

## Appendix A

### Public Engagement and Summary of Comments and Responses



**Draft Public Comment Response Document**

**Hempstead Lake State Park Project  
Draft Environmental Assessment  
Town of Hempstead, Suffolk County, New York**

*November 2019*



**Governor's Office of  
Storm Recovery**

*Prepared pursuant to the  
National Environmental Policy Act*  
**NY Governor's Office of Storm Recovery**  
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This document contains a summary of all substantive comments and responses to those comments. All comments are contained in **Appendix B**.

Substantive comments have been assigned a code. Comments are arranged and coded by their subject matter (e.g., all water quality comments are coded WQ). If one comment is closely related or similar in nature to one or more other comments, those comments have been combined to provide a single response. Verbatim comment language is not necessarily provided; however, all comments are intended to reflect, as accurately as possible, the original comment(s).

The names of the commenters and the comment numbers are provided after each comment. Comments by each commenter are coded by last name. For example, commenters from Grace Musumeci are coded “Musumeci 1, Musumeci 2,” etc. These codes are shown in the respective bracketed comments in the appendices. Note that, in some cases, comment numbering starts after number 1 in the correspondences contained in the appendices. This is to account for instances where the commenter has submitted a letter or email correspondence in addition to providing testimony at a public hearing. In such cases, the numbering of substantive comments begins at number 1 in one form of correspondence and proceeds consecutively for all other correspondences associated with the individual commenter.

The following is a list of commenters whose substantive comments are addressed herein. Commenters are organized alphabetically by last name.

Individual Correspondence (Letter and/or Email):

- Abriado-Fandino
- Bernhart
- Borecky (Long Island Clean Water and Soil)
- Denenberg (Long Island Clean Water and Soil)
- Drzewucki
- Esposito (Citizens Campaign for the Environment)
- Forgione (Citizens Advisory Committee [CAC])
- Gaffney
- Hubbard
- Ibman
- Larney
- McNiff
- Jacob (Nassau Hiking and Outdoor Club)
- Mallery (U.S. Army Corps of Engineers [USACE])
- Mendez
- Mullooly
- Musumeci (U.S. Environmental Protection Agency)
- Piazza-Bedner
- Price
- Stein
- Stern (CAC)
- Stilwell (U.S. Fish and Wildlife Service [USFWS])
- Weiner (South Shore Audubon Society)
- Wood

Public Hearing Testimony:

- Atkin
- Belford
- Boyle

- Brown
- Capella
- Caracciolo
- Delprete
- Denenberg
- Forgione
- Jacob
- Kemnitzer
- Kozianz
- Landesberg
- Rolston
- Stern

## **1.0 PROJECT OVERVIEW AND PROCESS**

### **1.1 Comment PO-1: Prepare an EIS for the Hempstead Lake State Park Project**

Commenters suggest that the project be delayed and an environmental impact statement (EIS) be prepared. Commenters state that the scope, size, and cost of the Hempstead Lake State Park Project warrant a full EIS and that the environmental assessment (EA) is insufficient to determine potential impacts to the Park’s ecosystem.

[Abriado-Fandino 2; Drzewucki 2; Gaffney 1; Hubbard 1; Mullooly 1; Piazza-Bedner 1; Wood 2; Borecky 3; Brown 2; Capella 2; Delprete 1; Kemnitzer 2; Esposito 1; Esposito 3; Esposito 4; Denenberg 2, Denenberg 4; Weiner 1; Weiner 4; Stern 2; Stern 6; Forgione 2; Jacob 1; Jacob 6; Musumeci 7; CAC 1; CAC 2]

#### **Response PO-1**

##### *National Environmental Policy Act*

Pursuant to U.S. Department of Housing and Urban Development (HUD) National Environmental Policy Act (NEPA) implementing regulations, 24 Code of Federal Regulations (CFR) 58.37, preparation of an EIS is required when the project is determined to have a potentially significant impact on the human environment. To determine whether the project would have a potentially significant impact on the environment, the Governor’s Office of Storm Recovery (GOSR), acting under the auspices of the New York State Homes and Community Renewal’s Housing Trust Fund Corporation (HTFC), as the Responsible Entity, as that term is defined by 24 CFR 58.2(a)(7)(i), and in cooperation with other involved, cooperating, and interested agencies, prepared this EA to analyze potential impacts of the proposed project.

Impacts and mitigation measures pertaining to issues such as wildlife, water quality, and other topics related to the park ecosystem are addressed in the EA. The EA evaluates the qualitative and quantitative significance of the effects of the proposed project on the character, features, and resources of the project area. The compliance or conformance determinations for each statute, executive order, or regulation are provided by section in the EA, subject to 24 CFR §§ 58.5 and 58.6. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Based on the analyses provided in the EA, GOSR determined that the project will not result in a significant impact on the quality of the environment. As such, preparation of an EIS is not required.

Since publication of the October 2018 EA, the project scope has been further reduced to avoid/lessen potential impacts. This scope revision was done in coordination with USFWS, USACE, and USEPA.

For additional analysis of impacts in response to public comments, refer to the headings below in this document. For example, section WL-3 provides additional analysis of temporary wetland impacts.

Alternatives considered in the NEPA analysis are addressed under response to comment AL-1.

#### *New York State Environmental Quality Review Act*

Pursuant to the New York State Environmental Quality Review Act (SEQRA) implementing regulations, 6 New York Codes, Rules and Regulations (NYCRR) 617.4(b)(6)(i), the action is classified as a “Type I” action because it involves the physical alteration of 10 or more acres of land. Type I actions are more likely to require preparation of an EIS, but preparation of an EIS is not automatically required. A Full Environmental Assessment Form (EAF) was prepared to analyze the impacts of the proposed project. As indicated in the Negative Declaration, GOSR determined that although this project could have a significant, adverse impact on the environment, impacts would be avoided or substantially mitigated because of the conditions required by GOSR.

### **1.2 Comment PO-2: Analyze the Entire Living with the Bay Program in an EIS or Enhance the Cumulative Impact Analysis**

Commenters state that the project should not be considered a functionally independent project from the rest of the Living with the Bay (LWTB) projects and state that segmentation is prohibited under SEQRA. Commenters state that the cumulative effects section of the EA lacks sufficient detail.

[Mallery 1; Abriado-Fandino 2; Weiner 6; Jacob 14; Musumeci 6; CAC 12]

#### **Response PO-2**

The outcome of the LWTB Project and Resiliency Strategy is a program of thematically consistent and prioritized projects. The LWTB Project and Resiliency Strategy identifies and prioritizes projects and project types with program-specific timeframes and costs for planning, design, permitting, procurement, construction, and project closeout.

As indicated in the EA, the Living with the Bay (LWTB) Project and Resiliency Strategy are configured such that the projects could advance independently, subject to the availability of funding. GOSR determined that a permissibly separate environmental review process for the Hempstead Lake State Park Project would best inform decision makers and the public of potential environmental impacts presented by the proposed project.

Because the timelines for development and construction of each LWTB project vary, each project’s environmental review will consider the cumulative environmental impacts of the previous project(s) in addition to the specific scope of the subsequent environmental review. The cumulative impact analysis has been enhanced in the final EA to describe each of the projects proposed by the LWTB Project and Resiliency Strategy and to assess the potential cumulative contribution to impacts occurring under the proposed project.

### **1.3 Comment PO-3: Public Notice and Review Time**

Commenters state that the level of public notice provided was inadequate and note that certain organizations were not notified about the public hearing. Commenters also state that the communication with the public concerning the public meetings was ineffective.

[Mallery 1; Koziarz 1; Kemnitzer 1; Stern 1; Forgione 1; Jacob 15; CAC 9; CAC 20; CAC 21]

#### **Response PO-3**

Pursuant to 24 CFR §§ 50.23 & 58.43, GOSR undertook a public outreach process, the details of which are described in the EA, in the public outreach section. GOSR published and distributed a Combined Notice of Preparation of a NEPA Draft Environmental Assessment; Early Notice of Early Public Review

of a Proposed Activity in a Wetland (Executive Order 11990); Notice of Section 106, National Historic Preservation Act Review (54 United States Code [USC] 306108); and an Announcement of Public Hearing. Along with the Combined Notice, GOSR published and distributed a Public Information Document describing the proposed project and existing conditions. The Combined Notice and Public Information Document were published on GOSR's website; distributed to local, state, and federal agencies; and published in the local newspaper. The Combined Notice solicited comments on the project to be submitted to GOSR by July 17, 2017. GOSR held a public hearing on July 6, 2017, at the Town of Hempstead Town Hall.

