

TOWN OF PALM BEACH

Information for Town Council Meeting on: June 14, 2022

TO: Mayor and Town Council
VIA: Kirk W. Blouin, Town Manager
FROM: H. Paul Brazil, P.E., Director of Public Works
RE: Review of Sea Turtle Nesting
DATE: June 6, 2022

STAFF RECOMMENDATION

Town staff requests that the Town Council provide any direction deemed necessary.

GENERAL INFORMATION

The Town has been fortunate to again see a large amount of sand placed on the beach this calendar year to maintain storm protection. The recently completed Inlet Maintenance Dredging Project included nearly 300,000 cubic yards of beach sand placed in Reaches 1 and 2 at no cost to the Town. Had the Town trucked in this volume of sand, it would have a cost exceeding \$12 million. The only obligation that the Town has in order to receive this sand is to provide heavy equipment access to the beach. While the nighttime sea turtle nesting monitoring was performed using the Town's contractor, as they hold the state permit on our beaches to do so, these efforts were funded by the U.S. Army Corps of Engineers (CORPS). The purpose of the additional monitoring, which started on February 10 as required under the Biological Opinion for the project, identified any new nests within the project area and relocated them from the fill placement area. The scheduled completion of the work on the beach was April 30.

Due to an excessive amount of rough weather during the project, the CORPS received regulatory approvals from both the Florida Department of Environmental Protection (FDEP) and the U.S. Fish & Wildlife Service to continue the work through the month of May 2022 in order to maximize dredging efforts in the inlet and the beneficial use of the dredged sand on our beaches. During dredging operations, seven nests were relocated to a section of the beach approved by Florida Fish and Wildlife Conservation Commission (FWCC). Any new nests where fill placement was completed were left in place and temporarily marked for avoidance. During the project, 64 nests were marked. This increase is due to the higher density of nesting as we approached the height of sea turtle nesting season. Once all demobilization efforts were completed, the markings were removed from the beach. Monitors have confirmed that no sea turtles were injured or killed during this project.

As an added effort with the Inlet Maintenance Dredging Project, the Town was able to mechanically move approximately 15,000 cubic yards of sand from the Reef Road area to the beaches between Merrain Road and Colonial Lane. This Sand Forepassing project was the first time that the Town was able to place sand through much of this area as a result of FDEP's Beach Management Agreement (BMA). Although appropriate sloping of the sand was performed to promote sea turtle nesting, rough weather, including that from Tropical Depression One a few days ago, caused some escarpments to form. These escarpments are expected to slough off naturally as the early summer beach-building weather conditions become more prominent and move the sandbar into shore. Should the escarpments be persistent, FWCC has the ability to direct the Town to use heavy equipment and knock them down.

The Town's Coastal Management Program has one of the most robust data collection efforts in the state with respect to sea turtle nesting. One of the eco-system benefits of the BMA was to collect data. The data collected in the various zones of the Town are helpful for both FDEP and FWCC to learn more about sea turtle nesting behavior in differing shoreline managed conditions. In order to accomplish this regulatory-required data collection effort, the use of ATV's on the beach is essential. ATV practices are standardized and utilized throughout Florida beaches for sea turtle nesting surveys. FWCC provides training and instruction each year to the marine turtle permit holder on proper ATV use for sea turtle surveys. Because many of the areas are deemed "non-marking zones", the monitor uses ATV tracks to cross-over and mark false crawls and encircle nests. This procedure has been in place since 2014. The monitors are well-trained and the ATV's are specially configured with sea turtle friendly lights and tire pressure at or below 5 psi. No harming of sea turtles occurs as a result of these monitoring efforts.

Aside from our sea turtle monitors, Ocean Rescue, and the Police Department, the only other vehicles that have regularly been authorized on the beach during nesting season year after year are the beach cleaners. Beach cleaners hold an FDEP permit to use a tractor to remove and bury seaweed along the wet beach. The Town has a beach cleaner that performs this work on Mid-Town and Phipps beaches. Based on the volume of seaweed to be maintained, this work is performed generally on Mondays and Fridays. Private properties hire permitted beach cleaners to perform this work as well including all the condominiums in Reaches 7 and 8 in the southern limits of the Town. In these areas, the Town's sea turtle nesting monitor works with these beach cleaners to best ensure that any nests within 10 feet of the seaweed line are marked and that the beach cleaners remain only on the wet beach. Monitors have confirmed that no sea turtles have been injured or killed as a result of these ongoing permitted activities.

The Town of Palm Beach continues to have strong partnerships with the state and federal agencies when it comes to our Coastal Management Program, as of all our activities, including both sea turtle nesting monitoring and beach cleaning, are consistent with the views of the regulatory and advisory agencies, and are consistent with FDEP's Strategic Beach Management Plan.

cc: Shore Protection Board
Patricia Strayer, P.E., Town Engineer
Robert Weber, Coastal Program Manager