

MEMORANDUM FOR RECORD

SUBJECT: Manatee Harbor Navigation Project, 10 March Site Visit

1. On 10 March 2004, Ms. Yvonne Haberer (PD-EP) conducted a site visit at the subject study area. The purpose of the site visit was to observe the mitigation construction sites. Mr. George Isiminger, Director of Engineering and Environmental Affairs for Port Manatee, assisted in the site visit.
2. Port Manatee is located within the southern portion of Tampa Bay in Manatee County, Florida, just south of the Hillsborough County line. Tampa Bay is situated midway along the west coast of Florida.
3. The mitigation required for the Manatee Harbor improvements (Phase II & III) consists of removal and transplanting of seagrasses located within the dredging areas, disposal island restoration, peanut lake restoration (Little Redfish Creek alternative), construction of a public boat ramp at Piney Point and providing educational signage at boat ramp.
4. Seagrass transplant sites are numbered from 1-7. Many of these sites could be observed from the shoreline. The first site visited was Site 7 (Figures 1-4). This site is located to the south of the port basin. About 13-acres of suitable seagrass habitat was created at Site 7 by scraping down the upland area that was historically referred to as Little Redfish Creek. The creek was filled in with material many years ago. The original mitigation plan identified this area for tidal creek restoration. However, during the permitting process, the decision was made to use this area for creation of seagrass habitat.
5. Figure 5 refers to the area to be impacted by extending the channel south of Berth 11. The photograph was taken from the berth looking south into the area to be impacted by the proposed south channel extension. A few mangrove trees are located along the shoreline (Figure 6). From the berth looking southwest, seagrass mitigation sites 1, 2 and 3 can be observed at a distance (Figure 7). The white PVC pipes are used for monitoring and location purposes.
6. Seagrass mitigation sites 4, 5, and 6 are located at Piney Point. Sites 4 & 5 are to the south of the old boat ferry docking area (Figures 8-9). Site 6 is to the north. Breakwaters were designed and installed to protect these seagrass restoration areas from erosion. Piney Point Boat ramp, part of the overall mitigation plan, has not been constructed at this time.
7. Peanut Lake (Little Redfish Creek alternative) restoration is complete. Restoration of Peanut Lake consisted of dredging a channel to increase tidal flow to the ecosystem. Mr. Isiminger stated that this area is used often by local schools for educational field trips.

8. A boat was arranged for transportation to the restored dredged material island. The 59 acre disposal island at Port Manatee was created in 1969 by side casting disposal material from dredging the Port access channel. The island was used by ground nesting shorebirds until the early 1980's. After that time, the use of the island declined due to habitat displacement by invasive (exotic) vegetation such as Brazillian pepper. As part of mitigation for adverse impacts for Phases II and III of the harbor improvements project, the island was restored. Restoration work included removal of exotic vegetation, creation of suitable habitat for beach nesting birds (Figure 10), subtropical habitat for migratory birds, and enhancement and creation of a total of approximately 25 acres of mangrove, salt marsh, salt barren, and tidal creeks (Figures 11-13). The dredged material island restoration construction activities are complete. However, monitoring, maintenance and reporting is ongoing as per requirement in the Environmental Resource Permit (No.: 0129291-003-EI).

9. Species of birds observed in the vicinity of the restored island during the site visit were: white ibis (*Eudocimus albus*), American white pelican (*Pelecanus erythrorhynchos*), double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), little blue heron (*Egretta caerulea*), common loon (*Gavia immer*), osprey (*Pandion haliaetus*), and several species of terns and gulls (Figures 14-16). The nesting season for beach-nesting birds is defined to be March 15 through August 31. Bird nesting activity was not observed during the site visit.

10. Vegetation management on the island is ongoing. Surveys have to be conducted twice each year to locate exotic plants. Depending on size, exotics are hand pulled or treated with herbicide. As observed in Figure 17, much of the beach nesting bird habitat is intended to be essentially devoid of vegetation to meet habitat objectives. Predator control is also essential on the island. Raccoons easily cross the shallow water barrier between the mainland and the island. Raccoons (*Procyon lotor*) are known predators on nesting shorebirds. As such, raccoons are removed if their presence on the island is detected. Live-traps are set around the island to catch the raccoons (Figure 18).

11. As part of the Phase II work, construction was taking place on the Port's upland material disposal site during the site visit (Figure 19). Work crews are currently elevating the perimeter dikes to meet the capacity needed for the new dredge material. Last year, construction was curtailed to avoid nesting birds on site. This year, work crews have installed several eagle decoys to deter nesting on the disposal site (Figure 19).

