

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Initial Notification Letters**



DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
NEW ENGLAND DISTRICT  
696 VIRGINIA ROAD  
CONCORD MA 01742-2751

February 21, 2017

Planning Division

Mr. Tom Chapman  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, New Hampshire 03301

Dear Mr. Chapman:

The U.S. Army Corps of Engineers New England District (USACE) was recently provided funding to conduct a feasibility study, and has subsequently entered into a cost-sharing agreement with the Connecticut Department of Energy and Environmental Protection (DEEP), to investigate opportunities to address flood risk management, coastal storm risk management and other related purposes within New Haven and Fairfield Counties in Connecticut. Due to the broad scope of the study and large size of the study area, advanced coordination will be critical in developing an appropriate scope of work as well as conducting the study within the mandated three-year study period. Accordingly, we are hereby notifying you of this study to both inform you of our efforts as well as elicit any initial feedback you wish to provide at this time.

The study area includes about 1,700 square miles, ranging from agricultural/rural towns, to moderately developed suburbs, to densely populated cities, and stretching from inland riverine watersheds to coastal communities. Consequently, as a part of the of the plan formulation process we are currently focusing our efforts on identifying the most significant problems within the study area and refining our scope to include those problems where there is the greatest opportunity for the Corps to improve upon those conditions and/or reduce damages.

Should you have any questions, comments or concerns at this time, please contact Ms. Grace Moses, of the Environmental Resources Section at (978) 318-8717, or by e-mail at [C.Grace.Moses@usace.army.mil](mailto:C.Grace.Moses@usace.army.mil), or Byron Rupp, Study Manager at 978-318-8172, or by e-mail at [Byron.R.Rupp@usace.army.mil](mailto:Byron.R.Rupp@usace.army.mil).

Sincerely,

  
John R. Kennelly  
Chief, Planning Branch

**Similar initial notification letters were sent to the following persons:**

TJG Shannon Andrew  
Waterways Management Division Chief  
U.S. Coast Guard Sector Long Island Sound  
120 Woodward Avenue  
New Haven, Connecticut 06512

Ms. Deb Szaro  
Regional Administrator  
U.S. Environmental Protection Agency  
Region I  
5 Post Office Square - Suite 100  
Boston, Massachusetts 02109-3912

Mr. John Bullard  
National Marine Fisheries Service  
Greater Atlantic Regional Fisheries Office  
55 Great Republic Drive  
Gloucester, MA 01930

Mr. Brian Thompson, Director  
Connecticut Department of Energy and Environmental Protection  
Office of Long Island Sound Programs  
79 Elm Street  
Hartford, Connecticut 06106-5127

Mr. David H. Carey, Director  
Connecticut Department of Agriculture  
Bureau of Aquaculture  
P.O. Box 97  
Milford, CT 06460

Mr. Roger Evans  
Regional Permit Administrator, Region I  
New York Department of Environmental Conservation  
50 Circle Road  
SUNY Stony Brook  
Stony Brook, NY 11790-3409

Ms. Denise Caldwell, Consistency Coordinator  
Consistency Review Unit  
Office of Planning and Development  
New York Department of State  
Suite 1010  
One Commerce Place, 99 Washington Avenue  
Albany, New York 12231-0001

Ms. Marissa Turnbull, Tribal Historical Preservation Officer  
Mashantucket Pequot Tribal Nation  
Natural Resources Protection & Regulatory Affairs  
350 Trolley Line Blvd., P.O. Box 3202  
Mashantucket, Connecticut 06338-3202

Mr. James Quinn, Tribal Historical Preservation Officer  
Mohegan Tribe Cultural Department  
5 Crow Hill Road  
Uncasville, Connecticut 06382

Dr. Brian Jones, State Archaeologist  
Office of Connecticut State Archaeology, Unit 4214  
University of Connecticut  
Storrs, CT 06269-4214

Mr. Daniel Forrest, State Historic Preservation Officer  
Department of Economic and Community,  
State Historic Preservation Office  
One Constitution Plaza, 2<sup>nd</sup> Floor  
Hartford, Connecticut 06103

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Initial Notification Letter  
Responses**



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5087  
<http://www.fws.gov/newengland>

REF: Flood Risk and Coastal Storm Risk Management Feasibility,  
New Haven and Fairfield Counties, CT

April 20, 2017

John R. Kennelly  
Chief, Planning Branch  
U.S. Army Corps of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

Dear Mr. Kennelly:

This responds to your letter, dated February 21, 2017, and received in our office on March 1, 2017, requesting initial feedback on a proposed cooperative feasibility study between the U.S. Army Corps of Engineers' (Corps) New England District and the Connecticut Department of Energy and Environmental Protection to investigate opportunities to address flood risk management, coastal storm risk management, and other related purposes within New Haven and Fairfield Counties in Connecticut. We appreciate the opportunity to provide advanced comment.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act (87 Stat. 884, as amended: 16 U.S.C. 1531, *et seq.*) (ESA). Section 9 of the ESA and its implementing regulations prohibit the taking, including incidental taking, of any federally listed endangered or threatened species. Federal agencies can obtain exemptions to the prohibitions against take through interagency cooperation with the Service. If a project is to be funded, authorized, or carried out by a Federal agency, and may affect a listed species or designated critical habitat, the Federal agency must consult with the Service pursuant to section 7(a)(2) of the ESA.

Only federally listed species receive protection under the ESA; however, other sensitive species that could occur in the proposed project area also should be considered in the planning process. For example, many nonlisted, native bird species occur in suitable habitats in the study area, and we recommend the Corps incorporate the Migratory Bird Treaty Act (16 U.S.C. 703-712) into the planning process.

John R. Kennelly  
April 20, 2017

2

There are many ways in which addressing flood and storm risk for local communities can benefit wildlife and habitat in highly fragmented areas of New England. One way is through restoration of coastal wetlands. Wetland ecosystems reduce risk of damages during flood and storm events by absorbing and slowly releasing water. Many freshwater and tidal wetlands in New Haven and Fairfield Counties have been altered by ditching, impoundment, excavation, and road crossings, resulting in reduced wetland functionality. Storm and flood risk benefits of wetlands can be restored through restoration of natural hydrology and control of invasive species, such as the common reed (*Phragmites australis*). Wetland restoration also benefits many fish and wildlife species by providing essential habitat and improving terrestrial and aquatic habitat connectivity. In addition to tidal wetlands, beach and dune habitat can also absorb wave energy during storms and provide necessary habitat for migratory birds. Some species listed under the ESA that may benefit from coastal ecosystem restoration include the piping plover (*Charadrius melodus*), red knot (*Calidris canutus rufa*), and roseate tern (*Sterna dougallii dougallii*).

Thank you for including environmental considerations as a component of your planning process. We look forward to working with you as the planning process moves forward. If you have any questions or concerns, please contact Ms. Eliese Dykstra of this office at (603) 227-6427.

Sincerely yours,



*Acting* ~~✓~~ Thomas R. Chapman  
Supervisor  
New England Field Office

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Resource Agency  
Meeting Letters**





DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
NEW ENGLAND DISTRICT  
696 VIRGINIA ROAD  
CONCORD MA 01742-2751

March 20, 2019

Planning Division

Mr. David Simmons, Assistant Supervisor  
Endangered Species  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, MA 03301-5087

Dear Mr. Simmons:

The U.S. Army Corps of Engineers (Corps), New England District (District) invites you and/or a member(s) of your staff to participate in a telephone conference and webinar for the New Haven and Fairfield Counties, Connecticut Coastal Storm Risk Management Feasibility Study. This study is authorized in a resolution approved by the Committee on Transportation and Infrastructure of the United States House of Representatives, dated April 29, 2010. Due to the broad scope of the study and large size of the study area, we are hosting a webinar rather than a coordinated site visit to provide information about the initial set of alternatives the District is evaluating to address coastal storm risk management in the area. The District will produce a Draft Integrated Feasibility Report and Environmental Assessment which is scheduled to be released in late June 2019 for public and agency review.

The study was initiated in 2016 when the District conducted an analysis for the Fairfield and New Haven County area utilizing the North Atlantic Coastal Comprehensive Study. This analysis concluded that there is a Federal interest in continuing with a feasibility study to examine coastal storm damage reduction in the two counties. The study area includes approximately 1,700 square miles of land within the state of Connecticut, ranging from agricultural/rural towns, moderately developed suburbs, to densely populated cities, and stretching from inland riverine watersheds to coastal communities.

The District refined the scope of the study area to focus on those areas where the greatest opportunity exists for the Corps to improve conditions and/or reduce coastal storm and flood damages. The proposed areas for detailed examination are approximately 4.75 square miles along the southern coast of the Town of Fairfield (Attachment 1) and approximately 1.5 square miles along the Long Wharf section of the

City of New Haven (Attachment 2). The general water resource problem to be addressed is the vulnerability of these areas to storm damage from wave attack, storm surge and erosion. Potential solutions being evaluated include structural and non-structural solutions.

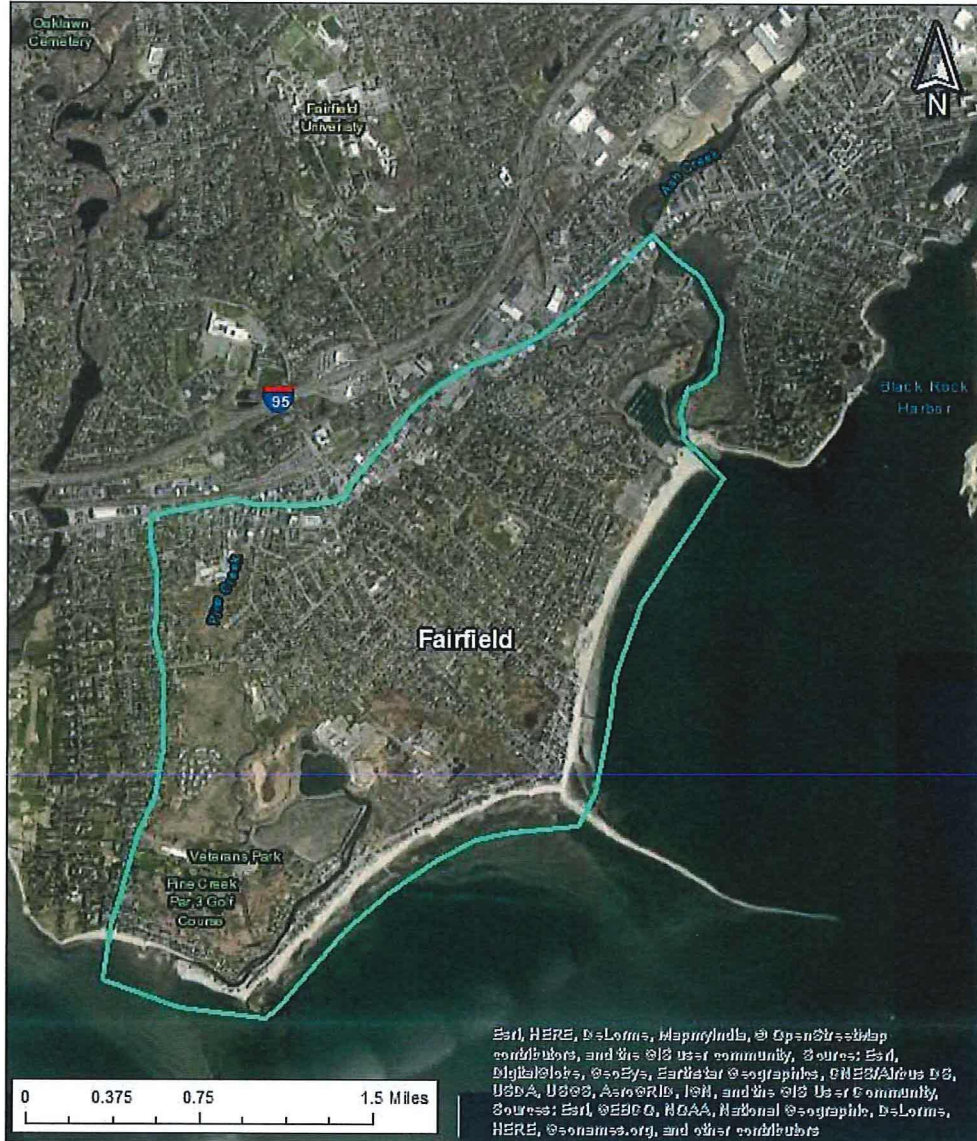
We would appreciate your participation in the webinar on March 28, 2019 from 10am to noon in order to gain your initial input on the proposed alternatives. We request written comments be provided within 30 days of the webinar to Ms. Grace Moses of the Environmental Resources Section at [C.Grace.Moses@usace.army.mil](mailto:C.Grace.Moses@usace.army.mil). Should you have any questions in the interim, please contact Ms. Grace Moses at (978) 318-8717, or Byron Rupp, Study Manager at 978-318-8172, or by e-mail at [Byron.R.Rupp@usace.army.mil](mailto:Byron.R.Rupp@usace.army.mil).

Sincerely,

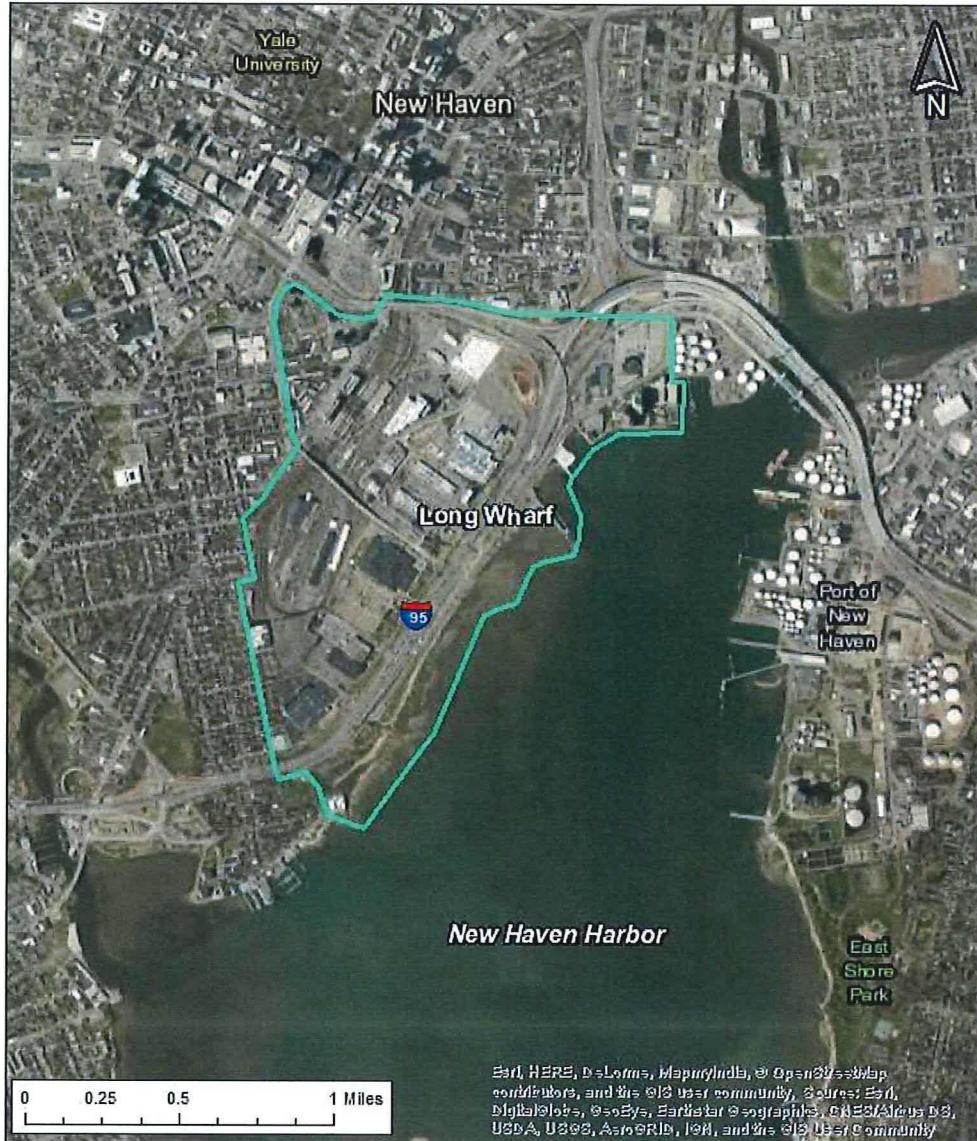


John R. Kennelly  
Chief, Planning Division

### Attachment 1. Study Area in Fairfield, Connecticut



**Attachment 2. Study Area in New Haven, Connecticut**



**Similar resource agency meeting letters were sent to the following persons:**

**Federal**

Ms. Deborah Szaro, Regional Administrator  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square – Suite 100  
Boston, Massachusetts 02109-3912

Mr. Ken Moraff, Director  
Office of Ecosystem Protection  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square – Suite 100  
Boston, Massachusetts 02109-3912

Mr. Timothy Timmermann, Associate Director  
NEPA Office  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square – Suite 100  
Boston, Massachusetts 02109-3912

Mr. Tom Chapman, Supervisor  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, Massachusetts 03301-5087

Mr. David Simmons, Assistant Supervisor  
Endangered Species  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, Massachusetts 03301-5087

Mr. John Warner, Assistant Supervisor  
Federal Activities  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, Massachusetts 03301-5087

Mr. Michael Pentony, Regional Administrator  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

Mr. Lou Chiarella, Assistant Regional Administrator  
Habitat Conservation Division  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

Mr. Mike Asaro, Acting Assistant Regional Administrator  
Protected Resources Division  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

### **Connecticut**

Ms. Katie Dykes, Commissioner  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Ms. Betsey Wingfield, Chief  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Brian Thompson, Director  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Jeff Caiola, Assistant Director  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. David Blatt, Supervisor  
Planning Section

Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Ms. Karen Michaels  
Planning Section  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Rick Jacobson, Chief  
Bureau of Natural Resources  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Peter Aarrestad, Director  
Fisheries Division  
Bureau of Natural Resources  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Frogard Ryan, State Director  
Connecticut Chapter, The Nature Conservancy  
55 Church Street, Floor 3  
New Haven, CT 06510-3029

Dr. Brian Jones, State Archaeologist  
Office of Connecticut State Archaeology, Unit 4214  
University of Connecticut  
Storrs, CT 06269-4214

