



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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Mr. Robert J. Smith and Mr. Daniel T. Falt
The U.S. Army Corps of Engineers, New York District
Planning Division-Environmental Branch (ATTN: Mr. Robert Smith)
26 Federal Plaza
New York, New York 10278-0090

Dear Mr. Smith and Mr. Falt:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency has reviewed the Draft Integrated Hurricane Sandy General Reevaluation Report and Environmental Impact Statement (HSGRR/EIS), CEQ # 20160200.

The HSGRR/EIS examines coastal storm risk management problems and possible solutions for the East Rockaway Inlet to Rockaway Inlet and Jamaica Bay project area. The document was prepared by the U.S. Army Corps of Engineers (USACE). The State of New York through the Department of Environmental Conservation (NYSDEC) is the non-Federal sponsor, and the City of New York through the New York City Mayor's Office of Recovery and Resiliency is the local sponsor to the NYSDEC. Additional partners include the NYC Department of Parks and Recreation, the NYC Department of Environmental Protection, and the National Park Service, Gateway National Recreation Area.

The project area includes the Atlantic Coast of NYC between East Rockaway Inlet and Rockaway Inlet, as well as the matrix of land and water that makes up the Jamaica Bay, New York. The project also includes the Coney Island section of Brooklyn. The area is located within the Federal Emergency Management Agency (FEMA) regulated 100-year floodplain. This area was significantly impacted during Hurricane Sandy in 2012. During the storm, tidal waters overtopped the peninsula and entered through Rockaway Inlet, causing inundation within the Bay and erosion along the beach front. Damage within the study area included 10 fatalities and over 1,000 structures were either destroyed or were designated as restricted re-entry after the storm. The document presents a tentatively selected plan (TSP) which identifies overall project features, however, the details for the TSP have not been finalized.

COMMENTS

EPA believes that the proposed project, on the whole, will add value by reducing future flood risk and costs associated with large-scale flood events and support the long-term sustainability of the coastal ecosystem. There are a number of ways in which the HSGRR/EIS can be enhanced as an analytical document so as to more thoroughly evaluate and communicate the potential impacts associated with the project; and ways in which the project itself can be enhanced to create more naturally resilient coastal ecosystem which are discussed below.

Financial Estimate

The document includes a number of tables including two in the Executive Summary (Without-Project Conditions Annual Damages, p. v and Alternative Plan Comparison, p. xi) which are simplified to the point at which they provide little insight into the financial impacts without the project or of the various alternatives. Further, Appendix C - Cost Estimating, is not completed. As the proposed alternatives are not finalized, it is understandable that specific costs are not known at this point, however, ball park estimates allow the public to more effectively evaluate the merits of the alternatives put forth in the document. The “Without-Project Conditions Annual Damages” should be known with more certainty, however. Providing a more detailed explanation of anticipated damages without the project, allows for a more informed assessment of the proposed alternatives. EPA believes this information should be provided in the FEIS with greater detail.

Green House Gas Emissions and Climate Change

The HSGRR/EIS references the Council on Environmental Quality’s 2014 Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (GHG Guidance). CEQ finalized the GHG Guidance on August 1, 2016. The Final GHG Guidance eliminates the reference point of 25,000 metric tons of CO₂-e annually for determining whether quantification of a project’s GHG emissions is warranted. This reference point is used throughout the GHG and climate change analyses in the HSGRR/EIS.

To ensure appropriate consideration of GHG emissions and climate change in the NEPA analysis and decision-making process, we recommend removing reference to the 2014 Draft GHG Guidance and discussing the 2016 Final GHG Guidance in the FEIS. Further, we recommend revising the GHG and climate change analyses to remove the 25,000 metric tons of CO₂-e reference point and ensure overall consistency with the 2016 Final GHG Guidance.

While the HSGRR/EIS includes estimates of GHG emissions for the preferred alternative, no estimates were given for other alternatives. NEPA requires rigorous and objective evaluation of all alternatives, and this approach is supported for GHG emissions by the CEQ Guidance. We recommend including GHG estimates resulting from each alternative and mitigation measures in the FEIS.