GOSR published the draft EA on October 5, 2018. The document was available on GOSR's website, at <https://stormrecovery.ny.gov/environmental-docs>, and hard copies were available at GOSR's offices, Hempstead Public Library, Lynbrook Village Library, and Rockville Centre Public Library. Two public hearings on the draft EA were held on October 17, 2018—the midday hearing at Rockville Centre Public Library, and the evening hearing at Lynbrook Village Library—to provide the public opportunities to provide verbal comment on the project. The comment period remained open until November 2, 2018.

Pursuant to the response provided in this Responses to Comments document, the EA will be revised and republished prior to the submission of GOSR's Request for Release of Funds to HUD.

In addition, the Living with the Bay Citizens Advisory Committee (CAC) was formed in 2016 to represent both local and regional stakeholders; it includes members with environmental, educational, government, business, and civic backgrounds. The CAC met with GOSR in 10 meetings prior to publication of the draft EA for Hempstead Lake State Park. The latest, and 11th, CAC meeting was held on Wednesday, December 12, 2018. The CAC has been informed of all milestones in the environmental review process.

## **2.0 PROJECT DESCRIPTION AND PROJECT COMPONENTS**

### **2.1 Comment PD-1: Purpose and Need: Water Impoundment**

Several commenters question the need for the project as a means of mitigating stormwater flooding through water impoundment and suggest that the project purpose and need be better demonstrated. Specifically, commenters question how repairing the main dam would mitigate future flooding risks, and they request more complete hydrologic and hydraulic modeling, stating that the current model lacks the hydrologic input data to calibrate the models that form the basis of the EA. Others express concern that the dam will not assist with storage capacity or surge water and question how it would be repaired if it were damaged.

[Delprete 1; Drzewucki 1, Landesberg 1, Larney 3, Forgione 3]

#### **Response PD-1**

A detailed hydrological and hydraulic assessment of the dams and waterbodies was prepared in 2015 and updated in 2017. It shows that the watershed draining to the dam at Hempstead Lake encompasses an approximately 6.5-square-mile area (4,160 acres). The existing park dams impound water. This impoundment provides benefits for the Mill River Watershed. The dams capture stormwater flows from the upper Mill River Watershed. This stormwater capture attenuates flows downstream, resulting in a moderating effect on peak flows during major rain events. However, because the Hempstead Lake Dam sluice gates are currently stuck in the open position, there is no seasonal attenuation of peak flows. The proposed project would promote resilience by reducing flooding downstream during some rain events and attenuating peak flows at times when tidal/coastal storm surges affect downstream communities. This attenuation would allow downstream flows to return to normal levels more quickly, effectively providing communities a faster recovery following major storm events.

The statement of purpose and need for the proposal is included in the EA; note that the purpose and need of each project component has been included before that applicable component in the Project Description.

Under existing conditions, modeling indicates that the Hempstead Lake Dam would first overtop at approximately a 35% probable maximum precipitation (PMP) event. Upon project completion, the dam would withstand a 39% PMP event without overtopping.

Regarding the hydrologic and hydraulic modeling, the analysis, prepared by Lockwood, Kessler & Bartlett (LKB), studied the entire watershed that contributes to the flows within Hempstead Lake State Park. The study was conducted according to New York State Department of Environment Conservation's (NYSDEC) Dam Safety Section guidelines. The Probable Maximum Flood for the study was determined according to NYSDEC program policy, using HMR-52. The study considered the size and the increase in stormwater runoff due to the urbanization of the watershed over more than 140 years.

Flow information from the Pines Brook was used to calibrate the modeling because no other significant data sources were available. Although the U.S. Geological Survey ceased data collection from this gauge in 1999, data points representing historical storms were obtained from the gauge. During the study period, lakes and ponds in the study area were at historically low levels, and any gauges that would have been installed would not be able to report stream and groundwater conditions.

Pines Brook, while located downstream of Hempstead Lake Dam, has characteristics similar to the Hempstead Lake Dam Watershed. The two flows combine downstream at Smith Pond. It was deemed important to study the flow from Pines Brook to incorporate the effects of this flow on any large storm flooding downstream of Hempstead Lake.

Moreover, as indicated in response to comment PD-2, the structural integrity of the dam would be improved with the proposed project.

## **2.2 Comment PD-2: Purpose and Need: Dam Safety**

Commenters are concerned about the effect of tree removal on the structural integrity of the earthen dam at Hempstead Lake. Commenters ask that a study be conducted on how the removal of mature trees will affect the dam. They indicate that the EA contains no studies of the dam's integrity and cite a formal U.S. Army Corps of Engineers' (USACE) inspection that includes a recommendation not to remove this vegetation.

[Hubbard 2; Larney 2; Borecky 1; Denenberg 1; Denenberg 3; Forgione 3; CAC 3; CAC 4; CAC 15]

### **Response PD-2**

The 1981 USACE Phase I Inspection Report for Hempstead Lake Dam, which is cited by the commenters, is included in **Appendix E**. As indicated in section 3.2 (page 7 of the appendix) and section 7.2 (page 13 of the appendix), on the downstream slope, all brush, saplings, debris, and coniferous trees should be removed. The report further indicates that on the downstream slope, larger hardwood trees should not be removed, but instead inventoried and their condition monitored. On the upstream face, all trees and brush should be removed, and periodic mowing and cutting provided. It should be noted that NYSDEC and the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) cannot currently fully inspect the dams at Hempstead Lake and South Pond until the trees are removed.

As indicated in the 1981 inspection report's preface, "It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through frequent inspections can unsafe conditions be detected and only through continued care and maintenance can these conditions be prevented or corrected."

In 1985 and revised in 1989, NYSDEC prepared "Guidelines for the Design of Dams." Section 9.4 Vegetation Control – Trees and Brush (9.4.1). This section states:

Trees and Brush Trees and brush are not permitted on earth dams because:

- a. Extensive root systems can provide seepage paths for water.
- b. Trees that blow down or fall over can leave large holes in the embankment surface that will weaken the embankment and can lead to increased erosion.
- c. Brush obscures the surface limiting visual inspection, provides a haven for burrowing animals and retards growth for grass vegetation.

Stumps of cut trees should be removed so grass vegetation can be established and the surface mowed. Stumps should be removed either by pulling or with machines that grind them down. All woody material should be removed to about 6 inches below the ground surface. The cavity should be filled with well compacted soil and grass vegetation established.

NYSDEC Dam Safety Regulations are codified in 6 NYCRR Part 673. These regulations require preparation of an inspection and maintenance plan for all dams equal to or greater than 15 feet in height; dams that have been assigned a hazard classification of class B or C; or dams that impose waters that pose, in the event of a failure, a threat of personal injury, substantial property damage, or natural resource damage. Owners of any class B or class C dam must submit to NYSDEC an annual certification of full implementation of the inspection and maintenance plan. Regular safety inspections of such dams are required, and NYSDEC may inspect any such dam without prior notice.

The Hempstead Lake State Park dams are inspected by the NYSDEC Division of Water, Bureau of Flood Protection and Dam Safety. **Appendix F** includes a copy of the NYSDEC dam inspection reports and correspondence between the Bureau of Flood Protection and Dam Safety and OPRHP. These documents indicate that NYSDEC requires tree removal for dam rehabilitation and to address deficiencies. Specific references are as follows:

- As indicated in NYSDEC’s December 31, 2007, review of the hydrologic and hydraulic report, “the dam has mature trees on both the upstream and downstream slopes which will need to be addressed as part of the dam rehabilitation project.”
- As indicated in the October 5, 2010, visual observations, Hempstead Lake Dam presented deficiencies in “maintenance” and “undesirable growth.” Specifically, “downstream slope is too overgrown with brush and mature trees to inspect properly,” and “upstream slope has brush and small trees.”
- As indicated in the November 3, 2016, visual observations:
  - Hempstead Lake Dam presents deficiencies in “maintenance” and “undesirable growth.” Specifically, “trees and brush are growing through the stone on the upstream embankment,” and the “downstream embankment slope is too overgrown with trees and brush to inspect.”
  - South Pond Dam presents deficiencies in “maintenance” and “undesirable growth.” Specifically, “dam is not maintained,” “there are mature trees and brush covering the dam,” and “the dam crest is uneven and narrow in some places.”

The tree removal application to NYSDEC is included in **Appendix H** of the EA. As further explained in **Appendix H**, in the June 15, 2018, Memorandum titled “Repairs at Hempstead Lake Dam & South Pond Dam,” the NYSDEC Dam Safety Central Office recommends issuance of a dam safety permit for the dam in accordance with the tree removal application. The NYSDEC permit is required to ensure that the tree removal is conducted to ensure that the structural integrity of the embankments is not compromised during and after tree removal.