Mr. Daniel Forrest, State Historic Preservation Officer  
Department of Economic and Community,  
State Historic Preservation Office  
One Constitution Plaza, 2<sup>nd</sup> Floor  
Hartford, Connecticut 06103

Ms. Marissa Turnbull, Tribal Historical Preservation Officer  
Natural Resources Protection & Regulatory Affairs  
Mashantucket (Western) Pequot Tribal Nation

350 Trolley Line Blvd., P.O. Box 3202  
Mashantucket, Connecticut 06338-3202  
Mr. James Quinn, Tribal Historical Preservation Officer  
Mohegan Tribe Cultural Department  
5 Crow Hill Road  
Uncasville, Connecticut 06382

### **Fairfield**

Mr. Mike Tetreau, First Selectman  
Sullivan Independence Hall, Second Floor  
725 Old Post Road  
Fairfield, CT 06824

Mr. Brian Carey, Director  
Fairfield Conservation Commission  
c/o Conservation Department  
725 Old Post Road  
Fairfield, CT 06824

Mr. James Wendt, Director  
Fairfield Town Plan and Zoning Commission  
c/o Town Plan and Zoning Department  
725 Old Post Road  
Fairfield, CT 06824  
email: [tpzcommission@fairfieldct.org](mailto:tpzcommission@fairfieldct.org)

Mr. Edward Jones, Open Space Manager  
Fairfield Open Space Program  
725 Old Post Road  
Fairfield, CT 06824

### **New Haven**

Mayor Toni Harp  
Office of the Mayor  
165 Church Street  
New Haven, CT 06510

Mr. Michael Carter, Chief Administrative Officer  
165 Church Street  
New Haven, CT 06510



Mr. Edward Mattison, Chair  
New Haven City Plan Commission  
15 Anderson Street  
New Haven, CT 06510

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Resource Agency  
Meeting Letter  
Responses**

**From:** [David Simmons](#)  
**To:** [Moses, Catherine G CIV USARMY CENAE \(US\)](#)  
**Cc:** [Cynthia Corsair](#)  
**Subject:** [Non-DoD Source] New Haven and Fairfield Counties Storm Risk Study  
**Date:** Wednesday, March 27, 2019 3:54:33 PM

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Hi Grace,

We received John Kennelly's letter, dated March 20, 2019, requesting we participate in a webinar on the subject study on March 28, 2019, and provide comments. I appreciate the invitation to participate, but we will be unable to attend the webinar. In addition, due to other workload demands, at this time we can provide only general comments to say that our recommendations for those parts of coastal New England would center around avoiding or minimizing impacts to listed shorebird species and maintaining or enhancing saltmarsh habitat, if present. Beyond that, we will be available if the Corps determines the final proposed project may affect a species listed under the ESA, at which point some level of consultation under section 7 would be needed. Please let me know if you have any questions, concerns, etc. Regards,

David

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David Simmons

Endangered Species Program Supervisor

New England Fish and Wildlife Office

U.S. Fish and Wildlife Service

70 Commercial Street, Suite 300

Concord, New Hampshire 03301

603.227.6425  
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**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Additional  
Correspondence**



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

In Reply Refer To:

June 18, 2019

Consultation Code: 05E1NE00-2019-SLI-0748

Event Code: 05E1NE00-2019-E-04980

Project Name: New Haven CSRM

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

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## Project Summary

Consultation Code: 05E1NE00-2019-SLI-0748

Event Code: 05E1NE00-2019-E-04980

Project Name: New Haven CSRM

Project Type: STREAM / WATERBODY / CANALS / LEVEES / DIKES

Project Description: USACE coastal storm damage reduction project located along Long Wharf in New Haven, CT.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/41.292762632007765N72.92164817809257W>



Counties: New Haven, CT

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## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Roseate Tern <i>Sterna dougallii dougallii</i> Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a>	Endangered

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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Connecticut Department of  
 Energy & Environmental Protection  
 Bureau of Natural Resources  
 Wildlife Division

CPPU USE ONLY

App #: \_\_\_\_\_

Doc #: \_\_\_\_\_

Check #: No fee required

Program: Natural Diversity Database  
 Endangered Species

Hardcopy \_\_\_\_\_ Electronic \_\_\_\_\_

## Request for Natural Diversity Data Base (NDDB) State Listed Species Review

Please complete this form in accordance with the [instructions](#) (DEEP-INST-007) to ensure proper handling of your request.

**There are no fees associated with NDDB Reviews.**

### Part I: Preliminary Screening & Request Type

Before submitting this request, you must review the most current Natural Diversity Data Base "State and Federal Listed Species and Significant Natural Communities Maps" found on the [DEEP website](#). These maps are updated twice a year, usually in June and December.

Does your site, including all affected areas, fall in an NDDB Area according to the map instructions:

Yes     No    **Enter the date** of the map reviewed for pre-screening: December 2018

This form is being submitted for a :

- New NDDB request
- Renewal/Extension of a NDDB Request, **without modifications and within two years of issued NDDB determination** (no attachments required)*

[CPPU Use Only - NDDB-Listed Species Determination # 1736]

- New Safe Harbor Determination** (optional) must be associated with an application for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
- Renewal/Extension of an existing Safe Harbor Determination*
  - With modifications
  - Without modifications (no attachments required)

[CPPU Use Only - NDDB-Safe Harbor Determination # 1736]

Enter NDDB Determination Number for Renewal/Extension:

Enter Safe Harbor Determination Number for Renewal/Extension:

## Part II: Requester Information

*\*If the requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's database CONCORD. ([www.concord-sots.ct.gov/CONCORD/index.jsp](http://www.concord-sots.ct.gov/CONCORD/index.jsp))*

*If the requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*

*If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the [Request to Change company/Individual Information](#) to the address indicated on the form.*

### 1. Requester\*

Company Name: **U.S. Army Corps of Engineers**

Contact Name: **Grace Moses**

Address: **696 Virginia Rd.**

City/Town: **Concord**

State: **MA**

Zip Code: **02155**

Business Phone: **978-318-8717**

ext.

\*\*E-mail: **c.grace.moses@usace.army.mil**

\*\*By providing this email address you are agreeing to receive official correspondence from the department, at this electronic address, concerning this request. Please remember to check your security settings to be sure you can receive emails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes

#### a) Requester can best be described as:

Individual       Federal Agency     State agency     Municipality     Tribal

\*business entity (\* if a business entity complete i through iii):

i) Check type     corporation       limited liability company       limited partnership

limited liability partnership     statutory trust     Other:

ii) Provide Secretary of the State Business ID #: \_\_\_\_\_ This information can be accessed at the Secretary of the State's database (CONCORD). ([www.concord-sots.ct.gov/CONCORD/index.jsp](http://www.concord-sots.ct.gov/CONCORD/index.jsp))

iii)  Check here if your business is **NOT** registered with the Secretary of State's office.

#### b) Acting as (Affiliation), pick one:

Property owner     Consultant     Engineer       Facility owner     Applicant

Biologist           Pesticide Applicator     Other representative:

### 2. List Primary Contact to receive Natural Diversity Data Base correspondence and inquiries, if different from requester.

Company Name:

Contact Person:

Title:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

\*\*E-mail:



## Part IV: Project Information (continued)

3. Give a detailed description of the activity which is the subject of this request and describe the methods and equipment that will be used. Include a description of steps that will be taken to minimize impacts to any known listed species.

**The activity may consist of several separate or combined alternative actions to address coastal storm damage to the Long Wharf area of New Haven including the Union Street Railyard. The alternative requiring the most construction consists of a floodwall running along the shorefront of Long Wharf Park, extending from the Vietnam Veterans Memorial Park in the south to the intersection of East Street and West Street in the north. Other alternatives are various placement locations of the floodwall and/or nonstructural alternatives such as first-floor floodproofing. As the study progresses, alternatives will be narrowed down, but the intent of this request is to obtain a species list for the overall project area.**

4. If this is a renewal or extension of an existing Safe Harbor request *with* modifications, explain what about the project has changed.

5. Provide a contact for questions about the project details if different from Part II primary contact.

Name:

Phone:

E-mail:

## Part V: Request Requirements and Associated Application Types

Check *one* box from either Group 1, Group 2 *or* Group 3, indicating the appropriate category for this request.

Group 1. If you check one of these boxes, complete Parts I – VII of this form and submit the required attachments A and B.

- Preliminary screening was negative but an NDDB review is still requested
- Request regards a municipally regulated or unregulated activity (no state permit/certificate needed)
- Request regards a preliminary site assessment or project feasibility study
- Request relates to land acquisition or protection
- Request is associated with a *renewal* of an existing permit or authorization, with no modifications

**Group 2.** If you check one of these boxes, complete Parts I – VII of this form and submit required attachments A, B, and C.

- Request is associated with a *new* state or federal permit or authorization application or registration
- Request is associated with modification of an existing permit or other authorization
- Request is associated with a permit enforcement action
- Request regards site management or planning, requiring detailed species recommendations
- Request regards a state funded project, state agency activity, or CEPA request

**Group 3.** If you are requesting a **Safe Harbor Determination**, complete Parts I-VII and submit required attachments A, B, and D. Safe Harbor determinations can only be requested if you are applying for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

If you are filing this request as part of a state or federal permit application(s) enter the application information below.

Permitting Agency and Application Name(s): \_\_\_\_\_

Related State DEEP Permit Number(s), if applicable: \_\_\_\_\_

State DEEP Enforcement Action Number, if applicable: \_\_\_\_\_

State DEEP Permit Analyst(s)/Engineer(s), if known: \_\_\_\_\_

Is this request related to a previously submitted NDDB request?  Yes  No

If yes, provide the previous NDDB Determination Number(s), if known: \_\_\_\_\_

## Part VI: Supporting Documents

Check each attachment submitted as verification that *all* applicable attachments have been supplied with this request form. Label each attachment as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name, site name and the date. **Please note that Attachments A and B are required for all new requests and Safe Harbor renewals/extensions with modifications.** Renewals/Extensions with no modifications do not need to submit any attachments. Attachments C and D are supplied at the end of this form.

<input checked="" type="checkbox"/> Attachment A:	<b>Overview Map:</b> an 8 1/2" X 11" print/copy of the relevant portion of a USGS Topographic Quadrangle Map clearly indicating the exact location of the site.
<input checked="" type="checkbox"/> Attachment B:	<b>Detailed Site Map:</b> fine scaled map showing site boundary and area of work details on aerial imagery with relevant landmarks labeled. (Site and work boundaries in GIS [ESRI ArcView shapefile, in NAD83, State Plane, feet] format can be substituted for detailed maps, see instruction document)
<input type="checkbox"/> Attachment C:	<b>Supplemental Information, Group 2 requirement (attached, DEEP-APP-007C)</b> <input type="checkbox"/> Section i: Supplemental Site Information and supporting documents <input type="checkbox"/> Section ii: Supplemental Project Information and supporting documents
<input type="checkbox"/> Attachment D:	<b>Safe Harbor Report Requirements, Group 3 (attached, DEEP-APP-007D)</b>

## Part VII: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided.

<p>"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."</p>	
<p><i>C. Grace Moses</i></p> <hr/> Signature of Requester (a typed name will substitute for a handwritten signature)	<p><b>6/18/2019</b></p> <hr/> Date
<p><b>Grace Moses</b></p> <hr/> Name of Requester (print or type)	<p><b>Project Biologist</b></p> <hr/> Title (if applicable)
<hr/> Signature of Preparer (if different than above)	<hr/> Date
<hr/> Name of Preparer (print or type)	<hr/> Title (if applicable)

Note: Please submit the completed Request Form and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT  
 DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION  
 79 ELM STREET  
 HARTFORD, CT 06106-5127

Or email request to: [deep.nddbrequest@ct.gov](mailto:deep.nddbrequest@ct.gov)

# Attachment C: Supplemental Information, Group 2 requirement

## Section i: Supplemental Site Information

### 1. Existing Conditions

Describe all natural and man-made features including wetlands, watercourses, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted and labeled on the site plan that must be submitted. Photographs of current site conditions may be helpful to reviewers.

- Site Photographs (optional) attached**
- Site Plan/sketch of existing conditions attached**

### 2. Biological Surveys

Has a biologist visited the site and conducted a biological survey to determine the presence of any endangered, threatened or special concern species  Yes  No

If yes, complete the following questions and submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms.

Biologist(s) name: \_\_\_\_\_

Habitat and/or species targeted by survey: \_\_\_\_\_

Dates when surveys were conducted: \_\_\_\_\_

- Reports of biological surveys attached**
- Documentation of biologist's qualifications attached**
- [NDDB Survey forms](#) for any listed species observations attached**

## Section ii: Supplemental Project Information

1. Provide a schedule for all phases of the project including the year, the month and/or season that the proposed activity will be initiated and the duration of the activity.
  
  
  
  
  
  
  
  
  
  
2. Describe and quantify the proposed changes to existing conditions and describe any on-site or off-site impacts. In addition, provide an annotated site plan detailing the areas of impact and proposed changes to existing conditions.

- Annotated Site Plan attached**




## Attachment D: Safe Harbor Report Requirements

Submit a report, as Attachment D, that synthesizes and analyzes the information listed below. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

- 1. Habitat Description and Map(s), including GIS mapping overlays, of a scale appropriate for the site, identifying:**
  - wetlands, including wetland cover types;
  - plant community types;
  - topography;
  - soils;
  - bedrock geology;
  - floodplains, if any;
  - land use history; and
  - water quality classifications/criteria.
- 2. Photographs** - The report should include photographs of the site taken from the ground and also all reasonably available aerial or satellite photographs and an analysis of such photographs.
- 3. Inspection** - A visual inspection(s) of the site should be conducted, preferably when the ground is visible, and described in the report. This inspection can be helpful in confirming or further evaluating the items noted above.
- 4. Biological Surveys** - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.
- 5. Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity.** This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.
- 6. In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:**
  - Information on Site Disturbance Estimates/Site Alteration information
  - Vehicular Use
  - Construction Activity Phasing Schedules, if any; and
  - Alteration of Drainage Patterns

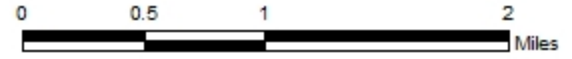


**Legend**

 Focused Study Area



# New Haven Study Location



Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

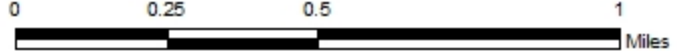


Legend

- Focused Study Area
- Natural Diversity Area



# New Haven Natural Diversity Areas



Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

June 27, 2019

Grace Moses  
U.S. Army Corps of Engineers  
696 Virginia Rd  
Concord MA 02155  
[c.grace.moses@usace.army.mil](mailto:c.grace.moses@usace.army.mil)

Project: Preliminary Assessment for New Haven Coastal Storm Risk Management Feasibility Study,  
Long Wharf Park in New Haven, CT  
NDDDB Preliminary Assessment No.: 201907766

Dear Ms. Moses,

I have reviewed Natural Diversity Database maps and files regarding the area delineated on the map provided for a preliminary assessment of the New Haven Coastal Storm Risk Management Feasibility Study at Long Wharf Park in New Haven, Connecticut.

According to our records there are known extant and historic populations of State Listed Species that occur within or close to the boundaries of this project. I have attached a list of species known from this area. Please be advised that this is a preliminary review and not a final determination. A more detailed review will be necessary to move forward with any environmental permit applications submitted to DEEP for the proposed project. **This preliminary assessment letter cannot be used or submitted with permit applications at DEEP.** This letter is valid for one year.

To prevent impacts to State-listed species, field surveys of the site should be performed by a qualified biologist(s) with the appropriate scientific collecting permits at a time(s) when these target species are identifiable. A report summarizing the results of such surveys should include:

1. Survey date(s) and duration
2. Site descriptions and photographs
3. List of component vascular plant and animal species within the survey area (including scientific binomials)
4. Data regarding population numbers and/or area occupied by State-listed species
5. Detailed maps of the area surveyed including the survey route and locations of State listed species
6. Statement/résumé indicating the biologist's qualifications
7. Proposed protection plan, avoidance measures or mitigation for species in areas potentially impacted by the project or an explanation of why these species and their habitats will not be impacted

The site surveys report should be sent to our CT DEEP-NDDDB Program ([deep.nddbrequest@ct.gov](mailto:deep.nddbrequest@ct.gov)) for further review by our program biologists along with an updated request for another NDDDB review. Incomplete reports may not be accepted.

If you do not intend to do site surveys to determine the presence or absence of state-listed species, then you should presume species are present and let us know how you will protect the state-listed species from being impacted by this project. You may submit these best management practices or protection plans with your new request for an NDDB review. After reviewing your new NDDB request form and the documents describing how you will protect this species from project impacts we will make a final determination and provide you with a letter from our program to use with DEEP-Permits.

Natural Diversity Database information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substitutes for onsite surveys necessary for a thorough environmental impact assessment. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

Please contact me if you have further questions at (860) 424-3378, or [karen.zyko@ct.gov](mailto:karen.zyko@ct.gov) . Thank you for consulting the Natural Diversity Data Base.

Sincerely,

A handwritten signature in blue ink, appearing to read "Karen Zyko".

