



# Environmental Monitoring Design to Support the Port Everglades Navigational Improvements Project

## ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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### Response Summary:

The U.S. Army Corps of Engineers is moving forward with plans to deepen the navigation channel at Port Everglades, Florida. Concerns remain regarding dredging related impacts to sensitive benthic habitats, particularly to coral species listed under the Endangered Species Act. Thus, an Interagency Workgroup (IWG) consisting of state and federal resource agencies was assembled to design and execute a comprehensive biological and water quality monitoring plan through the pre-, during-, and post-construction phases of the project. The Corps' Jacksonville District (SAJ) is therefore seeking ERDC staff expertise in field data collection to assist with the development of the monitoring plan. ERDC staff is working closely with the IWG to make recommendations regarding measurement techniques, instrumentation, and deployment and monitoring strategies to ensure that data quality and coverage aligns with project objectives.



### Period of Performance:

November, 2018 – December 2018

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

Environmental monitoring protocols vary with site conditions and project objectives, and are subject to workforce, budget, and regulatory constraints. Therefore, monitoring programs are designed to be informative, yet cost-effective. This guidance will help the IWG make informative decisions on the number of monitoring locations, frequency of observations, and appropriate instrumentation required to quantify direct and indirect impacts to the surrounding benthos. The successes and lessons learned realized from this effort will help to refine environmental monitoring plans for future dredging and navigation projects.

### Deliverable:

Write-up of proposed methods for sediment sampling in the field and laboratory analyses for particle size and geochemical testing. Cost estimates for field instrumentation deployment, maintenance, and servicing.



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

POC: Anthony M. Priestas  
Coastal & Hydraulics Laboratory  
[Anthony.M.Priestas@usace.army.mil](mailto:Anthony.M.Priestas@usace.army.mil)

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