE CRANEY ISLAND CONNECTION IS PUBLISHED MONTHLY UNDER THE AUSPICES OF THE VIRGINIA PORT AUTHORITY AND THE U.S. ARMY CORPS OF ENGINEERS, TO PROVIDE READERS WITH REPORTS RELATED TO THE DEVELOPMENT OF THE EASTWARD EXPANSION OF CRANEY ISLAND. ARTICLES PRINTED HEREIN ARE FOR INFORMATIONAL PURPOSES ONLY. WE INVITE READERS TO COMMENT ON ARTICLES AND SUGGEST FUTURE TOPICS FOR CONSIDERATION.

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consequences stemming from those alternatives.

Each alternative looked at ways to provide additional life to the Craney Island Dredged Material Management Area (CIDMMA) in support of Norfolk Harbor dredging projects, while accommodating the construction of a 4<sup>th</sup> state-owned marine terminal. Environmental, economic, and engineering analyses were performed to determine each alternative's feasibility for construction, operation, and maintenance. The Craney Island Eastward Expansion emerged from this process, as the alternative most consistent with protecting the Nation's environment, while also meeting the project's dual purpose. Accordingly, the EIS was reviewed by various Federal and state environmental agencies and approved by the Chief of Engineers of the Army Corps of Engineers in October 2006.

To understand project impacts and identify techniques for mitigation the project team participated in a dozens of meetings and workshops producing a series of analyses and reports. Such reports are vital to the environmental permitting process. For instance, 3-D hydrodynamic model was used to evaluate the potential impacts of alternative CIDMMA expansion plans on the Lower James River, Hampton Roads Harbor, and the Elizabeth River. The conclusion of the initial modeling study indicated that the eastward expansion of the CIDMMA will have no significant effects on the Elizabeth River. To evaluate the impacts of dredging and ship berthing during various conditions, a more comprehensive hydrodynamic model was used to evaluate the combined impact of the CIDMMA expansion, the dredging of the Maersk Terminal area, and the berthing of ships. As in the initial analyses, little change was noted when compared to the eastward expansion alone.

Similarly, water quality assessments provide further support to the permitting process. As discussed in the June 2008 edition of the Craney Island Connector, one of the key environmental goals of the Craney Island Eastward Expansion is to adhere to strict

standards in water quality monitoring and management. Project engineers understood early on that the primary effect on water quality from dredging and cell construction would be the temporary increase in turbidity or the stirring up of sediment particles, and total suspended solids from the release of sediments. Water quality assessments determined the re-suspended sediment plume created by the dredge are low, and would not be discernible from the normal turbidity levels within the Elizabeth River.

### Environmental Mitigation

In accordance with Council on Environmental Quality Regulations (CEQ) for implementing NEPA, USACE mitigation guidance provides the framework for the Craney Island Eastward Expansion mitigation plan, under which environmental impacts are avoided or minimized to the greatest extent practicable or compensated for through a range of mitigation alternatives. The USACE and the VPA have developed an integrated and comprehensive mitigation program to reduce the potential impacts of the eastward expansion, with input from representatives of 12 Federal and state agencies and 3 local interest groups.

As discussed above, a "landscape approach" was pursued to establish a connection between various mitigation sites and the greater Hampton Roads area. The recommended plan, based on 3 years of stakeholder involvement, scientific study, and thorough analysis of all data and information collected, proposes sediment clean-up and restoration, wetlands restoration and conservation, and oyster reef restoration, and provides large scale ecosystem benefits at a total cost of approximately \$50 million. Upon successful completion, the mitigation plan will restore critical biological functions and habitat in the Elizabeth River

### Joint Permit Application

While the discussion above only highlights aspects of the research program conducted in support of the project's environmental plan, recognizing the extensive efforts



undertaken provides the background necessary to understand the permitting process. A Joint Permit Application (JPA) is used to apply for permits to work in the waters and wetlands of the Commonwealth. Federal and State regulatory organizations share an application form to ensure an efficient and standardized permitting process. The JPA process protects Virginia's aquatic resources while allowing reasonable and responsible development. As described above, the JPA like other environmental permit applications typically contains information on project need, alternatives considered, impacts, design details, and mitigation. The content of the JPA is therefore generated from conclusions reached in the Environmental Impact Statement (EIS) as well as additional studies and reports generated throughout the project design. Accordingly, the JPA submittal and acquiring permits is closely linked with the overall project's environmental program.

