

DOI-NFWF

# 42279 Building Ecological Solutions to Coastal Community Hazards

NJ DEP Office of Coastal and Land Use Planning

Municipal Project Narrative

## **Secaucus**

**Scope:** The Secaucus NFWF funded activities are the design, development of construction documents, permitting, bidding, restoration and monitoring of three critical tidal drainage ditches in response to damage caused by Hurricane Sandy and the need to improve long-term resiliency for coastal communities.

**Goals:** The goals of these activities are habitat enhancement/creation, shoreline stabilization, tidal flood mitigation, stormwater management, public outreach and education, and overall additional resiliency for the upland area beyond the site. The project will provide insight into the issues and benefits of using ecological solutions at such conditions. Public education and outreach will encourage new projects in the area.

**Project Partners:** NJ Department of Environmental Protection, National Wildlife Federation, Barnegat Bay Partnership, Partnership for the Delaware Estuary, Stevens Institute of Technology, Secaucus City, Remington, Vernick and Aranco

### **Project Funding:**

DOI NFWF Grant

Secaucus Match

### **Project Design:**

Three tidal drainage swales will be cleared of debris, inappropriate vegetation and soils and restored to proper flow levels. The ditch cleaning activities are in intertidal/subtidal shallows between Elev. 3.25 and Elev. -6.62 NAVD 88 and deemed to be “new dredging” as they don’t comply with the definitions for maintenance dredging nor environmental dredging. The activities will be mechanical ditch cleanings at ditch bottoms, with sediment removal only sufficient to create positive stormwater flow and will not exceed a depth of 4’ below mean low water (-6.62 NAVD88). All construction activities shall be performed from the adjacent parking areas and/or upland properties. The proposed construction equipment (i.e. crane and/or long arm excavator) shall reach over the banks in order to prevent any disturbance to wetlands and areas outside of the channel/ditch. Sediment will be loaded directly into lined trucks and transported to a NJDEP approved facility for disposal or re-use.

Ditch #1 is located north of 1 Meadowlands Parkway, Extended Stay America, at the intersection of Riverside Court and the entrance and exit ramps for Route 3 westbound lanes. Ditch #1 is approximately 375’ long by 50’ wide.

Ditch #2 is north of 15 Meadowlands Parkway, Red Roof Plus, south of the Marina parking area on Block 159, Lot 1. Ditch #2 is approximately 325’ long by 50’ wide.

Ditch #3 is between 43 Meadowlands Parkway, WWOR 9, and 45 Meadowlands Parkway, Osprey Cove Apts, within Snipes Park, Block 21 Lot 3.01. Ditch #3 is approximately 335' long by 50' wide.

**Value:** These activities take steps towards providing long-term ecological solutions to improving the water quality of runoff to the Hackensack River, while also enhancing the resiliency of the storm water management systems. Three tidal drainage swales will be cleared of debris, inappropriate vegetation and soils and restored to proper flow levels. They also initiate the ecological restoration of shorelines along the Hackensack River in an area that includes significant opportunity for additional shoreline restoration.

**DEP and USACE Permit Approval Process:**

DEP Coastal GP 24 – Habitat creation, restoration, enhancement and living shorelines activities

DEP Waterfront Development

DEP Tidelands License

CAFRA (for activities above mean high water)

Water Quality Certificate

Green Acres Review (for compliance with Green Acres approved usage)

USACE Nationwide Permit #27

The permits reflect additional work funded by other sources in order to reduce permit fees and review time.

**Monitoring:** A monitoring plan will provide for documenting existing site conditions, monitoring during implementation, and post implementation monitoring through Jan 2018. Citizen scientist monitoring may be provided by locals.

**Project Schedule**

The implementation is anticipated to start in March 2017 and end in May 2017.

**Associated Projects:** Secaucus has funding for the restoration of the Public Safety Marina and dredging of the dock areas to mitigate damage from Super-Storm Sandy. This project has been coordinated with the NFWF project.

**Detailed Project Activities:**

The ditch cleaning activities are in intertidal/subtidal shallows between Elev. 3.25 and Elev. -6.62 NAVD 88 and deemed to be “new dredging” as they don’t comply with the definitions for maintenance dredging nor environmental dredging. The activities will be mechanical ditch cleanings at ditch bottoms, with sediment removal only sufficient to create positive stormwater flow and will not exceed a depth of 4’ below mean low water (-6.62 NAVD88). All construction activities shall be performed from the adjacent parking areas and/or upland properties. The proposed construction equipment (i.e. crane and/or long arm excavator) shall reach over the banks in order to prevent any disturbance to wetlands and areas outside of the channel/ditch. Sediment will be loaded directly into lined trucks and transported to a NJDEP approved facility for disposal or re-use.

Ditch #1 is located north of 1 Meadowlands Parkway, Extended Stay America, at the intersection of Riverside Court and the entrance and exit ramps for Route 3 westbound lanes. Ditch #1 is approximately 375' long by 50' wide. A floating turbidity barrier, Type 1, 102 LF will be installed between the mouth of the ditch and the Hackensack River. The excavation and disposal of sediment will be 480 CY. Coir erosion control matting, 183 SY, will be installed along with planting of 320 units of 2" plugs of *Spartina Alterniflora* and 315 units of 2" of *Spartina Cynosuriodes* at three areas on the sides of the ditch, each area approximately 40-60' long by 10-12' wide.

Ditch #2 is north of 15 Meadowlands Parkway, Red Roof Plus, south of the Marina parking area on Block 159, Lot 1. Ditch #2 is approximately 325' long by 50' wide. A floating turbidity barrier, Type 1, 60 LF, will be installed between the mouth of the ditch and the Hackensack River. The excavation and disposal of sediment will be 350 CY. Coir erosion control matting, 46 SY, will be installed along with planting of 80 units of 2" plugs of *Spartina Alterniflora* and 80 units of 2" of *Spartina Cynosuriodes* at one area on the side of the ditch, approximately 50' long by 10' wide.

Ditch #3 is between 43 Meadowlands Parkway, WWOR 9, and 45 Meadowlands Parkway, Osprey Cove Apts, within Snipes Park, Block 21 Lot 3.01. Ditch #3 is approximately 335' long by 50' wide. A floating turbidity barrier, Type 1, 65 LF, will be installed between the mouth of the ditch and the Hackensack River. The excavation and disposal of sediment will be 330 CY. Two tidal valves will be installed on existing pipes.