

Gem of a Beach Sparkles After Restoration

By Dr. JoAnne Castagna



Anthony Ciorra has many fond memories from his childhood in the 1970s of spending warm days at Orchard Beach in the Bronx, New York, with his parents. Today, he is a professional engineer and chief of the Civil Works Branch for the U.S. Army Corps of Engineers (USACE), New York District. Ciorra has been involved in the shoreline restoration project of Orchard Beach, one of several civil works projects performed by the district, and is proud to say he has played an important role in the restoration project.

“Today, when I drive on the roads leading into the beach, I get a sense of nostalgia,” said Ciorra. “I start thinking back to when I was a child, but I also feel a sense of pride that I helped make this beach enjoyable.”

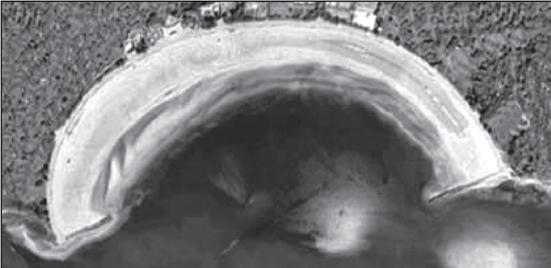
The popular recreational beach is in a heavily populated urban area and serves approximately 2.5 million visitors annually. Orchard Beach is located along the northeast shore of the Borough of the Bronx, at the western end of the Long Island Sound, a body of water between New York and Connecticut. The crescent-shaped beach is a mile long and 400 feet wide and considered the “gem” of Pelham Bay Park, New York City’s largest city park. There was a safety issue with overcrowding that prompted USACE to get the

project completed expeditiously and safely for public use. The year 2011 marked the 75th anniversary of this historic beach, and its shoreline was eroding, reducing the size of the beach and resulting in overcrowding.

Ciorra said, “The elevation of the beach was so low that when the Long Island Sound moved in, you couldn’t keep



Area map



The local community enjoys the newly restored Orchard Beach.

Aerial photos of Orchard Beach before (top) and after (bottom) the restoration project show USACE improvements.

your blanket on the beach anymore. You had to move into other crowded areas. In addition, there were some steep drop-off or slope areas just off the shore that caused a few drownings.”

USACE was asked by the New York City Department of Parks and Recreation to restore the beach. In October 2010, the organization began working 24-hour days to restore the beach for the 2011 season. It used a hopper dredge to get sand from a nearby channel and pump it onto the beach. The sand was then graded and smoothed out to extend the shoreline. Dredged sand was also used to fill in the dangerous drop-off area. In addition, USACE used 4,000 tons of rock to repair a 200-foot section of the south groin,

which was important because the groin aids in slowing down further beach erosion. The work was completed in 2 months—ahead of schedule and under budget.

More visitors were expected to visit the beach this year due to its increase in popularity. The beach includes a sandy beach area; a hexagonal-block promenade; a central pavilion with food stores and specialty shops; two playgrounds; two picnic areas; a large parking lot; and 26 courts for basketball, volleyball, and handball. It is easily accessible by public transportation, with plenty of parking for out-of-state visitors.

More people were expected to use their community beaches instead of going away on costly vacations this year. Once called the “Riviera of New York,” the artificial beach was constructed by the Works Progress Administration during the Great Depression. Under the direction of the New York City Department of Parks Commissioner, unemployed residents were hired to construct the beach to bolster the economy.

Ciorra said, “I’m certain that visitors are showing up at Orchard Beach for the first time since last summer and are seeing a significant change for the better. It feels good to be part of something where you know you made a difference, and it’s a project that is important to people because it’s being used by the public.” 



Engineers work to repair the beach.

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