The JPA process allows organizations to submit a single application to the Virginia Marine Resources Commission (VMRC), which acts as a clearinghouse issuing copies to other Federal, state and local environmental organizations, such as the Virginia Institute of Marine Science (VIMS). The VIMS Wetlands Advisory Program provides a report to all involved agencies on the marine impacts of the project. Local wetlands boards will then utilize this report and additional factors to reach consensus on issuing a Tidal Wetlands Permit for any impacts to tidal wetlands. Next, the Department of Environmental Quality is responsible for issuing the Virginia Water Protection Permit (VWPP). Finally, the Corps of Engineers coordinates the application with the Environmental Protection Agency, the U.S. Fish and Wildlife Service (FWS), and the National Marine Fisheries Service before they issue a permit. Each agency involved with the process issues a separate permit. Once approved, the JPA will confirm that project's environmental program fully complies with state and Federal laws that require mitigation of environmental impacts.

### Craney Island Eastward Expansion Joint Permit Application Process

The JPA is scheduled to be submitted this summer. The JPA will cover applicable water protection and wetland permits for the eastward expansion project phase. An additional JPA will be required in the future, for marine terminal construction. When issued, the Craney Island Eastward Expansion JPA permits will set policies and procedures for project-related dredging, filling, and excavation in waters or in wetlands. The Craney Island Eastward Expansion Joint Permit Application (JPA) will be used to apply for the following permits: the VDEQ Virginia Water Protection permit<sup>1</sup>, a Virginia Marine Resources Commission permit for encroaching on state bottom<sup>2</sup> as well as the local Wetlands Board Permit, and applicable USACE permits.

<sup>1</sup> Pursuant To Section 401 Of The Clean Water Act (CWA)  
<sup>2</sup> Pursuant To Title 28.2 And 62.1 Of The Code Of Virginia

Through the JPA public review process for the eastward expansion project, the regulatory agencies will thoroughly consider the views of the public, governments, and interested parties. Once the project is thoroughly vetted, the agencies carefully evaluate the JPA to determine what actions will best serve the public interest. JPA processing times vary according to the size and complexity of the project and the Craney Island Eastward Expansion project is anticipated to take 6-9 months to process.

### Conclusion

By developing an environmentally responsible design and construction plan and complying with all state and Federal permitting policies, the Craney Island Eastward Expansion project is working to construct a resource that serves the community as well as benefits the environment. The JPA application for the Craney Island Eastward Expansion is public information and can be downloaded via the Craney Island Eastward Expansion website (<http://www.craneyisland.info>) or requested at 757-628-8222.





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**Jerry A. Bridges**  
 Executive Director

### To The Hampton Roads Community:

It has been an exciting year for the Craney Island Eastward Expansion project. July 2007 marked the beginning of our public outreach campaign and since then the communities of Hampton Roads have actively engaged the project team at community events, public meetings, and civic gatherings.

The Craney Island Connection project newsletter has brought you vital news and information on the Craney Island Eastward Expansion project. Since last July, we have covered a series of project-related new stories, including:

- The Maritime History Of Hampton Roads
- Geotechnical Investigation
- The Chesapeake Bay Impact Crater
- Blue Ribbon Panel
- Transportation & The Environment
- The Dredged Material Management Plan
- Water Quality Management
- The Port Of Virginia: A Strategic Port
- Bulk Material Movement Technologies
- The Dike Alternatives Analysis

The project newsletter represents only one component of a wider effort to engage the community on this exciting project. Last September, the Virginia Port Authority (VPA) in partnership with the U.S. Army Corps of Engineers hosted a series of Community Open Houses. A second series of Community Open Houses is planned for this fall. Moreover, project representatives met with several community groups and civic leagues including: South Fairview Heights Civic League, the Mount Hermon Civic League, the Old Towne Civic League of Portsmouth, the Churchland Seniors Club, and the Rotary Club of Norfolk. These meetings provided a exciting opportunity for open and active communication, which is an integral part of this project's success. That said, I encourage you to continue to engage the project team with your questions and comments.

The Craney Island Eastward Expansion website has also played an important role in project outreach. Over the past year, we have 5,020 visits to the website, with more than 220 individuals receiving the newsletter electronically.

I hope The Craney Island Connection coupled with the wider project public outreach effort will continue to be a central news resource that will engage and inform you on the project. I invite you to tell us what you think, so please send your thoughts to [ciconnection@craneyisland.info](mailto:ciconnection@craneyisland.info).

Sincerely,

Jerry A. Bridges  
 Executive Director, Virginia Port Authority



*South Fairview Heights Civic League*



*Mount Hermon Civic League*