



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

696 Virginia Road  
Concord, MA 01742-2751

# PUBLIC NOTICE

In Reply Refer to: Programs Project  
Management Division  
Email: [nae-pn-nav@usace.army.mil](mailto:nae-pn-nav@usace.army.mil)  
Date: July 16, 2009  
Comment Period Closes: August 15, 2009

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## 30 DAY PUBLIC NOTICE

### MAINTENANCE DREDGING OF THE FEDERAL ENTRANCE CHANNEL AT NEWBURYPORT HARBOR, WITH BENEFICIAL USE OF DREDGE SAND AS BEACHFILL ON PLUM ISLAND AND SALISBURY BEACHES NEWBURYPORT, NEWBURY AND SALISBURY, MASSACHUSETTS

Interested parties are hereby notified that the U.S. Army Corps of Engineers, New England District, plans to perform maintenance dredging of a portion of the Federal navigation project, involving work in the navigable waters of this District, under the provisions of Section 404 of the Clean Water Act of 1977 (P.L. 95-217) and to authorize such work in accordance with Title 33, Parts 335-338 of the Code of Federal Regulations. Attachment No. 1 lists pertinent laws, regulations, and directives. This notice is supplemental to the Public Notice released on September 26, 2007 and reflects a change in the project description. Specifically, two new disposal areas (Plum Island Beach and Salisbury Beach) are being added for beneficial use of the dredged material.

**Project Description:** The existing Federal navigation project for Newburyport Harbor consists of: two jetties; one projecting 4,118 feet from the north shore, the other projecting 2,445 feet from the south shore, converging until 1,000 feet apart, then extending seaward 1,000 feet; a 15 foot deep entrance channel 400 feet wide through the bar into the harbor, thence 9 feet deep and 200 feet wide to the Newburyport waterfront. This notice applies to only the 15 foot entrance channel.

**Character and Purpose of Work:** The proposed work involves long term maintenance dredging of the 15 foot entrance channel to provide safe navigation conditions at the mouth of the Merrimack River. Dredging is performed about every five years, depending on the amount of shoaling. Each operation involves removing about 160,000 cubic yards of sand from the entrance channel and placing the sand within nearshore areas. This notice is intended to cover long term maintenance using the described dredging and disposal methods. Dredging will be performed by a private contractor, using either a hopper dredge or a hydraulic pipeline dredge, under the supervision of the Corps of Engineers. The method used will depend on the disposal site(s) selected. In response to requests from the State, the three municipalities and the National Marine Fisheries Service, the Corps has considered direct placement of the material onto the beaches

adjacent to the inlet as an alternative to placement of the material into the nearshore bars offshore of the beaches.

Should the nearshore bar disposal areas be used, a hopper dredge or mechanical dredge would accomplish the work. A hopper dredge removes material from the bottom by suction, lifting it through dragarms connected to the side of the vessel. At the end of the dragarms are dragheads which draw a slurry of bottom material and water to the surface where it is discharged into the hopper. As pumping continues, the solid particles settle into the hopper while the excess water and some material passes overboard through overflow troughs. After the hoppers are full the dragarms are raised and the dredge proceeds to the disposal area where the loaded hopper is emptied. The dredge then returns to the dredging area to repeat the cycle.

Should the direct beach placement option be used, either a hydraulic pipeline dredge or a pump-off capable hopper dredge would accomplish the work. These methods are described as follows:

**Hydraulic Pipeline Method:** Material would be removed from the channel by a hydraulic pipeline dredge using a cutterhead suction and discharged as a sand/seawater slurry through a pipeline to the beach placement area. Floating pipe would be used in the inlet to non-floating pipe crossing the shore ends of the jetties and placed along the beach berm (above the mean high water elevation) to the placement sites. On shore the pipe would be placed, extended and removed using heavy equipment. The shore pipe may be either delivered by truck to the beach, or floated in and pulled ashore onto the beach by heavy equipment.

**Pump-Off Hopper Method:** Material would be removed from the channel by a hopper dredge with internal pump-off capability in the same manner as described above for the nearshore placement, but would discharge the material onto the beach through a pipeline connection moored offshore of the receiving beach. The pipeline terminus would be either a moored floating tie-in, or mounted on a barge spudded a short distance offshore in water of sufficient depth to accommodate the dredge draft. The dredge would re-fluidize the dredged material with seawater and discharge the slurry into the pipeline.