Karen Zyko  
Environmental Analyst

# Species List for NDDB Request

Scientific Name	Common Name	State Status
<b>Invertebrate Animal</b>		
Brachinus medius	Bombardier beetle	SC
Brachinus ovipennis	Bombardier beetle	SC
<b>Vascular Plant</b>		
Asclepias viridiflora	Green milkweed	E
Cirsium horridulum	Yellow thistle	E
Coeloglossum viride	Long-bracted green orchid	E
Opuntia humifusa	Eastern prickly pear	SC
Pedicularis lanceolata	Swamp lousewort	T
<b>Vertebrate Animal</b>		
Acipenser oxyrinchus oxyrinchus	Atlantic sturgeon	E
Eremophila alpestris	Horned lark	E
Malaclemys terrapin terrapin	Northern diamondback terrapin	SC
Opheodrys vernalis	Smooth green snake	SC
Rana pipiens	Northern leopard frog	SC
Falco sparverius	American kestrel	SC
Alosa aestivalis	Blueback herring	SC

E = Endangered, T = Threatened, SC = Special Concern

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Draft Integrated Feasibility  
Report and Environmental  
Assessment  
Public Notice**



# Public Notice

U.S. Army Corps  
Of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

Date: December 19, 2019

Comment Period Closes: January 20, 2020

Planning Division

## **FAIRFIELD AND NEW HAVEN COUNTIES, CONNECTICUT** **COASTAL STORM RISK MANAGEMENT PROJECT** **NEW HAVEN, CONNECTICUT**

Interested parties are hereby notified that the U.S. Army Corps of Engineers (USACE), New England District, is currently working on the Fairfield and New Haven Counties, Connecticut Coastal Storm Risk Management (CSRМ) feasibility study in New Haven, Connecticut (see Figure 1). The non-Federal project partner for the study is the Connecticut Department of Energy and Environmental Protection (CT DEEP). The non-Federal sponsor for project implementation has not been identified at this point in the study, but a non-Federal sponsor for the project will be required for project design, implementation, and future operations & maintenance. This study is authorized in a resolution approved by the Committee on Transportation and Infrastructure of the United States House of Representatives, dated April 29, 2010. This resolution gives the Secretary of the Army the authority to “review the report of the Chief of Engineers on Land and Water Resources of the New England-New York Region, published as Senate Document No. 14, 85th Congress, 1st Session, and other reports to determine whether any modifications of the recommendations contained therein are advisable at the present time in the interest of flood damage reduction, coastal storm damage reduction, coastal erosion, and other related purposes in the vicinity of the estuaries and shoreline of Fairfield and New Haven Counties, Connecticut.” This public notice provides information about the Fairfield and New Haven Counties CSRМ project and documents compliance with all applicable laws and regulations.

**Purpose and Need for Work:** The authorized study area includes approximately 1,700 square miles of coastal and riverine floodplains located within Fairfield and New Haven Counties. Five primary focused-study areas (Stratford, Milford, New Haven, West Haven, and Fairfield) were identified in partnership with the Regional Councils of Governments in Connecticut for initial review. Following site visits and coordination with the CT DEEP, the Town of Fairfield and City of New Haven were selected for further consideration based on level of local support, density of development, and vulnerability to coastal storm damages.

In early 2019, the study team presented an initial suite of coastal storm risk management alternatives to the Town of Fairfield and City of New Haven as part of the study plan formulation process. The proposed alternatives developed for Fairfield would require a significant Federal and non-Federal investment, including the non-Federal responsibility



and costs to acquire large tracts of privately owned real estate, as well as a large environmental mitigation component. In discussions with the Town of Fairfield, it was agreed that the potential solutions would be too costly for the community to support at this time but that the community could potentially be the focus of a future Corps coastal storm risk management feasibility study.

The USACE Tentatively Selected Plan (TSP) milestone presented in the Integrated Feasibility Report and Environmental Assessment (IFR/EA) addresses the coastal storm risk management issues in the New Haven, Long Wharf area. The TSP consists of the construction of a 6,425 linear-foot coastal floodwall system running parallel to the Interstate 95 embankment. The length of the system consists of 5,950 linear-feet of floodwall and a combined 475 linear-feet of closure structures. The plan includes two pump stations and five deployable roadway closure structures. The system would have a top elevation of +15 feet NAVD88. The plan also includes the potential floodproofing of commercial and residential structures located seaward of the Interstate 95 embankment. Opportunities for floodproofing structures will be further analyzed before the study is completed. Optimization of the plan will occur after public and agency review of the Draft IFR/EA. Optimization of the TSP will include refinements to the plan and design based on any additional study and consideration of comments received during the review process.

**Alternatives Analysis:** The feasibility study plan formulation process considered a range of structural and nonstructural measures to manage the risk of coastal storm damage in the Long Wharf study area. Through an iterative planning process, potential coastal storm risk management measures were identified and alternatives were formulated, evaluated, and compared against each other in order to establish a tentatively selected plan. Initial screening of alternatives identified structural (floodwalls and closure structures) and nonstructural alternatives (wet/dry flood proofing and elevation of residential structures) that would reduce coastal storm risk for the Long Wharf area. These alternatives potentially provide sufficient damage reduction benefits to support justification of a cost-shared coastal storm risk management project.

**Coordination:** Coordination has been conducted with the following agencies:

**Federal**

U.S. Fish and Wildlife Service (USFWS)  
U.S. Environmental Protection Agency  
National Marine Fisheries Service  
U.S. Department of Transportation  
Federal Highway Administration

**State**

Connecticut Department of Energy and Environmental Protection  
Office of Long Island Sound Programs  
Bureau of Natural Resources  
Bureau of Water Protection and Land Reuse  
Connecticut Department of Agriculture, Bureau of Aquaculture  
Connecticut Historic Preservation Office  
Connecticut Department of Transportation

### **Tribal Governments**

Mashantucket (Western) Pequot Tribal Nation - Tribal Historic Preservation Office  
Mohegan Tribe - Tribal Historic Preservation Office

### **Local**

City of New Haven

### **Non-Governmental Agencies**

The Nature Conservancy Connecticut Chapter

**Endangered Species:** There are two federally protected bird species under the jurisdiction of the USFWS that have been identified as possibly being present in the proposed project area: roseate tern (*Sterna dougallii dougallii*) and red knot (*Calidris canutus rufa*). The project area does not support suitable breeding habitat or feeding habitat for either species. Construction noise may increase the amount and duration of noise in the project area. Any transiting roseate terns will only briefly be subjected to increased noise as they fly through the area, thus no impacts to their migrations are anticipated as a result of the proposed plan. The same is true for red knots, which make one of the longest yearly migrations to Arctic breeding grounds in Canada from southern South America. During migration, red knots concentrate in massive numbers at traditional staging grounds. The project area does not support suitable staging area, breeding habitat or feeding habitat for red knots. Therefore, the USACE has made a “no effect” determination for both roseate terns and red knots in the project area.

**Environmental Impacts:** A Draft Integrated Feasibility Report and Environmental Assessment was prepared for the Fairfield and New Haven Counties, Connecticut CSRSM study. A preliminary determination was made that an Environmental Impact Statement is not required under the provisions of the National Environmental Policy Act of 1969.

**Cultural Resources:** The proposed plan will have no effect on any historic properties. This determination is being coordinated with the CT State Historic Preservation Officer and the Tribal Historic Preservation Officers of the Mashantucket Pequot and Mohegan tribes, in accordance with Section 106 of the National Historic Preservation Act, as amended.

**Federal Consistency with Coastal Zone Management:** The project will be conducted in a manner consistent to the maximum extent practicable with all applicable Connecticut Coastal Zone Management Program policies.

**Other Federal Permit Requirements:** No in-water work is proposed. As such, a Water Quality Certificate (Section 401 of the Clean Water Act of 1977), Section 404(b)(1) evaluation (Section 404 of the Clean Water Act), and an Essential Fish Habitat review pursuant to the Magnuson-Stevens Fishery Conservation and Management Act are not required.

**Compliance:** This Public Notice is being issued in compliance with several environmental laws and regulations (see Attachment A).

**Availability of the Draft Integrated Report:** A copy of the report can be obtained via the website below or upon request by contacting the Project Manager, Byron Rupp at 978-318-8172.

<https://www.nae.usace.army.mil/Missions/Projects-Topics/Fairfield-and-New-Haven-Counties-Coastal-Storm-Risk-Management-Feasibility-Study/>

**Public Comments:** Comments are invited from all concerned parties and should be directed to the District Engineer at 696 Virginia Road, Concord, MA 01742, ATTN: Planning Division (Mr. Byron Rupp), within 30 days of this notice. Any person who has an interest that may be affected by the proposed project may request a public hearing. The request must be submitted in writing to me within 30 days of the date of this notice and must clearly set forth the interest and the manner in which the interest may be affected. Please bring this notice to the attention of anyone you know to be interested in the project.

19 DEC 2019

Date

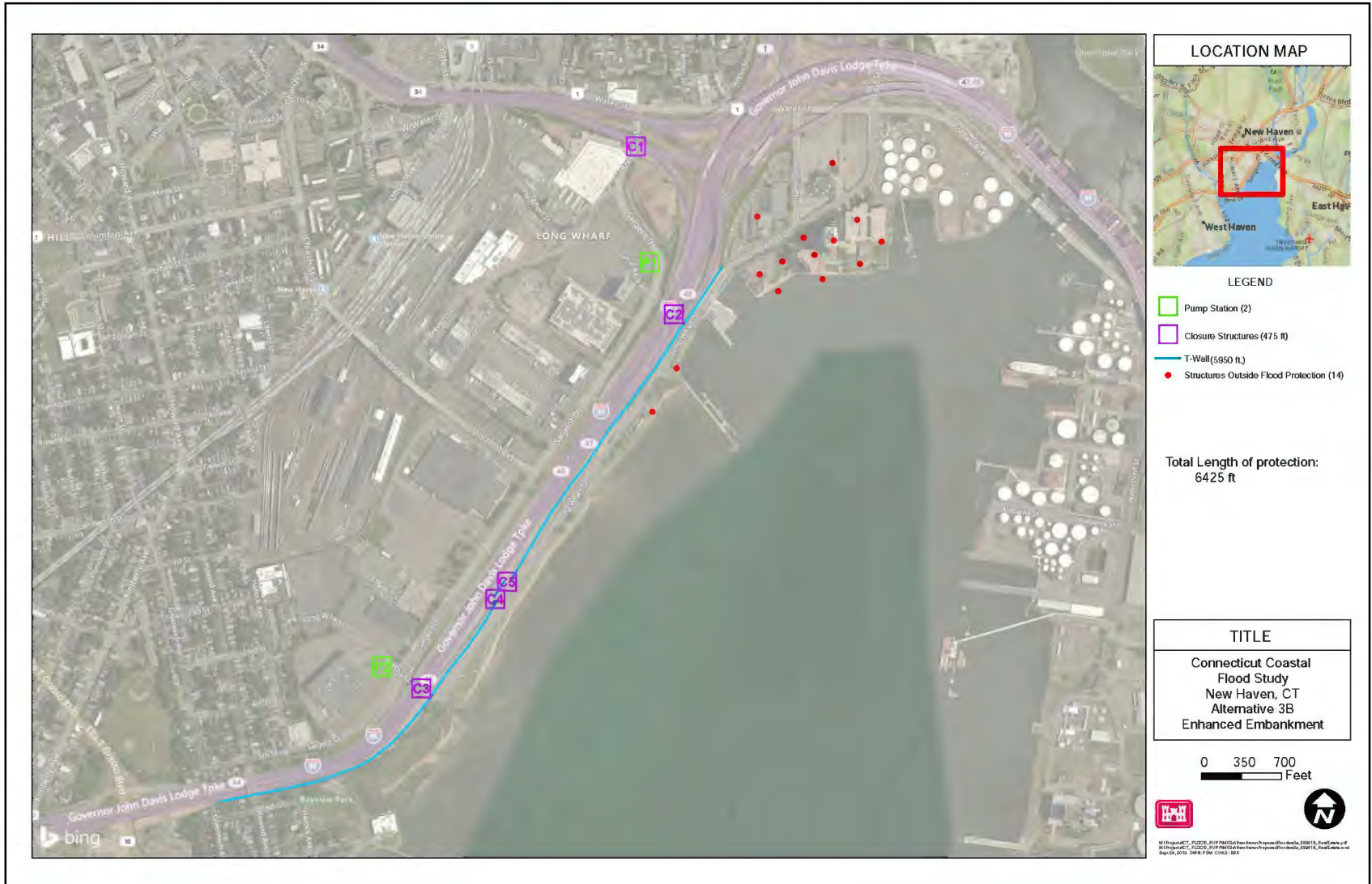


William M. Conde  
Colonel, Corps of Engineers  
District Engineer



Figure 1 – Location Map

Figure 2 – Tentatively Selected Plan Details



## **Attachment A**

### **PERTINENT LAWS, REGULATIONS AND DIRECTIVES**

Clean Air Act, as amended (42 U.S.C. §§ 7401 et seq.)

Clean Water Act, as amended (33 U.S.C. 1251 et seq.)

Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451-1464  
CT Gen Stat § 22a-90 Chapter 444, as amended)

Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)

Executive Order 11988, Floodplain Management, 24 May 1977

Executive Order 11990, Protection of Wetlands, 24 May 1977

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.

Executive Order 13007, Accommodations of Sacred Sites, May 24, 1996.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, April 21, 1997.

Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*)

National Environmental Policy Act of 1969 (42 U.S.C. 432 *et seq.*)

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 et seq.)

White House Memorandum, Government-to-Government Relations with Indian Tribes, April 29, 1994.

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Draft Integrated Feasibility  
Report and Environmental  
Assessment Release  
Letters**



DEPARTMENT OF THE ARMY  
US ARMY CORPS OF ENGINEERS  
NEW ENGLAND DISTRICT  
696 VIRGINIA ROAD  
CONCORD MA 01742-2751

December 16, 2019

Planning Division

Mr. Tom Chapman, Supervisor  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, MA 03301-5087

Dear Mr. Chapman,

The U.S. Army Corps of Engineers (USACE) New England District has completed the Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management (CSRМ) Draft Integrated Feasibility Report and Environmental Assessment (IFR/EA).

The Draft IFR/EA complies with National Environmental Policy Act (NEPA) requirements to identify and analyze the environmental effects of the alternatives, incorporate environmental concerns into the decision-making process, and to evaluate any environmental impacts of the Tentatively Selected Plan (TSP). The study area originally included approximately 1,700 square miles of land within the State of Connecticut. The USACE has refined the scope of the study area to focus on those areas where the greatest opportunity exists for the USACE to improve conditions and/or manage the risk of coastal storm and flood damages.

The area of detailed examination is approximately 1.5 square miles along the Long Wharf section of the City of New Haven (Attachment 1). The general water resource problem to be addressed is the vulnerability of this area to storm damage from coastal storm surge. Development in the project area includes commercial and industrial business, a recreation area, and key transportation infrastructure. A portion of Interstate 95 and the New Haven Rail Yard, a central hub of the Northeast Corridor, are subject to coastal flooding and significant transportation impacts if no action is taken.

Plan formulation involved the analysis of potential structural and non-structural alternatives. The TSP is an enhancement of the Interstate 95 embankment with approximately 5,950 linear feet of floodwall with a top elevation of 15 feet NAVD88 along with 475 feet of deployable closure structures. The floodwall will have a buried pile-supported foundation and be built from reinforced concrete. Five deployable road closure structures will be installed to prevent underpass flooding on Long Wharf Drive (three closure structures), Canal Dock Road, and Brewery Street. Two buried pump



stations sized to handle approximately 400-500 cubic feet of water per second (cfs) will be constructed to handle storm water behind the structure. These pump stations will pump water to existing storm water utilities owned and operated by the City of New Haven, thus no new outfalls will be built for this project. Potential nonstructural flood proofing measures will be assessed for the structures located seaward of the I-95 embankment. Please see Attachment 2 for the project details.

The Draft IFR/EA was released for public review on December 16, 2019 and may be accessed in its entirety on the following website:

<https://www.nae.usace.army.mil/Missions/Projects-Topics/Fairfield-and-New-Haven-Counties-Coastal-Storm-Risk-Management-Feasibility-Study/>

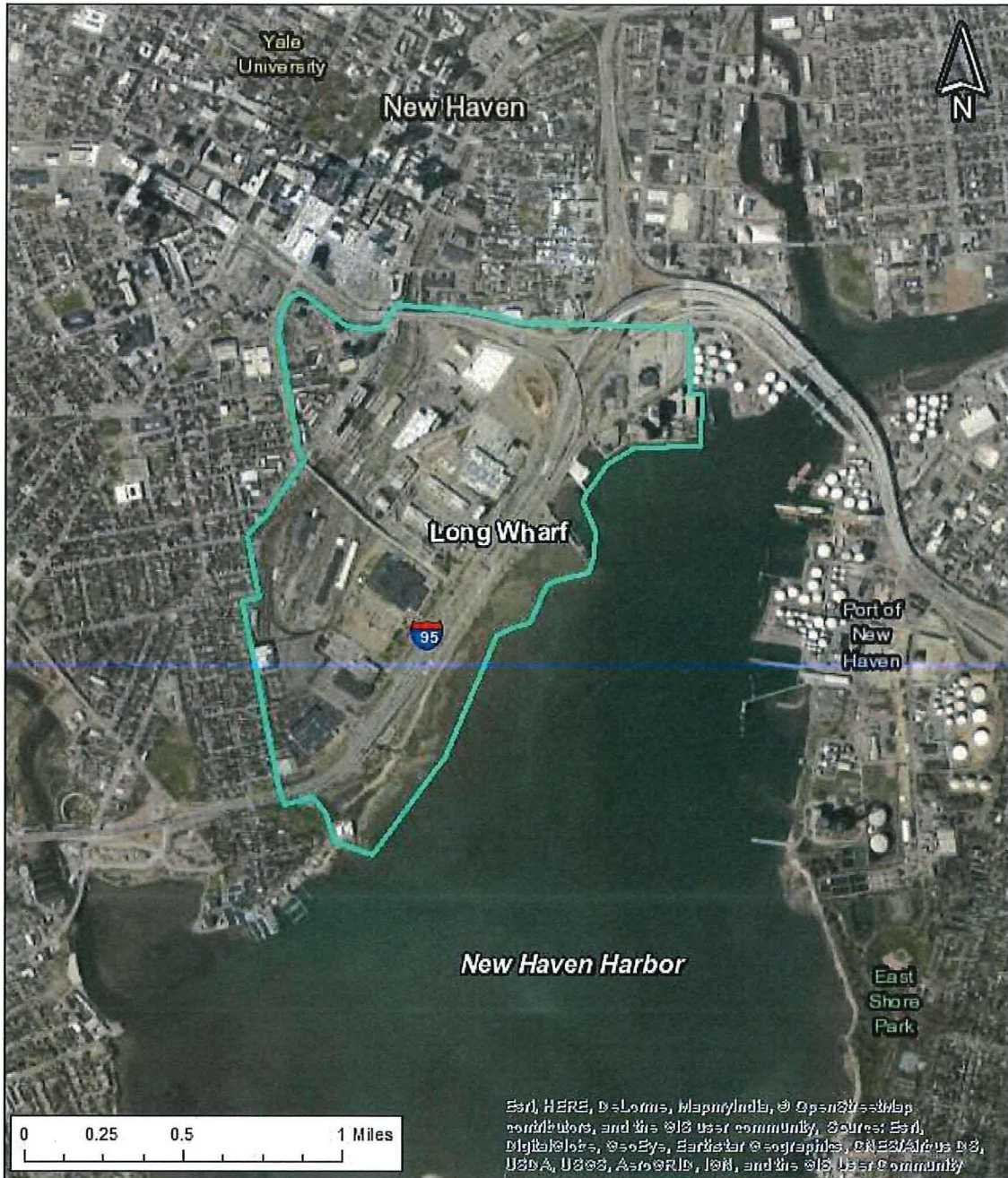
We are requesting comments under the Service's jurisdiction under the Fish and Wildlife Coordination Act and the Endangered Species Act. In addition, we are requesting that the Service provide a final coordination act report for the project. If you or your staff have any questions or require additional information, please contact Grace Moses of the Environmental Resources Section at (978) 318-8717 or by email at C.Grace.Moses@usace.army.mil. You may also contact the Planning Study Manager, Byron Rupp at 978-318-8172, or by e-mail at Byron.R.Rupp@usace.army.mil.