/s/

Yvonne Haberer
Biologist, CESAJ-PD-EP



Figure 1. Seagrass Mitigation Site No. 7



Figure 2. Seagrass Mitigation Site No. 7.



Figure 3. Seagrass Mitigation Site No. 7.



Figure 4. Seagrass Mitigation Site No. 7 (looking southwest).



Figure 5. Photograph taken from Berth 12, looking south. Area to be impacted by the side channel extension (Phase III).



Figure 6. Closeup of mangrove fringe to be impacted by side channel extension (Phase III).

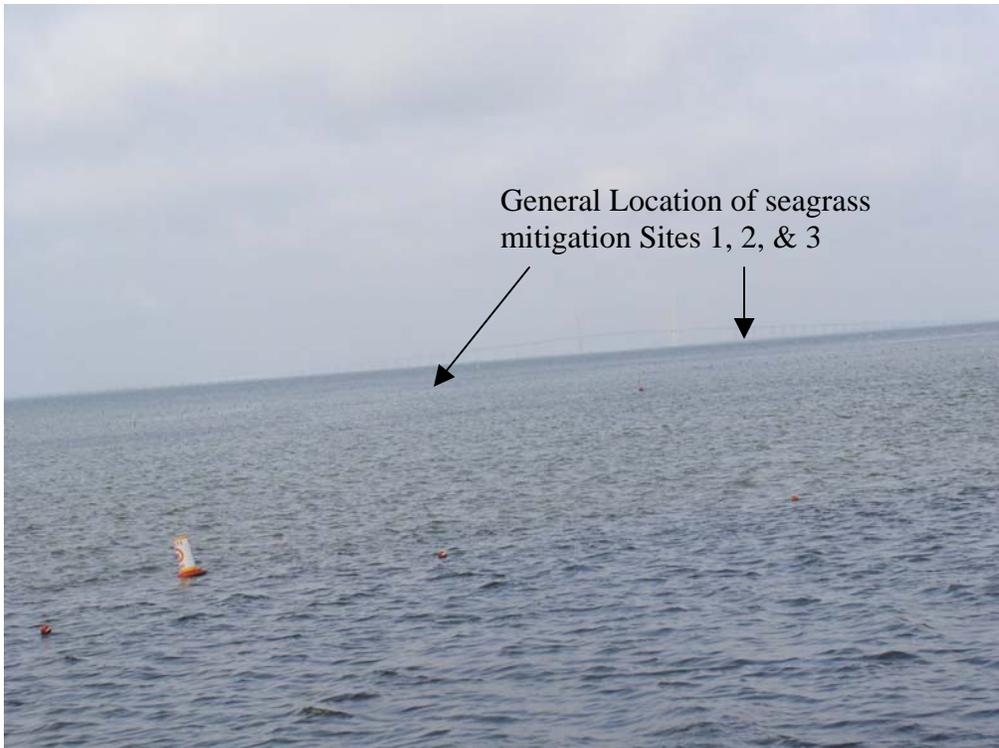


Figure 7. Seagrass mitigation sites 1, 2 & 3. Photograph taken from Berth 12 looking southwest.

