



**DEPARTMENT OF
ENVIRONMENTAL
PROTECTION**

59-17 Junction Boulevard
Flushing, New York 11373

**Emily Lloyd
Commissioner**

December 17, 2007

Mr. Doug Adamo
Jamaica Bay Watershed Protection Plan Advisory Committee Co-Chair
U.S. Department of Interior
National Park Service
210 New York Avenue
Staten Island, NY 10305

Mr. Brad Sewell
Jamaica Bay Watershed Protection Plan Advisory Committee Co-Chair
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011

Dear Mr. Adamo and Mr. Sewell:

Thank you for your November 1, 2007 comments on behalf of the Jamaica Bay Watershed Protection Plan Advisory Committee (Advisory Committee) on the Jamaica Bay Watershed Protection Plan (JBWPP). Thank you, also, for your dedication and service to the Advisory Committee.

As our work on the JBWPP demonstrates, DEP and the Advisory Committee share many of the same priorities for Jamaica Bay-- nitrogen reduction, scientific monitoring, habitat protection and restoration, salt marsh restoration and stormwater management. The JBWPP also makes it clear that effective ecosystem restoration strategies must have the support and commitment of multiple agencies. To that end, DEP has initiated a series of important first steps for the priorities identified above, including the formation of a steering committee of stakeholder agencies. Together, the agencies will address solutions and make decisions about ecosystem restoration in Jamaica Bay.

Nitrogen contained in the wastewater generated by the homes and businesses in the Jamaica Bay watershed has an adverse impact on the Bay's water quality. As part of a continuing effort to mitigate the impact of nitrogen, New York City and New York State are discussing how best to address the different problem areas within Jamaica Bay. As part of this discussion DEP has been evaluating not only the relationship between nitrogen loading and dissolved oxygen (DO), but also other water quality parameters, to address the needs of the Bay in a holistic manner and identify the appropriate levels of treatment. While improving compliance with state-mandated DO levels has been and will remain a focus of DEP's planning efforts, the JBWPP also takes a broader approach in its consideration of ecosystem health and restoration objectives.



For example, as evidenced by other estuary restoration programs (e.g., Chesapeake Bay), nutrient reductions that may not necessarily improve DO levels can be a precursor to the recovery and restoration of the valuable habitats of the Eastern Oyster (*Crassostrea virginica*) and Eelgrass (*Zostera marina*). Reducing nitrogen-related compounds such as chlorophyll "a" and dissolved inorganic nitrogen to permit the reintroduction of these habitats will provide important information on innovative ways to foster the health and resiliency of the Bay's ecosystem. The synergistic effect of these habitats on wetland systems and coastal processes, while not fully understood, is believed to be a significant factor in regulating the health of the overall Jamaica Bay ecosystem. The JBWPP recognizes the parallel goals of nitrogen reduction for the sake of DO benefits and nitrogen reduction for the sake of other eco-system benefits. Consistent with the JBWPP goals, DEP is planning for additional nitrogen treatment to reduce nutrient loading beyond the significant reductions achieved by DEP over the last 10 years.

However, the links between excess nutrients (e.g., nitrogen from wastewater treatment plants) and marshland loss are not well established as wetland losses are actively occurring within other coastal ecosystems that do not experience high nutrient levels, or direct discharge from water treatment plants. Substantial changes to the Bay's bathymetry, depletion of suitable marsh building sediments, altered tidal circulations and tidal regime have been critical in shaping the current ecosystem of the Bay and are likely to be more important factors in marshlands loss than nitrogen loadings. DEP is partnering with our state, federal and academic colleagues to support additional research and monitoring efforts to identify additional actions that can slow or reverse the path of marshlands loss.

Controlling combined sewer overflows (CSO's) and their corresponding coliform contributions in the tributaries of Jamaica Bay will continue to be a major focus of the DEP. Together with our CSO Long Term Control Plan, the many other improvements proposed in the JBWPP for the upland portion of the watershed (e.g., better land use management, stormwater control and increased vegetation) will further improve environmental conditions of an atypical "built" watershed. These proposed scenarios are based on scientific principles and found in other successful estuary programs. They will take time to implement and evaluate to ensure that we are providing the most cost effective and environmentally beneficial solutions.

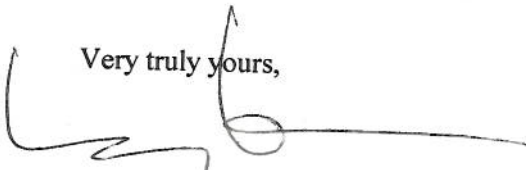
For instance, Mayor Bloomberg's Interagency Best Management Practices (BMP) Task Force is assessing multiple City initiatives for incorporating BMPs into the design and construction of City capital and public projects. As data are collected from DEP's pilot projects and other City agency projects, DEP will share information with other agencies and interested stakeholders about the demonstrated results of these pilots and studies. Where feasible, DEP will immediately seek to replicate positive results by expanding applications of new practices, technologies or facilities beyond the original pilot programs and study areas. Attachments A and B to this letter respond in more detail to recommendations in your November 1, 2007 letter concerning implementation timetables. Attachment A consists of 36 "Implementation Strategies" that have begun or will begin in 2008. Attachment B provides additional information on implementation timelines for priority strategies.

Mr. Adamo
Mr. Sewell
Page 3

We are committed to the restoration of Jamaica Bay. However, we and all of our partners must recognize that DEP's funds are limited, and we have many critical responsibilities. As you know, federal and State environmental mandates determine many of the capital investments DEP must make – almost 70% in FY 2008. Nonetheless, DEP has budgeted approximately \$54 million on WPCP improvements alone to reduce nitrogen loadings in Jamaica Bay and is working to identify additional funds to implement specific strategies contained within the JBWPP. DEP is also seeking additional funding from grants, academic partnerships and inter-agency collaborations. Once the funds for specific implementation strategies have been identified, DEP will be able to detail cost, milestone and schedule information. DEP will share funding and implementation status with interested members of the public according to the update cycle established in Local Law 71.

The plan will require significant stakeholder involvement and must be a collaborative effort if it is to produce significant improvements as the strategies are implemented over time. Many of the strategies and timelines of the JBWPP are similar to other watershed protection programs and we anticipate that our JBWPP will similarly achieve positive results. We are adopting an adaptive management approach for Jamaica Bay which has also proved beneficial in other watersheds. We look forward to collecting, analyzing and sharing the appropriate data that will enable us to measure our successes and to updating the JBWPP based on this information in the future.

Very truly yours,



Emily Lloyd

cc: Mayor Michael R. Bloomberg
City Council Speaker Christine Quinn