Developing a Community Approach to Support Improved Dredged Material Management Strategies

Dredging Operations Environmental Research (DOER) Program

#### U.S. ARMY CORPS OF ENGINEERS

## **Focus Area**

Sediment Dredging Processes

## Problem

USACE coordinates with multiple stakeholder groups to develop dredged sediment long-term management strategy (LTMS) that expands beneficial use (BU) practices which support resilience and ecosystem health. This requires operational changes which include sediment placement in nearshore regions or near sensitive habitat. These operational changes are often viewed with concern by local, state, and national stakeholder groups and the array of concerns expressed are often complex and sometimes contradictory. However, stakeholder acceptance is critical to increasing BU while managing costs. USACE does not maintain internal teams with the expertise to evaluate stakeholder response early in the process and develop strategies for securing stakeholder acceptance. Without stakeholder acceptance, improved LTMS which maximizes BU opportunities may not be achieved.



# **Study Description**

Proven methods have been developed to identify stakeholder perceptions and engage diverse communities toward acceptance of alternative management practices. These methods will be applied to develop methods for USACE to move communities toward more beneficial and sustainable LTMS and BU. External experts will be engaged to perform these assessments and support future USACE in-house capabilities. These experts specialize in developing and applying models that process diverse stakeholder perceptions, identify proponents, develop engagement and communication strategies, and support stakeholder engagement in strategy development. This RT will engage external experts to support communication strategies through a demonstrated multi-step process (including modeling) which has been successfully applied for large-scale projects that have significant impact on surrounding communities.

# Products

- Expert Modeling System and methodology for community engagement to support evolving LTMS
- Demonstration of the System and results at two high-profile USACE sites
- Guidance and training to support implementing the system across USACE Districts
- In-house USACE expert team to support District implementation

# Summary

The product of this research will provide an Expert Modeling System and in-house expert staff to improve community engagement and reduce project costs, reduce delays, and improves stakeholder perceptions of USACE as a partner which can support economic, flood risk management, social, and environmental benefits to a community. Stakeholders will be participate in project development using a flexible approach which identifies and addresses stakeholder priorities. An internal USACE team will support application of this system throughout USACE. Using this system, Cost-effective dredged sediment LTMS will be implemented and benefits will be provided across multiple USACE business lines.



Balancing operational and environmental initiatives and meeting complex challenges of dredging and dredged material placement in support of the navigation mission.