# PUBLIC NOTICE

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

696 Virginia Road
Concord, MA 01742-2751

**Date: February 17, 2009**
**Comment Period Ends: March 17, 2009**
**File Number: NAE-2009-350**
**In Reply Refer To: Kevin R. Kotelly, P.E.**
**Or by e-mail: Kevin.r.kotelly@usace.army.mil**

The District Engineer has received a permit application from the applicant below to **conduct work in waters of the United States** as described below.

**APPLICANT**
The Town of West Tisbury, Massachusetts

**PROPOSED WORK AND PURPOSE**
The work includes work in navigable waters to place structures below the mean high water line to establish a 25 acre subtidal aquaculture zone for submerged longline mussel culture. West Tisbury is one of three Martha's Vineyard towns seeking to establish offshore aquaculture zones for mussel culture. The other two towns are Chilmark and Aquinnah.

Each installation will consist of one 2.75 centimeter (cm) polysteel longline anchored by two 250 kilogram (kg) plow-type anchors with 7 meter (m) lengths of heavy chain. Buoyancy will be achieved with two clusters of six 40 cm diameter circular plastic floats located at each end of the horizontal section of the longline. The distance between anchors will be 165 m and the horizontal longline length between end floats will be 117 m. The submerged depth for the longline will be 8 m. As mussels increase in weight, additional buoyancy will be added to the submerged longline to maintain proper depth using additional plastic floats attached to the longline.

Seed mussels socked into biodegradable cotton sleeves with a rope core will be attached to the longline in continuous lengths of up to 600 m per longline, with the pattern consisting of alternating long and short loops descending 8 m and 0.5 m respectively in depth from the longline.

Initially, only two longlines total will be deployed within the four aquaculture zones being applied for by the three towns. These two longlines will serve as a pilot test. Additional lines may be deployed as requested by future mussel farmers. Future lines would be deployed parallel to existing longlines with the necessary distance between the lines to allow the passage and maneuvers necessary for the service vessels to work the lines. The longlines will be deployed parallel with the prevailing current.

The work is described on the enclosed plans entitled, "Block 18, Longline design and deployment," on one sheet.

**WATERWAY AND LOCATION OF THE PROPOSED WORK**
This work is proposed in Vineyard Sound approximately 1 mile offshore northwesterly of West Tisbury, Massachusetts. The proposed location on the USGS Martha's Vineyard quadrangle sheet is at Latitude 41° 27' 8" N and Longitude 70° 41' 31" W.

**AUTHORITY**
Permits are required pursuant to:
__X_ Section 10 of the Rivers and Harbors Act of 1899
____ Section 404 of the Clean Water Act
_____Section 103 of the Marine Protection, Research and Sanctuaries Act).

The decision whether to issue a permit 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 benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**ESSENTIAL FISH HABITAT**

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

This project will impact 25 acres of Essential Fish Habitat (EFH) for various life stages of the following species: Atlantic cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), pollock (*Pollachius virens*), whiting (*Merluccius bilinearis*), red hake (*Urophycis chuss*), white hake (*Urophycis tenuis*), redfish (*Sebastes fasciatus*), witch flounder (*Glyptocephalus cynoglossus*), winter flounder (*Pleuronectes americanus*), yellowtail flounder (*Pleuronectes ferruginea*), windowpane flounder (*Scopthalmus aquosus*), American plaice (*Hippoglossoides platessoides*), ocean pout (*Macrozoarces americanus*), Atlantic sea scallop (*Placopecten magellanicus*), Atlantic sea herring (*Clupea harengus*), monkfish (*Lophius americanus*), bluefish (*Pomatomus saltatrix*), long finned squid (*Loligo pealei*), short finned squid (*Illex illecebrosus*), Atlantic butterfish (*Peprilus triacanthus*), Atlantic mackerel (*Scomber scombrus*), summer flounder (*Paralicthys dentatus*), scup

(*Stenotomus chrysops*), black sea bass (*Centropristus striata*), surf clam (*Spisula solidissima*), ocean quahog (*Artica islandica*), spiny dogfish (*Squalus acanthias*), tilefish (*Lopholatilus chamaeleonticeps*), king mackerel (*Scomberomorus cavalla*), Spanish mackerel (*Scomberomorus maculatus*), cobia (*Rachycentron canadum*), blue shark (*Prionace glauca*), shortfin mako shark (*Isurus oxyrhyncus*), sandbar shark (*Charcharinus plumbeus*), and bluefin tuna (*Thunnus thynnus*).

This habitat consists of sandy substrate. Loss of this habitat may adversely affect the species listed above. However, the District Engineer has made a preliminary determination that the site-specific adverse effect will not be substantial. Further consultation with the National Marine Fisheries Service regarding EFH conservation recommendations is being conducted and will be concluded prior to the final decision.