Endangered Species and Essential Fish Habitat

The HSGRR/EIS does not effectively communicate whether or not consultation has been initiated with the U.S. Fish and Wildlife Service (USFWS) for this project. The HSGRR/EIS states on page 141 that, “Submittal of this Draft HSGRR/EIS to USFWS and the National Marine Fisheries Service (NMFS) initiates USACE’s requested Section 7 consultation for the TSP.” However, consultation is generally initiated with the Service(s) with an effects determination, as opposed to communication of a Biological Assessment via a NEPA document. The same is true for the Marine Mammal Protection Act. If, in this instance, alternative arrangements have been made for the initiation of consultation, that should be communicated in the document. Further, it is stated on page 141 that “USACE is currently conducting informal consultation with NMFS to determine the appropriate formal consultation (i.e., Biological Assessment or Not Likely to Adversely Affect Determination).” This sentence confounds multiple aspects of consultation that should be clarified with the Services. This inconsistency with Endangered Species Act terminology can also be found in the last paragraph of page 180.

Lastly, page 141 states that coordination will occur with NMFS for an Essential Fish Habitat assessment. However, page 167 states that “Because adverse effects to essential fish habitat would be minor, the essential fish habitat requirements of the Magnuson-Stevens Fishery Conservation and Management Act and implementing regulations would be satisfied.” This inconsistency should be clarified in the FEIS.

Water Quality

The document highlights the numerous stressors on water quality in the Bay, including combined sewer overflow (CSO), runoff from roads and the airport, leachate from landfills, windblown trash and other sources. The HSGRR/EIS cites one reference stating that as much as 240-340 million gallons per day of treated sewage effluent flow into the Bay from four wastewater treatment plants. In light of the water quality impairments in the Bay, a more detailed and refined assessment of the impacts resulting from the tidal gate on the hydrology and water quality of the Bay should have been included in the HSGRR/EIS. The impacts of alternative configurations of the tidal gate should have also been evaluated to assess whether varying layouts could have differing impacts on the hydrology and sedimentation of the Bay.

EPA does not feel that the HSGRR/EIS appropriately or sufficiently communicated the range of potential impacts, either qualitatively or quantitatively, that can result from this project. Page 147 states, “A detailed discussion of each type of impact and the degree that each barrier option would have on the Jamaica Bay environment is beyond the scope given the level of the present design detail.” This approach can be seen in various sections throughout the HSGRR/EIS. As detailed in the Council on Environmental Quality’s Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500-1508, inherent to all EISs is the discussion of environmental consequences. It states:

The discussion will include the environmental impacts of the alternatives including the proposed action, any adverse environmental effects which cannot be avoided should the proposal be implemented, the relationship between short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposal should it be implemented.

This document did not meet this standard. Delaying this discussion until the release of the Final EIS is not consistent with the intended implementation of the requirements of the National Environmental Policy Act.

Use of Natural Features

One of the stated goals of this effort is “to identify solutions that will reduce Atlantic Ocean Shoreline and Jamaica Bay vulnerability to storm damage over time, in a way that is sustainable over the long-term, both for the natural coastal ecosystem and for communities.” To that end, EPA does not feel that the HSGRR/EIS sufficiently evaluated potential alternatives that could achieve this goal utilizing a more natural approach. Techniques and approaches such as breakwaters, oyster reefs, or narrowing the inlet

should be considered and discussed as possible alternatives. If there are specific reasons why these and other natural approaches weren't considered, that should be discussed in the FEIS.

Flood Gates Impacts

In assessing the potential impacts of the tidal flood gate, it would be useful to see a schematic of what the gate would look like and how it would impact viewsheds from around the bay. There was a paucity of information regarding the operation of a flood gate including how long the gate would be opened/closed, if it would be adjusted in preparation of a storm or only during the actual event, who is responsible for decision making and manually adjusting the gate, whether it retracts within itself, etc. These details should be included in the FEIS.

Hazardous, Toxic, and Radioactive Waste

EPA notes the useful inclusion of sites that may be impacted by storms with the general status of each site. However, EPA believes it is necessary for the USACE to perform a more complete analysis of the potential public health and environmental issues related to properties and storm events and should, therefore, consider the following points:

