

Multi-agency effort ensures safety of endangered birds

By JoAnne Castagna, USAE District, New York

If we take a boat ride beginning from the southern tip of Texas, travel east through the Gulf coast, all the way up the east coast to New Jersey and then continue inland into a spur channel into Long Island's Great South Bay, Moriches Bay, and Shinnecock Bay, we would have traveled the Gulf and Atlantic Intracoastal Waterway.

Within these bays is the Long Island Intracoastal Waterway, a small portion of the entire water system, and the location for the New York District's Long Island Intracoastal Waterway Dredging Project, a multi-agency effort that is using dredged sand to create a habitat for several species of endangered shore birds.

The Atlantic Intracoastal Waterway, built in the 1930s and 40s, was designed so that small vessels, fishing boats, transportation vessels, private vessels, and small barges can travel along the coast without having to head into the ocean where the seas are rough. In the case of Long Island,

small vessels are able to travel from the Fire Island Inlet all the way to the Shinnecock Canal in a sheltered environment.

“We used to wait until there was a lot of shoaling, or sand buildup, in the channel before we dredged”

*John Tavolaro
Chief of Operations
Support Branch,
New York District*

Approximately every eight years the Corps has dredged the Long Island Intracoastal Waterway, a span of approximately 33.6 miles, from the Town of Patchogue to the south end of the Shinnecock Canal. The dredging eases the way for boat travel. Dredged material is placed on upland sites on the mainland and ocean barrier islands.

However, in the last few years, the District has found itself in a dilemma.

Because of a growing Long Island population and the building of homes on these upland sites, this was no longer an option.

“Homes and marinas are built on many of the areas where we used to deposit sand,” said Tavolaro. “We tried to think synergistically and creatively – outside of the box,” said Tavolaro. “We looked at what other Districts along the Atlantic Intracoastal Waterway were doing with their dredged sand.”

Baltimore District and Mobile District are successfully using their dredged material for beneficial uses including creating “artificial islands,” wildlife habitats, marshes, and oyster beds. Other Districts, including Norfolk and Galveston, are dredging “bite size pieces” of their Intracoastal Waterway every year instead of dredging larger areas every few years. The New York District's plan was to combine both concepts.

The District assembled a team to look for opportunities to enhance the

environment with dredged material on Long Island. Team members included staff from the U.S. Fish and Wildlife Service, U.S. Coast Guard, New York State Department of Environmental Conservation (Region 1), New York State Department of State, National Park Service (Fire Island National Seashore), and the Town of Brookhaven.

Tavolaro said, “By doing what these other Districts are doing — dredging more frequently in smaller areas — we will only need a few smaller places to dispose the material each time. Instead of dredging 200,000 cubic yards and 25 miles of channel, we will dredge only 80,000 cubic yards in one segment of the bay.”

In September 2002, the Long Island Intracoastal Dredging Project began. The team decided to place the dredged sand on East Inlet Island, a 30-acre island one-half mile off the Town of Moriches mainland, to enhance habitat for several endangered shore bird species, including least terns, common terns, piping plovers, and roseate terns.

In recent years, these bird populations have dropped due in part to



Piping Plover
(Charadrius melodus)

increasing human development and recreation on or near the coast where they migrate in the springtime to colonize, nest, and breed. The Long Island coast is one of their nesting areas. In the fall they fly south to spend their winters in regions including Florida, the Gulf coast of Mexico, the Caribbean, and South America.

“Placing the dredged sand on an island is better for the birds than dumping the sand on the mainland,” said Tavolaro. “Placing the sand on

an island that is relatively untouched by people and other predators gives the new habitat a chance to survive and thrive. An island is more protected than a mainland area. It has water around it. Just a few feet of water is a deterrent to many predators.”

Operating from the Moriches Bay Coast Guard Station, Innerspace Services, a Maine contractor, conducted all of the dredging from mid October 2002 to mid January 2003, outside the region’s winter flounder

spawning season, public recreational activity, and the months the birds are around. “If one bird showed up we might have had to close up shop. We couldn’t afford such a contingency,” said Tavolaro.

The company dredged approximately 5 miles of the Moriches Bay from the Village of West Moriches to the Village of East Moriches. They dredged 1300 cubic yards of sand a day, to an authorized depth of 6 feet below mean low water, said Jodi McDonald, project manager. “The dredged sand was pumped onto the East Inlet Island by a hydraulic dredge and pipeline into a specified disposal area. The sand was pumped into a diked disposal area and then regraded to achieve the proper slope and texture preferred by nesting birds.”

“To help encourage the birds to nest on the island, we made the habitat more friendly by de-vegetating the island and building nest boxes to replicate the habitat needs of these threatened and endangered shorebirds. In addition, we placed string fencing and interpretive signage reminding the public that the area

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Steve Mars
Supervisor, Long Island
Field Office, U.S. Fish
and Wildlife Service

is restricted from human use. To ensure project success we also developed a predator control program, in the event land predators, such as foxes, feral cats, or raccoons, are identified on the site. The area will be maintained and monitored by biologists from the U.S. Fish and Wildlife Service, the Town of Brookhaven (the island’s owner), and the New York State Department of Environmental Conservation,” said Steve Mars, supervisor of the Long Island Field Office of the U.S. Fish and Wildlife Service.

“The agencies combined their goals and desires and came up with something innovative where everyone won,” said Tavolaro. “The U.S. Coast Guard received a cleared bay channel

so they could more effectively perform their search and rescue operations; the State of New York received environmental enhancement of a degraded upland area and preserved an island, many of which are disappearing in the region; the U.S. Fish and Wildlife Service got a net environmental benefit for endangered species they are responsible to manage, and the Corps fulfilled its navigation mission while making an effort to benefit the environment, at no additional cost to the taxpayers. It’s a win-win-win-win-win situation.”

The \$1 million project was funded entirely by the Federal Government. Tavolaro hopes that the success of this project is a catalyst for future similar work on the Long Island Intracoastal Waterway.

“The stakeholders are very much in favor of this type of work. The Town of Brookhaven and the U.S. Fish and Wildlife Service are even suggesting other islands to us,” he said. “If this goes as we hope and we see birds nesting there in the spring, I think this will reinforce the importance of such a project.”

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