



**US Army Corps  
of Engineers**  
New England District

696 Virginia Road  
Concord, MA 01742-2751

# Public Notice

In Reply Refer to: Mr. Michael Riccio  
[nae-pn-nav@usace.army.mil](mailto:nae-pn-nav@usace.army.mil)  
Engineering/Planning Division  
Date: February 2, 2015  
Comment Period Closes: March 3, 2015

## 30 DAY PUBLIC NOTICE

### **MAINTENANCE DREDGING AND ADVANCE MAINTENANCE DREDGING OF THE FEDERAL NAVIGATION PROJECT IN THE CAPE COD CANAL BOURNE AND SANDWICH, MASSACHUSETTS WITH BENEFICIAL USE OF THE DREDGED SAND AS BEACH-FILL ON TOWN NECK BEACH, SANDWICH, MASSACHUSETTS**

Interested parties are hereby notified under the provisions of the National Environmental Policy Act (NEPA) (Title 33, Parts 335-338 of the Code of Federal Regulations) and Section 404 of the Clean Water Act of 1977 (P.L. 95-17) that the U.S. Army Corps of Engineers (USACE), New England District, plans to perform work in the navigable waters of this District. The work involves maintenance dredging and advance maintenance dredging of the Federal Navigation Project (FNP) in the Cape Cod Canal, Bourne and Sandwich, Massachusetts and is authorized in accordance with the River and Harbor Acts of 1935, 1945, and 1958. Attachment 1 lists pertinent laws, regulations, and directives.

**Authorized Federal Project Description:** The Cape Cod Canal is a toll-free, open-to-all, waterway that connects Buzzards Bay and Cape Cod Bay. The project is used by both commercial and recreational vessels and eliminates the need to transit around Cape Cod; a distance of approximately 135 miles, and a more hazardous route. The authorized FNP provides for a 600-foot long jetty and a 3,000-foot long breakwater, both at the east end of the Canal; a channel 32-feet deep at Mean Lower Low Water (MLLW) throughout its 17.5 mile length and two mooring basins; the West Mooring Basin, 32-feet deep at MLLW at the west end; and the East Mooring Basin (EMB), 25-feet deep at MLLW at the east end of the Canal.

**Character and Purpose of Work:** The proposed work involves maintenance dredging and advance maintenance dredging to remove approximately 150,000 cubic yards (cy) of clean sand and gravel from six areas (~ 54.4 acres) in the authorized, 32-feet deep by 500-foot wide, main-ship channel and the 25-feet deep EMB portions of the project (see Attachment 2). Shoaling in the main-ship channel consists of large sand wave formations. These formations cause draft restrictions, tidal delays and hazardous conditions for deep-draft commercial vessels transiting the Canal. Shoaling in the EMB limits the available space to moor these vessels in emergencies (e.g. icing). Further shoaling in the Canal proper may result in some deep draft vessels having to completely avoid using the Canal and transit around Cape Cod, thereby significantly increasing the risk profile of these vessels, especially during the winter months. In order to extend the time between maintenance

dredging events, advance maintenance will be performed to reduce the sand wave shoals to the depth of the surrounding environment. The six shoal areas in the authorized 32 feet deep main-ship channel will be dredged to depths ranging from -36 feet MLLW to -40 MLLW (includes 2 feet of allowable over-depth). The authorized 25 foot deep East Mooring Basin will be dredged to -34 feet MLLW (includes 2 feet allowable over-depth). The dredged material will either be beneficially used as beach-fill on an eroded portion of Town Neck Beach in Sandwich (see Attachment 3) or, alternatively, shall be placed at the previously used open water Cape Cod Canal Disposal Site (CCCDs) in Cape Cod Bay. The proposed work will be performed by a hopper dredge within a three to four month period during the late fall of 2015 to early spring 2016.

**Disposal Areas:** A study is currently ongoing under the authority of Section 204 of the Water Resources Development Act of 1992 (as amended) to evaluate the Federal interest in beneficially re-using the dredged material from the Cape Cod Canal project as beach-fill on a 2,500 foot long eroded section of Town Neck Beach in Sandwich. Town Neck Beach is adjacent to the south breakwater at the eastern end of the Canal. The town of Sandwich has been identified as the non-Federal sponsor for cost sharing of the study and the potential beach nourishment. If the Section 204 study is completed in time to coincide with this maintenance dredging event and the study results in a positive benefit/cost ratio, then the material dredged from the Canal could be placed on Town Neck Beach; the cost of which would be shared between the Federal government and the town of Sandwich at a 65 percent and 35 percent ratio, respectively. The town of Sandwich has also expressed interest in receiving the material dredged from the maintenance dredging of the Canal regardless of the outcome of the Section 204 study and has expressed a willingness to pay 100 percent of any additional costs over and above the Federal base plan (i.e. dredging and placement of the material at the CCCDS) to have material placed on Town Neck Beach.

