

## The Commonwealth of Massachusetts BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS 251 Causeway Street, Suite 800, Boston, MA 02114-2136

Tel. (617) 626-1200 Fax (617) 626-1240 Web Site: www.mass.gov/czm/buar/index.htm

March 10, 2010

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

RE: Nantasket Beach Shore Protection Project, Hull, MA

Dear Mr. Kennelly,

The Massachusetts Board of Underwater Archaeological Resources is in receipt of your letter of February 24, 2010, regarding the above referenced project. The Board has completed its review of the letter and accompanying materials, and offers the following comments. The Board concurs that the planned activities as currently proposed will not adversely affect submerged cultural resources at this time.

However, the Board cannot conclude that there are no submerged cultural resources in the proposed project area. The historical record indicates the high occurrence of shipwrecks in the vicinity for which locations are ambiguous and vague. It is important to note that nearby are major hazards to navigation lying along a significant route for vessel traffic approaching Boston Harbor. Furthermore, the loss of earlier and smaller coastal vessels and the purposeful abandonment of obsolete or damaged vessels are generally not found in the documentary record. In addition, the area may be considered inundated land formations and as such there exists the possibility for the preservation of now submerged ancient Native American cultural resources. However, the dynamic processes along the beach in this area have significantly diminished potential for the preservation of those sites.

Therefore, should heretofore-unknown submerged cultural resources be encountered during the course of the project, the Board expects that the project's sponsor will take steps to limit adverse effects and notify the Board and the Massachusetts Historical Commission, as well as other appropriate agencies in accordance with the Board's Policy Guidance for the Discovery of Unanticipated Archaeological Resources (updated 9/28/06).

The Board appreciates the opportunity to provide these comments. Should you have any questions regarding this letter, please do not hesitate to contact me at the address above, by telephone at (617) 626-1141 or by email at victor.mastone@state.ma.us.

Victor T. Mastone

Director and Chief Archaeologist

/vtm

Cc:

Brona Simon, MHC Marc Paiva, ACOE

Bettina Washington, THPO Wampanoag Tribe of Gayhead (Aquinnah)

Robert Boeri and Jason Burtner, MCZM



#### **DEPARTMENT OF THE ARMY**

#### NEW ENGLAND DISTRICT, CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MASSACHUSETTS 01742-2751

February 14, 2013

Engineering/Planning Division Planning Branch

Mr. Mel Cote US Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912

Dear Mr. Cote:

I am writing in reference to the US Army Corps of Engineers-New England District's proposed Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts.

Enclosed please find a draft copy of the draft Environmental Assessment (EA) and other supporting documentation for the proposed project. The draft EA and its appendices include maps of the proposed project area, resource characterization studies of the project area, an air quality statement of conformity, and copies of all coordination documents from Federal, State and local agencies and interests.

The study area for the Nantasket Beach Coastal Storm Damage Reduction Project consists of the DCR reservation and the adjoining back shore area; the open ocean borders the study area on the east and Sagamore Hill and Hingham Bay on the west. The study area is the southerly portion of an elongated spit averaging about 500 feet in width and extending along a SE-NW axis into Massachusetts Bay from the Atlantic Hill section of Hull to Point Allerton. Since approximately 1915, the back shore has been protected on the east by a 5,400-foot long reinforced concrete sea wall, whose crest ranges in elevation between 14.4 and 17.0 feet above the National Geodetic Vertical Datum (NGVD).

From the south end of the reservation, the sea wall is fronted by a 2,000 foot-long stone revetment known as the Temporary Seawall Fortification, or TSF. The TSF was placed in 2004 as an emergency action in response to beach erosion that had reached a point where no dry beach in front of the sea wall existed at high tide. At the northernmost end of the sea wall, a 650 foot-long portion of the sea wall failed or was weakened, including a segment that collapsed seaward, as a result of a December 1992 storm. DCR rebuilt that portion of the sea wall in 2008 as the 900 foot-long Northern Revetment. Beyond the Northern Revetment to the north, shoreline protection is provided by sand fill in combination with stone riprap revetment or jersey barriers.

New England District had issued a public notice in 2002 for a previous version of this report that called for placement of sand fill over 5,400 linear feet of the DCR Nantasket Beach Reservation, however the DCR has taken significant actions over the last ten years resulting in construction of the TSF as an emergency measure in 2005 and construction of the new Northern Revetment in 2008. These measures changed the level of protection afforded to the backshore in Zones 1 and 3, as the volume of water due to wave overtopping and wall failure risk in Zone 1 and Zone 3 are significantly reduced. The 2,200 footlong Zone 2 and its sea wall remains most vulnerable to wave attack, overtopping and possible failure. This report considers alternative methods for reducing flooding and erosion due to coastal storms in the Nantasket Beach's Zone 2.

