

## New hope for a restored Jamaica Bay

by Arielle Concilio , Chronicle Contributor

Sprawling across southern Queens and Brooklyn is Jamaica Bay, a wildlife refuge smack in the middle of one of the world's largest cities. With its breathtaking views of green marshland and glimmering water set against the backdrop of New York's urban landscape, it is the seeming image of peaceful coexistence between man and nature.

Years of abuse from overdevelopment and neglect have left the bay's days numbered. However, thanks to a new joint initiative from the city and state, prodded by a host of environmental organizations, Jamaica Bay may have another shot at survival.

"Jamaica Bay is an amazing resource for New Yorkers," said Larry Levine, an attorney with the Natural Resources Defense Council, an advocacy group. "It's a wildlife refuge near the subway. We need to start treating the bay in the way that it deserves."

The bay, which is marked off by Brooklyn, Queens and Long Island, and connects with Lower New York Bay through Rockaway Inlet, is made up of 25,000 acres of marshland, coastal lagoons, islands and open waters. It is accessible by car and public transit, lies next to Kennedy International Airport, and is surrounded by urban residential, commercial and industrial development.

The bay is also home to 60 species of butterflies, 80 species of fish, and a number of amphibians, small mammals and reptiles including the endangered diamondback terrapins, which lay their eggs on the beach each spring, and peregrine falcons. In addition, the bay boasts horseshoe crabs that come to mate and dig nests on the shore, and more than 300 species of birds — about 20 percent of North America's total bird species — that visit the area each year.

But unfortunately, those animals will fast disappear if the health of the bay continues to decline.

Since the beginning of the city's history, the bay has been plagued by the ill effects of development. Among the projects that damaged its ecology was the construction in 1931 of historic Floyd Bennett Field, the city's first municipal airport, which required 14 million cubic feet of fill. JFK Airport, mostly constructed in the 1940s, also destroyed 4,500 acres of wetlands as a result of dredging and filling that is believed to have disrupted the natural flow of sediment across the marshes. Industrial expansion and the construction of the Pennsylvania and Fountain Avenue landfills in the 1950s and 1960s by the city Sanitation Department saw the filling of another 12,000 acres of marshland. Today, only 800 acres of marshland remain.

But overdevelopment has not been the only cause of the disappearing marshlands. Erosion caused by sea level rise believed to be caused by global warming, and the dumping of contaminants including garbage from the Pennsylvania and Fountain Avenue landfills, also led to the shrinking of the salt marshes. In fact, the garbage that was dumped for over a century from those landfills eroded so much of the southernmost shoreline that it came to be called "Dead Horse Bay."

According to the Jamaica Bay Task Force, a group of private citizens, scientists and federal, state, regional and local agency representatives who work together to understand and propose solutions to the issues surrounding the bay, "tremendous amounts of toxins have possibly run into the bay" as the shoreline has been eroded and the landfill has "become exposed" over the years. They are working to reverse that, and just this past spring the Brooklyn landfills were reforested with 35,000 trees that will be incorporated as parkland in several years.

But despite the progress, sewage remains the largest problem threatening the bay.

In the early 20th century, discharge pipes in Brooklyn and Queens created mass pollution that led to bans on swimming, and extinguished the bay as the thriving shell-fishing community it once was.

Today four of the city's 14 sewage treatment plants discharge more than 45,000 pounds of nitrogen into the bay each day. Those discharges promote the growth of algae blooms which decrease the dissolved oxygen that marine life relies on. With greater levels of nitrogen, more and more portions of the bay become inhospitable to aquatic animals. In addition, the high nitrogen levels have also contributed to the rapid loss of the marshlands, which both provide a habitat for wildlife and act as a protective flood barrier to the communities that surround the bay.

According to a monthly journal published by the NRDC, the bay's marshlands are disappearing at a rate of 33 acres per year and are expected to completely disappear within 15 years if action is not taken to control the nitrogen levels.

That is why the NRDC and three other environmental organizations — the American Littoral Society, the Jamaica Bay Eco Watchers and the NY/NJ Baykeeper — along with the city Department of Environmental Protection and the state Department of Environmental Conservation, came up with an agreement last February to help improve the health of the bay through upgrades to sewage treatment plants and investments in marsh restoration.

The agreement came about after the four environmental groups threatened the governments with a lawsuit last August that finally got the city and state to sit down and negotiate. Talks went on for a number of months before a final agreement was reached.



Threatened with a lawsuit from several environmental organizations, the city and state have agreed in principal to upgrade sewage treatment plants on Jamaica Bay in the hope of improving water quality.

“We alleged there were violations” regarding the discharge of pollutants, said Levine, who has been negotiating the contract. “They may disagree, but there is no question that it is violating state standards.”

