

NEW HAVEN CITY PLAN COMMISSION ADVISORY REPORT

RE: RESOLUTION OF THE CITY PLAN COMMISSION approving the 2014 annual report on the 2011 Natural Hazard Mitigation Plan update (City Plan Director)

REPORT: 1514-14

ADVICE: Approval

BACKGROUND

The Federal Disaster Mitigation Act of 2000 (DMA) requires local communities to have an approved mitigation plan, which is updated once every five years in order to be eligible to receive Post-Disaster Hazard Mitigation Grant Program (HMGP) grants and Pre-Disaster Mitigation (PDM) program project grant funds. Once a community has a FEMA-approved hazard mitigation plan, it becomes eligible to apply for project funds for mitigation activities (See Section 322 of DMA).

PLANNING CONSIDERATIONS

The primary reason to update the Natural Hazard Mitigation Plan is to identify changes in scheduling, cost and scope of projects to protect New Haven's shorefront areas for the next five years and to meet federal requirements. New Haven's Natural Hazard Mitigation Plan (HMP) was formally adopted by the City in 2005 and approved by the Federal Emergency Management Agency on October 4, 2005. This plan has subsequently been updated at five year intervals, most recently in 2011. Due to time constraints, staff could not prepare annual updates to this plan in the past four years. The information presented here will also be reflected in the full update that will be prepared next year to meet statutory deadlines.

Major projects identified in the 2011 HMP Update which have been accomplished are the reconstruction of seawall at the Long Wharf Park drainage outlet and the demolition of the Pond Lily Dam and the restoration of the surrounding natural area.

The list below identifies projects to be completed over the next five years and their current status, and the attached table gives further information on their status and anticipated completion dates.

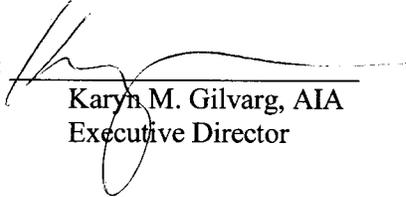
- Morris Cove Seawall
- Brewery Square Seawall
- River Street Seawall
- Morris Cove Storm Sewer Modification
- Downtown Storm Sewer System Upgrade
- Fort Hale Park Drainage Outlet Rehabilitation
- Long Wharf Park Shoreline Restoration
- East Shore Park Shoreline Stabilization
- Criscuolo Park Seawall
- Front Street Park Riprap Repairs
- Lighthouse Point Park Carousel Building Relocation
- Fort Hale Park Shoreline Stabilization

ADVICE

The Commission finds adoption of the 2016 Natural Hazard Mitigation Plan update in the best interest of the City and recommends its adoption via this Resolution.

ADOPTED: January 20, 2016
Edward Mattison
Chair

ATTEST:


Karyn M. Gilvarg, AIA
Executive Director

Summary of Projects in 2016 Hazard Mitigation Program Update (HMP) CDBG-DR Funded

Project	Description	Status	Estimated Cost	Permits
Morris Cove seawall	Installation of sheet pile seawall in front of several homes damaged by Irene and Sandy.	Conceptual design of project has been reviewed by DEEP. Project completion estimated at September 2017.	\$1.8 million CDBG-DR	Requires approvals from US Coast Guard (Captain of Port), Army Corps and local permits.
Brewery Square seawall (public)	Installation of sheet piling 18 inches outside of the existing seawall and restoration of the public walk area along the shore	Project has been designed and approved by the State DEEP. Project completion estimated late 2016.	\$988,000 CDBG-DR	US Coast Guard (Captain of Port) approval has been granted for this work. Local City Plan review required
River Street seawall	Shoreline stabilization along city property to prevent further erosion along the Quinnipiac River including sections of steel bulkhead and revetments with public access. Wetlands restoration has been eliminated in a modified scope.	Concept plan being developed by Roberge Associates scheduled for April 30, 2016 completion. Funding source for construction: TBD.	Analysis and design budget: \$342,000 CDBG-DR Construction budget: \$3 million (preliminary)	DEEP and local permits required
Long Wharf Park Shoreline Restoration	Install bulkhead along shoreline to prevent flooding of park and adjacent roadway. Repair damage to park from Hurricanes Irene and Sandy. Restore to pre-Hurricane Irene conditions.	Preliminary concept has been developed.	\$500,000 CDBG-DR	DEEP, Army Corps and local permits required.
Downtown Stormwater Modeling and Drainage System Improvements Project	Hydraulic study of the downtown area including Union Street and the Route 34 underpasses. The result of this study will inform the sewer system improvements to be made.	Engineering and City Plan staff will review options from the detailed modeling study. Model completion anticipated mid-2016. Sewer system improvement design completion is anticipated by September 2017.	\$2 million CDBG-DR.	May require DEEP approval and local permits
Downtown Green Infrastructure	Installation of green infrastructure within the downtown drainage area to alleviate pressure on the storm sewer system.	Siting of green infrastructure to be completed by February 2016	\$2.5 million CDBG - DR	Local permits.