Tree removal would be undertaken pursuant to the protocols established in the permit. Trees would be cut and removed from the dam. To ensure a level surface after tree removal, imported clean fill would be used to fill root balls from removed trees.

### 2.3 Comment PD-3: Existing and Proposed Wetland Calculations

Several commenters request more information about how wetland impacts were calculated. Commenters note that the “post-construction proposed areas” in the tables provided in the EA do not appear to reflect the existing areas and description provided in the text. Commenters recommend that additional information be included that shows how these values were derived and suggest that updated tables be provided to clearly support calculations for emergent wetland pre- and post-construction values. Additionally, commenters request clearer accounting regarding the amount of habitat area affected by the project elements and clarification as to whether native planting would be used to help offset impacts by creating a visual buffer.

[Capella 1; Jacob 10; Stilwell 17; Stilwell 18; Stilwell 19]

#### Response PD-3

The EA has been revised to include clarified tables and images of wetlands work. Within the project description, the EA provides details of the wetlands work to be conducted. Further detail regarding wetland impacts is now contained in the EA narrative and impact analysis. New figures have been added to depict specific areas of wetland loss and sample berm and slope profiles for berms that would provide a visual buffer. Areas of tree removal and replanting are depicted in **Appendix D** of the EA and in new figures in the EA.

### 2.4 Comment PD-4: Description of Tree Removal

Commenters express concern over the extent of tree removal proposed under the project and recommend that more information be provided regarding the number and location of plantings, the anticipated number of trees, and the species of trees that would be planted. Moreover, commenters call for additional figures to illustrate the location and distribution of tree removal to better assess the habitat value of trees and how removal may affect plant and wildlife species.

[Gaffney 1; Price 1; Caracciolo 2; Kemnitzer 3; Forgione 4; Jacob 2; Jacob 7; Stilwell 10; Stilwell 11]

#### Response PD-4

A tree removal figure has been added to the EA, and the project description of tree removal for each component has been updated. An estimated 1,830 trees would be removed for the project, over half of which are required to be *removed per dam safety regulations*.

The EA has been revised to provide an additional figure depicting the locations of proposed tree removal and replanting (see also response to comment PD-3, above). Additional information regarding the number and location of plantings, the anticipated number of trees, and the species of trees that would be planted is also provided. It should be noted that the number of trees to be removed is a conservative estimate based on trees of 3-inch caliper or more, and that many of the trees to be removed are samplings and not mature. Moreover, the project has been designed to avoid tree removal to the extent practicable. Specifically, trails were designed in the field in an effort to avoid tree removal to the maximum extent practicable by following existing social/informal paths. Additionally, some removal for the trails would include only limbs, and not entire trees. Refinements to the trail design would occur in the field, which could effectively further reduce and avoid tree removal.

The impacts of tree removal on habitat are discussed in the following draft EA sections:

Impacts on endangered species are assessed in the EA. Tree removal at NW Pond and NE Pond, would entail removal from disturbed woodlands with understories dominated by invasive species and dead/down trees. Additionally, replacement trees would be planted in approximately 3.5 noncontiguous acres around the two ponds. See **Appendix D** for Planting Plans and Planting Schedules. Therefore, the impact would be considered minor based on the nature of the trees to be removed and the hundreds of acres of similar habitat within the Park which would remain available to migratory birds and other species that utilize

forested habitat. Migratory birds are expected to temporarily leave the area during construction because of noise and disturbance. Because of a November 1 to March 31 tree-clearing window proposed to protect northern long-eared bats, trees would not be removed during the migratory bird breeding season, which occurs between April 1 and August 31. Limiting tree removal activities to between November 1 and December 31 would further minimize impacts on migratory bird species.”

Impacts on vegetation and wildlife are assessed in the EA. While larger stands of mature upland forest in Hempstead Lake State Park would remain undisturbed, the clearing of trees in some locations would result in permanent loss of vegetation and a reduction of this habitat type. The loss of forest cover from pond improvements would be partially offset by the increase in wetlands and water quality improvements that would benefit vegetation and wildlife, as well as plantings of upland forest.

## **2.5 Comment PD-5: Funding for Maintenance**

Commenters request details regarding where funding for maintenance of the proposed project would be obtained. Additionally, commenters ask how the park budget could sustain such assets as park paths, kayak launches, and the education center when past budgeting expenditures failed to maintain the park and the dams.

[Drzewucki 3; Price 1; Stern 5]

### **Response PD-5**

The sub-recipient agreement between OPRHP and GOSR requires regular maintenance of the proposed facilities.

In its *Federal Register* notice dated October 16, 2014, HUD required that Rebuild by Design grantees certify to adequately fund the long-term operation and maintenance of the Rebuild by Design project (70 *Federal Register* 200, 62189 (Oct. 16, 2014)). In Action Plan Amendment 16, GOSR certified that sub-recipients will be required to adequately fund long-term operation and maintenance of Rebuild by Design projects from reasonably anticipated revenue, recognizing that operation and maintenance costs must be provided from sources other than Community Development Block Grant (CDBG) and CDBG-Disaster Recovery (DR) funds.

As part of the final design, GOSR will develop robust maintenance and operation plans with budgets, working collaboratively with appropriate state, city, federal agencies, and non-profit organizations. Action Plan Amendment 16 was published on April 24, 2017, and was subject to a 30-day public comment period. On August 1, 2017, HUD approved the amendment.

The amendment is available on GOSR’s website at: <https://stormrecovery.ny.gov/funding/action-plans-amendments>.

According to the Action Plan Amendment, the approval of the final designs for the proposed project and the project’s eventual construction are contingent on the development of a long-term maintenance and operation plan with budget. The responsibilities of OPRHP continue in perpetuity and involve the annual appropriation of funding for operation and maintenance. Therefore, the EA adequately considers the impacts of the proposed project by presuming the required operation and maintenance activities will be funded by the sub-recipient through the project components’ life expectancy.

## **2.6 Comment PD-6: Construction Specifications**

Commenters request that technical construction plans for the shoreline bank stabilization be completed and included in the EA. Similarly, commenters request that the grading plan show all constructed structures such as forebays. They also request that a soil map be provided to demonstrate that the grading plan can successfully support the planting plan.

[Musumeci 2; Musumeci 5]

## **Response PD-6**

The grading plans and drawings have been added to the EA as **Appendix D**. A soil map has been prepared and included in the EA to demonstrate that the soils are appropriate to successfully support the planting plan.

## **2.7 Comment PD-7: Operational Plans**

Commenters request that the EA discuss the Water Level Management Plan and indicate whether this plan would be prepared in conjunction with the Hempstead Lake State Park Project and made available for public and agency review. Commenters request that the EA include information on water-level management and how it would affect the distribution and use of the water features, wintering waterfowl, and waterbirds.

Commenters ask how invasive species would be managed, both within and outside planned wetlands.

Commenters ask how the wetlands would be managed and maintained for ecological benefit.

[Musumeci 1; Stilwell 4; Stilwell 15]

## **Response PD-7**

The project description in the EA has been revised to reflect the preparation of the following plans.

Regular park maintenance activities currently occur and would continue as part of the proposed project. Refer to comment response PD-5 regarding funding sources.

### *Hempstead Lake Water Level Management Plan*

OPRHP would establish a protocol for non-emergency operation of Hempstead Lake Dam in coordination with the overall watershed and ecological management goals of the LWTB Project and Resiliency Strategy. GOSR (in its own capacity or using a third-party peer review entity selected by GOSR and disclosed to OPRHP) would have the opportunity to provide feedback on the protocol, and OPRHP would endeavor to incorporate reasonable feedback. **Appendix I** contains the inspection schedule, maintenance schedule, and operational procedures that would be observed as part of the Hempstead Lake Water Level Management Plan. The operational procedures outlined would apply to water levels in Hempstead Lake only. They would not affect the water levels at the NE and NW Ponds, which would be maintained by the fixed weir at the NW Pond Dam. The fixed weir would be provided with the lowest step set at an elevation of 21 feet, which would maintain the existing water levels in the ponds and would not result in permanent inundation of mudflats. See response VW-1 regarding impacts on waterfowl and waterbirds.