For placement on Town Neck Beach, a hopper dredge would utilize pump-off capability to re-fluidize the dredged material with seawater and discharge the slurry of water and dredged material onto the beach through a pipeline connection moored off the beach. The pipeline terminus would be either a moored, floating tie-in, or, mounted on a barge and spudded down a short distance offshore in water of sufficient depth to accommodate the draft of the dredging vessel.

Work on Town Neck Beach would likely consist of the following: Heavy equipment would be used to form-up toe dikes in the immediate area of the discharge using some existing beach material and some dredged material. The toe dikes would help contain the slurry as it is discharged and would minimize loss of material to the surf. The same heavy equipment would be used to spread the discharged material on the beach to roughly form the elevations and slopes specified for the beach berm, dune, and seaward slope of the beach. As discharge and spreading progresses along the beach-fill area, the toe dikes and pipeline would be extended. Portable lights may be used to enable work to proceed at night to expedite the work and further minimize loss of material to the surf during construction. Finish grading to the specified elevations and slopes would be accomplished using the same heavy equipment following completion of all placement on the beach, if not already accomplished by the contractor or by natural forces during placement. Where new dunes are created, the dune crest and slopes will be planted with American Beach Grass as soon as practicable after the construction of the dune is completed. Use of Town Neck Beach for the placement of dredged material from the Cape Cod Canal

maintenance dredging project is contingent upon the availability of non-Federal funding as mentioned above and upon successful coordination with the Federal and state environmental resource agencies.

Alternatively, the Cape Cod Canal Disposal Site would be used for the disposal of the dredged material from the Cape Cod Canal maintenance dredging. The CCCDS is a circular area, one nautical mile in diameter, located about 3 nautical miles northeast of the Cape Cod Canal Buoy #1. The center is located at 41° 49'N, 70° 25'W. The CCCDS is a previously used disposal site, last used for disposal of material from the Canal in 1990.

The material to be dredged has undergone physical testing. Based on this data and a review of historical data and a lack of potential sources of contaminants, it is our determination that the material is acceptable for placement on Town Neck Beach or disposal at the Cape Cod Canal Disposal Site.

**Additional Information:** Additional information on the proposed project may be obtained from Mr. Michael Riccio, Planning Division at the return address shown, by email at nae-pn-nav@usace.army.mil or telephone number (978) 318-8685.

**Coordination:** The proposed work has, or will be coordinated with the following agencies:

**Federal:**

U.S. Environmental Protection Agency  
U.S. Fish and Wildlife Service  
National Marine Fisheries Service

**Commonwealth of Massachusetts:**

Massachusetts Office of Coastal Zone Management  
Massachusetts Natural Heritage Program  
Massachusetts Department of Environmental Protection  
Massachusetts Historic Preservation Office  
Massachusetts Board of Underwater Archaeological Resources

**Tribal Nations:**

Mashpee Wampanoag Tribe  
Wampanoag Tribe of Gay Head (Aquinnah)

**Local:**

Town of Sandwich, Town Manager  
Town of Sandwich, Department of Natural Resources

**Environmental Impacts:** An Environmental Assessment (EA) for the maintenance dredging of the Cape Cod Canal is being prepared and will be available for review upon request. I have made a preliminary determination that an Environmental Impact Statement for the proposed maintenance dredging is not required under the provisions of the National Environmental Policy Act of 1969. This determination will be reviewed in light of facts submitted in response to this notice.

**Federal Consistency with the Massachusetts Coastal Zone Management Program:** I find that maintenance dredging of the authorized navigation project in the Cape Cod Canal is consistent, to the maximum extent practicable, with the applicable management programs established as a result of the Coastal Zone Management Act of 1972. The dredging and placement/disposal operations will be conducted, to the maximum extent practicable, in a manner that is consistent with the approved management program.

