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Highlights of the 180-Day Post-Construction Survey report Marine Benthic Survey and Assessment for Section 111 Shoreline Stabilization Project Virginia Key, Miami-Dade County, Florida – January 2006

A 180-Day Post-Construction Survey was conducted by Dial Cordy and Associates, Inc. out of Jacksonville, Florida for the US Army Corps of Engineers following the Section 111 Shoreline stabilization Project.

A Pre-Construction Survey was done prior to the start of the Section 111 Project to document the existing conditions of the Virginia Key Beach Park Shoreline in July 2004.

Following the completion of the Section 111 Project a 30-Day Post-Construction Survey was performed to assess sea grass bed changes and impact directly following the completion of the section 111 Project.

Finally a 180-Day Post-Construction Survey was preformed to assess longer term impact from the construction of the groins and placement of additional beach material at the Northern end of the shoreline.

The report makes comparisons between the pre-construction, 30-Day and 180-Day post-construction impact assessments and changing colonization of the sea grass beds.

The survey shows that the most serve impact to the sea grass beds came from the 2005 hurricane season which displaced 2,000 – 3,000 cubic yards of beach material. The Section 111 Project added 2,250 cubic yards of material; essentially all of the additional beach material that was placed on the beach by the Section 111 project was removed by storms.

However, the erosion didn't seem to hurt many of the adjacent sea grass beds.

The total reduction of sea grass from the pre-construction survey to the 180-Day post-construction survey was 78,688 square feet – approximately 20%. There was a slight increase (approximately 50 square feet) in the sea grass beds from the pre-construction survey to the 30-Day post-construction survey demonstrating the impact that was caused by the 2005 hurricane season.

Overall, it was determined that the groins are helping to stabilize the shoreline and that is allowing sea grass colonization in the nearshore.