

# Permitting An Offshore Mussel Farm In Federal Waters In The Gulf Of Maine: A Case Study

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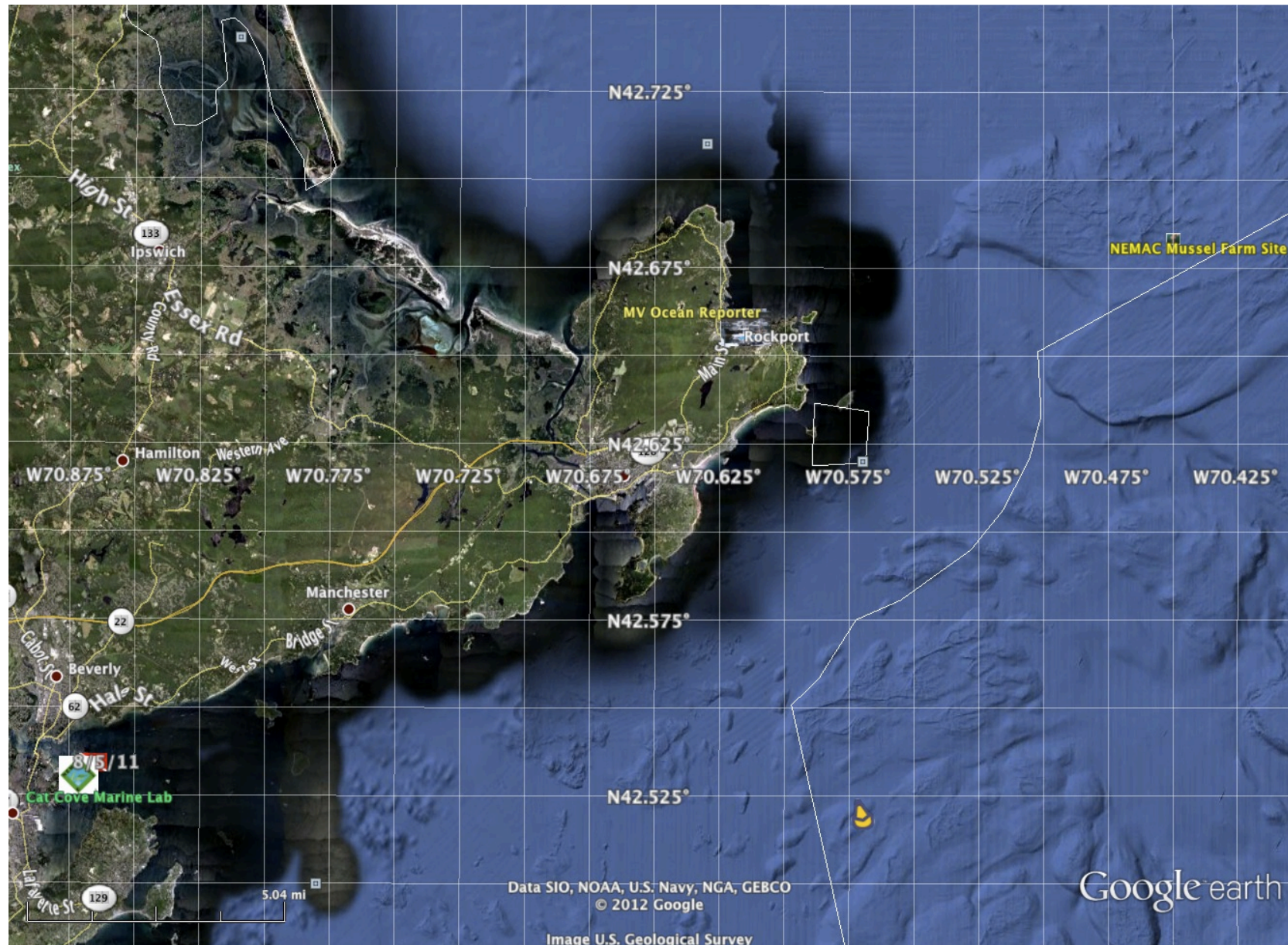
Salem State University



# Project Goals

- NOAA Aquaculture Office commissioned a white paper from the Sea Grant Law Center in 2012 to investigate the permitting process for mussel culture in federal waters.
- This project was funded by NOAA Aquaculture to explore and define the actual permitting process for an offshore mussel farm.
- Permit and establish a commercial scale (33 acre, 1.44 million sq ft.) submerged blue mussel (*Mytilus edulis*) farm in federal waters 8.5 miles off Cape Ann, Massachusetts.