**Summary of Projects in 2016 Hazard Mitigation Program Update (HMP)
Projects Not Funded via CDBG-DR**

Project	Description	Status	Estimated Cost	Permits
Fort Hale Park drainage outlet rehabilitation	Restoration and silt removal from an existing drainage channel. Requires access to the Armed forces Reserve Center but would solve a drainage problem for residents near the USCG facility.	Draft design has been developed	\$150,000 – Funding for implementation TBD	Requires DEEP approval, US Coast Guard and Federal GSA agreements for access as well as local approvals
Morris Cove Drainage Improvement Project	Redirection of existing drainage to improve conveyance of stormwater flow.	Preliminary designs have been developed for a relief sewer in Morris Causeway.	\$400,000. Funding: TBD.	Local permits.
East Shore Park shoreline stabilization	Living Shoreline solutions are being studied, including: segmented sills with marsh fringe, regrading and vegetating waterfront slopes with armored toe, and improving public access to the waterfront.	Study underway	\$145,000 – study only	DEEP, Army Corps and local permits required
Criscuolo Park seawall	Install wall along shoreline of park to prevent flooding of park.	Some preliminary concepts have been developed.	\$540,000	DEEP, Army Corps and local permits required
Front Street Park riprap repairs	Repair of existing riprap and seawall.	No work done to date.	\$125,000	DEEP, US Coast Guard (Captain of Port) and local permits required.
Lighthouse Point Park Carousel Building relocation	Relocate existing Carousel Building to higher elevation in park to eliminate any future flooding of building.	Preliminary exploration only.	\$2.75 million (ballpark estimate) Funding source, timing and amount, TBD	Federal, State and local permits required.
Fort Hale Park shoreline stabilization	Install riprap and other shoreline stabilization measures.	No work done to date.	\$225,000	DEEP and local permits required.

DEEP – Connecticut Department of Energy and Environmental Protection.
Army Corps – US Army Corps of Engineers

**Projects Completed Since 2011 HMP Update
CDBG-DR and Non-CDBG-DR Funding**

Project	Description	Cost
Reconstruction of seawall and soil stabilization at Long Wharf drainage outlet	Work completed in 2015 using City funds.	\$170,000
Pond Lily Dam removal	Physical dam removal completed in 2015 under the supervision of Save the Sound on land owned by the New Haven Land Trust with grants from the U.S. Fish and Wildlife Service and DEEP. Work underway to redirect stream alignment, monitor impact on other remaining infrastructure, and re-grade and vegetate exposed soils.	\$661,500 (federal grant)
West River Tide Gates	Three self-regulating tide gates replaced three of the existing wooden timber flap gates. This project restored tidal flows to 80 acres of salt marsh, provided fish passage, and improved upstream water quality. Two pedestrian bridges were built upstream of the tide gates to maintain public access to the site. This project was administered by Save the Sound through funding from the American Recovery and Reinvestment Act.	\$1.6 million (federal grant)