Sincerely,

  
John R. Kennelly  
Chief, Planning Division

cc:  
Mr. David Simmons

**Attachment 1. Study Area in New Haven, Connecticut**



Attachment 2. Tentatively Selected Plan Details, New Haven, CT



LOCATION MAP

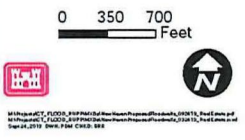


- LEGEND
- Pump Station (2)
  - Closure Structures (475 ft)
  - T-Wall (5950 ft)
  - Structures Outside Flood Protection (14)

Total Length of protection: 6425 ft

TITLE

Connecticut Coastal  
Flood Study  
New Haven, CT  
Alternative 3B  
Enhanced Embankment



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**Similar report release letters were sent to the following persons:**

**Federal**

Mr. Timothy Timmermann, Associate Director  
NEPA Office  
U.S. Environmental Protection Agency, Region 1  
5 Post Office Square – Suite 100  
Boston, Massachusetts 02109-3912

Mr. David Simmons, Assistant Supervisor  
Endangered Species  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, Massachusetts 03301-5087

Mr. Michael Pentony, Regional Administrator  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

Mr. Mark Murray-Brown  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

Mr. Zach Jylkka  
Greater Atlantic Region Fisheries Office  
National Marine Fisheries Service  
55 Great Republic Drive  
Gloucester, Massachusetts 01930-2276

**Connecticut**

Ms. Betsey Wingfield, Chief  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Brian Thompson, Director  
Land and Water Resources Division

Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Ms. Denise Ruzicka, Director  
Water Planning and Management Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Ms. Karen Michaels  
Planning Section  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

Mr. Rick Jacobson, Chief  
Bureau of Natural Resources  
Department of Energy and Environmental Protection  
79 Elm Street  
Hartford, CT 06106-5127

CT DEEP-OLISP  
79 Elm Street  
Hartford, CT 06106-5127

Ms. Catherine Labadia, Deputy  
State Historic Preservation Office  
450 Columbus Boulevard, Suite 5  
Hartford, CT 06103

Ms. Marissa Turnbull, Tribal Historical Preservation Officer  
Natural Resources Protection & Regulatory Affairs  
Mashantucket (Western) Pequot Tribal Nation  
350 Trolley Line Blvd., P.O. Box 3202  
Mashantucket, Connecticut 06338-3202

Mr. James Quinn, Tribal Historical Preservation Officer  
Mohegan Tribe Cultural Department  
5 Crow Hill Road  
Uncasville, Connecticut 06382

Honorable Toni N. Harp  
Mayor of New Haven  
165 Church Street  
New Haven, Connecticut 06510

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Draft Integrated Feasibility  
Report and Environmental  
Assessment**

**Public and Agency Letter  
Responses**

January 14, 2020

Byron R. Rupp, Planner  
Planning Division  
New England District Office  
U.S. Army Corps of Engineers  
696 Virginia Rd.  
Concord MA 01742

Dear Mr. Rupp,

DEEP would like to thank you for the opportunity to review and comment on the draft report of the *Fairfield & New Haven Counties, Connecticut Coastal Storm Risk Management Feasibility Study*. This office has reviewed the draft report and has the following comments:

- **Benefit-Cost Ratio (BCR) Refinement:** Page nine of the *Economic Appendix* indicates that the BCR developed for this draft report appears to include only the protection of structures as presented in Table 7. Thus, no economic benefits and costs appear to have been analyzed for either the Connecticut Department of Transportation's (CT DOT) train station and rail infrastructure or I-95. Since Alternative B (the preferred mitigation strategy) would be important to the protection of such transportation infrastructure in the immediate project area, costs and benefits associated with these entities should be included in the BCR. DEEP encourages the USACE to work with CT DOT or the Federal Highway Administration to obtain potential benefit and cost (damage) avoidance information and data that could be incorporated into the BCR. This would help the Army Corps to develop a more refined and complete BCR for the proposed project. Since the existing transportation hub is critical for the economic well-being of this geographic area of Connecticut and for the state as a whole, it is important that the potential benefits and the avoided potential costs for the proposed protection of this transportation infrastructure are captured and included in the BCR for the study's preferred mitigation alternative (Alternative 3B).
- **Budget Comprehensiveness:** The proposed budget for Alternative 3 includes a relatively high contingency percentage for all major line items. DEEP understands that some information, which would help support the project manager with the development for such costs was not readily available for the creation of this draft report. To that point, DEEP encourages the Army Corps to obtain additional data and information, to the extent possible, to help potentially reduce the contingency percentages associated with the proposed project. This also includes, if possible, obtaining more information regarding all underground utilities (types and depths) that will affect the costs of the design and construction of this project. The refinement of the proposed construction costs and any



additional information on existing utilities in the project location will also help to improve the overall risk assessment for this project and BCR.

- Risk Analysis Enhancement: Additional structural information with respect to I-95 and its embankment area (including the easement area where the proposed wall would be located) would be beneficial for the development of a more complete risk assessment for the proposed project and this study. In addition, a comparison between the “Do-Nothing Alternative” and “Alternative B: Enhanced I-95 Embankment” would be beneficial to show potential future impacts to the highway infrastructure for both alternatives. In addition, this would also help to show the need that currently exists for the protection of the critical transportation infrastructure in this area of the state from increased sea level rise and coastal storms, which appear to be increasing in intensity and frequency. Again, the Army Corps is encouraged to obtain as much information as is possible for this study, with the funding available to support such efforts, on costs, benefits, and potential impacts and damages that may afflict I-95 during intense storm events.

DEEP understands the budgetary limitations placed on this study will determine the extent to which the Corps can pursue the incorporation of the information and data as suggested above. However, DEEP also recognizes that the inclusion of the additional data and information stated above would greatly benefit both the study as a whole and the proposed mitigation strategy of Alternative B.

If you have any questions or comments regarding the comments presented in this letter, please contact me at [Karen.Michaels@ct.gov](mailto:Karen.Michaels@ct.gov) or by telephone at (860) 424-3779.

Sincerely,



Karen A. Michaels  
Environmental Analyst III  
Planning Section  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse

KAM/kam

Cc: Brian P. Thompson, LWRD Director  
USACE/DEEP Flood Study Project File



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MA 02109-3912

OFFICE OF THE  
REGIONAL ADMINISTRATOR

January 16, 2020

Grace Moses  
Environmental Resources Section  
U.S. Army Corps of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

RE: Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management Draft Integrated Feasibility Report and Environmental Assessment

Dear Ms. Moses:

We are writing in response to your December 2019 Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management Draft Integrated Feasibility Report and Environmental Assessment (EA). We submit the following response to the Draft EA in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The study area considered in the Draft EA covers 1,700 square miles of coastal land in Fairfield and New Haven Counties, Connecticut that are vulnerable to coastal storms and flooding impacts. The final study area was defined by the Corps of Engineers "...based on level of local support, density of development, and vulnerability to coastal storm damages." Preliminary coastal storm risk management alternatives were developed and presented to the Town of Fairfield and City of New Haven. The Town of Fairfield found the project cost prohibitive but reserved the right to be the focus of future studies and solutions. As a result, the Draft EA focuses on structural and non-structural coastal storm risk management for the Long Wharf area in the City of New Haven.

The Draft EA documents the need for the project and considered alternatives including the No Action Alternative; Alternative 2, a Non-Structural Alternative; Alternative 3A (using the Existing I-95 Embankment); Alternative 3B (an Enhanced I-95 Embankment Alternative); Alternative 4A (a Shoreline Floodwall); and Alternative 4B (an Extended Shoreline Floodwall). The Draft EA explains that Alternative 2 would not reduce risks from coastal storm events to rail and highway infrastructure and that the 126 commercial structures within the study area would be difficult to floodproof. According to the Draft EA floodproofing may still be considered and possibly implemented in part with a structural solution. The Draft EA analysis of potential environmental impacts associated with a floodwall along the shoreline (Alternatives 4A and 4B)

justified the elimination of those alternatives from further consideration based on significant potential impacts to intertidal and subtidal habitats and wetland areas.

The EA identifies Alternative 3B as the Corps of Engineers Tentatively Selected Plan (TSP). Alternative 3B consists of a 6,425 linear-foot coastal floodwall (5,950 linear-feet of floodwall and a combined 475 linear-feet of closure structures) constructed generally parallel to Interstate 95. The TSP design includes two pump stations to remove stormwater out of the protected area and five deployable roadway closure structures. Non-structural risk management measures include floodproofing of commercial and residential structures seaward of Interstate 95. The Draft EA also explains that the TSP can be implemented with no direct or indirect impacts to wetlands. We encourage the Corps of Engineers to continue to coordinate closely with state and federal resource agencies and permitting authorities as the TSP design is refined.

We generally agree with the rationale for the selection of Alternative 3B as the TSP. We recommend that the final EA provide additional information regarding the operation of the proposed pump stations associated with the TSP. It is not clear from the current discussion how the pump stations will be powered, whether they will be susceptible to the same coastal storm conditions/damage the overall project is intended to address, and how they will be maintained into the future.

The Cumulative and Secondary impacts analysis in the Draft EA (page 85) mentions future Corps of Engineers work for the New Haven Harbor Navigation Improvement Project. As part of this project the Corps of Engineers would remove approximately 43,500 cubic yards of rock from the navigation channel. Depending on the timing of the dredging project and eventual implementation of the TSP we recommend that final EA discuss whether the Corps of Engineers can reuse the blasted rock to support construction of the proposed floodwall.

Thank you for the opportunity to review the Fairfield and New Haven Counties Coastal Storm Risk Management Draft Integrated Feasibility Report and Environmental Assessment. Please contact me at (617) 918-1025 with any questions regarding our comments.

Sincerely,



Timothy Timmermann  
Director Office of Environmental Review



Matthew Ranelli  
Phone: (860) 251-5748  
Fax: (860) 251-5318  
mranelli@goodwin.com

January 20, 2020

VIA ELECTRONIC  
SUBMITTAL

U.S. Army Corps of Engineers  
New England District  
District Engineer  
696 Virginia Road  
Concord, MA 01742

ATTN: Planning Division (Mr. Byron Rupp)

Re: Notice of Fairfield and New Haven Counties, Connecticut Coastal Storm Risk Management Feasibility Study in New Haven, Connecticut; Draft Integrated Feasibility Report & Environmental Assessment ("IFR/EA"); Tentatively Selected Plan; Comments of Fusco Harbour Associates LLC and Fusco Maritime Associates, LLC ("Fusco")

Dear Mr. Rupp:

On behalf of Fusco, enclosed please find comments on above referenced draft IFR/EA and TSP related to coastal storm risk management issues in the Long Wharf areas of New Haven. Fusco is the developer/owner of much of the Long Wharf Maritime Center and owner of other real estate in the Long Wharf area slated for redevelopment. The enclosed comments are being submitted on behalf of the Fusco by Shipman & Goodwin LLP.

Sincerely,

  
Matthew Ranelli

Enclosure

8310652 / s1

**COMMENTS OF FUSCO HARBOUR ASSOCIATES LLC AND FUSCO MARITIME ASSOCIATES, LLC: FAIRFIELD AND NEW HAVEN COUNTIES, CONNECTICUT COASTAL STORM RISK MANAGEMENT (CSRM) FEASIBILITY STUDY IN NEW HAVEN, CONNECTICUT; DRAFT INTEGRATED FEASIBLY REPORT & ENVIRONMENTAL ASSESSMENT (“IFR/EA”)**

These comments are submitted by Shipman & Goodwin LLP on behalf of Fusco Harbour Associates LLC and Fusco Maritime Associates, LLC ("Fusco"). Fusco is a leading construction and property management company headquartered at 555 Long Wharf Drive, New Haven Connecticut. Fusco was founded in 1924 in New Haven. It has a extensive portfolio of projects throughout Connecticut and beyond and has remained a leading developer, employer and property owner in New Haven. Fusco is a significant stakeholder in the study area by virtue of being the developer of the Long Wharf Maritime Center and owning much of the Center as well as abutting real estate.

Fusco has cooperated with the United States Army Corps of Engineers and other stakeholders on numerous occasions regarding coastal storm risk management and shoreline flooding and resiliency issue and looks forward to continuing that work. As one of the longest continuous residents of the Long Wharf area and the developer of the most recent multi-phase construction project along the Long Wharf waterfront, Fusco both understand the complexity and challenges of long-term planning for this area and the importance of such planning for the future of the entire study area and the City of New Haven (“City”).

We have the following two comments on the draft IFR/EA and TSP:

1. We are concerned that the TSP - Alternative 3B may result in increased rather than decreased risk and impact to the Long Wharf Maritime Center and adjacent properties. In particular, our concern is that a storm front or tidal surge being pushed from west to east would essentially ride or be deflected along all or part of the 6,425 foot linear floodwall and road closure structures until it outlets almost directly into the Maritime Center area. We are concerned that this could result in not only an increase of water discharged in the area, but also increased wave action. The draft IFR/EA does not adequately evaluate this risk. The TSP generally refers to the potential floodproofing of the Maritime Center and other nearby structures but does not provide adequate discussion of (1) the scope of the floodproofing needed in the area and (2) the impact of the TSP linear structure on the volume of water and wave action. It is important that the draft IFR/EA evaluate these aspects of the TSP to provide stakeholders and decision-makers with adequate information regarding the suitability of alternatives. Fusco looks forward to and welcomes the opportunity to discuss this issue.

2. The draft IFR/EA acknowledges the significant and recent planning efforts by the city and state but it appears to discount or not recognize robustly enough the planned redevelopment of the Long Wharf area in the very near future. For example, the draft IFR/EA inaccurately states that “no construction plans ...are planned for development in the near-term” and that “[f]uture activities in the study area are anticipated to remain similar to present actions.” See, IFR/EA, pp. 81 and 85. On the contrary, there are in fact significant plans for construction

and development specifically in the Long Wharf area, which would improve and increase the activities well beyond what exists in the area presently. It is important that the draft IFR/EA reflect and account for this planned future development so that decision-makers can best evaluate the adequacy and efficacy of the TSP.

As correctly noted in the draft IFR/EA, the City has recently completed several key planning studies regarding its future environmental and land use planning for the area including the 2019 Long Wharf Responsible Growth Plan. The City's plans call for developing a waterfront neighborhood in Long Wharf with a mix of residential, commercial and professional office uses and enhanced public access to the waterfront. Current Long Wharf property owners that may have been forbearing on development plans while awaiting the completion of the studies can now calibrate their redevelopment plans based in part on the completed studies. In addition, while the studies were in process, the state and federal government identified nearly the entire Long Wharf area as an Opportunity Zone to spur timely development of that area. In short, City, State and private stakeholders are actively encouraging and planning redevelopment of the Long Wharf area in the near future. The draft IFR/EA does not adequately address this fact. As noted above the draft IFR/EA only generally identifies floodproofing efforts on 14 buildings located in the Long Wharf area but this leaves decision-makers in the dark regarding the much more extensive development planned in the area in the near future. The draft IFR/EA notes that floodproofing issues will be analyzed further before the CSRSM is complete; however, the draft report should also correct the mis-impression that there is no development planned in the near future and that the future use will be similar to the present use of the area. Fusco looks forward to and welcomes the opportunity to discuss this issue.

#### **CONTACTS:**

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555 Long Wharf Drive  
Suite 14  
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265 Church Street  
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New Haven, CT 06510  
Tel.: (203) 836-2805  
Email: [mraneli@goodwin.com](mailto:mraneli@goodwin.com)

## Conference Call Meeting for City Point Neighborhood

January 17, 2020

Meeting Minutes

### **In Attendance**

USACE: Byron Rupp (BR), John Kennelly (JK), Christopher Hatfield (CH), Lisa Winter (LW)

DEEP: Brian Thompson (BT), Sue Jacobson (SJ), Karen Michaels (KM)

City of New Haven: Aicha Woods (AW), Giovanni Zinn (GZ), Gage Frank (GF)

City Point Neighborhood Representatives: Carmen Rodriguez (CR), Anna Marriotti (AM)

### **Minutes**

Meeting started with introductions and a brief description of the proposed project by BR. In addition, BR noted that he would document this conference call/meeting and incorporate it into the public comment record for the Study's draft report.

AW noted that there would be a follow-up meeting between the city and the neighborhood residents for the City Point Neighborhood to discuss future potential mitigation activities that could be performed to help reduce the impacts from flooding in that neighborhood. AW also noted that the proposed USACE project for Long Wharf Drive had a very limited scope that did not include neighborhood of City Point. The scope's intent was really to look at alternatives that could reduce flood impacts to I-95, the rail station, and businesses behind Long Wharf Drive. BR stated that the intent of the proposed project was not to impact the residents of City Point, and that the extent of the wall within the neighborhood would, at the most tie into high ground (elevation 15) which is between Howard Ave Overpass and the beginning of the sound wall. In addition, BR stated that the tie into would be far lower in height than the existing sound wall.

Also discussed was the fact that this feasibility study represents the initial stage of a multi-step process that also includes design phase. All of which include an opportunity for the public to comment and input into the project. The resulting report from this study is also called a discussion document; one of several documents that will be used for the authorization and appropriation of funding for this project by Congress.

AM and CR were asked to read the questions they received from neighborhood residents regarding the proposed project. Questions included:

- How did the Corps define the risk to the city?
- Questions regarding the extent, location of the wall within the neighborhood and regarding the height and appearance of the wall;
- How would a 100 year (1%/year) flood impact the neighborhood;
- Would the proposed wall remove the neighborhood from being in a floodplain; and,
- How would this wall impact the south area (i.e., northern most area) of the neighborhood (including how would the proposed project impact flooding pathways within the neighborhood).