### *Invasive Species Management and Post-Construction Monitoring and Reporting Plan*

The draft Invasive Species Management and Post-Construction Monitoring and Reporting Plan, which is provided as **Appendix K** to the EA, has been developed to address the methods by which to monitor success of the installation and the reestablishment of native species in the northern ponds, as well as to address methods to monitor and remove invasive species in the project planting areas. The plan has been developed to be used in conjunction with the Hempstead Lake State Park Invasive Species Management and Native Species Enhancement Plan, which is described below. It identifies monitoring methods to assess the success of the wetland and upland native plant establishment and outlines control methods to remove invasive species from revegetated project areas.

### *Park Invasive Species Management and Native Species Enhancement Plan*

In addition, as indicated in the EA, for areas outside the northern ponds, OPRHP is drafting a Park Invasive Species Management and Native Species Enhancement Plan, which is included in the EA as **Appendix L**. This draft plan is subject to further refinement but has been included for reference purposes. The plan outlines goals, strategies, interagency cooperation, and follow-up for the Long Island Regional

Environmental Office for management efforts at Hempstead Lake State Park. The plan also provides background information about the Park and invasive species concerns, and it outlines a process through which management can be implemented.

### **3.0 WETLANDS IMPACTS**

#### **3.1 Comment WL-1: Jurisdictional Determination**

Commenters state that approved jurisdictional determination submitted to USACE for review is absent. This review is necessary for an accurate description of the impacts of the project and as a starting point for the consideration of the mitigation that would be required for those impacts.

[Mallery 2; Musumeci 4]

#### **Response WL-1**

USACE issued the jurisdictional determination for Hempstead Lake State Park on February 1, 2019. It is included in the EA as **Appendix P**.

#### **3.2 Comment WL-2: Permanent Wetland Loss**

Some commenters question how the loss of wetlands results in the conclusion in the functional wetland assessment that the project would increase wetland quality and function. Commenters also note that mitigation is proposed in the form of emergent wetlands, but that no in-kind mitigation is proposed for other wetland types.

[Capella 1; Jacob 10; Stilwell 18; Stilwell 19]

#### **Response WL-2**

The Evaluation of Planned Wetlands (EPW) technique was used to compare the functional capacity of wetlands associated these ponds in their current conditions (2017 baseline) with their planned conditions following proposed restoration and enhancement actions. USACE approved the use of the EPW method to provide a quantitative comparison of baseline and post-construction functions of wetlands and waters to determine the net ecological uplift of a proposed project. The EPW method also assesses the potential for functional uplift by quantifying net benefits. The EPW handbook describes EPW as “. . . a rapid-assessment procedure used to determine whether a planned wetland has been adequately designed to achieve defined wetland function goals. EPW allows the designer and decision maker to identify characteristics which are important to each function and determine how and if the planning goals are attainable.” The handbook also describes how the method is used to compare wetlands before and after a planned activity is implemented to determine changes in functional capacity and identify potential mitigation needs to offset impacts. Details on the EPW process and evaluation are provided in the report included in **Appendix X** of the EA.

Refer to comment response WL-1, above, regarding coordination with USACE and to comment response WL-3, below, regarding temporary impacts on wetlands.

Note that the project has been refined since receipt of these comments. The project would result in 2.76 acres of net wetland loss, as shown in **Table 9**. OPRHP has submitted a joint permit application to USACE and NYSDEC. See **Appendix N** for the public notice, which includes plans for all impacts to WOTUS. **Appendix M** includes a detailed table of wetland impacts.

**Table 9: Summary of Wetland Impacts Across All Project Components**

| <b>Aquatic Resource Type</b> | <b>Wetland Loss Acres</b> | <b>Wetland Creation Acres (Table 10)</b> | <b>Net Loss Acres Adjusted for Created Wetlands</b> |
|------------------------------|---------------------------|--|---|
| Open Water                   | -1.07                     | +0.07                                    | -1.00   |
| Emergent Wetland             | -0.85                     | +0.09                                    | -0.76   |
| Scrub Shrub Wetland          | -1.00                     | 0.00                                     | -1.00   |
| <b>Total</b>                 | <b>-2.92</b>              | <b>+0.16</b>                             | <b>-2.76</b>  |

The permanent losses and permanent impacts would be substantially offset by the proposed mitigation measures (see Section 3.6, Wetlands Impacts and Compensatory Mitigation) and the positive improvements to the overall NE and NW Ponds area, including significant functional amelioration to existing wetlands. See **Appendix M** for the detailed table of wetland impacts. See **Appendix D** for detailed drawings.

**3.3 Comment WL-3: Temporary Wetland Impacts**

Commenters recommend providing more information about how temporal losses in wetland function were evaluated in the wetland functional assessment and factored into the analysis of impacts and determination of wetland mitigation acres.

[Stilwell 17; Stilwell 18; Stilwell 19]

**Response WL-3**

The EPW functional assessment method discussed in comment response WL-2 is focused on comparing the baseline or existing conditions with post-construction conditions. Temporal losses that occur during construction and the initial establishment period of vegetation are not considered in the EPW functional assessment. Temporary impacts that occur during construction are not considered as part the EPW evaluation.

Individual temporary wetland and open water impacts during construction are anticipated to be six months in duration and would be restored in-kind. In addition, the habitat benefits derived from the implementation of the Invasive Species Management and Post-Construction Monitoring and Reporting Plan would be realized throughout the construction period. See also the proposed compensatory mitigation for wetland impacts.

**4.0 WATER QUALITY IMPACTS**

**4.1 Comment WQ-1: Existing Wetland Water Quality Benefits**

Commenters note that water quality testing performed for the existing northern ponds indicates that the ponds currently provide significant water quality improvements. Commenters indicate that the EA fails to evaluate whether disturbing this area would significantly reduce the current water treatment ability of the existing ponds and does not acknowledge the pollutant reduction functions already provided by the existing wetlands.

[Weiner 3; CAC 6]

## **Response WQ-1**

The existing wetlands do provide water quality benefits to communities and assets downstream of Hempstead Lake State Park; they serve as a collection point for sediments and floatables that enter the watershed upstream of the Park. These sediments and floatables have degraded the ecological value of the wetlands in the Park. In addition, as stated in the project purpose and need in the EA, NW Pond Dam failed in 2011, creating a 35-foot breach of the embankment dam, which is expanding and decreasing water levels in NW Pond and NE Pond, thereby impairing the functionality of wetland systems. The embankment dam needs to be repaired to restore the ecological value of the NW Pond and NE Pond wetland systems and increase stormwater runoff impoundment during rainfall events.

The proposed project would create and enhance wetland areas and improve pond habitat in the northern pond/wetland complex.

The bottom of Mill Creek has substantial sediment loads, and the creek banks have eroded. The creek flow velocity dissipates after passing a berm as the channel widens and enters NE Pond, causing floatables, debris, and sediment to accumulate in this location. These materials can be carried throughout the ponds during periods of high water and flooding from larger storm events. In addition to floatables, water pollutants enter the ponds and contaminate the sediment. Upon completion of the project, the rehabilitated wetlands would improve water quality. Sediment basins and floatables capture mechanisms would allow these materials to be removed before entering the NW Pond and NE Pond wetland systems. The project's beneficial effects to water quality are described in the EA, which states "Stormwater would also be slowed and filtered through the wetlands in the NE and NW Ponds, which would reduce erosion and increase water quality, including reducing nitrogen. Removing the twin pipes under Southern State Parkway and repairing the dams would better regulate overall stormwater flows and reduce erosion compared to existing conditions."

Tree removal, dredging, excavation, and grading activities could result in increased erosion during construction. The proposed project would disturb more than 1 acre of land and, as such, must obtain coverage under the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity. The SPDES General Permit requires the use of New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, as well as preparation of a Stormwater Pollution Prevention Plan to incorporate appropriate best management practices (BMPs) during construction activities. Silt curtains would be installed around the dredging area or at the outlets of each pond to prevent turbidity downstream of the dredging areas. Additionally, specific mitigation measures may be implemented as identified during the permitting process by federal and state agencies.

## **4.2 Comment WQ-2: Canada Geese**

Commenters note that transformation of significant portions of Hempstead Lake State Park from forest to grasslands will provide ideal habitat to attract Canada Geese and that the geese will add high concentrations of nutrients and fecal pathogens into the waterway, resulting in additional eutrophication. Commenters note that the EA does not consider how these contaminants will be contained during project construction and after the project is complete.

[CAC 10]

## **Response WQ-2**

As indicated in the EA, removal of trees on the dams could provide new habitat for Canada geese if planted with grass that is kept short through regular mowing. However, new pollinator habitat on dams would be tall grasses, not mowed lawns. These tall grasses are not attractive to geese. Moreover, multiple established open-space design approaches and post-construction management practices could be implemented to limit such spaces as Canada geese habitat. Design approaches include the type and

spacing of planting on the exposed surfaces, the length of maintained grass, and fences. Post-construction management practices include the length of maintained grass or other types of vegetation, dogs, nest destruction, and lethal control. The U.S. Department of Agriculture independently implements a geese management program in the Park. This program would continue with the project. In addition, Park staff has been trained in geese management techniques.