**Other Information:**

- a. Local Sponsor: Town of Sandwich
- b. Non-Federal Dredging: No private or non-Federal dredging work is being proposed in conjunction with the proposed work.
- c. Previous Dredging: The last time the Canal was dredged was in 2010 when 106,000 cubic yards of material were dredged from the channel and the East Mooring Basin and used as cap material for the Boston Harbor confined aquatic disposal cells.
- d. Alternative Placement Areas/Methods: Alternative placement areas and methods have been considered as part of this proposal. Alternative placement options considered include: open-water disposal (at CCCDS), nearshore placement, upland placement, and beach placement (beneficial use). USACE favors using the beach placement option because it is environmentally-sound; it keeps clean sediments in the littoral system and it conveys sand to a beach that has significantly eroded. However, if the Section 204 study is not completed in time to coincide with this maintenance dredging event (or does not result in a positive benefits/cost ratio) or, in the event that the necessary non-Federal funding is not available to place material on the beach, then the material will be placed at the CCCDS.
- e. Endangered Species: It is our preliminary determination that no threatened or endangered species will be adversely impacted by the proposed project. The town of Sandwich will be responsible for monitoring of piping plovers on Town Neck Beach. USACE will consult with the National Marine Fisheries Service and the United States Fish and Wildlife Service to ensure that the proposed activity will not significantly affect any species or critical habitat designated as endangered or threatened pursuant to the Endangered Species Act of 1973 (87 Stat. 844).
- f. Floodplain Management: In accordance with Executive Order 11988, the Corps of Engineers has determined that the proposed work will not contribute to negative impacts or damages caused by floods.
- g. Cultural Resources: The proposed work consists of maintenance dredging of the FNP in previously dredged areas. This proposal, including use of the beach placement area or CCCDS is being coordinated with the Massachusetts Historic Preservation Office and tribes. In the past they have determined that the work will not adversely affect any cultural or archaeological features or resources.

h. Essential Fish Habitat Assessment: It has been determined that the project may have a temporary adverse effect on Essential Fish Habitat (EFH). The project site is contained within areas designated as EFH as defined by the Magnuson-Stevens Fishery Conservation and Management Act and amended by the Sustainable Fisheries Act of 1996 for Federally-managed fish species. The U.S. Army Corps of Engineers has assessed the effects that the project is likely to have on EFH and has determined that they will be short-term and localized and that there will be no significant impacts on the designated fisheries resources. USACE will consult with the National Marine Fisheries Service to ensure that any potential impacts will be minimized.


Additional Requirements: A request will be sent to the Massachusetts Office of Coastal Zone Management for the State's concurrence with our determination of Federal consistency with the State's approved Coastal Zone Management Program. A request will also be sent to the Massachusetts Department of Environmental Protection for a Water Quality Certification in accordance with Section 401 of the Clean Water Act, 33 U.S.C. § 1341, which requires that the work comply, to the maximum extent practicable, with State or interstate requirements to control the discharge of dredged or fill material.

The decision whether to perform the work will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, will be balanced against its reasonably foreseeable detriments. All factors, which may be relevant to the proposal, will be considered; among these are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use classification, and the welfare of the people.

Any person who has an interest that may be affected by the dredging and disposal of this dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by this activity.

Please bring this notice to the attention of anyone you know to be interested in this project. Comments are invited from all interested parties and should be directed to the U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751, ATTN: Michael Riccio; or emailed to [nae-pn-nav@usace.army.mil](mailto:nae-pn-nav@usace.army.mil) within 30 days of this notice.

23 JAN 2015  
Date

  
Christopher J. Barron  
Colonel, Corps of Engineers  
District Engineer

Attachments

## Attachment 1

### 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 Barrier Resources Act, as amended (16 U.S.C. 3501 et seq.)

Coastal Zone Management Act of 1972 (16 U.S.C. 1456)

Code of Federal Regulation, Title 33, Parts 335 through 338

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

Estuary Protection Act (16 U.S.C. 1221 et. seq.)

Federal Water Project Recreation Act, as amended (16 U.S.C. 460L-12 et. seq.)

Fish and Wildlife Coordination Act (16 U.S.C. 661-667e)

Fish and Wildlife Act of 1956 (16 U.S.C. 742a, et. seq.)

Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460L et. seq.)

Magnuson-Stevens Fishery Conservation and Management Act as amended by the

Sustainable Fisheries Act of 1996 (16 U.S.C. 1801 et seq.)

