

5-Mile-Seawall Will Protect S.I.'s **East Shore**

BY JOANNE CASTAGNA, ED.D.

uring the intense winds and flooding of Hurricane Sandy in 2012, Joseph McAllister, an electrician, was driving around South Beach trying to help his neighbors stranded in the dark.

"I went into my home to get a flashlight and when I left, I couldn't believe what I saw. The wind pushed the roof off a large catering hall behind my house and it came crashing down, almost landing on a kid, almost killing him!" he said.

New York City was severely impacted by Hurricane Sandy. Staten Island was hardest hit, experiencing winds up to 80 mph, and a 20-foot storm surge that washed away homes along the borough's east coast. The borough saw 24 deaths, more than any other. Sadly, many of the victims drowned in their homes.

Joseph McAllister doesn't want to experience this ever again. Today he's using his role as the President of the South Beach Civic Association, along with his wife and Vice President, RoseAnn McAllister, to ensure that their community is better prepared for future coastal storms that are becoming stronger and more frequent. They are thrilled that the U.S. Army Corps of Engineers, New York District, has a coastal storm risk management plan in place that will help reduce coastal impacts along Staten Island's east coast, including their community of South Beach, as well as Midland Beach, New Dorp Beach, and Oakwood Beach during future coastal storms.

This wasn't the first time the borough was severely impacted by a hurricane. Other recent major storms included the Nor'easter of December 1992, the March storm of 1993, Hurricane Irene in 2011, and then came Sandy the following year in 2012.

To better prepare Staten Island for another storm like Sandy, the Army Corps is working on a long-term solution.

Frank Verga, Staten Island resident, and



June 2024 photo of the coast of Staten Island, New York where coastal restoration work will soon be taking place.

an project manager for the Army Corps said, "The size and design of this project is for a storm bigger than Sandy. If this project was already in place, it could have alleviated Sandy's damages." Verga, a Staten Island resident added, "The project will include a nearly 5-mile seawall that will provide a line of protection, a barrier to the water that will come in from an ocean event, and on the interior, we'll have all-natural ponding areas that will allow water to hold until events are finished."

First, all-natural ponding areas will be constructed on land that will receive and store stormwater runoff from large drainage areas to allow water to hold until storm events are finished. These ponds will be in South Beach, where construction is taking place now, and later in Midland Beach and in Oakwood Beach.

In addition, an earthen levee, road closure gate and tide gate will be constructed near Great Kills Park to keep tidal waters back. Tide gates will also be constructed in Oakwood Beach along the existing creek, as well as construction of a flood wall around the Oakwood Beach Waste Water Treatment Plant that will also keep water back.

Following this, the approximate fivemile-long seawall, with an elevation of 21 feet will be constructed. The wall will run along the east coast of the borough, from the edge of Fort Wadsworth in the north, just south of the Verrazzano-Narrows Bridge, to Oakwood Beach in the south. In front of the seawall in the Oakwood Beach area a tidal wetlands will be created. The wetland's vegetation will help stabilize the land, reduce waves and coastal erosion, and will help build the ecological resilience of the coast to respond to increasing sea level rise. As part of the seawall structure, the Army Corps will be reconstructing the existing boardwalk that will continue to provide public access to Midland Beach and South Beach. New York City has plans to build six natural and recreational areas in and around the seawall that will include bike paths, public spaces, and beach access.

The entire project is expected to be completed within a decade. After this the Army Corps will monitor for any necessary changes due to future sea level increases, while the State and City of New York will be responsible for operating and maintaining the project.

This complex project has been years in the making because it covers such a large area and requires major design and coordination with multiple agencies including the State of New York, City of New York, National Park Service, and local community groups like the South Beach Civic Association. The Association has held many public meetings with the Army Corps to discuss the project.

"The purpose of our organization is to deal with quality-of-life issues for our residents," said Joseph McAllister who has lived on Staten Island for 60 years and has overseen the South Beach Civic Association with his wife since 2000. Now that the project is starting to move forward, the Army Corps will be attending more meetings with the McAllisters to discuss the project details.

RoseAnn McAllister said, "In the future our hope is to get that seawall so we can protect many generations down the road besides ourselves. Our kids, our grandchildren, and their families. So, they don't have to worry about getting a seawall. So, their community has quality of life and are not fearful that something like another Sandy could happen again and wash away their homes and busi-