Please accept this letter, and its enclosures, as the New England District's request for coordination under the Clean Air Act (CAA). We request that comments be provided to this office within 30 days of receipt of this letter.

If you have any questions concerning this request, please contact the project manager, Mr. David Larsen, at (978) 318-8113, or the project ecologist, Mr. Todd Randall, at (978) 318-8518.

Sincerely,

John R. Kennelly Chief, Planning Branch

Enclosure

Similar Letter Sent to:

Ms. Maria Tur U.S. Fish and Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, New Hampshire 03301

Mr. Lou Chiarella National Marine Fisheries Service Northeast Regional Office Habitat Division 55 Great Republic Drive Gloucester, Massachusetts 01930

Ms. Mary Colligan National Marine Fisheries Service Northeast Regional Office Protected Resources Division 55 Great Republic Drive Gloucester, Massachusetts 01930



#### DEPARTMENT OF THE ARMY

NEW ENGLAND DISTRICT, CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MASSACHUSETTS 01742-2751

February 14, 2013

Engineering/Planning Division Planning Branch

Ms. Maria Tur U.S. Fish and Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, New Hampshire 03301

Dear Ms. Tur:

I am writing in reference to the US Army Corps of Engineers-New England District's proposed Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts.

Enclosed please find a draft copy of the draft Environmental Assessment (EA) and other supporting documentation for the proposed project. The draft EA and its appendices include maps of the proposed project areas, resource characterization studies of the project area, an essential fish habitat assessment, and copies of all coordination documents from Federal, State and local agencies and interests.

The study area for the Nantasket Beach Coastal Storm Damage Reduction Project consists of the DCR reservation and the adjoining back shore area; the open ocean borders the study area on the east and Sagamore Hill and Hingham Bay on the west. The study area is the southerly portion of an elongated spit averaging about 500 feet in width and extending along a SE-NW axis into Massachusetts Bay from the Atlantic Hill section of Hull to Point Allerton. Since approximately 1915, the back shore has been protected on the east by a 5,400-foot long reinforced concrete sea wall, whose crest ranges in elevation between 14.4 and 17.0 feet above the National Geodetic Vertical Datum (NGVD).

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New England District had issued a public notice in 2002 for a previous version of this report that called for placement of sand fill over 5,400 linear feet of the DCR Nantasket Beach Reservation, however the DCR has taken significant actions over the last ten years resulting in construction of the TSF as an emergency measure in 2005 and construction of the new Northern Revetment in 2008. These measures changed the level of protection afforded to the backshore in Zones 1 and 3, as the volume of water due to wave overtopping and wall failure risk in Zone 1 and Zone 3 are significantly reduced. The 2,200 footlong Zone 2 and its sea wall remains most vulnerable to wave attack, overtopping and possible failure. This report considers alternative methods for reducing flooding and erosion due to coastal storms in the Nantasket Beach's Zone 2.

Please accept this letter, and its enclosures, as the New England District's request for coordination under Section 7 of the Endangered Species Act (ESA) and the Fish and Wildlife Coordination Act (FWCA). We request that you provide this office, pursuant to Section 2(b) of the FWCA, with a Final Coordination Act Report (FCAR) within 30 days of receipt of this letter.

If you have any questions concerning this request, please contact the project manager, Mr. David Larsen, at (978) 318-8113, or the project ecologist, Mr. Todd Randall, at (978) 318-8518.

Sincerely,

John R. Kennelly Chief, Planning Branch

#### Enclosure

Similar Letter Sent To:

Mr. Lou Chiarella National Marine Fisheries Service Northeast Regional Office Habitat Division 55 Great Republic Drive Gloucester, Massachusetts 01930

Ms. Mary Colligan National Marine Fisheries Service Northeast Regional Office Protected Resources Division 55 Great Republic Drive Gloucester, Massachusetts 01930

Mr. Mel Cote US Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912



## DEPARTMENT OF THE ARMY

NEW ENGLAND DISTRICT, CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MASSACHUSETTS 01742-2751

February 14, 2013

Engineering/Planning Division Planning Branch

Mr. Lou Chiarella National Marine Fisheries Service Northeast Regional Office Habitat Division 55 Great Republic Drive Gloucester, Massachusetts 01930

Ms. Mary Colligan National Marine Fisheries Service Northeast Regional Office Protected Resources Division 55 Great Republic Drive Gloucester, Massachusetts 01930

Dear Mr. Chiarella and Ms. Colligan:

I am writing in reference to the US Army Corps of Engineers-New England District's proposed Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts.