**Both Methods:** Depending on the size of dredge identified by the contractor, a booster pump may or may not be needed. The booster pump would likely be barge-mounted and moored near the jetties under both methods, or may be aboard the barge used for the pump-off hopper method. Work at the beach placement areas under both methods would likely consist of the following: Heavy equipment would be used to form-up toe dikes along the mean low water elevation on both beaches in the immediate area of the discharge using existing beach 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 face and seaward slope of the beach. As discharge and spreading progresses along the beachfill area the toe dikes and pipeline would be extended. Portable lights would be used to enable work to proceed at night to speed the work and further minimize loss of material to the surf during construction. On Plum Island, where placed material would extend the fill section of the

seaward slope below mean lower low water, material would be pushed seaward over the toe dike and the surf would spread that material. At both beaches finish grading to the specified elevations and slopes would be accomplished using the same heavy equipment following completion of all placement on each beach, if not already accomplished by the contractor or by natural forces during placement. The work window for dredging and disposal is 1 September to 14 March, to protect shorebirds, shellfish and fisheries resources.

Both Methods - Planting, Fencing and Beach Management: In beach areas where new dune is created, the dune crest and dune face would be planted with American Beach Grass. The spacing of the plantings would be worked-out in consultation with the US Fish and Wildlife Service and the State Natural Heritage Office, to conform to requirements for nesting shorebirds. Sand fencing would be installed along the new or existing dune crest, along the new dune toe, and laterally along public beach access ways. Sand fencing along the dune toe would be elevated at the bottom of the fence at intervals to be specified in consultation with the US Fish and Wildlife Service and the State Natural Heritage Office, to conform to requirements for nesting shorebirds. Elevated fence sections would be lowered back to the sand surface at times of year outside of the shorebird season. The shorebird season is 15 March to 31 August. The State and Town of Newbury, at Salisbury and Plum Island Beaches, respectively, would place signage at public access ways warning the public to stay off the dunes. Additional signage warning the public away from shorebird nesting sites would be placed as needed during the shorebird season as "virtual fencing" in accordance with the Beach Management Plans for each beach.

The work will be performed during a two to three month period in the year in which funding becomes available. Attachment No. 2 shows Newburyport Harbor, the dredge area, and the proposed disposal and beach nourishment sites.

**Disposal Area:** The material will be disposed of at one of five disposal sites: 3 sites are located nearshore and 2 sites are beach nourishment areas (Attachment 2). The three nearshore sites are located in about 18 to 30 feet of water off Plum Island Beach in Newburyport and Newbury, or Salisbury Beach in Salisbury. The two beach nourishment sites are located at Plum Island Beach in Newbury and at Salisbury Beach. The material (sand) will be beneficially used, either as a feeder berm at the nearshore sites (which will transport sand to adjacent beaches) or by direct placement at the beach sites. Any of the sites may be used; the Commonwealth of Massachusetts will determine the site that will be used depending on need. Direct beach placement would require cost-sharing by the Commonwealth.

The 5 disposal sites are shown in Attachment 2 and briefly described below:

The previously-used Plum Island Beach nearshore site is generally rectangular in shape, and about 5,000 feet by 1,000 feet.

The new, extended Plum Island Beach nearshore site extends about 1,500 feet south of the previously-used Plum Island Beach nearshore site, is generally rectangular in shape, and about 1,500 feet by 1,000 feet.

The previously-used Salisbury Beach nearshore site is a 40-acre square area.

The Plum Island Beach nourishment site is an approximately 2,200 to 2,500-foot long stretch of beach located on Plum Island extending northerly from State Groin #1 at the terminus of the Plum Island Turnpike. .

The Salisbury Beach nourishment site is 1,200 to 1,400-foot long stretch of beach located on Salisbury Beach, approximately between Murray Street (Beach Access #2) and Fowler Street (Beach Access #3).

Actual conditions encountered at the sites at the time of construction, including the amount of material actually removed from the channel maintenance, will determine the final length of each beachfill.

The proposed dredged material has undergone physical analysis. It is our determination that the material is acceptable for disposal at these nearshore and/or beach nourishment sites.

**Additional Information:** Additional information may be obtained from Mr. Jack Karalius, Programs & Civil Project Management Branch, Programs Project Management Division, at the return address shown, telephone number (978) 318-8288.

**Coordination:** The proposed work is being coordinated with the following Federal, State, and local agencies:

Federal

U.S. Environmental Protection Agency  
U.S. Fish and Wildlife Service  
National Marine Fisheries Service  
United States Coast Guard

Local Agencies

City of Newburyport  
Town of Newbury  
Town of Salisbury

Commonwealth of Massachusetts

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

**Environmental Impacts:** An Environmental Assessment for this work has been prepared and is 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 Massachusetts Coastal Zone Management Program:** I find that maintenance dredging of the authorized navigation project and the disposal of the

sandy material as described is consistent, to the maximum extent practicable, with the State of Massachusetts's management program established as a result of the Coastal Zone Management Act of 1972. The dredging and disposal operations will be conducted, to the maximum extent practicable, in a manner that is consistent with the approved management program.