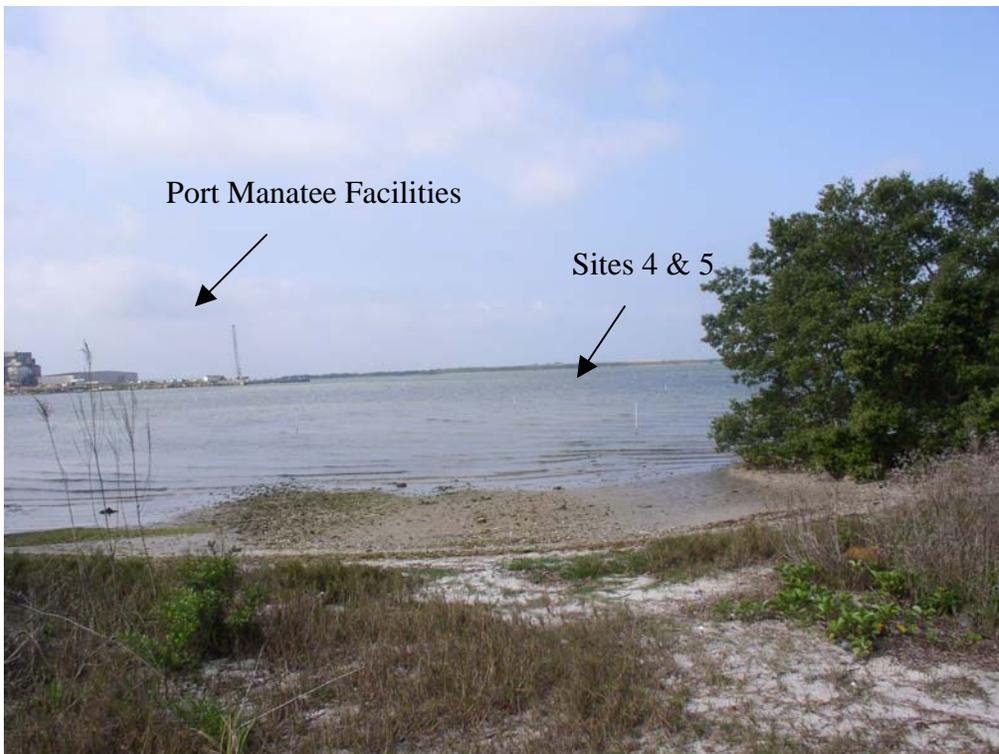


Figure 8. Seagrass mitigation sites 4 & 5. Photograph taken standing at Piney Point looking south towards the port.



Figure 9. Seagrass mitigation sites 4 & 5. Photograph taken from Piney Point looking south.

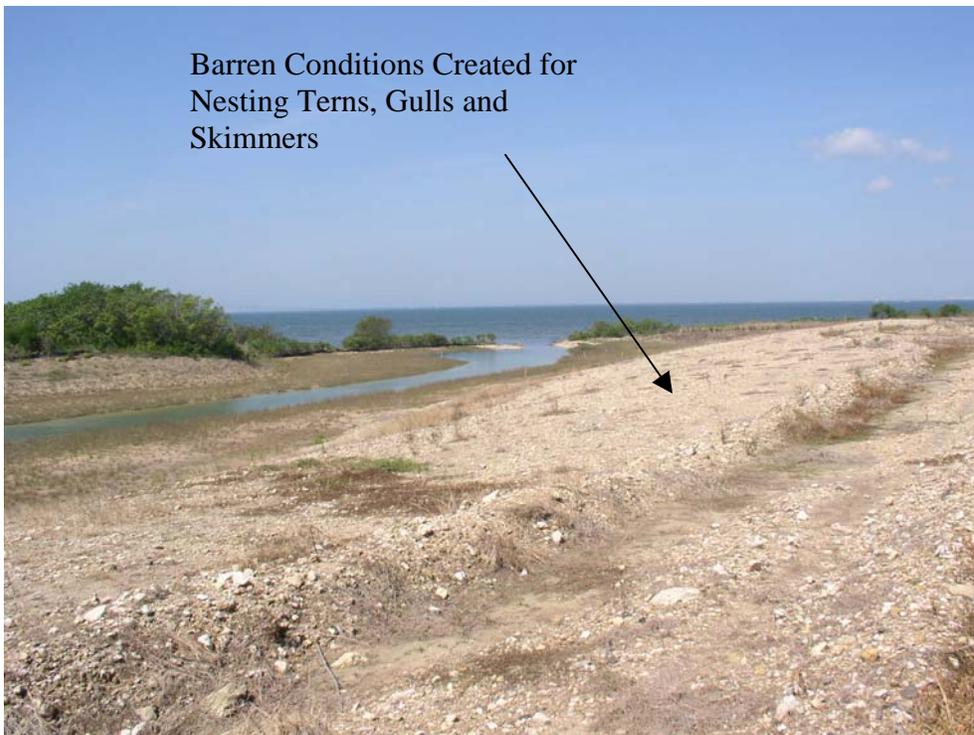


Figure 10. Dredged material island restoration work. Nesting habitat for beach-nesting, colonial birds.