- An analysis should be performed to determine the potential chemical, radiological and biological exposures related to storm-impacted sites, properties, and nearby humans, ecosystems and the environment and how they would vary with each alternative and the no action alternative. This should include sensitive populations such as children, expecting mothers, the immunocompromised, the elderly, the impoverished, the infirmed, and any others that could be identified. Potential exposure pathways and detrimental effects should be determined. For example, contaminants may wash into surface waters, groundwater or become airborne, resulting in impacts to humans through recreational exposure in the ocean, consumption of contaminated water or fish, inhalation of contaminants outside or via vapor intrusion in homes. Potential contamination issues and exposure pathways should also be evaluated for ecosystems and intervention strategies for these should be determined.
- Any additional sites of concern should be inventoried and evaluated for potential problems that could be caused by storms. Sites may include, but are not limited to, gas stations, chemical companies, tank farms, facilities with fuel tanks, sources of chemical or infectious waste (e.g., hospitals or animal farms) or those with combined sewer/storm-water systems, septic tanks or cesspools that may fail or become overloaded during extreme flooding.
- If not already completed, the USACE should contact agencies that were involved in the relief work that was completed after past storms to identify problems relating to hazardous, toxic and radioactive waste that were created by past storms and how they were addressed. This information should be used to help identify precautions during the construction phase, and potential design elements, that can be integrated into the TSP to help prevent potential problems that may occur in the future.

Environmental Justice

Page 145 of the document states:

Based on a demographic analysis of the study area (presented in section 7: Environmental Consequences) and based on findings of an environmental justice review, the TSP would not have a disproportionately high and adverse impact on any low-income or minority population. USACE has determined that the TSP will provide short- and long-term benefits to disadvantaged populations by protecting infrastructure resources (e.g. housing, transportation, commercial/retail/recreational facilities) from damage caused by coastal storms.

EPA conducted an evaluation of the area using EJSCREEN, a screening tool that uses a nationally consistent dataset to identify areas of potential EJ concern. The report generated from the tool indicated that there are several potential EJ concerns within the project area. In reviewing EJ Indices at or above the 80th percentile, which likely warrant further review/investigation, EPA found that the indices for PM 2.5, Ozone, NATA Respiratory Hazard Index, Traffic Proximity and Volume, Superfund Proximity, and Water Discharger Proximity were all 80% or higher, indicating potential areas of concern.

The FEIS should include greater detail on the demographics data, the environmental data and the sources of the data that were used in reaching the determination that there will be no disproportionately high adverse impacts on any low-income or minority populations. Information should also be included concerning the geographic scope of the EJ analysis so the public can have a better idea of what is being considered in the EJ assessment. This information will allow for a more thorough evaluation of potential EJ impacts.

Children's Health

EPA would like to emphasize that Executive Order 13045 on Children's Health and Safety directs each federal agency, to the extent permitted by law and appropriate, to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, and to ensure that its policies, programs, activities, and standards address these risks. Analysis and disclosure of these potential effects under NEPA is necessary because some physiological and behavioral traits of children render them more susceptible and vulnerable than adults to environmental health and safety risks. Children may have higher exposure levels to contaminants (through pathways such as degraded water quality or contaminants exposed during construction) because they generally eat more food, drink more water, and have higher inhalation rates relative to their body size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. In addition, a child's neurological, immunological, digestive, and other bodily systems are also potentially more susceptible to exposure-related health effects. It has been well established that lower levels of exposure can have negative toxicological effects in children as compared to adults, and childhood exposure to contaminants can have long-term negative health effects. The DEIS did not include a dedicated section addressing Children's Health, and only stated that "it has been determined that children in the project areas would not likely experience any adverse effects from the TSP." EPA does not question the validity of this statement, however, further detail is required. It is unclear whether the evaluation that was completed included the construction phase of this project, or

evaluated aspects such as the potential for degraded water quality as a result of impacts from the proposed floodgate. A dedicated Children's Health section should be included in the FEIS and the evaluation included should be of greater scope and detail than what was included in the HSGRR/EIS.

RATING

Thank you for the opportunity to comment on the HSGRR/EIS for the East Rockaway Inlet to Rockaway Inlet and Jamaica Bay project area. EPA rates the DEIS an EC-2 or "Environmental Concerns – Insufficient Information." Our comments on the HSGRR/EIS contained in this letter are intended to help the USACE by providing useful information that will ultimately inform local, state and federal decision-making and review related to land use and impacts. Should you have any questions regarding the comments and concerns detailed in this letter, please feel free to contact Stephanie Lamster of my staff at 212-637-3465.

Sincerely,



Judy-Ann Mitchell, Chief
Sustainability and Multimedia Programs Branch
Clean Air and Sustainability Division