CR stressed the importance in having a neighborhood meeting in which city officials could provide additional information to neighborhood residents and initiate discussions with the neighborhood group to develop future mitigation actions for the neighborhood. GZ and AW agreed that this was important and once scheduled, they would be there to discuss this project with residents and discuss any concerns residents may have with the project. GZ also noted that the proposed project would not affect current flooding pathways into the neighborhood with one exception. Since the wall and underpass closure structures, and pump stations would be designed to keep the water from flooding behind Long Wharf Drive, this would effectively close off this pathway of flooding into the neighborhood.

CR and AM thanked everyone for the meeting and CR stated that she would work to schedule the neighborhood meeting immediately.

Conference call was ended.



**From:** [Moses, Catherine G CIV USARMY CENAE \(US\)](mailto:Moses.Catherine.G.CIV.USARMY.CENAE@US)  
**To:** [Moses, Catherine G CIV USARMY CENAE \(US\)](mailto:Moses.Catherine.G.CIV.USARMY.CENAE@US)  
**Subject:** RE: Public Comment: Fairfield and New Haven Counties, CT Coastal Storm Risk Management Feasibility Study  
**Date:** Monday, July 27, 2020 4:38:38 PM

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-----Original Message-----

From: French, Rebecca [<mailto:Rebecca.French@ct.gov>]  
Sent: Thursday, January 16, 2020 5:00 PM  
To: Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Cc: Delaire, Hermia <Hermia.Delaire@ct.gov>; Thompson, Brian <Brian.Thompson@ct.gov>  
Subject: [Non-DoD Source] Public Comment: Fairfield and New Haven Counties, CT Coastal Storm Risk Management Feasibility Study

Dear Mr. Rupp,

As the Director of Resilience for the Connecticut Department of Housing I oversee the US HUD CDBG-NDR grant program funding the implementation of the Resilient Bridgeport flood risk reduction project and the Resilient Connecticut plan. I also work closely with the CDBG-DR Sandy Recovery program managed by Hermia Delaire (copied here).

In my current role at CTDOH and in my former role as Director of Community Engagement at the UConn CIRCA, I have participated in multiple planning efforts for the Long Wharf study area described in the USACE report, Fairfield and New Haven Counties, CT Coastal Storm Risk Management Feasibility Study since 2014. I also hold a Ph.D. in geosciences and have been working on climate adaptation and resilience in Connecticut since 2014.

I write in support of the continued identification of a flood risk reduction solution for the Long Wharf area. The GZA, 2017 report cited in the USACE study was funded by a planning grant from the CT DOH CDBG-DR program. That 2017 report spelled out the significant flood risk facing this area now and in the future under rising seas. It also served as the blueprint for the living shoreline project at Long Wharf to be funded by CT DEEP. Connecticut's application for funding to the US HUD National Disaster Resilience Competition, prepared with input from 9 state agencies through the State Agencies Fostering Resilience Council, identified the Long Wharf area, including the New Haven railyard, as infrastructure in need of protection as a critical junction in the state's and northeast's transportation corridor. Moreover, this area was held up in that application as an example of the need to invest in resilient transit oriented development as a no regrets approach to achieving a more resilient Connecticut due to the multitude of co-benefits resulting from flood protection of this area within walking distance of the train station. Coastal flood risk reduction for Long Wharf would also work in concert with the CT DOH CDBG-DR investment in building 200 bioswales in downtown New Haven to reduce flooding from stormwater that also impacts the neighborhood.

As USACE refines their study and moves on to next steps, I urge you to incorporate green infrastructure and nature-based features into the project's design and not to solely rely on grey infrastructure solutions for coastal flood protection, stormwater flood risk reduction, and mitigation of coastal erosion. Green infrastructure and living shorelines address flood risk while also providing the benefits of habitat creation and restoration and can potentially address heat island effects predicted to increase in our state as the climate warms. The report notes that the city of New Haven plans to build the living shoreline at the water's edge with funding from CT DEEP and the preferred alternative integrates that plan into the overall design. I support that approach, but continue to urge the USACE to look for opportunities to build green infrastructure for stormwater management in addition to the pump stations as a

solution to mitigating any residual flood risk behind the floodwall system.

I further encourage USACE to review the State's CDBG-NDR Resilient Bridgeport process.

Blocked<https://portal.ct.gov/DOH/DOH/Sandy-Pages/Sandy-Programs/NDRC> The State has successfully moved the Resilient Bridgeport coastal flood defense system for the South End of the city of Bridgeport through a NEPA EIS approval process and achieved community and private landowner buy-in due to an extensive community engagement effort and design process that integrates the flood system into the urban fabric using urban environmental design concepts. We have seen in Connecticut that making the investment in the design and community engagement process at the front end pays off in the long run by minimizing impacts to environmental and historic resources and creating community amenities in addition to flood protection.

Thank you for the opportunity to review and comment on the study.

Please reach out to me with any questions.

Sincerely,  
Dr. Rebecca French

CC:

Hermia Delaire, Sandy Program Manager, CT DOH

Brian Thompson, Director Land and Water Resources Division, CT DEEP

-----  
Rebecca A. French, Ph.D.

Director of Resilience

Department of Housing

State of Connecticut

E-mail: [Rebecca.French@ct.gov](mailto:Rebecca.French@ct.gov)

Phone: 860-270-8231

Cell: 860-381-9372



Justin Elicker  
Mayor

**City of New Haven**  
**Office of the Economic Development Administrator**  
**165 Church Street**  
**New Haven, Connecticut 06510**



Michael Piscitelli  
*Acting Economic  
Development  
Administrator*

**Byron Rupp, R CIV USARMY CENAE (USA)**

**U.S. Army Corps of Engineers**

**North Atlantic Division**

**New England District**

This letter is to provide comment on behalf on the City of New Haven's Office of Economic Development regarding the United States Army Corps of Engineers (USACE) Fairfield and New Haven Counties, Coastal Storm Risk Management Feasibility Study-Draft Integrated Feasibility Report & Environmental Assessment dated December 2019 and posted for public comment until Jan 20<sup>th</sup>, 2020 at following link.

<https://www.nae.usace.army.mil/Portals/74/docs/Topics/FairField/Draft-Main-Report-EA-13DEC2019.pdf>

From an economic development perspective, we find the USACE-recommended alternative 3B to be responsive to the City's needs to protect infrastructure, including I-95 and the railyards, critical to New Haven and the region's economic well-being. At latest count, upwards of 140,000 daily travelers use the Long Wharf section of I-95 which also serves as the gateway to New England. Meanwhile, the railyards serve at least five different rail services (both commercial and passenger) while Union Station is a vital transportation hub and Connecticut's major entry point for visitors serving 4 million yearly riders. Just as important, Long Wharf's retail, industrial and hospitality businesses as well as medical facilities, which provide important services and approximately 5,000 jobs to residents of New Haven and surrounding towns, would also be protected under this proposal.

The City of New Haven's Office of Economic Development in conjunction with the City Plan Department also recently completed the Long Wharf Responsible Growth Plan funded by a grant from the State of Connecticut in 2019. This plan, executed by Perkins Eastman Architects and Langan Engineers, took into consideration flood protection elements including the flood wall as well as extensive green infrastructure and Living Shoreline elements. The plan, including the concept flood wall proposal, was ultimately adopted by the City of New Haven's Board of Alders as part of the Comprehensive Plan of Development for the City.

The Office of Economic Development looks forward to working with both the USACE, state partners like DEEP and CT-DOT as well as our fellow City departments, including Engineering and City Plan who are leading the project for the City, as we move into a design development phase of this project.

Respectfully submitted,

Carlos Eyzaguirre, Economic Development Officer, City of New Haven



**NEW HAVEN CITY PLAN DEPARTMENT**  
165 CHURCH STREET, NEW HAVEN, CT 06510  
TEL (203) 946-6378 FAX (203) 946-7815

January 20<sup>th</sup>, 2020

**Byron Rupp, R CIV USARMY CENAE (USA)**

U.S. Army Corps of Engineers

North Atlantic Division

New England District

Dear Mr. Rupp,

This letter is to provide comment on behalf on the City of New Haven regarding the United States Army Corps of Engineers (USACE) Fairfield and New Haven Counties, Coastal Storm Risk Management Feasibility Study- Draft Integrated Feasibility Report & Environmental Assessment dated December 2019 and posted for public comment until Jan 20<sup>th</sup> , 2020 at following link.

<https://www.nae.usace.army.mil/Portals/74/docs/Topics/FairField/Draft-Main-Report-EA-13DEC2019.pdf>

### Background

The in partnership with CT-DEEP, the USACE primary objective over the 50-year period of analysis (2024-2074) is to reduce coastal storm risk (i.e., coastal flood-related losses due primarily to building, content and infrastructure damage) within the Long Wharf, New Haven, CT focused study area. The specific objectives for the study area over the period of analysis are to:

- Reduce risk of coastal storm disruption to critical services and transportation infrastructure including the New Haven railroad system and Interstate 95 which have national and regional impacts
- Reduce risk of coastal storm damage to residential, commercial, and infrastructure development in the Long Wharf, New Haven focused study area
- Reduce risk of coastal storm impacts to public health and safety
- Consider alternatives that support functional coastal ecosystems

The USACE has evaluated a range of alternatives including: 1) using the existing Interstate 95 embankment; 2) enhancing the I-95 embankment with a floodwall system; and 3) building a floodwall system along the shoreline of Long Wharf Park and Maritime Center in combination with closure structures; all with pump stations and nonstructural features.

The USACE-recommended alternative 3B consists of:

- road closure structures at Long Wharf Drive, Canal Dock Road, and Brewery Street;
- two pumping stations;

- enhancement of the I-95 embankment with approximately 5,950 linear feet (lf) of “T-wall” type floodwall with 475 lf flood gates (closure structures); and
- potential flood proofing of commercial and residential structures.

### Process

After consideration of multiple sites in the New Haven and Fairfield County area, the USACE and CT-DEEP team selected New Haven’s Long Wharf area as the site with highest cost-benefit ratio potential as well as extensive flood modeling data available through the 2017 Long Wharf Flood Protection Report prepared for the City Plan Department, City of New Haven by GZA GeoEnvironmental Inc.

The 2017 Long Wharf Flood Protection report included a high-resolution flood scenario model as well as recommendations for flood protection measures, including a flood wall along Long Wharf Drive as well as other measure such a Living Shorelines.

The City of New Haven Economic Development and City Plan subsequently completed the Long Wharf Responsible Growth Plan funded by a grant from Office of Policy and Management, State of Connecticut. This plan, executed by Perkins Eastman Architects and Langan Engineers, took into consideration the flood protection elements including the flood wall as well as extensive green infrastructure and Living Shoreline elements. The Long Wharf Responsible Growth Plan, including the concept flood wall proposal was adopted by the City of New Haven Board of Alders in February 2019 as part of the Comprehensive Plan of Development for the City.

The USACE planning team has maintained open communication with the City of New Haven City Plan Department and Engineering Department during the Feasibility Report including site visits and multiple progress updates. The USACE planning team has been very responsive to comments and concerns conveyed by the City and other agencies including readjusting the location and extent of proposed flood wall based on specific feedback regarding the user experience of Long Wharf park as well as concerns conveyed by CT-DOT.

The City commends the collaborative and responsive approach taken by the USACE planning team led by Byron Rupp and we look forward to continuing the open communication and coordination throughout the design development process.

As the project costs as well as ongoing maintenance costs are substantial, it is critical that the non-federal obligations and partner agreements are addressed early and with transparency. The City also recommends that there is ongoing and iterative value engineering process and refinement of budget so project is appropriately costed. Finally, as private development and investments take place in advance of completion of study, the City also recommends that cost-benefit ratio is adjusted to include these improvements and that any related ongoing public or private investments in flood protection be evaluated as counting towards non-federal match,

We look forward to continuing to work with USACE and its non-federal partners throughout the development and implementation of this significant project.

The following questions are submitted as part of the Public Review Process.

1. The proposed New Haven storm sewer project is not identified as a previous study (Chapter 1, Section 1.5) or considered in discussions about the proposed pump stations. Will this be taken into account in design phase?
2. Stormwater management requirements associated with the existing I-95 roadway stormwater collection are not mentioned. Will these be taken into account in design phase and possibly change project pump station requirements?
3. Under Alternative 3B, are the flood closures part of and in alignment with the flood wall or are they structurally attached to the I-95 embankment and abutments?
4. For Alternatives 3A, 3B, 4A and 4B, were alternatives to pumps stations considered for stormwater management during flood events? For example, on-site detention?
5. For Alternative 3B, temporary, deployable (post and panel gate) (wall closures) are assumed in the cost analysis. These will require material storage, maintenance and manpower to deploy. Please confirm. Has the responsible party for maintenance and deployment been identified?
6. In final design, please place special consideration to discharge water quality issues associated with the proposed stormwater pumps. It is the City's expressed desire to more fully develop the basin north of Long Wharf Pier for in water recreational purposes in conjunction with the newly constructed Canal Dock Boathouse and adjacent docks. We would like to ensure that the water quality in this vicinity facilitates those uses.

A handwritten signature in black ink that reads "Aicha Woods". The signature is written in a cursive, flowing style.

Aicha S. Woods  
Executive Director of City Plan  
City of New Haven  
(203) 946-6380  
[awoods@newhavenct.gov](mailto:awoods@newhavenct.gov)



February 4, 2020

John R. Kennelly, Chief of Planning Division  
US Army Corps of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

Subject: Federal consistency determination of the Fairfield and New Haven Counties Coastal Storm Risk Management (CSRМ) Draft Integrated Feasibility Report and Environmental Assessment within 1.5 square miles along the Long Wharf section of the City of New Haven  
**#202000152-FCC**

Dear Mr. Kennelly:

This correspondence is in response to the US Army Corps of Engineers consistency determination (“Determination”) received on December 23, 2020 for the Fairfield and New Haven Counties Coastal Storm Risk Management (CSRМ) Draft Integrated Feasibility Report and Environmental Assessment within 1.5 square miles along the Long Wharf section of the City of New Haven. This Determination was received pursuant to Section 307(c)(1) of the Coastal Zone Management Act of 1972, as amended, Subpart C in Title 15 of the Code of Federal Regulations (CFR) Part 930, Connecticut General Statutes (“CGS”) Section 22a-96(c), and Section II, Part VII(c) of the State of Connecticut Coastal Management Program and Final Environmental Impact Statement.

The Determination specifies that the Feasibility Report includes a Tentatively Selected Plan (TSP) of an enhancement of the Interstate 95 embankment with approximately 5,950 linear feet of flood wall with a top elevation of 15’ NAVD88 along with 475 feet of deployable closure structures. The intent of the TSP is to improve conditions and/or manage the risk of coastal storm and flood damages. This Department concurs with your determination that the proposed activity is consistent to the maximum extent practicable with Connecticut’s approved Coastal Management Program in accordance with CGS Section 22a-97(b).

Pursuant to 15 CFR §930.6(b) and §930.41(a), this response is provided subsequent to securing necessary review and comment from other applicable government agencies and after providing for public participation in our review of the consistency determination. Please be advised if any substantial changes are made or significant new circumstances are found relevant to the proposed activity that will affect any coastal use or resource substantially different than originally described, a supplemental consistency determination must be submitted for our review pursuant to 15 CFR 930.46.

Thank you for the opportunity to review this proposed activity for its consistency with our Coastal Management Program.

Sincerely,



Brian P. Thompson, Director  
Land & Water Resources Division  
Bureau of Water Protection & Land Reuse

BPT/kr

cc: John R. Kennelly- [john.r.kennelly@usace.army.mil](mailto:john.r.kennelly@usace.army.mil)

Byron Rupp- [Byron.R.Rupp@usace.army.mil](mailto:Byron.R.Rupp@usace.army.mil)

Grace Moses- [C.Grace.Moses@usace.army.mil](mailto:C.Grace.Moses@usace.army.mil)

File #202000152-FCC

Karen Michaels, [karen.michaels@ct.gov](mailto:karen.michaels@ct.gov)

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**From:** [Moses, Catherine G CIV USARMY CENAE \(US\)](mailto:Moses.Catherine.G.CIV.USARMY.CENAE@US)  
**To:** [Moses, Catherine G CIV USARMY CENAE \(US\)](mailto:Moses.Catherine.G.CIV.USARMY.CENAE@US)  
**Subject:** FW: USACE Fairfield and New Haven Counties Coastal Storm Risk Management Feasibility Study  
**Date:** Monday, July 27, 2020 4:48:00 PM  
**Importance:** High

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-----Original Message-----

From: Hogan, Michael E [<mailto:Michael.Hogan@ct.gov>]  
Sent: Wednesday, February 26, 2020 10:07 AM  
To: Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Cc: Burch, Allison W. <Allison.Burch@ct.gov>; McDonnell, Michael F <Michael.McDonnell@ct.gov>; Song, Won S. <Won.Song@ct.gov>; Sweeney, Bartholomew P. <Bartholomew.Sweeney@ct.gov>; Nezames, Theodore H <Theodore.Nezames@ct.gov>; Hill, Scott A <Scott.Hill@ct.gov>; Rolfe, Mark D <Mark.Rolfe@ct.gov>  
Subject: [Non-DoD Source] USACE Fairfield and New Haven Counties Coastal Storm Risk Management Feasibility Study

Byron,

Below are comments prepared by the CTDOT Soils & Foundations and the Hydraulics & Drainage sections on the Draft Fairfield and New Haven Counties Coastal Storm Risk Management Feasibility Study Report and Appendices.

#### Soils & Foundations Comments

1. Main Report, Page 57, Paragraph 2 ... The report mentions that use of the I-95 embankment as part of the flood protection system “cast uncertainty on the non-Federal acceptability of this alternative.”. The language should be a little stronger to indicate that ConnDOT does not find this alternate acceptable. Also the name of the alternative, “Enhanced I-95 Embankment”, give the impression that the I-95 embankment is still part of the flood protection system. Consider revising.
  
2. Main Report, Page 58, Figure 12 and Coastal Management Consistency Review Form Attachment ... The figures implies a continuous T-wall along the entire length of the study when in fact there are breaks with flood gates along roadways passing through the wall ... revise to clarify.
  
