



Workshop for Developing a New Dredged Material Disposal Concept for Calcasieu Lake

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

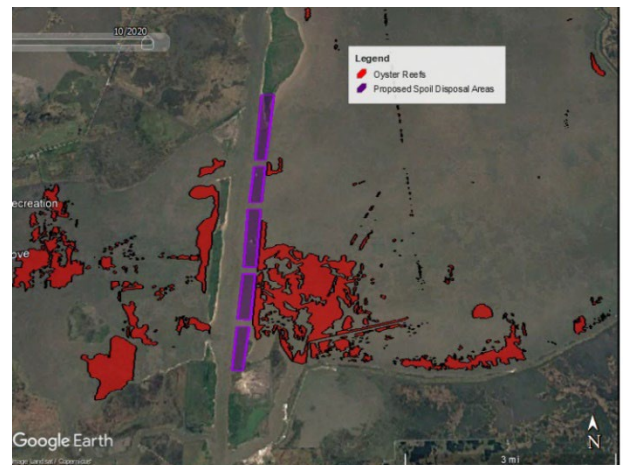
Faced with dwindling capacity to place dredged material from anticipated future dredging activities in Calcasieu Lake, solutions were needed for the USACE New Orleans District (MVN) to utilize this material in a manner that offers navigation as well as environmental and other benefits. One solution is to construct several dredged material disposal cells along the southwestern boundary of Lake Calcasieu. The cells present a unique opportunity to meet ecological goals while satisfying future dredged material capacity requirements of Calcasieu Channel users. The workshop was designed to bring together engineers, scientists, and landscape architects to co-develop solutions that were sustainable, nature-based, and increased sediment beneficial use in the region. The workshop included a breakout session where smaller groups of participants were asked to provide their input and insights into the proposed placement plan.

Period of Performance:

The workshop was held on Tuesday 16 May 2023 at the Louisiana Department of Wildlife and Fisheries office in Lake Charles, LA.

Benefits of the Response to the USACE Dredging/Navigation Program:

Briefly summarize the benefits of the technical response to the Dredging /Navigation program(s). The benefits to MVN include providing an opportunity for USACE MVN Operations and Maintenance staff to share their navigation project objectives through meaningful engagement of federal, regional, state, local, NGO, industry, and academic stakeholders that leverage common goals and objectives. Objectives of developing a nature-based design were to reduce tidal exchange between the ship channel and southern Calcasieu Lake and to confine tidal flows to specific locations, thus reducing sedimentation and promoting establishment of healthy oyster reefs. Over 30 attendees participated in the half-day workshop. The image shows the southern Calcasieu Lake placement area concept that was presented at the workshop. The concept design was discussed during the workshop and suggestions and recommendations to improve implementation of the plan made with input from the multiple stakeholders present.



Deliverable:

Outcomes of the workshop included detailed drawings of dredged material cells and how they could be designed and engineered to work with nature within Calcasieu Lake. The resultant designs will be used by the MVN and its stakeholders to plan sediment placement activities in future years in ways that produce triple-win outcomes of economic, environmental, and social benefits for the stakeholders involved.



Providing environmental and engineering technical support to the U.S. Army Corps of Engineers
Operations and Maintenance navigation and dredging missions

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