### 4.3 Comment WQ-3: Impervious Surfaces

Commenters request that the EA describe how the increase in impervious surface would change the character of the watershed and/or its impacts on habitats, plants, and wildlife.

[Stilwell 16]

#### Response WQ-3

As stated in the EA, the proposed project would result in approximately 8 acres of impervious area, as shown in Table 7.

**Table 7: Project Impervious Area Summary**

| <b>Project Component</b>                            | <b>New Impervious Area (Acres)</b> |
|---|------------------------------------|
| Dams, Gatehouses and Bridges                        | 0.201                              |
| NE and NW Ponds                                     | 0.810                              |
| Greenways, Trails, Gateways, and Waterfront Access* | 6.73                               |
| Environmental Education and Resiliency Center       | 0.26                               |
| <b>Total</b>  | <b>8.001</b>                       |

\*4.28 acres of the new impervious area will comprise existing compacted dirt trails that would be overlaid with semi-pervious crushed stone and stone dust

The proposed project would result in 6.73 acres of net new impervious surfaces created for the greenway, trails, gateways, and waterfront access improvements, of which 4.28 acres would be semi-pervious and composed of crushed stone and stone dust. Specifically, trails would be composed of stone dust over a crushed stone drainage layer, and they would be designed to retain the dust within the trail and limit overland sedimentation and runoff. Although such surfaces allow for infiltration, this trail cover was counted towards impervious surface area to provide for a conservative analysis. An additional 0.201 acres would result from the dams component, 0.810 acres from the ponds component, and 0.26 acres would result from the new education center.

These impervious surfaces would be distributed among the Park's 521 acres, most of which are pervious and, thus, would not result in substantial new stormwater flows. This minimal increase in impervious surface would not result in substantial impacts on watershed habitats, plants, and wildlife. Moreover, stormwater runoff from these surfaces would also be directed to bioswales in the new parking area and into vegetated areas along trails, further reducing impacts on habitats, plants, and wildlife.

## **5.0 IMPACTS TO ENDANGERED SPECIES, VEGETATION, WILDLIFE AND HABITATS**

### **5.1 Comment VW-1: Impacts on Birds, Bats, and Terrestrial Wildlife**

Various commenters express concern over the impacts on vegetation and wildlife, including threatened and endangered species, citing that Hempstead Lake is one of the most important sites on Long Island for wintering waterfowl, with buildups beginning in late August and peaking in the late fall and winter. These commenters request a study to determine how tree removal would affect wildlife and local ecology. Commenters note that the monarch butterfly (*Danaus plexippus*) and the yellow-banded bumble bee (*Bombus terricola*) may be present in the project area and that the tree cutting time restriction between November 1–March 31 would not cover the time the great-horned owl or other raptor species nest. Commenters request that mitigation measures be included to avoid destroying active nests of these species during any tree removal or planting activities.

[Bernhart 1; Ibman 1; Larney 1; Mullooly 1; Atkin 1; Belford 1; Brown 1; Weiner 2; Jacob 3; Jacob 8; Jacob 9; Stilwell 1; Stilwell 2; Stilwell 3; Stilwell 5; Stilwell 6; CAC 5; CAC 7]

#### **Response VW-1**

Impacts on plants and animals are disclosed on in the EA “Threatened & Endangered Species” section, as well as the “Vegetation & Wildlife” section.

In July 2017, GOSR initiated consultation with USFWS regarding potential impacts on species protected under the Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act, including northern long-eared bats. At the request of USFWS, a Northern Long-eared Bat 4(d) Rule Streamlined Consultation Form was submitted to USFWS. USFWS concurred with the determination that the project may affect but is not likely to adversely affect species protected under USFWS’s jurisdiction. Specific mitigation measures may be implemented as identified during the permitting process by federal and state agencies.

As documented in the EA, tree removal associated with the project would result in a loss of northern long-eared bat summer roosting, foraging, and travel habitat. The permanent loss of potential summer habitat would result in a minor, adverse impact on northern long-eared bats because similar habitat would remain available elsewhere in the Park. These impacts would be minimized by limiting most tree removal activities to between November 1 and March 31, outside the active season/roosting season. Outside the active season, northern long-eared bats are in hibernation and would not be directly affected by tree removal activities, thereby avoiding any prohibited incidental take. Only trees on Hempstead Lake and South Pond Dams may be removed during the active season/roosting season. To mitigate potential impacts, a qualified biologist would survey trees for northern long-eared bat prior to and during tree removal activities. Additionally, tree removal would be minimized to the greatest extent practicable, and trees that would be protected from cutting would be clearly marked to prevent unnecessary clearing. Refer to comment response PD-3, above, which shows the location of proposed plantings/habitats.

To avoid impacts on raptor species, pre-construction raptor surveys by a qualified biologist to address the possible presence of raptors, including the great-horned owl, would be undertaken. OPRHP has qualified biologists on staff, who can undertake, or assist in, surveys before and during construction. This information has been added to the EA in the “Endangered Species” analysis, as well as the “Mitigation Measures and Conditions” section.

Refer to comment response PD-6, above, which describes the three plans that would be included in the proposed project. The Water Level Management Plan would apply to the Hempstead Lake Dam sluice gates and the associated affected water levels within the lake. It would not affect the water levels at the NE and NW Ponds, which would be maintained by the fixed weir at the NW Pond Dam. The weir would be provided with the lowest step set at elevation 21 feet, which would maintain the existing water levels

in the ponds and would not result in inundation of mudflats. The Wetlands Monitoring and Reporting Plan would be developed through the Joint Permit Application process.

Other species that USFWS is currently evaluating for listing under the ESA—little brown bat (*Myotis lucifugus*), tri-colored bat (*Perimyotis subflavus*), monarch butterfly (*Danaus plexippus*), and yellow-banded bumblebee (*Bombus terricola*)—have been incorporated into the analysis in the EA in the “Endangered Species” analysis. Following tree removal, the project area would be reestablished with pollinator habitat that includes native flowering plants to support the initiative to protect pollinators in New York State. Implementation of pollinator habitat would help support monarch butterfly and yellow-banded bumble bee populations.

Please also see the landscape and planting plans included in EA **Appendix D**.

In November 2019, OPRHP and GOSR discussed the project changes with USFWS that have resulted in a reduction of impacts as compared to an earlier iteration of the project.

## **5.2 Comment VW-2: Impacts on Fish**

Commenters recommend that GOSR evaluate the impacts that sediment dredging and loss of open water habitat may have on fish use at the project locations.

[Borecky 3; Stilwell 7]

### **Response VW-2**

Impacts on fish are addressed in the EA Vegetation & Wildlife section. EA. As indicated, management of water levels could have a negative impact on fish spawning and bird nesting/feeding, depending on the timing and extent of drawdowns and storage. However, fish, benthic invertebrates, and waterfowl and waterbirds that use the ponds in Hempstead Lake State Park and the downstream waters of Mill River would benefit from improved water and sediment quality that may result from enhanced wetland filtration, sediment capture, and removal of floatables that come from the upper watershed and flow out to Hewlett Bay.

Note that the draft EA “Wetlands” analysis incorrectly stated that water levels would be managed in NE and NW Ponds. Seasonal water levels would only be managed in Hempstead Lake, which would not affect the NE and NW Ponds wetlands. As such, the “Wetlands” analysis in the revised EA no longer contains this text.

The EA “Vegetation, Wildlife” section has been updated to address presence of fish, particularly overwintering fish, in NE and NW Ponds. As noted by OPRHP, overwintering does not occur in the ponds, and no fish were found during surveys conducted by Cashin Associates. The shallow water depths within both NE and NW Pond do not provide optimal habitat for overwintering fish.

As stated in the EA, dredging would occur in both NE and NW Ponds. Impacts from dredging are increased turbidity and exposure of nutrient-rich sediments. Silt curtains would be installed around the dredging area or at the outlets of each pond to prevent turbidity downstream of the dredging areas. Additionally, specific mitigation measures may be implemented as identified during the permitting process by federal and state agencies. Refer to comment response PD-7, above, regarding the Water Level Management Plan. The weir at NW Pond would be provided with the lowest step set at elevation 21 feet, which would maintain the existing water levels in the ponds. Refer to comment response WL-2, above, regarding impacts on wetlands.

