

PORT OF PALM BEACH SLIP 3 RECONSTRUCTION ENVIRONMENTAL SUPPORT



Project Description

Scheda led environmental permitting efforts for the widening of a cargo vessel docking slip, construction of a new wharf, and associated dredging at the Port of Palm Beach. The permitting activities necessitated a submerged resources assessment across 10 acres of hardbottom and seagrass habitat in Lake Worth Lagoon and a coral assessment over 55,000 square feet of existing seawall. Survey techniques included aerial photointerpretation, tow-behind underwater video cameras, and GPS estimates of the limits of protected resources. Belt transects using SCUBA and percent coverage (Braun-Blanquet method) were used. Point counts were used to estimate coral size distribution and abundance on the seawalls and in the hardbottom habitat.

Seagrasses observed were *Halophila decipiens* and the federally endangered *Halophila johnsonii*. Sponges (*Xestospongia* sp.), gorgonians (*Gorgonia* spp., *Plexaura* sp., *Psuedopteragorgia* spp.) and calcareous algae (*Caulerpa* sp.) were typical in hardbottom habitats. Over 500 coral colonies of (*Solanastrea* sp., *Siderastrea siderea*, *Stephanocoenia* sp., *Solanastrea* sp.) were identified. In addition, scientists conducted upland vegetation and wildlife assessments at proposed dredge spoil disposal sites. Scheda biologists also identified preferred disposal locations and coral relocation recipient sites in close proximity to the Port. Scheda ecologists coordinated with the regulatory agencies to determine the number of corals to relocate and seagrass mitigation options. Additional work included coral relocations, seagrass and hardbottom impact assessment using Uniform Mitigation Assessment Methodology (UMAM), drafting a seagrass mitigation plan, and submittal of permit applications.