**Other Information:**

- a. Previous Dredging: This project has been dredged numerous times in the past. The most recent maintenance dredging was in July-August 1999 when 145,000 cubic yards of sand was removed from the entrance channel and placed nearshore off Plum Island Beach. Other previous projects were in September 1996 when 125,000 cubic yards of sand were dredged and placed nearshore off Salisbury Beach, and April-May 1993 when 125,000 cubic yards of sand were dredged and placed nearshore off Plum Island Beach.
- b. Non-Federal Dredging: No private dredging is proposed in conjunction with this project.
- c. Alternate Disposal Methods: All disposal methods evaluated (i.e., nearshore placement and beach nourishment) are considered beneficial use alternatives. The nearshore disposal method is the Government's preferred alternative. However, direct beach nourishment is being considered under the Corps beneficial use of dredge material program which cost-shares the additional costs of beach nourishment with a non-Federal public sponsor, in this case the Massachusetts Department of Conservation and Recreation.
- d. Endangered Species: Preliminary determinations indicate that the proposed activity will not likely affect any endangered species or critical habitat designated as endangered or threatened pursuant to the Endangered Species Act of 1973 (87 Stat. 844).
- e. 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.
- f. Cultural Resources: The proposed work is maintenance involving previously dredged areas and previously used disposal sites, and is not likely to affect any cultural or archaeological features or resources. The new, expanded site off Plum Island Beach is adjacent to the previously used Plum Island Beach site and is not likely to affect any cultural or archaeological features or resources. The placement of material directly on the beaches is also not likely to affect any cultural or archaeological features or resources.
- g. Essential Fish Habitat Assessment: It has been determined that dredging may have a temporary adverse effect on Essential Fish Habitat (EFH). The Merrimack River and Newburyport Harbor is designated as EFH under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for federally managed

fish species. The Army Corps of Engineers has assessed the effects the dredging is likely to have on EFH, and has determined that there will be no significant impacts on the designated fisheries resources. The Corps has consulted with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service to ensure that all impacts will be minimized and will not significantly affect these resources.

- h. Additional Requirements: A Water Quality Certification (WQC), pursuant to Section 401 of the Clean Water Act of 1977 (P.L. 95-217), was received for this project from the Massachusetts Department of Environmental Protection on January 23, 2008. The WQC was for the disposal of dredged material nearshore off either Plum Island Beach in Newbury or Salisbury Beach in Salisbury. A request for an amendment to the WQC to include the beach disposal sites has been submitted pursuant to The Clean Water Act of 1977, 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. Similarly, the Commonwealth has concurred with our determination of Federal consistency with the Commonwealth's approved coastal zone management program for nearshore disposal; but we have now requested consistency for direct beach placement also.

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.

Selection of the above described proposed disposal sites for dredged material associated with maintenance of this navigation project shall be made through the application of guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, in conjunction with the Secretary of the Army. If these guidelines alone would prohibit the use of the proposed disposal sites, any potential impairment to the maintenance of navigation, including any economic impact on navigation which would result from failure to use the disposal sites, will also be considered.

The final selection of a disposal method will depend on Federal funding and the Commonwealth's decision on cost-sharing in the beach nourishment alternative, and on the willingness of beachfront property owners in the areas receiving nourishment material to execute easements covering construction access and public access for the beaches.

Any person who has an interest which 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 me within 30 days of the date of this notice and must clearly set forth the interest which 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 me at U.S. Army Corps of Engineers, New England District, 696 Virginia Road, Concord, MA 01742-2751, ATTN: Jack Karalius, within 30 days of this notice.

14 July 2009

Date



Philip T. Feir

Colonel, Corps of Engineers  
District Engineer

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

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

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

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

Fish and Wildlife Coordination Act (16 U.S.C. 661-666c)

Fish and Wildlife Act of 1956 (16 U.S.C. 472a, et. seq.)

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

Coastal Zone Management Act of 1972 [16 U.S.C. 1456(c)(1) and (2)],

Sections 307(c)(1) and (2),

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

Endangered Species Act of 1973 as amended (16 U.S.C. 668aa-668cc)

Clean Air Act, as amended (42 U.S.C. 1221 et. seq.)

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

Federal Water Project Recreation Act, as amended (16 U.S.C. 4601-12 et. seq.)

Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4 et. seq.)

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

Sustainable Fisheries Act of 1996

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

**Attachment No.1**

## Attachment No. 2.

### PROPOSED DISPOSAL SITES FOR NEWBURYPORT HARBOR MAINTENANCE DREDGING