### 5.3 Comment VW-3: Impacts on Trees

Commenters are concerned about the removal of trees and question if a tree survey has been conducted, if the quality or age of the trees would be considered during their removal, what would be done to replace the trees, and if the project would remove invasive species. Further comments note that removing 2,500 trees would destabilize the forested area, noting that undisturbed forests are better equipped to withstand hurricanes and storms than fragmented forests. Commenters question the finding that the loss of these trees would have “no significant environmental impact.” Commenters recommend that the EA assess the relative value of existing and proposed mitigation habitat to wildlife to ensure that any potential losses are sufficiently offset. They note that the HUD EA template makes analyses difficult to read.

[Abriado-Fandino 1; Bernhart 1; Gaffney 1; Mendez 1; Piazza-Bedner; Stein 1; Borecky 2; Atkin 2; Belford 2; Caracciolo 1; Stilwell 8; Stilwell 9; Stilwell 12]

#### Response VW-3

Of the 1,830 trees that would be removed for the project, 1,297 trees would be removed per dam safety regulations. Of the 617 trees that would be removed for wetland enhancement activities at NW and NW Ponds, many are within disturbed woodlands with understories dominated by invasive species and dead/down trees. Eleven trees would be removed for the environmental education and resiliency center, and 102 trees for greenways, gateways and waterfront access improvements. A significant number of the trees to be removed are damaged and unhealthy. In addition, the total tree count includes many trees of 3-inch caliper or more, a high proportion of trees in the count are smaller, immature saplings.

The impacts of tree removal on endangered species are described in detail under the section “Endangered Species” of the EA. Tree removal associated with the project would result in a loss of northern long-eared bat summer roosting, foraging, and travel habitat. The permanent loss of potential summer habitat would result in a minor, adverse impact on northern long-eared bats because similar habitat would remain available elsewhere in the Park. These impacts would be minimized by limiting all tree removal activities to between November 1 and March 31, outside the active season/roosting season. Refer to comment response PD-4, above, regarding new information that has been added to the EA about tree removal and planting. Outside the active season, northern long-eared bats are in hibernation and would not be directly affected by tree removal activities, thereby avoiding any prohibited incidental take. Additionally, tree removal would be minimized to the greatest extent practicable, and trees that would be protected from cutting would be clearly demarcated to prevent unnecessary clearing.

Wetlands serve an important role in carbon sequestration, and the planned removal of trees would affect carbon dioxide removal. However, 2.76 acres of net wetland loss would be offset by proposed compensatory mitigation. Additionally, replacement trees would be planted in approximately 3.5 non-contiguous acres around the two ponds. Therefore, the impact would be considered minor based on the nature of the trees to be removed and the hundreds of acres of similar forest within the Park.

With regard to effects of the project on the visual character of the Park, the Park provides unique aesthetic benefits to the surrounding communities. The impacts to the Park’s character are addressed on in the analysis of “Scale and Urban Design.” As indicated there, “the environmental education and resiliency center and greenway would be built to complement the natural topography of the Park and provide scenic views.” See also the analysis of “Parks, Open Space, and Recreation.” As indicated there, the environmental education and resiliency center would . . . result in conversion of approximately 4,075 square feet of lawn open space into the education and resiliency center. Although this change would represent a loss of lawn open space, there is ample passive and active outdoor recreational space throughout the park. The proposed environmental education and resiliency center would complement these existing outdoor recreational features. The project would enhance these benefits by improving surface water quality through floatables and sediment capture and disposal and stormwater filtration in

new wetlands. Refer to comment response PD-2, above, regarding the visual and noise buffering benefits of trees and the proposed plantings.

Note that GOSR and OPRHP have coordinated with USACE, USFWS, and USEPA since summer 2019 to reduce the project scope and address potential impacts.

The EA has been revised to follow a standard, full-page-text format. The HUD EA template tables are included at the end of the document for reference.

#### 5.4 Comment VW-4: Habitat Fragmentation

Commenters recommend that the new wetland trail to be constructed between NE and NW Ponds be positioned to have the least impact on habitat fragmentation to reduce the impact on existing habitat. Moreover, commenters call for the EA to describe the direct and indirect impacts of the proposed observation pavilion, kayak launch, and education center on the western side of Hempstead Lake, as well as the expansion or creation of new trails, and to describe the proposed strategy to reduce or minimize habitat fragmentation or loss.

[Abriado-Fandino 1; Ibman 1; Stilwell 13; Stilwell 19]

#### Response VW-4

As indicated in EA Table 7, the project would result in approximately 8 acres of net new impervious surfaces, of which 6.73 acres would be for the greenway, trails, gateways, and waterfront access. Refer to comment responses VW-1 and VW-3, above, for impacts on habitats. Most trail work would involve formalizing existing trails, such as paths to the kayak launch areas and down to the water.

**Table 7: Project Impervious Area Summary**

| <b>Project Component</b>                            | <b>New Impervious Area (Acres)</b> |
|---|------------------------------------|
| Dams, Gatehouses and Bridges                        | 0.201                              |
| NE and NW Ponds                                     | 0.810                              |
| Greenways, Trails, Gateways, and Waterfront Access* | 6.73                               |
| Environmental Education and Resiliency Center       | 0.26                               |
| <b>Total</b>  | <b>8.001</b>                       |

\*4.28 acres of the new impervious area will comprise existing compacted dirt trails that would be overlaid with semi-pervious crushed stone and stone dust

Approximately 5.2 acres of existing trails would be resurfaced, 2.3 acres of existing trails would be widened, and 0.8 acre of existing social trails would be formalized in areas already subject to heavy foot traffic by park users. With regard to tree removal on dams, such areas do not provide high quality habitat. With regard to habitat fragmentation where existing social trails would be formalized, tree or limb clearing to accommodate formalized trails would not result in fragmentation of mature forest or loss of the buffer between human activity and waterfowl/waterbirds. Moreover, the project would also create approximately 1.5 acres of upland forest within disturbed mowed grass areas. The Education Center would be constructed on an open grass field. In some locations of the park, existing topography provides views that would not be substantially affected by the limited tree removal.

## **6.0 LAND USE, PLANNING, AND OPEN SPACE IMPACTS**

### **6.1 Comment LU-1: There is no Park Plan**

Commenters express concern that the proposed project would transform a significant percentage of the natural portion of the Park into active recreational areas (trails, kayak launches or open grass vistas), industrial facilities (floatable collection and detention basins), or buildings (the resiliency office building). They state that Hempstead Lake State Park currently has no master plan to provide a vision of the Park and has not solicited public input on the major transformation of this last large natural area in southern Nassau County.

[CAC 8]

#### **Response LU-1**

There would be no change to designated land uses or use of the existing project site. OPRHP manages Hempstead Lake State Park, and the Park is not subject to local plans or zoning requirements. The proposed project would occur entirely within the Park's boundaries and would not result in inconsistencies with the Nassau County Master Plan or any other local plans and policies.

See comment response PO-3, above, regarding public outreach.

OPRHP considers undertaking discretionary master planning processes at the request of a Parks Region/Park Manager generally when significant new property has been acquired, a park is newly established, or when a park has been completely repurposed. The master planning process can range from 18 months to several years to complete and is not undertaken when a park is renovated, redeveloped, or when infrastructure is upgraded.

### **6.2 Comment LU-2: Conversion/Alienation of Parkland**

Commenters state that the proposed project components violate the public trust doctrine because parkland cannot be alienated for non-park purposes. Commenters state that the proposed features would require National Park Service approval for "conversion" of parkland to non-outdoor recreational use. Commenters state that that the northern ponds area should be designated as a Parks Preservation Area pursuant to New York Law governing state parks.

Commenters call for the proposed changes to the park to be thoroughly evaluated for any resulting impacts on the character of the Park, claiming that transformation of significant portions of Hempstead Lake State Park from natural park to non-park uses (such as a stormwater catchment facility) adversely affect the use of this property as parkland.

[Abriado-Fandino 1; Esposito-1, Larney 3; CAC 18; CAC 19]

#### **Response LU-2**

As the administering agency for the Land and Water Conservation Fund Act (LWCF Act) in New York and the sponsor of the project, OPRHP has the authority to undertake this project. The State is authorized to undertake projects, within the protected Park, funded by other sources and without the approval of the National Park Service provided they are projects that would otherwise be eligible for funding under the LWCF (LWCF Manual vol. 69 Chapter 3. C. a. page 3-7). Since the proposed project is for the betterment of the Park and in support of public outdoor recreation, it would be eligible for funding.

