

Appendix M  
8-Step Wetlands Analysis



**FLOODPLAIN AND WETLANDS 8-STEP PROCESS IN ACCORDANCE WITH  
EXECUTIVE ORDER 11988: FLOODPLAIN MANAGEMENT AND  
EXECUTIVE ORDER 11990: WETLANDS**

New York Governor's Office of Storm Recovery

Hempstead Lake State Park Project

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The New York State Governor's Office of Storm Recovery ("GOSR") received a funding application from the New York State Department of Parks, Recreation and Historic Preservation (subgrantee) for the proposed Hempstead Lake State Park Project located in the Town of Hempstead, Nassau County, New York. The proposed project area encompasses Hempstead Lake State Park. The Park is located on the northern end of the Mill River watershed and includes the largest body of fresh water in Nassau County, namely Hempstead Lake, as well as several smaller ponds including: Northeast (NE) Pond; Northwest (NW) Pond; McDonald Pond; South Pond; and Schodack Pond. In addition to its water assets, the park also provides one of the largest continuous tracks of forested land present in southern Nassau County.

The Proposed Action consists of four (4) components intended to improve stormwater management, enhance natural ecosystems, provide connectivity among diverse populations, enhance safety, and promote education programs at the Park. The Proposed Project components are as follows: "Dams, Gatehouse and Bridges;" "Northwest and Northeast Ponds;" "Environmental Education and Resiliency Center;" and "Greenways, Gateways and Waterfront Access."

- The Dams, Gatehouses and Bridges component would restore the operation of the dams and associated water flow control infrastructure within the Park to improve stormwater management, include dam improvements to meet current regulatory standards, gatehouse repairs, and installation of pedestrian bridges over park water ways.
- The Northeast and Northwest Ponds component would involve the installation of floatables catchers and sediment basins at pond inlets, as well as creation of stormwater filtering wetlands and dredging of the ponds to remove debris, improve water quality and increase impoundment capacity.
- The Environmental Education and Resiliency Center component would comprise construction of a new, two-story, approximately 8,000-square-foot building west of Lakeside Drive. The focus of the Education and Resiliency Center would be on environmental stewardship, and climate change adaptation resiliency.
- The Greenways, Trails, Gateways and Waterfront Access component would comprise expansion and improvement to the existing path system within the park, including connection points to the surrounding neighborhoods, as well as installation of observation areas, piers, and kayak launches along Hempstead Lake.

This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in Presidential Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands), and the implementing regulation found at 44 CFR Part 9,

Floodplain Management and Protection of Wetlands. These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains or wetlands.

Additionally, all HMGP grant-funded projects carried out in the floodplain or affecting the floodplain must be coordinated with the local floodplain administrator for floodplain development permit and the action must be undertaken in compliance with all relevant, applicable, and required local codes and standards and thereby will reduce the risk of future flood loss, minimize the impacts of floods on safety, health, and welfare, and preserve and possibly restore beneficial floodplain values as required by EO 11988.

**Step ONE: Determine if proposal is in a floodplain or wetland.**

According to FEMA, Flood Insurance Rate Map (FIRM) panels 36059C0217G and 36059C0220G (effective September 11, 2009), the park is located within an area of minimal flood hazard, designated by FEMA as Zone X, which is outside of both the 1 percent and 0.2 percent annual chance floodplain. It is therefore not located within the 100-year or 500-year floodplain (see Figure 3).

NYSDEC-regulated wetland areas are associated with each of the waterbodies and vegetated wetlands in the project area. Each waterbody is a Class 1 wetland and identified as L-1, L-2, and L-3 (**Figure 22**).

Wetland assessments were conducted at the two northern ponds in fall 2016. NYSDEC staff conducted a wetland delineation at the NE and NW Ponds in May 2017 to establish the limit of NYSDEC-regulated wetlands in this portion of the project area. NYSDEC staff flagged wetland limits in the field, and Cashin Associates surveyed them. The field assessments indicate that there are more extensive vegetated wetlands associated with each pond than were included in the NWI mapping. Approximately 18.09 acres of emergent wetlands and 2.51 acres of scrub shrub wetlands are associated with NW Pond and 1.24 acres of emergent wetlands, 2.32 acres of scrub shrub wetlands, and 2.18 acres of forested wetland occur at NE Pond, for a total of 26.34 acres of vegetated wetlands.

**Step TWO: Involve public in decision-making process (notice).**

Because a portion of the Proposed Action would be located in a wetland, GOSR published an early notice that allows the public an opportunity to provide input into the decision to provide funding for the project activities in this area. The notice was published on June 15, 2016, and is attached hereto.

Public involvement occurred during the public outreach for the project and has occurred as part of the EA process. The New York State Office of Parks, Recreation and Historic Preservation has coordinated directly with NYSDEC to vet the design of the proposed wetland modifications, and GOSR has informed the U.S. Army Corps of Engineers of the proposed action in wetlands. GOSR has consulted with the NYSDEC Natural Heritage Program, as well as with the USFWS Service, to determine project impacts to special-status species. Additionally, following completion of the detailed design process, GOSR would provide a copy of the EA to NYSDEC and USFWS and notify these regulatory agencies of GOSR's intent to modify land located in a wetland.

After the early public notice and comment period was complete, GOSR assessed, considered, and responded to the comments received individually and collectively for the project (see Appendix N), then proceed to Step Three.

**Step THREE: Determine if there is a practicable alternative.**

The No Action Alternative was analyzed to determine its practicability. No other alternatives were analyzed.

***No Action Alternative***

Under the No Action alternative, there would be no work undertaken on the dams, bridges, ponds, environmental education and resiliency center, or greenway and trails. There would be no impacts to existing wetlands. Floatables, sediment, and other pollutants would continue to accumulate in the Northern Ponds. There would be no loss of existing wetlands, nor restoration or creation of new wetlands.

