



Water Quality and Sediment Monitoring for the Port Everglades Deepening Project

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

New work dredging of the Port Everglades, Florida navigation channel is planned in order to accommodate modern, deep-draft vessels. Concerns remain regarding water quality impacts to sensitive habitats surrounding the project site, which are expected to be highly variable in space and time. Therefore, the Corps, in collaboration with ERDC and NOAA's Atlantic and Oceanographic Meteorological Laboratory (AOML), intend to deploy multiple bottom-mounted instrument stations for compliance and adaptive management purposes. The SAJ requested ERDC personnel to provide consultation and assist with the development and execution of the monitoring plan to include instrument selection, deployment strategies, sediment sampling, and data analysis. These data will be used to develop water quality-based triggers and to document dredge-related impact areas.



Period of Performance:

January 2019 – June 2019

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

The contentious nature of dredging near environmentally sensitive habitat underscores the need for a well-devised monitoring plan to determine cause and effect relationships. This effort will help to assess and constrain project-related impacts to coral colonies associated with dredge plume dispersal. The successes and lessons learned will be used to refine best management practices and better quantify project-related risks, and communicate those risks to regulatory agencies and the public.

Deliverable:

Numerous planning actions including conference calls and briefings between SAJ, ERDC, and NOAA. Development of cost estimates and scopes of work. Contributions to the development of a Water Quality and Oceanographic Data Collection Plan, and Sediment Sampling and Analysis Plan.

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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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