In the State of New York, the alienation and dedication of parkland is governed by the public trust doctrine. Under the public trust doctrine, the State holds municipal parkland in trust for the public and requires specific legislative approval before parkland can be alienated or used for an extended period for non-park purposes. See *Friends of Van Cortlandt Park v. City of New York*, 750 N.E.2d 1050, 1053-54 (N.Y. 2001).

However, the parkland alienation and dedication processes do not apply to State-owned parkland. Instead, State-owned parkland is governed by the legislative authority granted to State agencies in the Public Lands Law, the Parks Recreation and Historic Development Law, and the Environmental Conservation Law. See the *Handbook on the Alienation and Conversion of Municipal Parkland in New York*.<sup>1</sup> Because the proposed project includes improvements located entirely within Hempstead Lake State Park, the public trust doctrine does not apply.

Nevertheless, if the public trust doctrine were to apply to the proposed project, the improvements proposed serve a park purpose and are consistent with the types of incidental uses that the courts have upheld when applying the public trust doctrine to municipally owned parkland. See *Williams v Gallatin*, 128 N.E. 121, 121-23 (1920). For example, the stormwater catchment facility, noted by commenters, is intended to improve water quality throughout the Park and downstream, and the proposal would function as a park asset that preserves and increases the ecological performance of the natural areas throughout the Park to further the use and enjoyment of the Park for future generations.

Section 6(f) of the LWCF Act protects properties, such as parks and recreation areas, improved by LWCF funds from conversion to non-park uses. Specifically, section 6(f)(3) of the LWCF Act prohibits the conversion of property acquired or developed with grants from this fund to a non-recreational purpose without the approval of the National Park Service. Hempstead Lake State Park received LWCF funding for two projects. The first project was approved in 1977 and closed in 1979, amended in 2001. The second project was part of a region-wide grant involving several Long Island parks and included upgrades to the waste systems at Hempstead Lake State Park. This grant was awarded in 1979 and closed in 1984, amended in 1999. While the Park is still protected by Section 6(f)(3) of the LCWF Act, the State is allowed to undertake projects in the Park without approval of the National Park Service as long as the project would otherwise qualify for LWCF funding. Because the proposed project is for the betterment of the Park and in support of public recreation, the project would be eligible for LWCF funding. Because OPRHP is the administrating agency for the LWCF Act in New York State, it has the authority to undertake the proposed project.

See response to comment VW-3 regarding the character of the Park.

Article 20 of OPRHP Law authorizes the OPRHP Commissioner to designate a system of park preserves and park preservation areas. Essentially a preserve encompasses a whole park, and a preservation area is a limited area within a park preserved for its natural resource preservation with only passive recreation within that area. Both are rarely considered and are not proposed for this project.

## **7.0 CONTAMINATION AND TOXIC SUBSTANCES IMPACTS**

### **7.1 Comment CT-1: Perform Upland Soils Sampling and Analysis**

Commenters recommend that the EA include results of contaminant analyses from excavated soils and the potential impacts of reusing these sediments in wetland creation.

[Jacob 12; Stilwell 14]

#### **Response CT-1**

Pursuant to 24 CFR Part 50.3(i) and 24 CFR 58.5(i)(2), it is HUD policy that:

1. All property proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gasses, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property.

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<sup>1</sup> Available at <http://www.nysparks.com/publications/documents/AlienationHandbook.pdf>.

2. Environmental review of multifamily and non-residential properties shall include evaluation of previous uses of the site and other evidence of contamination on or near the site, to assure that occupants of proposed sites are not adversely affected by the hazards.
3. Particular attention should be given to any proposed site on or in the general proximity of such areas as dumps, landfills, industrial sites, or other locations that contain, or may have contained, hazardous wastes.
4. The responsible entity shall use current techniques by qualified professionals to undertake investigations determined necessary.

It is therefore essential that responsible entities, potential grant applicants, and other HUD program participants become familiar with the potential environmental issues involving property before leasing, optioning, and/or acquiring the property. Unknowing individuals or parties that acquire contaminated property with good intentions could face liability for clean-up costs under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), third party lawsuits, and costly delays in implementing the project.<sup>2</sup>

No known historical uses on the site that would have contributed to upland soil contaminants. The project area contains no sites listed on the NYSDEC Environmental Site Remediation Database, and it is highly unlikely that contamination from the nearest contaminated sites would have migrated to the upland portions of the project site. As such, previous uses of the site or nearby listed contaminated sites would not affect the planned use of the site as wetlands (24 CFR Part 50.3(i)(2,3)).

The NW and NE Ponds are the collection point for a highly developed suburban watershed. Pursuant to (24 CFR Part 50.3(i)(4)), qualified professionals took samples of the sediments in NW and NE Ponds. Ten sediment cores were collected, and each core sample was divided into segments representing (a) the surface to proposed dredging depth; (b) 0 to 6 inches below the proposed dredging depth (the post-dredging bottom to be exposed); and (c) 6 to 12 inches below the proposed dredging depth. These samples were analyzed, and the results are summarized in **Appendix T** of the EA. The samples indicate high concentrations of metals contamination, particularly for lead and zinc. Metals in general were found to be beyond NYSDEC's Class C contamination thresholds. Class C sediments, as described in NYSDEC's Technical & Operation Guidance Series, Section 5.1.9, are expected to be acutely toxic to aquatic biota and would likely be subject to more stringent dredging, management, and disposal requirements.

Approximately 5,365 net CY of dredging/excavation would be required in the NE Pond and NW Ponds. A permit would be required from NYSDEC for this activity in accordance with a NYSDEC Use and Protection of Waters Permit (6 NYCRR Part 608.2(a)); Freshwater Wetlands Permit (6 NYCRR Part 663); SPDES Permit (6 NYCRR Part 751.3(a)(6)); and Clean Water Act (CWA) §401 Water Quality Certification.

OPRHP submitted the Sediment Sampling Findings Report to NYSDEC for review. NYSDEC's response is included in **Appendix J** of the EA. NYSDEC stated that if it were to allow dredged and excavated material to remain on-site, the presence of contamination above Class C, and in some cases Class B, thresholds, would require additional testing for contaminant mobility and that a Toxicity Characteristic Leaching Procedure would be required for (dredge) locations with any samples with lead in exceedance of 420 parts per million. In addition, if dredged and excavated material were to remain on-site, NYSDEC would require submission of a Toxicity Characteristic Leaching Procedure analysis for any samples in which lead exceeded 420 parts per million to determine whether the proposed dredged and excavated material would exceed the hazardous waste thresholds of the Identification and Listing of Hazardous Wastes (6 NYCRR Part 371).

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<sup>2</sup> <https://www.hudexchange.info/environmental-review/site-contamination/>

However, NYSDEC also indicated that OPRHP could forego further testing if all dredged sediments were disposed off Long Island. OPRHP has committed to such disposal, as stated in the revised EA; therefore, further testing for purposes of on-site usage of dredge material is not proposed. OPRHP would conduct additional testing if required by the facility receiving the material or if such testing would otherwise be required during the permitting process.

OPRHP has developed a preliminary Sediment Management Plan, provided as **Appendix Z** to the EA. This plan was developed in accordance with NYSDEC Technical & Operational Guidance Service (TOGS) 5.1.9 to guide the dredging of sediment. The document details the BMPs for the management of soils based on the current site characterization. A more detailed plan would be prepared to incorporate permit conditions developed through the regulatory process. Additional details regarding sediment quantities, locations, and depths would be provided in a final Sediment Management Plan, which would be submitted to NYSDEC for review and approval as part of the permitting process.

BMPs that would be employed for the management of dredged materials include the construction method for removal of sediments, the handling and movement of sediments to a temporary dewatering location in the project area (to be determined during the permitting process), and methods to minimize transport of sediments during dredging beyond the dredge area (e.g., turbidity curtains and silt fencing). Pursuant to TOGS 5.1.9, dredging will be conducted in a manner that:

- Minimizes the resuspension of silt, oil, and grease and other fine particles
- Minimizes the amount of material disturbed or returned to the body of water
- Avoids damage to nearby wetlands and habitats
- Avoids exposing benthic organisms to more contaminated material

Dewatering of areas prior to dredging is also being considered as an option. Construction of a berm surrounding the dredge area for dewatering purposes may be feasible because of the amount of earth moving already taking place in the area. If dewatering is pursued, the environmental objectives listed above must still be achieved.

