



Contact:
USACE Philadelphia District
Stephen.Rochette@usace.army.mil

Army Corps update on Northern Ocean County dune project

PHILADELPHIA (July 13, 2018) – The U.S. Army Corps of Engineers' Philadelphia District began dredging and beachfill operations at Ortley Beach in Toms River Township on July 12th. The work is part of the 14 mile beachfill and dune construction along the Barnegat Peninsula. The project is a joint effort of the Army Corps' Philadelphia District and the New Jersey Department of Environmental Protection (NJDEP) and is designed to reduce coastal storm damages.

During beachfill operations on July 12th, the project team observed a darker material being pumped onto the beach. The team initiated a geotechnical investigation to better understand the situation. It appears the dredge hit a peat layer in the offshore borrow area. Peat is a naturally occurring material and is typically a combination of ancient soil and vegetative materials. Though undesirable and a nuisance in a beachfill operation, they are sometimes encountered during the dredging process.

While the borrow areas are rigorously sampled during the planning of the project, it is possible that a dredge can encounter a layer of peat, silt or clay. These relatively small layers are common along the coast of New Jersey. The finer grained soil materials (peat, silt and clay) when agitated by the dredging process, will temporarily result in turbidity near the dredge discharge point. USACE and NJDEP will work closely with Weeks Marine to ensure inclusion of these materials in the beachfill are kept at the absolute minimum, but occasionally these materials may be present in the beachfill, but present no danger to the environment or public.

The dredge EW Ellefson resumed dredging operations on July 13 and the team observed typical sand being discharged from the pipe. Toms River Township raked the beach and was able to remove the vast majority of

the peat material from the beach. The project team will continue to monitor the material being pumped onto the beach as always.

Thus far, USACE has successfully pumped more than 2 million cubic yards of sand onto the beaches of Mantoloking and Brick Township as part of the project. The project, once fully completed, will cover approximately 14 miles of coastline along the Barnegat Peninsula and will reduce the risk of storm damages for the communities of Point Pleasant Beach, Bay Head, Mantoloking, Brick Township, Toms River Township, Lavallette, Seaside Heights, Seaside Park, and Berkeley Township. More than 11 million cubic yards of sand will be dredged from approved borrow areas and pumped through a series of pipes onto the beaches of the municipalities. The sand is then built into a dune and berm system designed to reduce potential damages to infrastructure, businesses, and homes that can occur from coastal storm events. For most of the project area, dunes will be built to an elevation of 22 feet. Beaches will be constructed from 100 feet to 300 feet wide and to an elevation of 8.5 feet.

Details on the process to identify sand borrow areas

The coastal geology of New Jersey is extremely complex, influenced over the millennia by sea level rise and fall; movement of inlets, and geologic deposition processes. The sand borrow area identification process includes sampling at multiple locations over a period of years and close coordination with a multitude of state and federal regulatory agencies. This is a scientific approach; however due to the extremely complex geology, there are sometimes pockets of soil materials other than sand such as silt, clay, gravel and peat.