Enclosed please find a draft copy of the draft Environmental Assessment (EA) and other supporting documentation for the proposed project. The draft EA and its appendices include maps of the proposed project areas, resource characterization studies of the project area, an essential fish habitat assessment, and copies of all coordination documents from Federal, State and local agencies and interests.

The study area for the Nantasket Beach Coastal Storm Damage Reduction Project consists of the DCR reservation and the adjoining back shore area; the open ocean borders, the study area on the east, and Sagamore Hill and Hingham Bay on the west. The study area is the southerly portion of an elongated spit averaging about 500 feet in width and extending along a SE-NW axis into Massachusetts Bay from the Atlantic Hill section of Hull to Point Allerton. Since approximately 1915, the back shore has been protected on the east by a 5,400-foot long reinforced concrete sea wall, whose crest ranges in elevation between 14.4 and 17.0 feet above the National Geodetic Vertical Datum (NGVD).

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Please accept this letter, and its enclosures, as the New England District's request for consultation under the Fish and Wildlife Coordination Act, Section 7 of the Endangered Species Act, and for consultation regarding Essential Fish Habitat under the Magnuson-Stevens Fishery Conservation and Management Act amendments. We request that this information be provided to this office within 30 days of receipt of this letter.

If you have any questions concerning this request, please contact the project manager, Mr. David Larsen, at (978) 318-8113, or the project ecologist, Mr. Todd Randall, at (978) 318-8518.

Sincerely,

John R. Kennelly Chief, Planning Branch

Enclosure

Similar Letter Sent To:

Ms. Maria Tur U.S. Fish and Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, New Hampshire 03301

Mr. Mel Cote US Environmental Protection Agency, Region I 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912 
 From:
 Larsen, David A NAE

 To:
 Randall, Todd A NAE

 Cc:
 Mackay, Joseph B NAE

Subject: FW: Nantasket Beach 103 (UNCLASSIFIED)

Date: Monday, March 11, 2013 12:42:32 PM

Classification: UNCLASSIFIED

Caveats: NONE

FWD:

----Original Message-----

From: Cote, Mel [mailto:Cote.Mel@epa.gov] Sent: Monday, March 11, 2013 12:10 PM To: Reiner, Edward; Larsen, David A NAE

Cc: LeClair, Jacqueline; Tay Evans

Subject: RE: Nantasket Beach 103 (UNCLASSIFIED)

Thanks, Ed. Ocean and Coastal Protection Unit concurs.

-----Original Message-----From: Reiner, Edward

Sent: Monday, March 11, 2013 11:20 AM

To: Larsen, David A NAE

Cc: LeClair, Jacqueline; Cote, Mel; Tay Evans

Subject: RE: Nantasket Beach 103 (UNCLASSIFIED)

Thank you for providing information on the Corps proposed Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts. We reviewed the Environmental Assessment, Finding of No Significant Impact and Clean Water Act Section 404 (B)(1) Evaluation provided. EPA has no concerns or objections to the project as proposed.

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

Phone (978) 318-8113 Fax (978) 318-8080

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

MAR 20 2013

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

Re: Draft Environmental Assessment, Nantasket Beach Coastal Storm Damage Reduction Project, Hull, Massachusetts

Dear Mr. Kennelley:

We have reviewed the Draft Environmental Assessment (EA) and Essential Fish Habitat (EFH) Assessment, dated February 14, 2013, which describes your proposed Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts. The Draft EA evaluates alternative methods for reducing flooding and erosion due to coastal storms along a portion of the Department of Conservation and Recreation (DCR) Nantasket Beach Reservation, known as Zone 2. This includes a 2,200 foot-long stretch of shoreline with a degraded sea wall that is currently the most vulnerable area to waves, overtopping, and possible failure. The preferred alternative includes the construction of a rock reventment along the 2,200 foot-long section of Nantasket Beach Reservation. The rock reventment would be built adjacent to the existing seawall, displacing approximately 129,800 square feet of cobble-sand beach. Mitigation is not proposed for this project.

As you are aware, the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Fish and Wildlife Coordination Act require Federal agencies to consult with one another on projects such as this. Insofar as a project involves essential fish habitat (EFH), as this project does, this process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH Assessments and generally outlines each agencies obligations in this consultation procedure. We offer the following comments and recommendations on this project pursuant to the above referenced regulatory process.