If temporary dewatering were necessary to conduct the dredging, the dewatered area would be minimized to the extent practicable. Dewatering is not expected to substantially interrupt stream flow. Dredging would also consider the potential seasonal restrictions on in-water work to avoid or minimize impacts on the life cycles of aquatic organisms. BMPs would minimize the potential for contaminants in the sediments to migrate during dredging and once the dredge materials are stored on-site in an appropriate containment location prior to transport to an off-Long Island permitted disposal facility.

To achieve the environmental objectives listed above at NE Pond, hydraulic dredging and barge overflow would not be allowed. Clamshell dredging or a similar method would be required for this site. At NW Pond, the area to be excavated is not submerged in water. The material could be excavated using methods similar to that used in upland excavation. Because the entire project would be subject to a Stormwater Pollution Prevention Plan, sediment and erosion control measures would be required to prevent the loss of sediment into adjacent surface waters (NYCRR Part 750). In addition, once excavated, the area may have standing water and in-water containment controls such as turbidity curtains must be used.

These controls would ensure that the construction activities would not affect the health and safety of occupants or conflict with the intended use of the property, and use of the site as wetlands would not be adversely affected by hazards (24 CFR Part 50.3(i)(1,2)). With implementation of BMPs, the proposed dredging would result in a minimal downstream increase in turbidity, sedimentation, or nutrient/contaminant inputs; limited impediments to flow or aquatic organism movements in tidal or non-tidal waterways; limited displacement or degradation of aquatic resources, including benthic communities; and would not adversely affect special-status species and their habitats. Biological resources in the dredging area would only be altered/diminished for a short, finite period, but would recover. Short-term impacts would be localized in specific areas and would not substantially affect or

diminish biological resources throughout the site. The proposed dredging would be temporary and result in short-term, less-than-significant, adverse impacts. Once completed, the post-dredging environment would benefit biological resources as a result of the permanent removal of contaminated sediments from this portion of the site.

The EA “Mitigation Measures and Conditions” section has also been revised to include the requirements of the preliminary Sediment Management Plan.

## **8.0 TRAFFIC AND AIR QUALITY IMPACTS**

### **8.1 Comment TR-1: Impacts of Maintenance**

Commenters stated that the EA fails to provide information on the traffic and air quality impacts that will result from routine maintenance of the proposed northern detention basins, trails, and newly created manicured areas of the park.

[Mendez 1; Price 1; Wood 1; CAC 11]

#### **Response TR-1**

As explained under “Transportation and Accessibility,” the proposed project would not result in substantial new vehicle trips or changes to traffic patterns. Therefore, a mobile source air quality impact analysis for the direct impacts of the proposed project was not deemed necessary. Routine maintenance of the proposed park features would not require a substantial increase in vehicle trips.

## **9.0 ALTERNATIVES**

### **9.1 Comment AL-1: Alternatives**

Several commenters ask for additional alternatives to be considered in the NEPA analysis, including (1) constructing the education center in a developed lot or an existing building elsewhere in the Mill River Watershed; (2) relocating the stormwater treatment facilities closer to its source at Hempstead Lake State Park to incorporate them into Hempstead High School Creek Restoration Project; (3) constructing an emergency spillway; partnering with the Center for Science Teaching and Learning at the Tanglewood Preserve to serve the proposed environmental education functions; and (4) implementing mechanisms to ensure the maintenance of catch basins that drain to the Mill River.

[McNiff 1; Rolston 1; Boyle 1; Landesberg 1; Weiner 3; Weiner 5; Stern 3; Stern 4; Jacob 4; Jacob 5; Jacob 10; Jacob 11; Jacob 13; Musumeci 3; CAC 13; CAC 14; CAC 16; CAC 17]

#### **Response AL-1**

With regard to relocating the stormwater treatment facilities closer to their source at Hempstead Lake State Park, the proposed project lies at the collection point for much of the upstream watershed. As such, this location has been degraded by stormwater sediments/floatables from the watershed. As stated in the project purpose and need, the proposed project would improve the stormwater impoundment capacity in the Park by replacing NW Pond Dam and improving stormwater management through the restoration of the flow control at Hempstead Lake Dam. However, the proposed project would not preclude additional projects upstream in the watershed that are being managed by other entities.

Regarding alternatives for the proposed stormwater treatment basin and wetland (i.e., relocating the stormwater treatment facilities elsewhere in the watershed, placing the stormwater treatment facilities farther upstream near Hempstead High School, or replacing the proposed basin with a mechanism to ensure the maintenance of catch basins that drain to the Mill River), the NEPA analysis discusses alternatives in **Appendix X**, including a No-Build Alternative and other off-site alternatives. As stated in the alternatives discussion, the numerous catch basins and other sources of nonpoint pollution (floatables,

sediment, and nutrients) in an urban watershed covering more than 10,000 acres present an insurmountable challenge to provide equivalent levels of treatment throughout the watershed because of the absence of space for the required treatment facilities without conflicting with existing land use, utilities, and transportation networks. Shifting the stormwater basin to a location within the Hempstead High School property is constrained by existing recreational facilities, parking lots, buildings utilities, and steep slopes. Impacts on this area would both add to the project cost and possibly require relocation or reconstruction of athletic fields elsewhere. Without direct support from the Hempstead Union Free School District, this alternative was deemed impractical for further consideration.

The LWTB Project and Resiliency Strategy evaluated each location and project site to determine where the proposed interventions would best meet project needs. The environmental education and resiliency center component is required as part of sub-recipient agreement between OPRHP and GOSR.

During the design process, multiple design options for different aspects of the design were considered. The design options were developed through discussions with project partners, input from community members, and feedback from field meetings with NYSDEC wetland representatives. Concepts were presented at public meetings and at meetings with the NYSDEC. Designs were modified based on location, design concept, limitations, and constraints to avoid and minimize impacts on open waters and wetlands. The list of design changes adopted within the proposed project are listed below.

- The management plan for the wetland detention ponds includes provisions for partial, selective sediment removal as needed, so that wetland vegetation can remain viable and continuous in the basins even during maintenance events. See also response to comment PD-7 regarding the operational plans to be included in the project.
- Connecting watercourses and wetlands between the NE and NW Ponds will be kept largely intact, with modifications to remove invasive species and areas of stagnant water, so the connecting waterways can remain as functioning wetlands.
- The enhancement of existing, degraded wetland areas is included in the design to return these wetlands to viable, sustainable, and healthy systems (e.g., removal of existing debris covering shoreline wetland areas).
- Selective areas for wetland tree plantings in wet meadow areas with appropriate elevations will be used to establish new forested wetlands to mitigate loss of forested areas in the wetland detention pond areas.
- Wetland enhancement and construction will be limited to areas within the existing ponds because of the constraints imposed by the basin-like and steep shoreline configuration of the ponds. Extending into shoreline areas requires extensive earth moving and removal of natural woodlands; limiting the work within pond basins avoids substantial impacts that would occur if pond shorelines were expanded.
- An Invasive Species Management and Native Species Enhancement Plan is being incorporated into the maintenance plan for the proposed action. The Invasive Species Management Plan and Native Species Enhancement Plan will provide for the identification, monitoring, and removal of targeted invasive species, as part of the efforts to improve wetland and upland habitats in the NE and NW areas. See also response to comment PD-6 regarding the operational plans to be included in the project.
- The design of wetlands was modified during the design process to minimize disturbance of contaminated sediments and to provide for capping and encapsulation of potentially contaminated sediments. These measures will help to reduce the potential for resuspension and release of sediments and associated contaminants during future storm events, providing future protection of the ecosystem and water quality.

Designs were further modified in summer of 2019, during which OPRHP worked with USACE through the Joint Permit Application. An earlier-proposed new wetland and sediment basin were removed from

the work proposed at NE Pond, further reducing impacts. The above measures and the overall beneficial impacts of the project would provide an overall ecological uplift to the wetlands and open waters of NE and NW Ponds. The proposed project would result in a net loss of wetlands and open waters, but it would substantially improve the short-term conditions and long-term functionality of wetland areas, with associated benefits to water quality, wildlife habitat, and community values. Pursuant to the Joint Permit Application process, OPRHP has prepared a draft compensatory mitigation proposal with USACE.

Regarding the design of the berms, slopes were established at 1 to 3 or 1 to 4 to provide structural stability for wetlands containment while minimizing the surface area (and associated environmental impacts) of the berm. In locations where slopes would exceed these ratios, coir mat or fiber logs would be installed. Sample berm cross-sections and explanatory text have been added to the EA.

Sediment basins were selected as the most effective and efficient method to reduce wetlands sedimentation because sediments can be regularly removed. The wetlands beyond (downstream of) the sediment basins are intended for nutrient removal and water quality enhancement. This point has been clarified in the EA "Project Description."