**SECTION 106 COORDINATION**

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

a. The permit area has been extensively modified by previous work.
b. The permit area has been recently created.
c. The proposed activity is of limited nature and scope.
d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s)

**ENDANGERED SPECIES CONSULTATION**

The New England District, Army Corps of Engineers has reviewed the list of species protected under the Endangered Species Act of 1973, as amended, which might occur at the proposed project site during the construction and subsequent operation/use period sought by the applicant. It is our determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect any federally listed endangered or threatened species or their designated critical habitat. By this Public Notice, we are requesting that the appropriate Federal Agency concur with our determination.

The States of Connecticut, Maine, Massachusetts, New Hampshire and Rhode Island have approved **Coastal Zone Management Programs**. Where applicable the applicant states that any proposed activity will comply with and will be conducted in a manner that is consistent with the approved Coastal Zone Management Program. By this Public Notice, we are requesting the State concurrence or objection to the applicant's consistency statement.

The following authorizations have been applied for, or have been, or will be obtained:

(X) Permit, License or Assent from State.
(X) Permit from Local Wetland Agency or Conservation Commission.
( ) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by the above date.** If you have any questions, please contact Kevin R. Kotelly, P.E. at (978) 318-8703, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The Corps holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

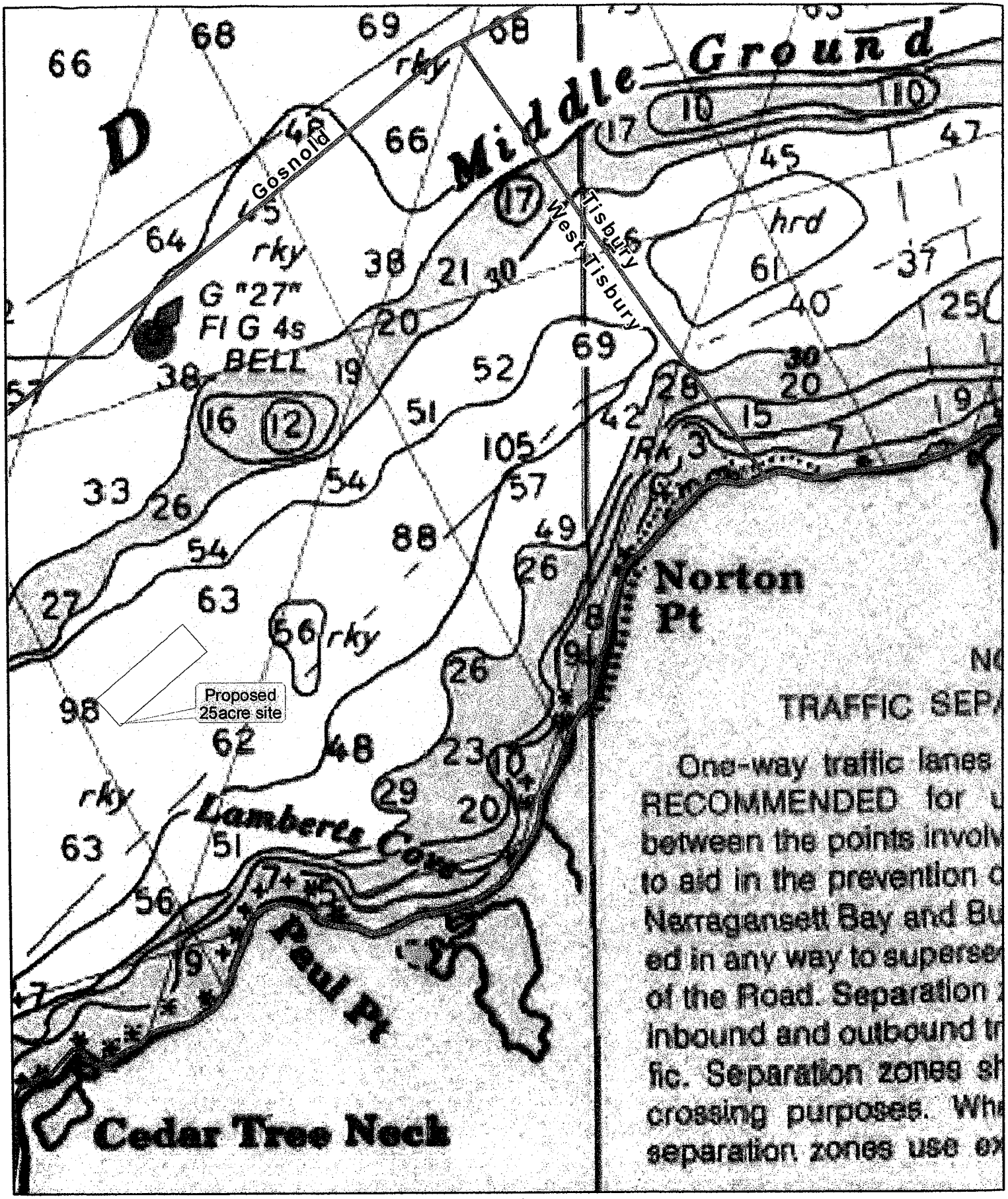
For more information on the New England District Corps of Engineers programs, visit our website at http://www.nae.usace.army.mil.

**THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK.**

**Karen K. Adams**
**Chief, Permits and Enforcement Branch**
**Regulatory Division**

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here (  ) and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____




Soundings are in Feet at MLLW

Proposed Aquaculture Site

Offshore Town Boundary

# Proposed Aquaculture Site
## Offshore - West Tisbury, MA

0 0.25 0.5 Kilometers

0 0.25 0.5 Miles

N

Note: This map is for planning purposes only. It is not adequate for legal boundary definition or navigation. The MVC cannot be responsible for how this data is used or interpreted by the end user.

Prepared by: The Martha's Vineyard Commission, CL Seidel, 5/6/08, www.mvcommission.org, 508-693-3453
Data: Nautical Chart #13218 - NOAA/MassGIS 1993; Proposed Aquaculture Sites - MV Shellfish & MVC 2008
Coordinate Reference: State Plane, Mass Mainland, NAD 83, m
File: cls_estuaries, wtl_shellfish.mxd; original in color

## Block 18

**Longline design and deployment**

**(based on design from: Langan, R. and F. Horton. 2003. Design, Operation and Economics of Submerged Longline Mussel Aquaculture in the Open Ocean, Bull. Aquaculture Assoc. Canada 103-3)**

Each longline installation will consist of one line anchored by two 250 kg plow-type anchors (Jeyco Stingray) with 7 m lengths of heavy chain. Buoyancy will be achieved with clusters of six 40 cm diameter rotationally molded plastic floats, providing 190 kg of buoyancy at each corner. Polysteel rope (2.75 cm) will be used for anchor lines and headlines. For longlines deployed in water 25 meters deep, (Figure 1) the distance between anchors will be 165 m and a headline length between corner floats of 117 m, resulting in a submerged depth for the headline of 8 m. As mussels increase in weight, additional buoyancy will be added to the submerged longline to maintain proper depth using submersible plastic buoys attached to the longline using short lengths of braided nylon twine.

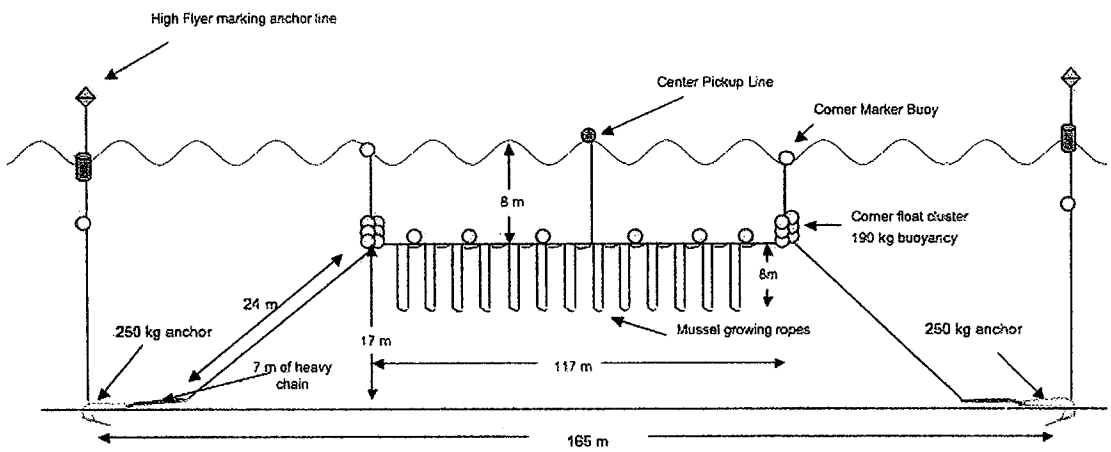



Figure 1. Schematic of a submerged longline with dimensions for deployment in water depths of approximately 25 meters

Seed mussels socked into biodegradable cotton sleeves with a rope core will be attached to the headline in continuous lengths of up to 600 m per longline, with the pattern consisting of alternating long and short loops descending 8 m and 0.5 in depth respectively from the headline.