



Though I do not believe that a plant will spring up where no seed has been, I have great faith in a seed. ...

Seven Mile Beach Endures the Fury of Mother Nature

By Sandi Schwartz



(Above) Water pools in the dunes of 32nd Street. (Below) With surgical precision, the ocean sliced through sand and rock creating drops as great as 20 feet in the area around 18th Street.

This winter season was one of the worst periods as far as storm frequency in over a decade, according to Dr. Stewart Farrell, Director and Founder of the Coastal Research Center at Richard Stockton College. He leads the effort to track the damage caused by the recent storms, from the remnants of Hurricane Ida in November to the back-to-back snow storms in February.

The November storm produced sustained winds of 30 to 40 miles per hour with 8- to 15-foot swells. Dr. Farrell's team determined that the north end of Avalon experienced substantial beach erosion as a result of the storm. The beaches lost 125,700 cubic yards of sand and the dunes lost 34,000 cubic yards. Additionally, the sea wall under the dune crest was completely exposed. Dr. Farrell said that 10th through 21st Streets were hit hardest, resulting in limited access to the shoreline in the north end. "You can't get to the beach because of a 15-foot drop from the wall of sand that built up after the erosion from the storms," he explained. "It is very hard to get down

to the beach and even more difficult to get back up." This type of damage can cause major economic consequences—especially for the summer rental market—if people are unable to access the beach.

Fortunately, Stone Harbor is in relatively good shape following the storms. Sand was lost between 80th and 98th Streets, but beaches remain usable. Unlike 1987 when high tide made it to residents' doorsteps, homes were not damaged by any flooding this time. It is expected that much of the sand will return after the storm season.

A recently completed beach fill project led by the New Jersey Department of Environmental Protection's (DEP) Bureau of Coastal Engineering may have helped protect Stone Harbor from major damage during the recent storms. Targeting Strathmere, Sea Isle City, Stone Harbor, and North Wildwood, the project was developed to administer beach nourishment, shore protection, and navigational dredging to protect life and property along the coast, preserve coastal resources, and maintain safe and navigable waterways. In Stone Harbor, about 300,000 cubic yards of sand were brought in between

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April prepares her green traffic light and the world thinks Go. ~Christopher Morley, John Mistletoe

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98th to 111th Streets right after the November storm. The cost of this effort was just over \$2.7 million, with Stone Harbor's share being just under \$680,000.

Additionally, the U.S. Army Corps of Engineers finished a beachfill project last season to restore the north end of Avalon. It protected Avalon through the summer, but the recent storms caused so much damage that borough officials decided to initiate a much needed beachfill for this coming spring. Avalon and Sea Isle City are teaming up to fund the joint beachfill project that will protect the beach and ensure that residents and visitors can enjoy it. Dr. Farrell said, "Sea Isle and Avalon have chosen to be proactive as a result of the storm damage and are already working on the spring beach renourishment project."

The spring 2010 Beach Renourishment Project is considered an emergency, so the towns will be providing the funding up front and then seeking reimbursement from the state and federal governments. Sea Isle City will be requesting a 75 percent reimbursement from the DEP in its fiscal 2011 shore protection budget. Unfortunately, FEMA does not provide funding to repair federal beach projects that fall under the Army Corps. In addition, the state recently reduced its Beach Replenishment Fund by millions of dollars. Town officials decided that they could not wait for help from the federal or state governments. Avalon will continue to meet with officials in Washington, DC to make sure that emergency funding is placed in the Army Corps budget. "This is a monumental project," explained Scott Wahl, Avalon's Public Information Officer. "The scope of this beachfill is much larger than the one done this past spring. It will help protect Avalon from storms as large as a category 2 hurricane. Right now the north part of Avalon is not protected, so this is a major public safety concern."

The hydraulic beach fill will involve pumping in dredge sand from Townshend Inlet to Sea Isle's south end and Avalon's north end. Avalon is expected to receive approximately 500,000 cubic yards of sand that will be placed on beaches from 9th to 26th Streets. Sea Isle City will receive approximately 700,000 cubic yards of sand that will be placed from 73rd to 94th Streets. The cost for each cubic yard of sand is \$7.02.

According to Avalon's engineer Tom Thornton, the project should take place between mid-May and June. He is hopeful that it will be completed before the summer tourism season begins, but the town to start first will have more of a guarantee that the dredging will be done before the first vacationers arrive, which is critical since

several blocks of the beach will need to be closed in order to pump in the sand. At this point, the towns have left it up to the contractor to decide where the project will start. The decision may ultimately come down to a coin toss.

The Avalon Borough Council formally awarded the contract to Great Lakes Dredge and Dock Company, LLC of Oak Brook, Ill. Avalon has authorized about \$4.5 million for its share of the emergency beachfill, while Sea Isle City will pay \$5.9 million. Both towns have applied for the necessary permits from DEP. Sea Isle City has applied for a permit from the Army Corps, while Avalon already has a permit from the agency and just needs it to be modified for the project to proceed.

By working together, the two towns will be able to save money since they are sharing the mobilization cost totaling about \$1.982 million. Ultimately, they will be able to get more sand for less money.

Additionally, Stone Harbor and Avalon are in discussions with the Army Corps about another beach replenishment project that would focus on repairing Stone Harbor beaches from 80th to 122nd Streets. Kenneth Hawk, Stone Harbor Administrator, is hopeful that the Army Corps will approve the project. "We have authorization, but funding is not available to actually do the work. We are hoping that following these large storms there will be a push for funding."

He also explained that U.S. Rep. Frank LoBiondo (R-2) is working on ensuring that the money is appropriated by Congress. Finally, he said that the town will be fixing several beach entrances to make sure they are passable for the upcoming summer season.

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Aerial photos by Gregg Kohl/AC Photo



(Above) From the air it's clear that this beach path is a dead end. (Left) Waves as high as 12' crashed over the rocks protecting Ocean Drive forcing the closure of the Townsends Inlet Bridge as a safety precaution.

(Below) Holding the line – a rock protected bulkhead that was first laid in 1962 held off the ocean's fury on Avalon's north end – but surrendered thousands of cubic yards of sand.