This alternative does not satisfy the Purpose and Need of the proposed action, which is to improve stormwater management, enhance natural ecosystems, provide connectivity among diverse populations, enhance safety, and promote education programs at the park.

**Step FOUR: Identify adverse and beneficial impacts.**

GOSR has evaluated the alternatives to the proposed project activities in wetlands, and has determined that the proposed activities must take place in wetlands.

The NW and NE Ponds portion of the project site comprise freshwater wetlands and waterbodies that would be disturbed by project. On-site wetland creation and habitat enhancement is also proposed to mitigate impacts. The extent of construction activities/disturbance to wetlands and ponds was quantified.

In total, project work in the NW and NE Ponds would remove 2.87 acres of wetlands and open water and create 1.15 acres of wetlands and open water from existing uplands, for a net loss of 1.72 acres.

- NW Pond: The project would remove 0.78 acre of emergent and scrub-shrub wetland and 0.2 acre of open water and add 0.17 acre of emergent wetland and open water from uplands for a net loss of 0.63 acre.
- NE Pond: The project would remove 1.82 acres of open water and 0.25 acre of a mix of emergent, scrub shrub and forested wetland. The project would create 0.35 acre of open water and 0.63 acre of emergent wetland from uplands for a net loss of 1.09 acres.
- NE Pond: The project would convert 1.13 acres of a disturbed forested wetlands to emergent wetland and shallow open water, and permanently fill 0.13 acre, for a net loss of 1.26 acres of forested wetland.

An alternatives analysis and wetland functional assessment was prepared and is included in **Appendix F**. 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 and agency input. The proposed project as presented has avoided and minimized impact to the extent possible, while remaining functional to meet the project purpose and need. The wetland functional assessment was performed to evaluate potential changes to wetland functions with four separate wetland systems affected by the proposed project. Collectively, the planned wetland changes associated with the project would result in a net benefit and functional uplift within the collective wetland systems of the northern ponds to offset the permanent and temporary impacts to the wetlands and open waters in the project area. The functional assessment indicates that no additional project measures are warranted to achieve a goal of no-net-loss of wetland functions (**Appendix F**).

The creation of additional recreational trails would not have direct impacts on wetlands and open water.

**Step FIVE: Mitigate adverse impacts.**

A Freshwater Wetlands Permit, Protection of Waters Permit, and 401 Water Quality Certification from NYSDEC would be required to physically disturb the wetlands and open waters. Prior to construction, the project sponsor would be required to secure a Clean Water Act Section 404 Individual Permit from the U.S. Army Corps of Engineers. NYSDEC and the U.S. Army Corps of Engineers will determine the need for compensatory mitigation during the permitting process; however, the net gain in wetland functions and services through the implementation of the project is likely to be sufficient to offset impacts.

**Step SIX: Re-evaluate alternatives.**

GOSR has reevaluated the proposed action and determined that the Hempstead Lake State Park Project is still practicable considering its effects on wetlands. As indicated in Step 5, a Freshwater Wetlands Permit, Protection of Waters Permit and 401 Water Quality Certification from NYSDEC would be required to physically disturb the wetlands. Prior to construction, the project sponsor would be required to secure Clean Water Act Section 404 Authorization from USACE. The need for compensatory mitigation will be determined by NYSDEC and USACE during the permitting process.

As further detailed in **Appendix F**, although the selected project will result in a net loss of 1.72 acres of existing wetlands, environmental analyses indicate that the proposed action will offset that loss by improving the quality and function of existing wetlands, increasing and improving wetland buffers, and improving water quality and environmental conditions throughout the park and downstream Mill River. Offsetting measures incorporated into the project design will provide an overall ecological uplift to the NW and NE Pond areas, and substantially impact the short-term conditions and long-term functionality in the wetland areas, with associated benefits to water quality and wildlife habitats.

The public access components of this project will allow public use in areas of the park now essentially unavailable to the public, and provide substantial benefits to community value in terms of opportunities for passive recreation activities and health value. The ecological and wetland benefits will strengthen the area's long-term resiliency to future storm events. Therefore, the project would result in long-term beneficial impacts to wetland quantity, quality, and function, as well as to associated habitat.

GOSR has also reconsidered the alternatives discussed in Step Three and determined the best practicable alternative is the proposed action. The No Action alternative is not practicable because it would not improve stormwater management, enhance natural ecosystems, provide connectivity among diverse populations, enhance safety, and promote education programs at the park. Although the No Action alternative would not result in the loss of wetlands or the temporary impacts to wetlands associated with construction, the No Action Alternative is not preferred because it would not improve the wetlands quantity, quality, and function, nor would it improve the associated habitats.

This section may be modified following public comment on the EA and this 8-step evaluation if substantive comments are received regarding wetland impacts.

**Step SEVEN: Announce and explain decisions to the public (notice).**

Step 7 requires that the public be provided with an explanation of any final decisions that the proposed action in a wetland is the only practicable alternative, potential impacts of the proposed action on wetlands, and associated mitigation measures. In accordance with 44 CFR 9.12, this notice is provided with the notice of availability of the EA for public review and comment.

The public would be provided a “Notice for Final Public Review of a Proposed Activity in a Wetland” either through the Notice of Availability of the EA or a standalone notice. Under each option, the public would have the opportunity to review and comment on the determination that the proposed action is practicable, and the potential impacts and mitigation measures.

**Step EIGHT: Implement proposal with appropriate mitigation.**

GOSR will ensure that this plan, as modified and described above, is executed and that necessary language is included in all agreements with participating parties. Further, GOSR will see that all mitigation measures described in Step 5 of this 8-step review and in the EA will be implemented.