3. Appendix D3, Geotechnical Report and Appendix D2, Structural Design ... The piles are designed assuming no downdrag loads. This could be problematic for several reasons;
  - a. The proposed plans are unclear as to if there will be any grade changes, more specifically any increase in grade elevation within the project areas near the floodwalls. If there is, then it is highly likely downdrag loads would be mobilized.
  
  - b. Two of the ConnDOT Project 92-649 Geotechnical Reports (the Roadway report and the Wall 128 report) provided recommendations that allowed for up to 90mm (3.5”) of settlement at various portions of this area. The report, unfortunately, is silent as to the time rate of settlement, and the presence of secondary settlement (which is likely given the geology). Note: Only a small amount of settlement is required to fully mobilize down drag load on a pile (10mm or 0.4”, per FHWA GEC-12). The Army Corps should evaluate to determine if any secondary

settlement is ongoing and determine if there will be sufficient strain to mobilize downdrag forces (Note - these reports have been previously forwarded).

c. It would be in ConnDOT's interest to have the piles designed to resist downdrag loads regardless of the findings from bullet points a. and b. Without downdrag accounted for in the floodwall pile design, ConnDOT will be constrained from the future placement of any fill material or any increase in grade in the vicinity of the floodwall (on both the flood and protection side). Any future work here would have to have either no increase in grade or utilize grade increases with no net stress increase (e.g. over excavate and place lightweight fill, geofoam, etc.).

d. FHWA recommends that battered piles be avoided in areas where downdrag loads are possible. In lieu of battered piles, consider relying on the pile/soil interaction of plumb piles to resist lateral load demands.

4. Appendix D2, Structural Design ... There has been no plan or elevation view of the proposed floodwall provided. More comments may be forthcoming upon receipt.

5. Appendix D2, Structural Design ... There are numerous locations where storm drainage pipes/structure cross either below of through the proposed floodwall. The Army Corps needs to check for conflicts between these drainage pipes/structures and the proposed floodwall pile cap, piles and sheet piling.

Michael McDonnell, P.E.

Transportation Supervising Engineer (Engineering) Connecticut Department of Transportation Soils and Foundations Section

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Room 4212

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#### Hydraulics & Drainage Comments

1. In Section 2.1.5 Relative Sea Level Change (Page 13), it is stated that "CIRCA's recommended sea level change scenario is an increase of 0.5 m (20 inches) by 2050." Similarly, Page 30 of Appendix C -4.0 Sea Level Change indicates that CIRCA "recommends that planning anticipates that sea level will be 0.5 m (1.6 feet) higher than the national tidal datum by 2050" and "an increase of 1.0 m (3.3 feet ) by 2100". On both the main report and the appendix, the CIRCA's recommendations are described being "slightly" above or higher than the USACE intermediate scenario. The appendix then states, "Given this recommendation, the USACE intermediate sea level rise scenario was used to estimate future conditions for the feasibility study". Since the CIRCA projections are higher than the USACE intermediate scenario, and meeting or exceeding the CIRCA recommendation will be required if the project is to be implemented by a municipal or State agency per CT State Public Act 18-82, should the CIRCA recommended values be used instead of the USACE intermediate scenario? The description of the difference being "slight" does not seem fitting. The USACE Intermediate SLC is 1.37 ft by 2074 while the CIRCA project for that year is more like 2.5 ft. The difference seems rather significant.

2. Appendix B. 6.2.5 – It is stated that, “An increase of 0.93 feet, based on the intermediate rate of SLR determined by the project coastal engineer, was added to the stage-probability estimates for 2074 future conditions.” Comparing Tables 10 & 11 in the appendix, it seems that this represents an increase from 2024. However, this is not consistent with Table 4-2 of Appendix C. According to Table 4-2, the difference between the 2024 and 2074 water levels for Intermediate SLC is 0.98 ft. Why are they different? Are they from different save points of the NACCS model? If so, why were the different save points used? The difference between the 2024 water levels in Table 4-2 and the corresponding values in Table 3-1 is 0.39 ft (current or before sea level rise is added). Thus, the difference between the values in Table 3-1 and the 2074 water levels would be 1.37 ft (0.98 ft + 0.39 ft) which is consistent with the USACE Intermediate SLC. Again, this is lower than the CIRCA recommendation.

3. The selected Alternative 3B involves constructing 5,950 ft of floodwall. Although a detailed layout plan of the floodwall was not provided, Figure 12 roughly provides the starting and ending locations of the wall. Reviewing the wall’s depicted location to a higher resolution aerial map with existing condition contour lines reveals that there may be an area where the floodwall may not be necessary and, thus, the required length may be shortened. An area along I-95 south of the Long Wharf Drive underpass for a length of approximately 1,000 feet has a natural ground that is higher than other locations where the toe of the highway embankment is close Elevation 15 ft. Table 7 of the main report does not recommend retaining the “Small individual levees, berms or wall” option for further evaluation, but the option could be investigated for this area. While the current assumption of the floodwall being required for this area is deemed suitable for the feasibility assessment, considering the more cost effective measure is suggested during the actual design phase.

4. The report narrative states that, among the nonstructural measures, elevating buildings was not retained for further evaluation (Page 51). This seems to contradict Table 7, which identifies the option to be retained for further evaluation.

5. The dry flood proofing is noted to be for a design depth of 3 to 4 feet (Page 51). At the Long Wharf Maritime Center, it appears that the general ground elevation there is close to Elevation 10 ft. The required flood protection to Elevation 15 ft will exceed the generally allowed depth for the dry flood proofing.

6. The report (Page 71) states that “USACE projects require the non-Federal sponsor to provide lands, easements, rights-of-way and relocations, and disposal/borrow areas (LERRDs) for a project”, and that both permanent and temporary easements from CTDOT will be required for the floodwall. Does this mean that USACE will have ownership of the flood walls and the other protection features and be responsible for maintaining them after construction? Which entity will be responsible for the deployment and operation of the proposed floodgates and road closure structures? The report should clearly state such information.

7. Besides all the flood entry points to the Long Wharf area identified in the study, there may be one other potential entry point which is from the West River via the existing railroad where the ground elevation is approximately 11 ft. The concern of this being another flood entry point was communicated to GZA in our previous review of their study. They concurred this being an entry point at “higher flood elevations (i.e. with sea level rise)” than their 2016 500-year recurrence interval flood simulation. Should this location be considered for a flood gate structure as well, which would hinder the railroad operation?

8. We recommend that the coincidental effect of the riverine flow be considered and that a detailed hydrodynamic modeling be performed for the post-construction flooding, as a part of the Step “4. Evaluation of the effects of the alternative plans” of the USACE project planning process (Page 11) or during the design phase. It appears that the current assessment of the flooding elevation and extent is based on the existing condition and without the consideration of the riverine flow condition (per our previous communication with GZA). The flooding is sensitive not only to the peak flood elevation but also to the volume, according to GZA, which our office agrees. As the floodwall would have to fully absorb or redirect the energy of the storm surge, the resulting water surface elevation at the wall may be higher than what the current model based on the existing condition portrays. Furthermore, the coincidental riverine condition may pose a higher potential for the flood flow entry from the West River via the railroad.

9. Appendix C, 5.1 Flood Wall, states that “The floodwall crest elevation in USACE projects is almost always selected based on an optimized construction/maintenance analysis”. However, it is not apparent whether such analysis was performed. In the main body of the report, it is described that the crest elevation was “selected considering future annual exceedance probability water levels under the intermediate and high sea level change scenarios.” In Section 5.5 Risk and Uncertainty Analysis of the main report, it does seem a sensitivity analysis was conducted to “capture the effects of “low” and “high” sea level change”, but it is not clear how that information is being used for setting the floodwall crest elevation. More directly, should there be a cost vs. benefits analysis of the differing wall crest elevations for the selected alternative?

10. Is there a floodwall type that can be raised or has the capacity to be raised in the future and in multi-stages if higher sea level rise is to occur than anticipated, or if raising the height in pre-determined stages (say a 20- to 30-year cycle) is desired to address the uncertainty of sea level rise or the context sensitivity aspect of the design? Has the feasibility of such wall design been considered?

Respectfully,

Mike

Michael E. Hogan, P.E.

Transportation Supervising Engineer

Hydraulics & Drainage

Connecticut Department of Transportation

2800 Berlin Turnpike

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Newington, CT 06131-7546

Phone: 860-594-3241

FAX: 860-594-3374

From: Aicha Woods <AWoods@newhavenct.gov <<mailto:AWoods@newhavenct.gov>> >  
Sent: Wednesday, February 12, 2020 4:03 PM  
To: Burch, Allison W. <Allison.Burch@ct.gov <<mailto:Allison.Burch@ct.gov>> >  
Cc: Rupp, Byron R CIV USARMY CENAE (US) <Byron.R.Rupp@usace.army.mil <<mailto:Byron.R.Rupp@usace.army.mil>> >  
Subject: Connecting re ACOE flood wall study

Dear Allison and Byron,

Connecting you for follow up on New Haven Army Corps flood wall project.

Blocked<https://www.nae.usace.army.mil/Missions/Projects-Topics/Fairfield-and-New-Haven-Counties-Coastal-Storm-Risk-Management-Feasibility-Study/>

Aïcha S. Woods

Executive Director of City Plan

New Haven City Plan

T 203.946.6380

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# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

New England Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5087  
<http://www.fws.gov/newengland>

April 17, 2020

John Kennelly  
U.S. Army Corps of Engineers  
Planning Division  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

Re: Coastal Storm Risk Management (CSRM) Draft Integrated Feasibility Report and Environmental Assessment (IFR/EA), Fairfield and New Haven, CT (TAILS # 2020-I-0849)

Dear Mr. Kennelly:

This responds to your correspondence dated December 16, 2019, and received in our office on December 20, 2019, requesting comments related to the above-referenced document. Your request and our response are made pursuant to section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884, as amended; 16 U.S.C 1531, et seq.) (ESA) and section 2(b) of the Fish and Wildlife Coordination Act of 1934, as amended (16 U.S.C. 661-667e).

The U.S. Army Corps of Engineers (Corps) proposes to address the vulnerability of a 1.5-square-mile area along the Long Wharf section of the City of New Haven to storm damage from coastal storm surge. Development in the project area includes commercial and industrial business, a recreation area, and key transportation infrastructure. A portion of Interstate 95 and the New Haven Rail Yard, a central hub of the Northeast Corridor, are subject to coastal flooding and significant transportation impacts if no action is taken. The project involves enhancement of the Interstate 95 embankment with approximately 5,950 linear feet of floodwall with a top elevation of 15 feet NAVD88 along with 475 feet of deployable closure structure.

The proposed project falls within the range of the federally threatened red knot (*Calidris canutus rufa*) and the federally endangered roseate tern (*Sterna dougallii dougallii*). However, according to our records, neither of these species have been documented using this area. In addition, the small size and close proximity to a highly urbanized area make the marsh and tidal flat habitat marginal, and therefore, use by these species is unlikely. The Corps determined the project would have no effect on either of these species.

While we are not able to provide a complete Fish and Wildlife Coordination Act report at this time, we would like to offer the following comments. The Long Wharf Nature Preserve is an important area for recreation and plays a role in the Service's efforts to connect people with nature, particularly in urban areas. The Long Wharf Nature Preserve is considered an Urban Oasis, and is one of more than 25 such sites in New Haven that have been restored, protected, and/or managed in collaboration with the New Haven Harbor Watershed Urban Wildlife Refuge Partnership since 2013. The Urban Oasis at Long Wharf is a demonstration site, and is used by our partners at the New Haven Land Trust and the Sound School to host a nature camp for underserved youth in New Haven. Access to natural areas and immersive, affordable, environmental education opportunities like those provided by the Long Wharf Nature Preserve is very limited for this population. Based on our understanding of the proposed project, we anticipate that the increased wave energy that will likely result from the floodwall construction would degrade, erode, or eliminate much of the shoreline habitat present in this area. We encourage the Corps to consider the possible loss of this green space in the analysis, and evaluate any and all options to minimize and/or mitigate the impacts of the proposed project on this highly valuable area.

Further consultation with us under section 7 of the ESA is not required at this time. If the proposed action changes in any way such that it may affect a listed species in a manner not previously analyzed, or if new information reveals the presence of additional listed species that may be affected by the project, the Corps should contact us immediately and suspend activities that may affect those species until the appropriate level of consultation is completed with our office. Thank you for your cooperation, and please contact Ms. Cindy Corsair of this office at (401) 213-4416 if you have questions or need further assistance.

Sincerely yours,

Thomas R Chapman  
Supervisor  
New England Field Office

cc: Reading file  
ES: CCorsair:jd:4-17-20:401-213-4416



# STATE OF CONNECTICUT

DEPARTMENT OF TRANSPORTATION

2800 BERLIN TURNPIKE, P.O. BOX 317546  
NEWINGTON, CONNECTICUT 06131-7546



July 9, 2020

Mr. John Kennelly  
Chief of Planning Division  
U.S. Army Corps of Engineers  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

Dear Mr. Kennelly:

Subject: Title: New Haven (Long Wharf) Coastal Study

The Connecticut Department of Transportation (CTDOT) has reviewed the draft Fairfield and New Haven Counties Coastal Storm Risk Management Feasibility Study which focuses on a proposed coastal storm risk management project in the City of New Haven, Connecticut, in the developed waterfront area known as "Long Wharf". CTDOT supports the continued study and development of coastal storm risk management improvements in this area. Based upon a final approved plan, along with any necessary concurrence from the Federal Highway Administration, property under the control of CTDOT may be made available to other state agencies and/or municipalities, at no cost, as long as the property is being utilized for coastal storm management improvements. Any proposed structures for said use must not compromise the current or future ability for the transportation corridor to function for its intended transportation purpose.

If you have any questions, please contact Scott Hill at (860) 594-3150 or [Scott.Hill@ct.gov](mailto:Scott.Hill@ct.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Giuliatti".

Joseph Giuliatti  
Commissioner  
Connecticut Department of Transportation

cc: Justin Elicker, Mayor City of New Haven  
Katie Dykes, DEEP Commissioner



William M. Conde  
Colonel, U.S. Army Corps of Engineers  
North Atlantic Division  
New England District  
696 Virginia Road  
Concord, MA 01742-2751

July 9, 2020

Subject: New Haven and Fairfield Counties: Draft Integrated Feasibility Report & Environmental Assessment

Dear Colonel Conde:

The State of Connecticut and the City of New Haven have reviewed the Draft Integrated Feasibility Report & Environmental Assessment (IFR/EA) regarding the New Haven and Fairfield County Coastal Storm Risk Management Feasibility Study, concur with the recommendations set forth therein, and support the recommended plan for the proposed flood protection project.

The IFR developed alternatives that over the 50-year period of analysis (2024-2074) reduce coastal storm risk (i.e., coastal flood-related losses due primarily to building, content and infrastructure damage) within the Long Wharf, New Haven, CT focused study area.

The specific objectives for the study area over the period of analysis are to:

- Reduce risk of coastal storm disruption to critical services and transportation infrastructure including the New Haven railroad system and Interstate 95 which have national and regional impacts
- Reduce risk of coastal storm damage to residential, commercial, and infrastructure development in the Long Wharf, New Haven focused study area
- Reduce risk of coastal storm impacts to public health and safety
- Consider alternatives that support functional coastal ecosystems

The alternatives studied include: 1) using the existing Interstate 95 embankment; 2) enhancing the I-95 embankment with a floodwall system; and 3) building a floodwall system along the shoreline of Long Wharf Park and Maritime Center in combination with closure structures; all with pump stations and nonstructural features.

The USACE-recommended alternative 3B consists of:

- road closure structures at Long Wharf Drive, Canal Dock Road, and Brewery Street;
- Stormwater pumping capacity; and
- enhancement of the I-95 embankment with approximately 5,950 linear feet (lf) of "T-wall" type floodwall with 475 lf flood gates (closure structures);

After consideration of multiple sites in the New Haven and Fairfield County area, the USACE selected New Haven's Long Wharf area as the site with highest cost-benefit ratio potential, supported by extensive flood modeling data available through the 2017 Long Wharf Flood Protection Report commissioned by the City Plan Department, City of New Haven.

The recommended alternative is in alignment with the adopted goals of both the State of Connecticut and the City of New Haven on coastal protection and resiliency. Executive Order #3 of the Governor of the State of Connecticut calls for adaptation and resiliency strategies, especially for communities most vulnerable to the effects of Climate Change. The City of New Haven's Long Wharf Responsible Growth Plan, including the concept flood wall proposal, was adopted by the City of New Haven Board of Alders in February 2019 as part of the Comprehensive Plan of Development for the City.

The Connecticut Department of Transportation and the City of New Haven both have extensive rights-of-way in the project area and are willing to host the project on their land. At this time, all of the project improvements would occur within these rights-of-way and thus further real estate acquisition is not anticipated. Nonetheless, both the State of Connecticut and the City of New Haven have the ability to acquire land if required.

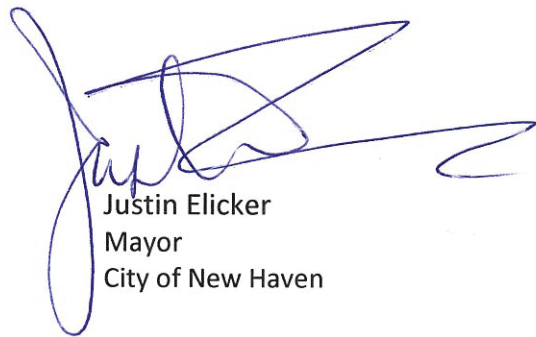
The State of Connecticut and the City of New Haven understand the responsibility of the Project Sponsors. Subject to the allocation, approval, and bonding of the necessary funds by the Connecticut General Assembly, the State Bond Commission, and/or the City of New Haven Board of Alders, the State of Connecticut and the City of New Haven assert that they have the capacity to meet the financial obligations of the Project Sponsors. The State of Connecticut and the City of New Haven have both successfully partnered with the Army Corps of Engineers in the past.

The State of Connecticut and the City of New Haven commend the collaborative and responsive approach taken by the USACE planning team led by Byron Rupp and look forward to continuing the open communication and coordination throughout the design development process.

