RESOURCE RESTORATION PROJECT
PLAN

NYC Parks Bronx River Island Proposal to NYSDEC
Freshwater Oxbow Wetland Restoration in Bronx Forest Park

Background

The following Resource Restoration Project (RRP) is proposed to resolve the State of New York’s Natural Resource Damages (NRD) Claim against Con Edison for the release of petroleum into the Bronx River on September 9, 2015. The release and resolution of the NRD claim is the subject of Order on Consent R2-20150929-516. Implementation of the following RRP would resolve Con Edison’s liability for injury from the subject release.

Project Description

The New York City Department of Parks and Recreation (NYCDPR), Natural Resources Group (NRG) is currently designing a channel restoration project for the Bronx River in the Bronx Forest Park north of Kazimiroff Blvd. at the Bronx River “Island.” The Island was created in the 1930-50s during the construction of the Bronx River Parkway when a large natural meander was truncated and a new channel was excavated. The aim of this project is to restore a dominant single, meandering channel through the forest, increase in-stream habitat diversity, help reduce floatable debris accumulation, plant native riparian forest species, manage invasive species, and control bank erosion (see location map in Figure 1 below). This project is funded through NYCDPR Million Trees Program.

Adding $50,000 to the project will enable the expansion of the restoration effort to the channel on the east side of the Island to create an oxbow floodplain wetland of approximately 0.7 acres. This planned restoration work will include moderate regrade. The restoration funds will allow construction of a more complex natural system that is resilient to flooding through the installation of log structures (e.g., weirs, sills, deflectors, snags, etc.) that create pools and cover for aquatic species and thus enhance in-stream habitat and complexity (e.g., trap gravel, confine channel, create spawning habitat, etc.), and the planting of approximately 200 native trees and shrubs (#1 container size), and 3,214 herbaceous plants (quart container size). In addition, approximately 5 lbs. of native seed mix will be applied to increase biodiversity and provide habitat for native wildlife.

We are currently in the design and permitting phase of this project. This restoration funding will allow the incorporation of items into the design and construction that would not otherwise be included in the project. Contractor procurement and construction is expected to occur from 2017-2018.
**Approach**

The NRG Project Manager will lead this work and carry out the following tasks:
- Manage project and contractor to ensure design and planting plans are appropriate for this site
- Assist with developing final designs of the east channel conversion into an oxbow riparian wetland
- Ensure fine grading and planting of native wetland plants occurs along the east side channel of the river
- Ensure log structures in the east channel of the river are installed properly

The Contractors will be responsible for the following tasks:
- Design consultant: Complete final design and construction documents
- Contractor: Construct project (grading and in-stream structures).

**Deliverables and Schedule (Target Completion)**

- Design and Construction Documents (January 2017)
- Bid Award (November 2017)
- Construction Complete (May 2019)

Budget Estimate for the In-Stream Structures and Planting Materials for the Freshwater Oxbow Wetland in Bronx Forest Park

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>COST PER UNIT</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log structures</td>
<td>2*</td>
<td>$15,000.00 - $20,000.00</td>
<td>$30,000.00 - 40,000.00</td>
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<tr>
<td>Native trees and shrubs (#1 container size)</td>
<td>214</td>
<td>~$5.25</td>
<td>$1,123.50</td>
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<tr>
<td>Herbaceous plants (quart container size)</td>
<td>3214</td>
<td>~$2.45</td>
<td>$7,874.30</td>
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<tr>
<td>Native seed mix</td>
<td>5 lbs.</td>
<td>Lump sum</td>
<td>$1,000.00</td>
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<tr>
<td><strong>GRAND TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$50,000.00</strong></td>
</tr>
</tbody>
</table>

*Once the cost per log structure is determined plant quantities will be adjusted to total $50,000.
Figure: Proposed design plan for the restoration of the channel at the Bronx River Island. Restoration funding of $50,000 is proposed to be used to add in-stream habitat structures and planting to the proposed oxbow wetland depicted in this map.
RESPONSE TO PUBLIC COMMENTS RECEIVED

No comments received.
Appendix A
Executed Order on Consent:
Consolidated Edison Company of New York
Case No. R2-20150929-516