Migratory Marine Game-Fish Act (16 U.S.C. 760c-760g)

National Environmental Policy Act of 1969 (42 U.S.C. 4321-4347)

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

Executive Order 11988, Floodplain Management, 24 May 1977

Executive Order 11990, Protection of Wetlands, 24 May 1977

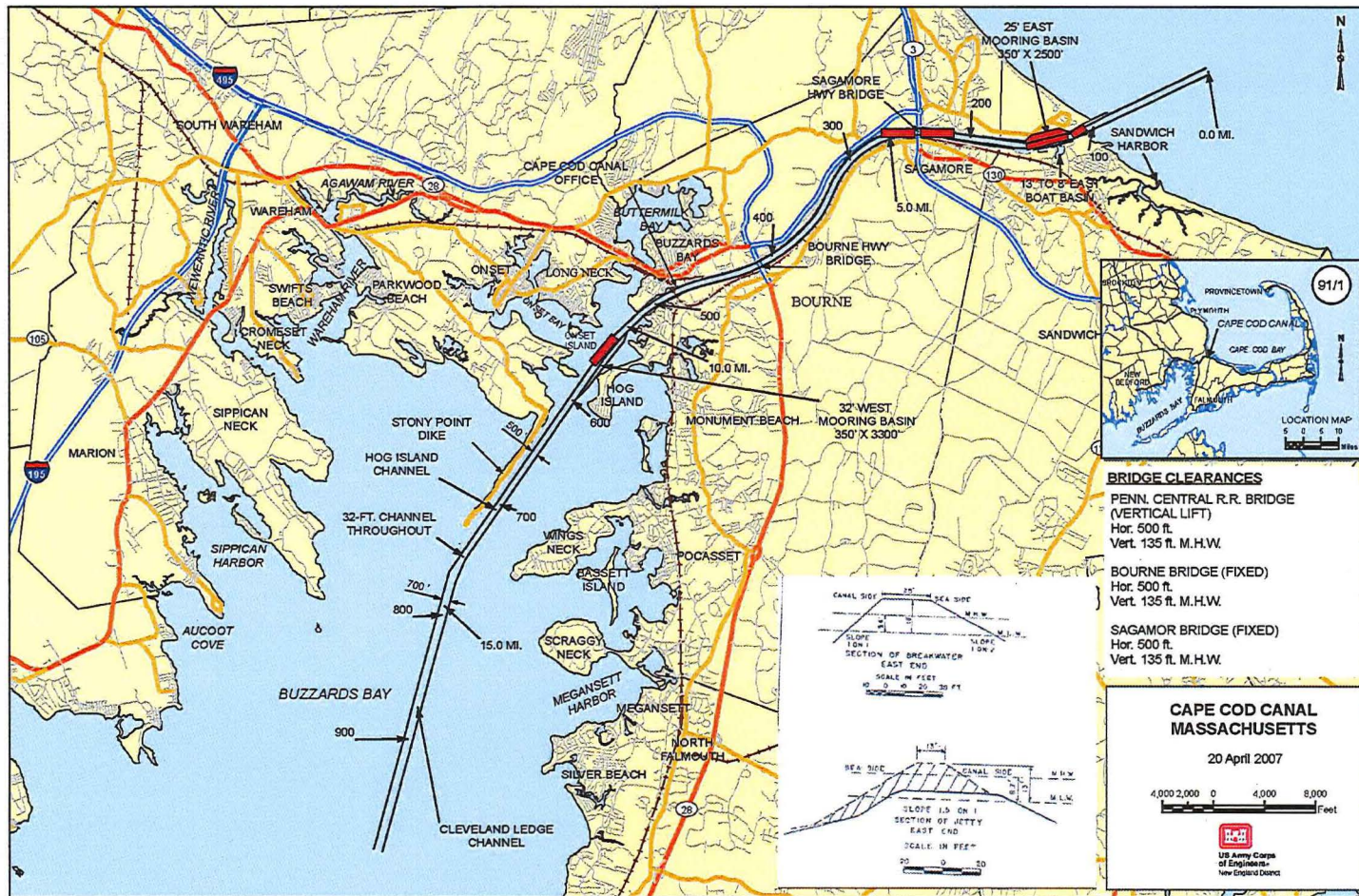
Executive Order 12898, Federal Actions to Address Environmental Justice in Minority

Populations and Low Income Populations, 11 February 1994

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

Water Resources Development Act of 1992, Section 204 (as amended), Beneficial Uses of  
Dredged Material

## Attachment 2



**Map of Cape Cod Canal Federal Navigation Project**

# Attachment 3



Map of Proposed Placement/Disposal Sites