Sincerely,



Graham J. Stevens  
Chief, Bureau of Water Protection & Land Reuse  
Department of Energy & Environmental Protection  
State of Connecticut



Justin Elicker  
Mayor  
City of New Haven

**Fairfield and New Haven Counties,  
Connecticut  
Coastal Storm Risk Management  
Feasibility Study**

**Draft Integrated Feasibility  
Report and Environmental  
Assessment**

**Public and Agency Review  
USACE Responses**



**DEPARTMENT OF THE ARMY**  
**US ARMY CORPS OF ENGINEERS**  
**NEW ENGLAND DISTRICT**  
**696 VIRGINIA ROAD**  
**CONCORD MA 01742-2751**

May 18, 2020

Planning Division

Mr. Tom Chapman, Supervisor  
U.S. Fish and Wildlife Service  
New England Field Office  
70 Commercial Street, Suite 300  
Concord, New Hampshire 03301

Dear Mr. Chapman:

This formalizes a telephone call between Ms. Cindy Corsair of your office and staff of the U.S. Army Corps of Engineers (Corps) in regards to your letter dated April 17, 2020 in which you provided comments pursuant to the Fish and Wildlife Coordination Act on the Corps' Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management (CSR) Draft Integrated Feasibility Report and Environmental Assessment (DFR/EA). The DFR/EA presented details related to the study area including an analysis of the environmental impacts of the Tentatively Selected Plan (TSP). The TSP is a 5,950 linear foot long floodwall along the Interstate 95 embankment in Long Wharf, New Haven, CT.

As discussed in the call with Ms. Corsair, the floodwall will be located along the Interstate 95 embankment landward of Long Wharf Park and the Long Wharf Nature Preserve between Long Wharf Drive and I-95. Based on this alignment, the floodwall will not increase wave energy that would degrade, erode, or eliminate any of the shoreline habitat under typical conditions. During major storm events, temporarily increased wave energy due to wave reflection along the floodwall has the potential to occur. However, the impacts of this kind of event would be temporary and localized, and therefore, not expected to cause erosion of the shoreline.

As noted in the DFR/EA, the City of New Haven received funding from the Connecticut Department of Energy and Environmental Protection in 2019 to construct a living shoreline along Long Wharf Park which is intended to protect the shoreline against erosion and help ease the effects of sea level rise. A stone sill, intertidal marshes, sand fill, and native plants are proposed as part of the living shoreline. The Corps has actively worked with the City of New Haven to ensure that the TSP will have no impact on the planned living shoreline project.

If you or your staff have any questions or require additional information, please contact Grace Moses of the Environmental Resources Section at (978) 318-8717 or by email at [C.Grace.Moses@usace.army.mil](mailto:C.Grace.Moses@usace.army.mil). You may also contact the Planning Study Manager, Byron Rupp at 978-318-8172, or by e-mail at [Byron.R.Rupp@usace.army.mil](mailto:Byron.R.Rupp@usace.army.mil).

Sincerely,

KENNELLY.JOH  
N.R.1228532939

Digitally signed by  
KENNELLY.JOHN.R.1228532939  
Date: 2020.05.18 14:46:05  
-04'00'

John R. Kennelly  
Chief, Planning Division

Enclosures

Copy Furnished (via email):

Ms. Cindy Corsair: [Cynthia\\_Corsair@fws.gov](mailto:Cynthia_Corsair@fws.gov)



**DEPARTMENT OF THE ARMY**  
**US ARMY CORPS OF ENGINEERS**  
**NEW ENGLAND DISTRICT**  
**696 VIRGINIA ROAD**  
**CONCORD MA 01742-2751**

July 31, 2020

Planning Branch

Ms. Catherine Labadia, Deputy State Historic Preservation Officer  
Connecticut State Historic Preservation Office  
450 Columbus Boulevard, Suite 5  
Hartford, CT 06103

Dear Ms. Labadia:

The U.S. Army Corps of Engineers (USACE) New England District has completed the Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management (CSRM) Final Draft Integrated Feasibility Report and Environmental Assessment (IFR/EA). We are consulting with you to satisfy our responsibility under Section 106 of the National Historic Preservation Act, of 1966, as amended. We would appreciate any comments you may have on this proposed project.

The USACE has revised the scope of the study area to focus on those areas with the greatest opportunity to improve conditions and/or manage the risk of coastal storm and flood damages. The area of detailed examination is approximately 1.5 square miles along the Long Wharf section of the City of New Haven (Attachment 1).

The general water resource problem to be addressed is the vulnerability of this area to storm damage from coastal storm surges. Development in the project area includes commercial and industrial business, a recreation area, and key transportation infrastructure. A portion of Interstate 95 and the New Haven Rail Yard, a central hub of the Northeast Corridor, are subject to coastal flooding and significant transportation impacts if no action is taken.

Plan formulation involved the analysis of potential structural and non-structural alternatives. The Recommended Plan is an enhancement of the Interstate 95 embankment with approximately 5,800 linear feet of floodwall with a top elevation of 15 feet (North American Vertical Datum 88), along with 475 feet of deployable closure structures. The floodwall will have a buried pile-supported foundation and be built from reinforced concrete. Five deployable road closure structures will be installed to prevent underpass flooding on Long Wharf Drive (three closure structures), Canal Dock Road, and Brewery Street.

One pump station sized to handle approximately 900 cubic feet of water per second (cfs) will be constructed to handle storm water behind the structure. The pump station will pump water to existing storm water utilities owned and operated by the City

of New Haven, thus no new outfalls will be built for this project. Please see Attachment 2 for the project details.

There were three historic properties/resources identified in the vicinity of the proposed project. These include the Oyster Point Historic District, the Howard Avenue Historic District, and the New Haven Railroad Station (Woods Hole 2010). The area has been heavily disturbed by industrial, commercial, and residential development. There is no archaeological sensitivity in the project area and no pre-contact archeological sites have been located in or near the project area.

There are no known archaeological resources that will be impacted by the Recommended Plan. The Recommended Plan will have no effect on the Oyster Point Historic District as no structural or non-structural plans are being proposed in the historic district. There are two historical properties that are listed on the National Register of Historic Places, which could be impacted by the construction of the flood wall. The Howard Avenue Historic District is adjacent to the project area and the New Haven Railroad Station is located at the northern end of Long Wharf. The construction of the Recommended Plan will have a long-term positive effect on these resources as they will be protected from flooding, thereby reducing the potential of coastal storm-related damages to the Howard Avenue Historic District and the New Haven Railroad Station. The USACE has determined that the proposed project will have no adverse effect on historic properties. We would appreciate your concurrence.

If you have any questions, please contact Kate Atwood, Archaeologist, at [Kathleen.a.atwood@usace.army.mil](mailto:Kathleen.a.atwood@usace.army.mil) or at (978) 318-8537. You may also contact the Planning Project Manager, Byron Rupp at [byron.r.rupp@usace.army.mil](mailto:byron.r.rupp@usace.army.mil) or at (978) 318-8172

HATFIELD.CHRISTOPHER.L.122851  
9908  
Date: 2020.07.31 16:17:14 -04'00'

Sincerely,  
Christopher L. Hatfield  
Chief, Plan Formulation Branch

Enclosures

Same Letter Sent (with enclosures)

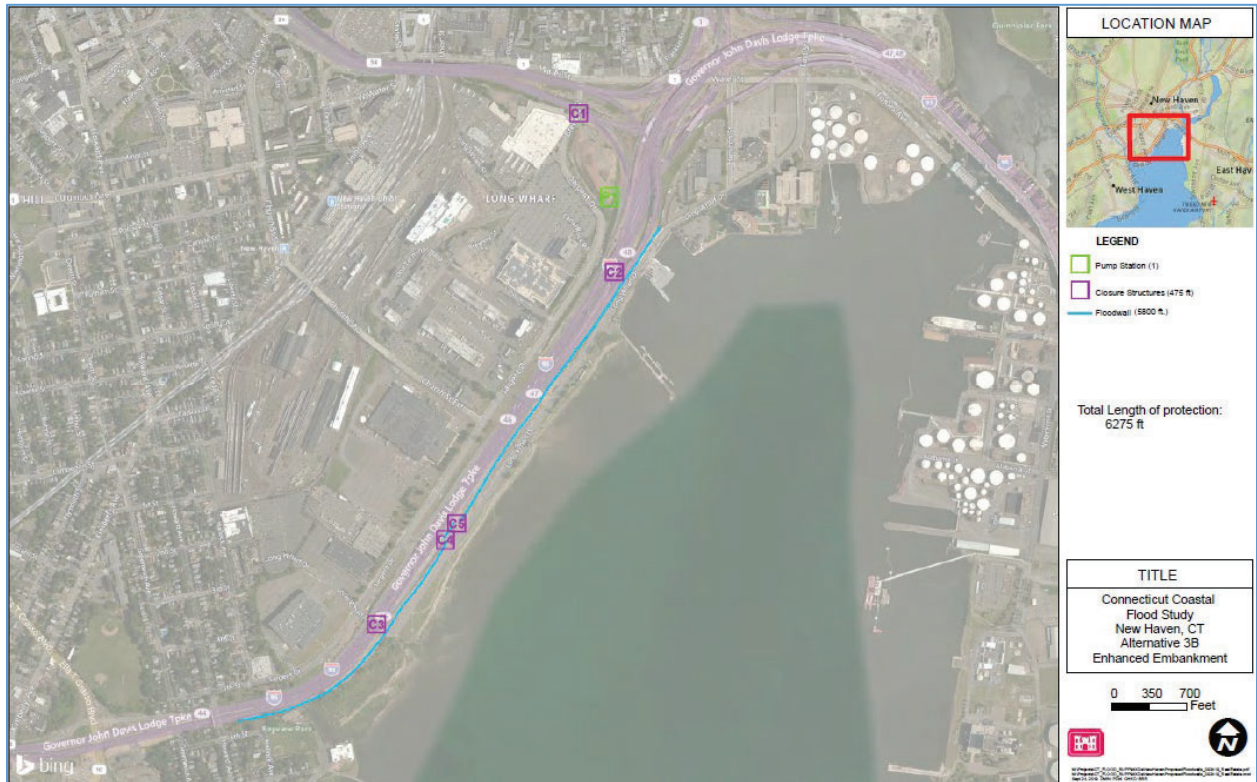
Ms. Marissa Turnbull, Tribal Historical Preservation Officer  
Natural Resources Protection & Regulatory Affairs  
Mashantucket (Western) Pequot Tribal Nation  
350 Trolley Line Blvd., P.O. Box 3202  
Mashantucket, Connecticut 06338

Mr. James Quinn  
Tribal Historic Preservation Officer  
Mohegan Tribe  
13 Crow Hill Road  
Uncasville, CT 06382  
Mashantucket, CT 06338-3202





Attachment 1



**Attachment 2, Recommended Plan**

**From:** [James Quinn](#)  
**To:** [Atwood, Kathleen A CIV \(USA\)](#)  
**Subject:** [Non-DoD Source] RE: CT Coastal Storm Reduction report  
**Date:** Thursday, August 6, 2020 10:54:17 AM

---

Hello Kathleen,

Thank you for sending the information regarding the above referenced project. The Mohegan Tribal Historic Preservation Office does not have any concerns with the project as it proposed. However, please contact my office in the advent of any inadvertent discoveries of archaeological sites or huan remains.

Thank you,  
James

-----Original Message-----

From: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Sent: Monday, August 3, 2020 7:41 AM  
To: James Quinn <jquinn@moheganmail.com>  
Subject: CT Coastal Storm Reduction report

WARNING: External email. Please verify sender before opening attachments or clicking on links.

Dear Mr. Quinn,

A hard copy of this letter is being sent to your office. Your office was notified at the start of the Feasibility Report/Environmental Assessment and then at the public release of the draft report.

This letter is to initiate consultation under Section 106 of the NHPA as amended.

Please let me know if you have any questions or comments concerning this project.

Thank you very much,  
Kate Atwood  
(978) 318-8537

Since I'm working from home you can also contact me on my cell phone at (774) 218-1099.

**Response to Public Comments on Proposed Coastal Storm  
Risk Management Project in the City of New Haven, Long  
Wharf District**

July 2020

On December 19, 2019, the US Army Corps of Engineers (USACE) released the Draft Fairfield and New Haven Counties, CT Coastal Storm Risk Management (CSRМ) Integrated Feasibility Report and Environmental Assessment (IFR/EA) for public review and comment. The report recommend construction of a CSRМ project with the Long Wharf District located within the City of New Haven, CT.

Through written and oral comments submitted by mail, email, and phone, USACE received comments from 13 individuals, groups or entities on the report and recommended plan. Each comment was assigned a unique comment number. This document contains the essential points of the commenters and the USACE response to each comment.

The table at the end of this document associates each of the commenters with the unique comment number.

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**Comment 1, Connecticut Department of Energy and Environmental Protection**

**(CTDEEP):** The commenter suggested the USACE study team works with Connecticut Department of Transportation (CTDOT) and Federal Highways Administration (FHA) to determine project benefits associated with the train station and rail infrastructure (note, this category of benefits was not included in the draft report).

**Response:** Following release of the draft report in December 2019, the USACE team has developed benefits associated with reduced coastal storm damages connected to the New Haven Rail infrastructure. Details of this analysis may be found in the feasibility report *Appendix B Economics*.

**Comment 2, CTDEEP:** The commenter suggested that the USACE study team obtains additional data and information to potentially reduce the contingency percentages associated with the project. This includes looking at all underground utilities that would affect the costs of the project.

**Response:** Following the Agency Decision Milestone in March, 2020. The USACE study team conducted a Cost and Schedule Risk Assessment (CSRA) per USACE regulations to identify and quantify project risks and uncertainties. An analysis of utility impacts within the project area was conducted as a part of the CSRA. As a result of this analysis, project contingencies were reduced from the high 40's -low 50's to 37%. This reduced contingency led to a substantial decrease of the total project cost. Full details on the cost analysis conducted for this study may be found in *Appendix E Cost Engineering*.

**Comment 3, CTDEEP:** The commenter suggested that the USACE study team obtain information about costs, benefits, and potential impacts to I-95 during intense storm events to better evaluate risk.

**Response:** Similar to the response to comment #1, following release of the draft report in December 2019, the USACE team has developed benefits associated with the potential shutdown of I-95 during a major coastal storm. Details of this analysis may be found in the feasibility report *Appendix B Economics*.

**Comment 4, National Marine Fisheries Service (NMFS) Protected Resources Division:** The commenter requested that the USACE provide updated and corrected information for the Federal Threatened and Endangered Species section.

**Response:** Section 3.6 Federal Threatened and Endangered Species has been updated with the information and references provided by NMFS.

**Comment 5, U.S. Environmental Protection Agency (USEPA):** The commenter recommends that the final EA provide additional information regarding the operation of the proposed pump stations.

**Response:** Since release of the draft report, the study team, working with the City of New Haven Engineering team has reduced the number of pump stations from two to a single pump station. This pump station will connect to existing stormwater infrastructure and is designed to be used on an emergency basis. Additional information on this update to the design may be found in the final EA as well as *Appendix D1 Civil Engineering*. A full analysis of the pump station design and operation will occur in the pre-construction engineering and design phase of the project.

**Comment 6, USEPA:** The commenter recommends that the final EA discuss whether the USACE can reuse the blasted rock from the New Haven Harbor Navigation Improvement Project to support construction of the floodwall.

**Response:** It is unclear if the Navigation Improvement project would produce rock or other materials that are suitable to support the floodwall project. At this point in the feasibility study, there is too much uncertainty associated with the timing of the two projects to fully explore this option in the EA. Opportunities to beneficially reuse materials from the New Haven Harbor Navigation Improvement Project will be explored in the next phase of the project.

**Comment 7, Law firm of Shipman and Goodwin:** The commenter wrote that his client is concerned that the floodwall will result in increased storm surge wave action, and flooding effects in the Maritime Center area. This risk should be evaluated in the IFR/EA.

**Response:** The floodwall will be located along the Interstate 95 embankment landward of Long Wharf Park and the Long Wharf Nature Preserve between Long Wharf Drive and I-95. Based on this alignment, the floodwall will not increase wave energy that would degrade, erode, or eliminate any of the shoreline habitat under typical conditions. During major storm events, temporarily increased wave energy due to wave reflection along the floodwall has the potential to occur. However, the impacts of this kind of event would be temporary and localized, and therefore, not expected to cause erosion of the shoreline or increase the flood water levels in the vicinity of the Maritime Center area.

**Comment 8, Law firm of Shipman and Goodwin:** The commenter recommends adding a discussion of the scope of floodproofing in the Maritime Center.

**Response:** The Long Wharf Maritime Center and other structures on the seaward side of I-95 were analyzed in more detail following release of the draft report to determine if they may be eligible for floodproofing. Due to first floor elevations and building contents, the study team determined it would not be economically feasible to floodproof these structures under this study authority. The final recommended plan does not include floodproofing structures seaward of the I-95 embankment. This decision was made concert with the CTDEEP and City of New Haven.

**Comment 9, Law firm of Shipman and Goodwin:** The commenter suggested that on pages 81 and 85, for the USACE to add plans for development in the Long Wharf area outlined in the 2019 Long Wharf Responsible Growth Plan.

**Response:** Section 6.9: Socioeconomics and Chapter 7: Cumulative and Secondary Impacts have been updated to include the 2019 Responsible Growth Plan.

**Comment 10, Private Citizen 1:** The commenter made the following statement: “What about the homes on the shore of East Haven? Something could be put in the sound to stop the water from rising”.

**Response:** While the city of East Haven is outside of the project area, the USACE acknowledges that there are areas within East Haven that are currently at a high risk of coastal flooding and erosion. Comment acknowledged.

**Comment 11, Private Citizen 2:** Residents of the City Point/Oyster Point neighborhood were concerned about whether they were included in the project. Other questions include clarification of the extent and location of property acquisitions mentioned in the report and the height and appearance of the wall. Requested a meeting so they could understand the project.

**Response:** Meeting held on Friday, 17 January 2020 with the City of New Haven, Corps, CTDEEP, and two neighborhood representatives. Following that meeting, the City of New Haven followed up with neighborhood residents to discuss coastal storm risk specifically for the City Point neighborhood.

**Comment 12, Private Citizen 3:** Writes in support of flood risk reduction solutions for the Long Wharf area and urges to incorporate green infrastructure and nature-based features into the design specifically for stormwater management.

**Response:** Support of the recommended plan is acknowledged. Opportunities to incorporate green infrastructure and nature-based features into the design (specifically for stormwater management) will be explored during the design phase of the project.