#### **General Comments**

Nantasket Beach and the surrounding area include habitat designated as EFH for a number of federally managed species. Particularly, the project is known to support commercially harvestable surf clam (*spisula solidissima*) populations. Though the population largely exists between the -12 and -20 foot contour, surf clams have been found at the extreme low tide mark along the beach. In addition, winter flounder (*Pleuronectes americanus*) are likely to occur in the shallow offshore area of Nantasket Beach. Elevated sediments in the water column may



impact filter feeding shellfish and degrade habitat for sensitive life stages of winter flounder. Avoiding in-water work by conducting construction activities during low tide periods could significantly minimize turbidity levels and impacts to these trust resources.

Our agency has been involved in past efforts to reduce coastal storm damage to Nantasket Beach. We have raised EFH concerns regarding past proposals that involved substantial beach nourishment below the high tide line. The current draft EA identifies a sand fill nourishment alternative as a feasible alternative to meet the project need. However, the EA evaluates the reventment alternative as the preferred option. The EFH recommendations provided in this letter are based on evaluation of the reventment alternative only.

#### **Essential Fish Habitat Conservation Recommendations**

The project area has been designated as EFH under the MSA for several species, including surf clam and winter flounder. These species are most likely to be found in the project area and therefore, most likely to be impacted by the proposed construction. Pursuant to Section 305(b)(4)(A) of the MSA, we recommend that you adopt the following conservation recommendation to ensure minimal impacts to EFH:

1. All shore-side construction activity should be conducted during periods of low tide to minimize impacts of turbidity to species with designated EFH in the project area.

Please note that Section 305(b)(4)(B) of the MSA requires you to provide us with a detailed written response to these EFH Conservation Recommendations, including a description of measures adopted by you for avoiding, mitigating, or offsetting the impact of the project on EFH. In the case of a response that is inconsistent with our recommendations, Section 305(b)(4)(B) of the MSA also indicates that you must explain your reasons for not following the recommendations. Included in such reasoning would be the scientific justification for any disagreements with us over the anticipated effects of the proposed action and the measures needed to avoid, minimize, mitigate, or offset such effects pursuant to 50 CFR 600.920(k).

Please also note that a distinct and further EFH consultation must be reinitiated pursuant to 50 CFR 600.920(l) if new information becomes available or the project is revised in such a manner that affects the basis for the above EFH Conservation Recommendations.

#### **Endangered Species Act**

We have reviewed the proposed action and the project location and have determined that no species listed under our jurisdiction will be exposed to any direct or indirect effects of the proposed project. Based on this, we do not believe a consultation in accordance with section 7 of the ESA is necessary. As such, we do not intend to offer additional Section 7 comments on this action. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. If you have any questions regarding Section 7, please contact Julie Crocker in our Protected Resources Division at (978) 282-8480 or (julie.crocker@noaa.gov).

#### **Conclusions**

In summary, we recommend construction of the reventment be conducted during periods of low tide to minimize elevated levels of sediment in the water column. Should any alternative methods for storm damage reduction identified in this report be proposed, an additional EFH consultation will be required. We look forward to your response to our EFH Conservation Recommendations on this project. Should you have any questions about this matter, please contact Sue Tuxbury at (978) 281-9176 or (susan.tuxbury@noaa.gov).

Sincerely,

Louis A. Chiarella

Assistant Regional Administrator

for Habitat Conservation

cc: Ed Reiner, USEPA Eileen Feeney, MA DMF Bob Boeri, MA CZM -----Original Message-----From: Randall, Todd A NAE

Sent: Monday, April 08, 2013 10:07 AM

To: Susan.Tuxbury

Subject: Nantasket Beach (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Hey Sue!

Hope all's well!

The Corps is in receipt of NMFS EFH rec letter for the Nantasket Beach Section 103 project.

The Corps accepts the rec of doing shore-side construction at low tide to minimize impacts to EFH.

Give me a call if you have any questions.

TODD

TODD RANDALL
Marine Ecologist
US Army Corps of Engineers
696 Virginia Road
Concord MA 01742
978-318-8518
todd.a.randall@usace.army.mil

Classification: UNCLASSIFIED

Caveats: NONE



## 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

February 4, 2014

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

Dear Mr. Kennelly:

This is in response to your February 13, 2013 request for comments regarding the Nantasket Beach Coastal Storm Damage Reduction Project in Hull, Massachusetts. Our comments are provided pursuant to section 7 of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531, et seq.) and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667d).

#### **Endangered Species Comments**

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area. Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

#### Fish and Wildlife Coordination Act Comments

Based on our review of the information provided at this time, we have no comments for this project with regard to the Fish and Wildlife Coordination Act. However, this does not preclude future evaluation and recommendations by the U.S. Fish and Wildlife Service, pursuant to the Fish and Wildlife Coordination Act, as project-specific information becomes available.

Thank you for your coordination. Please contact Maria Tur of this office at 603-223-2541, extension 12, if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman

Supervisor

New England Field Office