The agreement entails a 10-year plan that aims to improve water quality by devoting \$100 million to upgrading the four sewage treatment plants, which are expected to cut nitrogen levels in half by the year 2020, along with improved water quality monitoring. Fifteen million dollars will also be spent on marsh restoration, which is expected to leverage an additional \$30 million in federal funds from the U.S. Army Corps of Engineers, which has begun the rehabilitation project.

According to Don Riepe, founder of the northeast chapter of the American Littoral Society, a coastal conservation group that promotes the study and preservation of marine life and habitat, work on the bay’s Elders Point West Island, south of the Brooklyn-Queens border, has already begun, and next summer, the engineers will start working on Yellow Bar Hassock Island, which will see 50 acres of marsh restored.

To restore the marshland, the Army Corps of Engineers is using muck dredged up to deepen the channels, or clean fill taken from New York City waters, to enlarge the bay’s islands for maritime development, instead of building docks and warehouses. The dredged material will become 35 new acres of marsh by the end of the year. The project is expected to be completed by 2014 with the restoration of 42 million cubic yards of material from various channels.

But despite those advancements, as of now, the plan is still largely an agreement in principle. In fact, the NRDC, along with the other groups involved, has been working with the city for over six years to get the plan approved, and still it remains to be finalized.

According to DEP spokeswoman Mercedes Padilla, the contract could be signed “in the very near future,” however, a definitive date was not given. “We are finishing some details,” Padilla said.

A spokeswoman for the DEC also confirmed that “we are in the process of putting some last minute finalizations together,” but, “we don’t have an estimated date.”

Dan Mundy, president of Jamaica Bay Eco Watchers and founder of the Jamaica Bay Task Force, is “concerned” about the delay. “We are still waiting on the city and state and still pressuring them,” Levine said. “We had anticipated completion much sooner. ... We’ve done our part and have been letting them know we’re frustrated with the length of time it’s taken them.”

State Sen. Joe Addabbo Jr. (D-Howard Beach), whose father, the late Congressman Joseph P. Addabbo, helped form a special task force of government officials, community leaders and environmental experts to address the bay’s environment, said that “implementation takes a long time.”

However, Addabbo added that, “if we don’t pay attention now, we will have problems that can’t be reversed. The DEP and DEC serve as watchdogs ... We need to keep up on these issues, and encourage agencies to continue examining them.”

And though officials only came to the table after being threatened with a lawsuit, Debbie Mans, executive director of the NY/NJ Baykeeper group, confirmed that the city is “now talking about the restoration in very positive ways,” explaining, “They didn’t talk about it in a way that they were being forced, which I thought was interesting. They said, ‘No this is a good thing.’ They are taking real ownership of it, including the millions of dollars they’re putting in it.”

Though the contract has yet to be signed, the city has agreed to abide by its deadlines on testing equipment used for lowering nitrogen levels and performing more water monitoring than had previously been done.

But while everyone agrees that the plan is a good one, past efforts to restore the bay have seen little success. The DEP’s Watershed Protection Plan, signed by Mayor Mike Bloomberg back in 2005, had similar goals to help improve the water quality of the bay.

Under the legislation, the agency was required to create a plan to restore and maintain the water quality of the bay by assessing threats to its ecology and overseeing protection efforts. The DEP was also mandated to create an advisory committee to provide advice to the commissioner regarding the final watershed plan.

However, Brad Sewell, an attorney for NDRC who has been working on the Watershed Protection Plan with the DEP for several years, said the plan was never finalized.

“It hasn’t been ongoing,” he said, adding in regard to its status, “I just have no idea.”

Riepe agreed: “It was a good plan to look at all the areas of the bay to capture runoff. But I haven’t heard much since.”

Although the environmental organizations are supposed to receive annual reports with updates on the water quality, they said they only received one incomplete report back in October of 2008. Although the next one is due in the fall, Sewell said, “we have no idea what we’re going to get,” because there was “never really a quantitative plan.”

Sewell said he believes part of the problem is that “the DEP didn’t want to do it. They didn’t want to be tied to doing certain things. They never really set out any quantitative methods to assess water quality.”

According to Sewell, the Watershed Protection Plan “talks about the nitrogen oxide problem and says it intends to fix it, but didn’t provide a specific solution.”

The new agreement in principle, however, calls for a specific solution with the plant upgrades and the marsh restorations.

“We will remain optimistic and move forward with the upgrades. Jamaica Bay suffers from being downstream in the country’s largest city, and suffered historically from lack of political attention,” he added.

“We are very pleased with it,” Levine said of the pending contract.

Mans agreed: “I feel good about what we accomplished. It’s going to take several years to lower the nitrogen, but we weren’t looking to punish the city.”

And while working on restoration efforts with the city have often been frustrating, Sewell was also quick to note that there has been a “sincere effort by the DEP and DEC to implement a solution.”

“If the plan is finalized, it will be a significant victory for the bay,” he said.

Advocates hope the past will not serve as an indicator of the future and the new agreement will be finalized, so the bay’s image as a unique gem where man and nature coexist will no longer be a mere mirage.