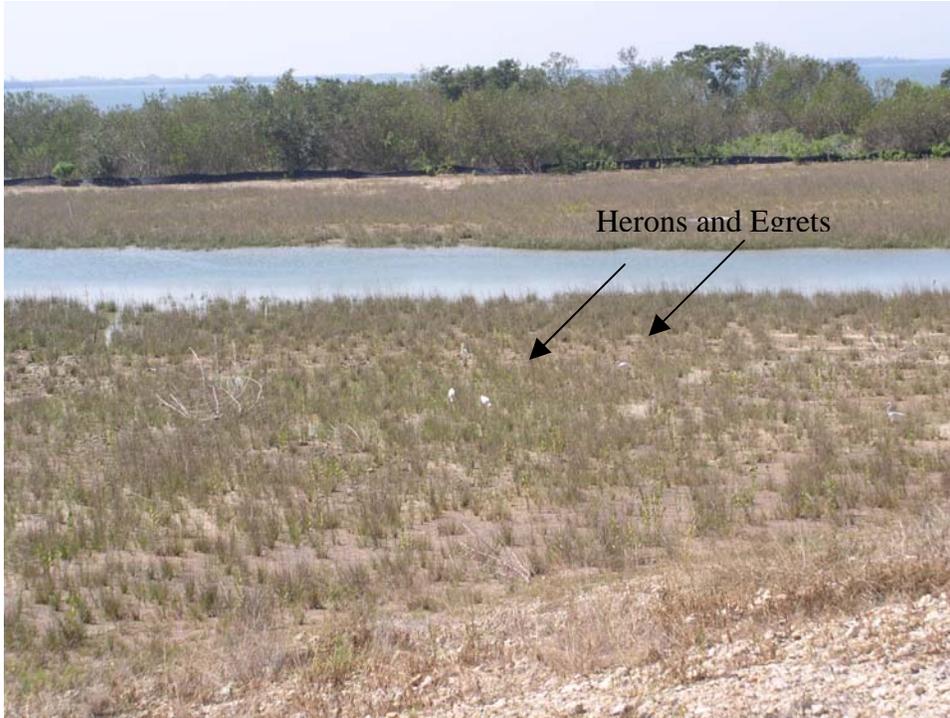


Figure 11. Dredge material island. Salt barren and tidal marsh.



Figure 12. Dredge material Island. Enhanced creek and tidal lagoons.



Figure 13. Dredged material island. Salt marsh and tidal creek/lagoons.



Figure 14. Dredge material island. White ibis (*Eudocimus albus*).



Figure 15. Sandbar on southeast side of dredge material island being utilized by pelicans and cormorants.



Figure 16. Common loon (*Gavia immer*) utilizing tidal creek on island.

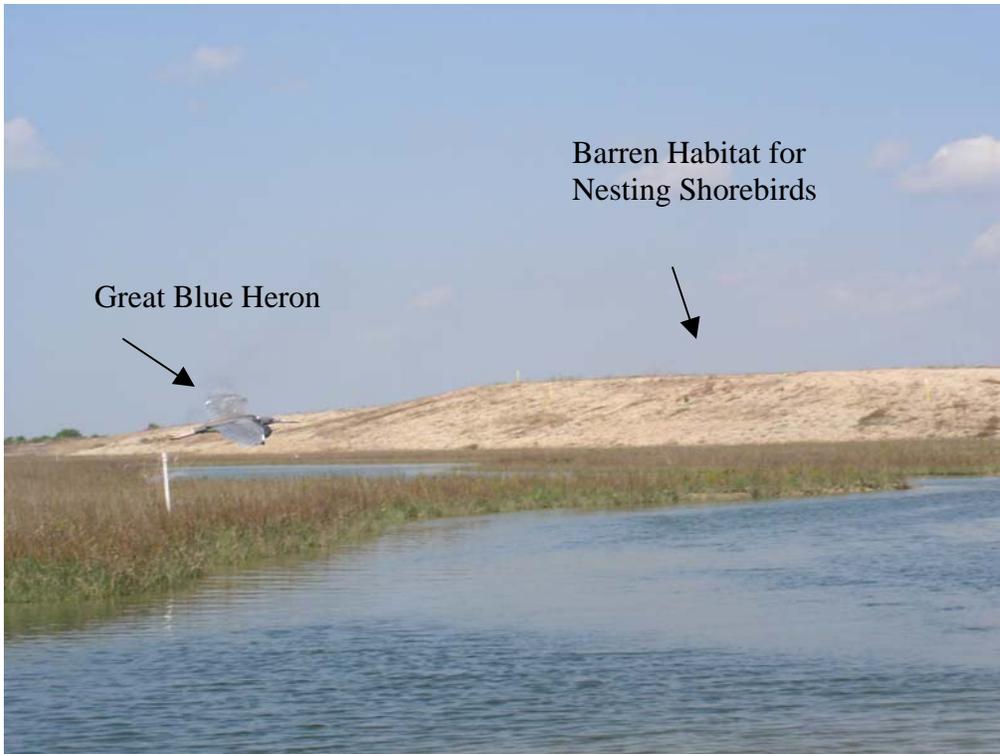


Figure 17. Dredge material island.



Figure 18. Dredge material island. Predator control effective for raccoons.



Figure 19. Dike elevation construction of the Port's upland disposal site. Eagle decoys installed to deter bird nesting activities.