**Comment 13, City of New Haven Office of Economic Development:** The commenter writes in support of the recommended alternative and provides information related to transportation and jobs that the project would help support.

**Response:** Support of the recommended plan is acknowledged. Acknowledge the submitted information related to transportation and jobs that the project would help support.

**Comments 14, City of New Haven Planning Department:** The commenter provided the following comment: "As the project costs as well as ongoing maintenance costs are substantial, it is critical that the non-federal obligations and partner agreements are addressed early and with transparency. The City also recommends that there is ongoing and iterative value engineering process and refinement of budget so project is appropriately costed. Finally, as private development and investments take place in advance of completion of study, the City also recommends that cost-benefit ratio is adjusted to include these improvements and that any related ongoing public or private investments in flood protection be evaluated as counting towards non-federal match."

**Response:** Comment is acknowledged. Non-Federal responsibilities (cost-sharing, operations and maintenance costs etc.) will be fully developed and coordinated with the non-Federal sponsor prior to formally beginning the design phase of the project. A Design Agreement (DA) and/or a project partnership agreement (PPA) containing the



previously mentioned details will be developed and jointly approved before the project can move forward. Value Engineering during the Pre-construction Engineering and Design (PED) phase is a USACE requirement and the non-Federal sponsor will be involved with that process. Regarding the benefit-cost ratio (BCR), the USACE generally doesn't modify the BCR once the project is authorized by the Congress. The USACE has strict policies in place which limit the types of benefits that may be counted towards the official BCR for the project. Private development and investments occurring after completion of the study will not impact the official BCR for the project.

**Comment 15, City of New Haven Planning Department:** The commenter provided the following question: The proposed New Haven storm sewer project is not identified as a previous study (Chapter 1, Section 1.5) or considered in discussions about the proposed pump stations. Will this be taken into account in design phase?

**Response:** The proposed New Haven storm sewer project will be fully considered during the design phase of the project. In addition, following release of the draft feasibility report, the USACE study team worked with the City of New Haven Engineering Department to refine the feasibility-level designs using the Stormwater Water Management Model currently being used by the city to develop stormwater management improvements. A full engineering design analysis of the stormwater management system will be completed during the design phase of the project.

**Comment 16, City of New Haven Planning Department:** The commenter provided the following question: Stormwater management requirements associated with the existing I-95 roadway stormwater collection are not mentioned. Will these be taken into account in design phase and possibly change project pump station requirements?

**Response:** Stormwater management requirements associated with the existing I-95 roadway stormwater collection will be taken into account in design. A full engineering design analysis of the stormwater management system for the highway (and entire project area) will be completed during the design phase of the project. The current cost estimate for the stormwater management system (including the pump station) includes a contingency of 37% to account for risks and uncertainties associated with the feasibility-level design.

**Comment 17, City of New Haven Planning Department:** The commenter provided the following question: Under Alternative 3B, are the flood closures part of and in alignment with the flood wall or are they structurally attached to the I-95 embankment and abutments?

**Response:** Under Alternative 3B, (the recommended plan,) the flood closure structures and floodwall are designed to be structurally-independent of the I-95 embankment and bridge abutments. The floodwall and closure structures will form a continuous line of protection which will sit upon deep, pile-supported foundations.

**Comment 18, City of New Haven Planning Department:** The commenter provided the following question: For Alternatives 3A, 3B, 4A and 4B, were alternatives to pumps stations considered for stormwater management during flood events? For example, on-site detention?

**Response:** Alternatives to pumps stations were considered by the USACE team. However, given the footprint of the project area and size of the associated sewershed, the potential volume of water associated with the design storm would quickly overwhelm available on-site detention/retention. There may be opportunities to utilize on-site detention areas or green infrastructure to reduce the pumping requirements – this will need to be analyzed during the design phase of the project.

**Comment 19, City of New Haven Planning Department:** The commenter provided the following question: For Alternative 3B, temporary, deployable (post and panel gate) (wall closures) are assumed in the cost analysis. These will require material storage, maintenance and manpower to deploy. Please confirm. Has the responsible party for maintenance and deployment been identified?

**Response:** The recommended plan, (Alternative 3B,) includes the use of post and panel type closure structures. This type of deployable structure will require material storage, maintenance and manpower to deploy as noted by the commenter. The non-Federal sponsor will be responsible for maintenance and deployment of the closure structures. The details of the operations and maintenance of the project will be developed in partnership with the City of New Haven and State of Connecticut.

**Comment 20, City of New Haven Planning Department:** The commenter provided the following question: In final design, please place special consideration to discharge water quality issues associated with the proposed stormwater pumps. It is the City's expressed desire to more fully develop the basin north of Long Wharf Pier for in water recreational purposes in conjunction with the newly constructed Canal Dock Boathouse and adjacent docks. We would like to ensure that the water quality in this vicinity facilitates those uses.

**Response:** Comment is acknowledged. Water quality standards associated with discharges from the proposed pump station will be a critical aspect of the design- to be analyzed during the next phase of the project.

**Comment 21, Connecticut Department of Transportation:** The commenter provided the following comment: Main Report, Page 57, Paragraph 2 ... The report mentions that use of the I-95 embankment as part of the flood protection system “cast uncertainty on the non-Federal acceptability of this alternative.” The language should be a little stronger to indicate that ConnDOT does not find this alternate acceptable. Also the name of the alternative, “Enhanced I-95 Embankment”, gives the impression that the I-95 embankment is still part of the flood protection system. Consider revising.

**Response:** Comment is acknowledged. Following release of the draft report, Alternative 3A, which was designed to integrate into the I-95 embankment, was screened out of consideration based on feedback from the CTDOT. Acknowledge the name of Alternative 3B may give the impression that the embankment is part of the flood protection system – the following statement was added to the main report under the description of the recommended plan: “The proposed floodwall is designed to be built upon a robust, pile-supported foundation, independent of the I-95 earthen embankment.”

**Comment 22, Connecticut Department of Transportation:** The commenter provided the following comment: Main Report, Page 58, Figure 12 and Coastal Management Consistency Review Form Attachment ... The figures implies a continuous T-wall along the entire length of the study when in fact there are breaks with flood gates along roadways passing through the wall ... revise to clarify.

**Response:** Comment is acknowledged. The figures noted in the comment are intended to show the breaks for the closure structures with the purple icons labeled C1, C2, etc. The detail is lost at the current scale of the figures which shows the entire alternatives on a single sheet. Detailed figures showing more accurate details will be developed during the design phase of the project.

**Comment 23, Connecticut Department of Transportation:** The commenter provided the following multi-part comment regarding downdrag loads: Appendix D3, Geotechnical Report and Appendix D2, Structural Design ... The piles are designed assuming no downdrag loads. This could be problematic for several reasons:

- a. The proposed plans are unclear as to if there will be any grade changes, more specifically any increase in grade elevation within the project areas near the floodwalls. If there is, then it is highly likely downdrag loads would be mobilized.
- b. Two of the ConnDOT Project 92-649 Geotechnical Reports (the Roadway report and the Wall 128 report) provided recommendations that allowed for up to 90mm (3.5”) of settlement at various portions of this area. The report, unfortunately, is silent as to the time rate of settlement, and the presence of secondary settlement (which is likely given the geology). Note: Only a small amount of settlement is required to fully mobilize down drag load on a pile (10mm or 0.4”, per

FHWA GEC-12). The Army Corps should evaluate to determine if any secondary settlement is ongoing and determine if there will be sufficient strain to mobilize downdrag forces (Note - these reports have been previously forwarded).

c. It would be in ConnDOT's interest to have the piles designed to resist downdrag loads regardless of the findings from bullet points a. and b. Without downdrag accounted for in the floodwall pile design, ConnDOT will be constrained from the future placement of any fill material or any increase in grade in the vicinity of the floodwall (on both the flood and protection side). Any future work here would have to have either no increase in grade or utilize grade increases with no net stress increase (e.g. over excavate and place lightweight fill, geofoam, etc.).

d. FHWA recommends that battered piles be avoided in areas where downdrag loads are possible. In lieu of battered piles, consider relying on the pile/soil interaction of plumb piles to resist lateral load demands.

**Response:** Comments related to downdrag loads are acknowledged. It is acknowledged that the CTDOT is also concerned with downdrag loads associated with future placement of any fill material or any increase in grade in the vicinity of the floodwall. A full analysis of settlement, secondary settlement and downdrag forces will be completed during the design phase project in collaboration with the CTDOT engineering team. The current cost estimate for the coastal storm risk management system (including the deep, pile-supported foundation) includes a contingency of 37% to account for risks and uncertainties associated with the feasibility-level design.



September 9, 2020

Ms. Kate Atwood  
Regulatory Division  
U.S. Army Corps of Engineers  
696 Virginia Road  
Concord, MA 01742-2751

Subject: Coastal Storm Risk Management  
I-95, Long Wharf Section  
New Haven, Connecticut

Dear Ms. Atwood,

The Connecticut State Historic Preservation Office (SHPO) has reviewed the referenced project in response to your request for consultation pursuant to Section 106 of the National Historic Preservation Act. SHPO understands that the United States Army Corps of Engineers (USACE), in an effort to improve conditions and/or manage the risk of coastal storm and flood damages, has completed the Fairfield and New Haven Counties, Connecticut, Coastal Storm Risk Management (CSRМ) Final Draft Integrated Feasibility Report and Environmental Assessment (IFR/EA). Although the study area covers two counties, a detailed examination in the draft feasibility report focuses on an area of the New Haven waterfront known as the Long Wharf area. The area extends roughly one mile along New Haven Harbor from where Interstate 95 merges with Interstate 91 in the east to the intersection of Sargent Drive and Hallock Avenue in the west; the study area extends inland to encompass the New Haven railyard. The report identified this section of Interstate 95 and the New Haven Rail Yard, a central hub of the Northeast Corridor, as critical transportation corridors that can be subject to significant coastal flooding if no action is taken.

After a careful analysis of several alternatives, Alternative 3B emerged as the preferred alternative. This alternative calls for enhancing slightly more than one mile of the existing Interstate 95 embankment to a top elevation of 15 feet along with five deployable road closure structures to prevent underpass flooding on Long Wharf Drive (three closure structures), Canal Dock Road, and Brewery Street; as well as a new pump station to be located between Sargent Drive, Route 34, and Interstate 95. SHPO concurs that because the proposed project items are located within areas that have been substantially disturbed, it is unlikely that significant archaeological deposits would be impacted by the proposed undertaking. SHPO notes, however, that three properties situated within the study have been determined eligible for listing on the

State Historic Preservation Office

One Constitution Plaza | Hartford, CT 06103 | P: 860.256.2800 | [ct.gov/historic-preservation](http://ct.gov/historic-preservation)

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Department of Economic and  
Community Development

State Historic Preservation Office

National Register of Historic Places. These properties are the historic Long Wharf Pier (off Long Wharf Drive), the Canal Dock Boathouse (475 Long Wharf Drive), and the Pirelli Tire Building (500 Sargent Drive). These properties were not given consideration in the IFR/EA and SHPO recommends that USACE evaluates how these historic properties might be affected by the undertaking. Our office looks forward to additional consultation as the project moves forward.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Catherine Labadia, Staff Archaeologist and Environmental Reviewer, at (860) 500-2329 or [catherine.labadia@ct.gov](mailto:catherine.labadia@ct.gov).

Sincerely,

A handwritten signature in blue ink that reads "Jonathan Kinney". The signature is written in a cursive style with a large, sweeping flourish at the end.

Jonathan Kinney  
Deputy State Historic Preservation Officer

State Historic Preservation Office

One Constitution Plaza | Hartford, CT 06103 | P: 860.256.2800 | [ct.gov/historic-preservation](http://ct.gov/historic-preservation)

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**From:** [Labadia, Catherine](#)  
**To:** [Atwood, Kathleen A CIV \(USA\)](#); [Rupp, Byron R CIV USARMY CENAE \(USA\)](#)  
**Cc:** [Scofield, Jenny](#); [Wisniewski, Marena](#)  
**Subject:** [Non-DoD Source] RE: CT Storm Reduction Report  
**Date:** Monday, October 05, 2020 10:21:22 AM  
**Attachments:** [long wharf pier 2008report.pdf](#)  
[DRAFT Armstrong Rubber Co Building NR.pdf](#)  
[Armstrong Rubber SR Form.pdf](#)

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Good Morning Kate,

Attached is a copy of excerpts from a report about Long Wharf Pier and copies of the State Register and draft National Register nominations for the Pirelli Building. Unfortunately, I am not able to readily access files regarding the boathouse. However, I was able to pull the following statement from a DOT summary:

In 1910, Yale College opened the Adee Boathouse, named after its late benefactor George Adee, at the confluence of the Mill and Quinnipiac Rivers on New Haven Harbor. Built to serve as home base for Yale's collegiate rowing programs, it would only function in this capacity for a decade before increased commercial traffic in the harbor forced the school to relocate the programs to a new facility on the Housatonic River. The building would go on to house the U.S. Coast Guard during World War II before it was sold by the school in the 1950s and converted to commercial offices space. In 1976 the building was designated a local landmark by the New Haven Historic Preservation Trust and in 1998 it became eligible for listing in the National Register of Historic Places. This structure, located at 74 Forbes Avenue in New Haven was identified as a historic resource in the FEIS/Section 4(f) Evaluation. The design of the recommended improvements proposed under Project No. 92-354 required that this property be acquired by the Department and the Boathouse be demolished. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, the Connecticut State Historic Preservation Officer (SHPO) determined that project 92-354 would have an adverse effect upon this historic and architecturally significant property.

Let me know if this information is sufficient for a few sentences in the EA. If not, I can go into the office later this week and pull some more information. In any case, do not hesitate to contact me if you have any questions.  
Cathy

-----Original Message-----

From: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Sent: Thursday, October 1, 2020 9:13 AM  
To: Labadia, Catherine <Catherine.Labadia@ct.gov>; Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Cc: Scofield, Jenny <Jenny.Scofield@ct.gov>; Wisniewski, Marena <Marena.Wisniewski@ct.gov>  
Subject: RE: CT Storm Reduction Report

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

We aren't allowed to use Zoom. We can use Skype, Webex and conference lines.

-----Original Message-----

From: Labadia, Catherine [<mailto:Catherine.Labadia@ct.gov>]  
Sent: Thursday, October 1, 2020 9:08 AM  
To: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>; Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Cc: Scofield, Jenny <Jenny.Scofield@ct.gov>; Wisniewski, Marena <Marena.Wisniewski@ct.gov>  
Subject: [Non-DoD Source] Re: CT Storm Reduction Report

Great. We can meet via zoom, teams, or a conference line. I included two SHPO colleagues on this reply that can

help with language to add to the environmental document. Marena has been working with HUD on the resilient Bridgeport project and Jenny has been working on the nomination of the Pirelli building.  
Talk soon,  
Cathy

---

From: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Sent: Thursday, October 1, 2020 7:59 AM  
To: Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>; Labadia, Catherine <Catherine.Labadia@ct.gov>  
Subject: RE: CT Storm Reduction Report

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Yes, that works for me.

-----Original Message-----

From: Rupp, Byron R CIV USARMY CENAE (USA)  
Sent: Wednesday, September 30, 2020 2:16 PM  
To: Labadia, Catherine <Catherine.Labadia@ct.gov>; Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Subject: RE: CT Storm Reduction Report

Cathy,

Thanks for the quick response. I am available on Friday and will be happy to set up a call so the three of us can discuss the 3 historic properties in question.

Kate - are you good with Friday at 11? Thanks,

Byron

Byron R. Rupp  
Planning Branch  
U.S. Army Corps of Engineers, New England District  
696 Virginia Road  
Concord, MA 01742-2751  
Office phone: (978) 318-8172  
byron.r.rupp@usace.army.mil

-----Original Message-----

From: Labadia, Catherine [<mailto:Catherine.Labadia@ct.gov>]  
Sent: Wednesday, September 30, 2020 2:11 PM  
To: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Cc: Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Subject: [Non-DoD Source] RE: CT Storm Reduction Report

Hi Kate,

I hate to push this to the last minute, but would you have time around 11:00 am on Friday?  
Cathy

-----Original Message-----

From: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>



Sent: Tuesday, September 29, 2020 9:03 AM  
To: Labadia, Catherine <Catherine.Labadia@ct.gov>  
Cc: Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Subject: CT Storm Reduction Report

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Hello Catherine,

The Project Manager, Byron Rupp and I would like to discuss the three historic properties you mentioned in your email of earlier this month. Are you available tomorrow through Friday for a phone call to discuss these properties and any effects there may be on them.

I would appreciate you finding time this week, as the Corps is ready to finalize the report.

Thank you.  
Kate Atwood  
(774) 218-1099

**From:** [Labadia, Catherine](#)  
**To:** [Atwood, Kathleen A CIV \(USA\)](#); [Rupp, Byron R CIV USARMY CENAE \(USA\)](#)  
**Cc:** [Scofield, Jenny](#); [Wisniewski, Marena](#)  
**Subject:** [Non-DoD Source] RE: CT Storm Reduction Report  
**Date:** Friday, October 09, 2020 10:43:07 AM

---

Thank you for assisting our office with managing Connecticut's important historic resources.  
Have a wonderful weekend,  
Cathy

-----Original Message-----

From: Atwood, Kathleen A CIV (USA) <Kathleen.A.Atwood@usace.army.mil>  
Sent: Thursday, October 8, 2020 8:39 AM  
To: Labadia, Catherine <Catherine.Labadia@ct.gov>; Rupp, Byron R CIV USARMY CENAE (USA) <Byron.R.Rupp@usace.army.mil>  
Cc: Scofield, Jenny <Jenny.Scofield@ct.gov>; Wisniewski, Marena <Marena.Wisniewski@ct.gov>  
Subject: FW: CT Storm Reduction Report

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Catherine,

USACE appreciates that you provided us with information on three historic properties that were not identified in our Feasibility Study/Environmental Assessment.

The CT SHPO identified three additional historic properties in the Area of Potential Effect. USACE made a determination that the Recommended Plan will have no adverse effect on historic properties. The SHPO concurred in our determination in a letter dated September 9, 2020. USACE evaluated the affect the Recommended Plan would have on the three additional historic properties, and determined that the Plan will also have no adverse effect on these historic properties. USACE will continue coordination and consultation with your office as this project proceeds.

Again, thank you very much for your time.

Kate