# Proposed NEMAC Offshore Mussel Farm Site

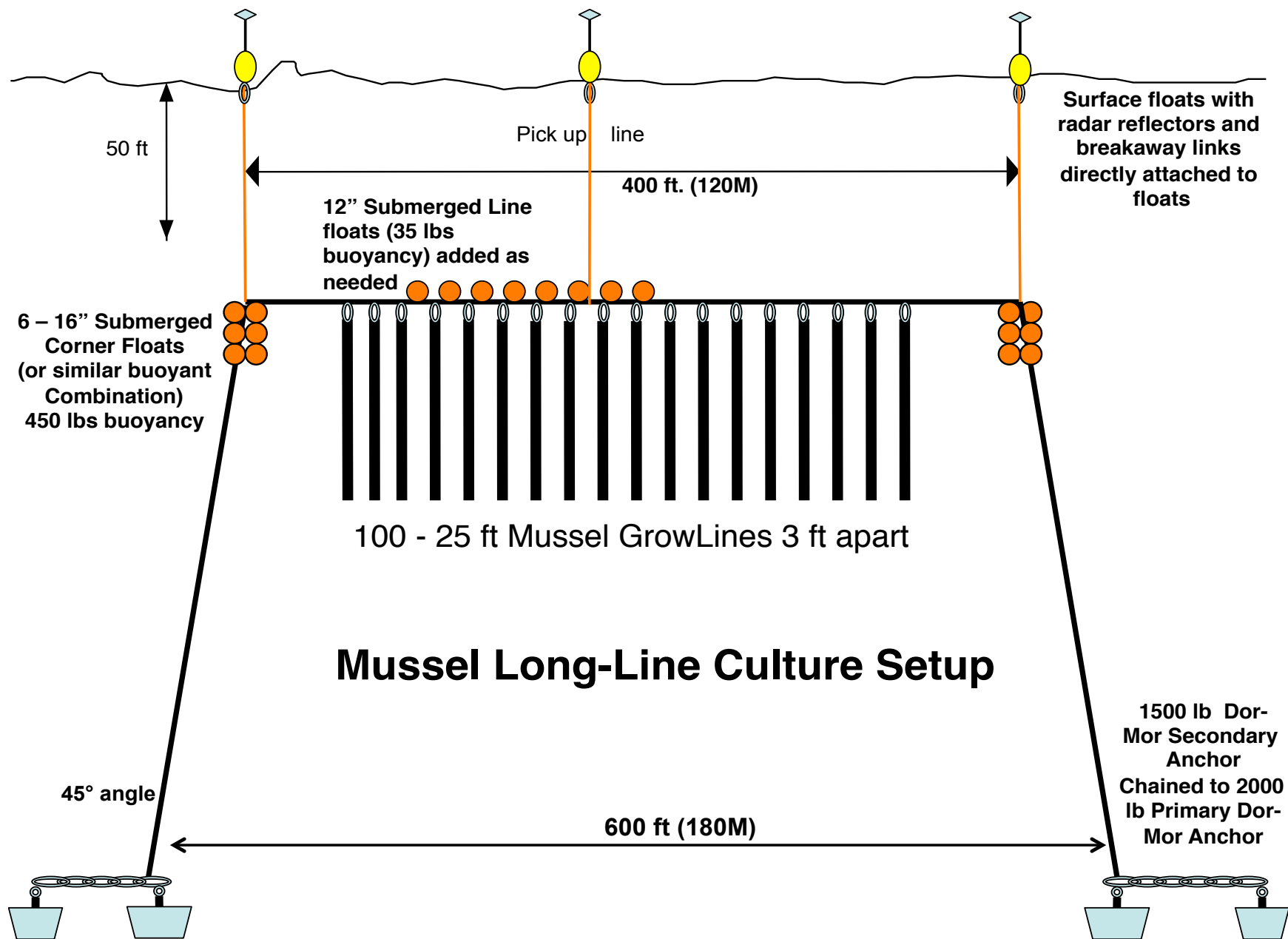


Google earth

miles  
km

10  
20





# Permitting Process Timeline

- **May 2012:** NOAA Fisheries awarded a grant to support a demonstration mussel farm in federal waters off the coast of Massachusetts.
- **July – August 2012:** Selected 2 possible sites and conducted preliminary surveys.
- **September 2012:** Held an informal conference with various state and federal government agencies
  - Determined that Site 2 was not feasible due to the fact that it was within the Stellwagen Bank Marine Sanctuary (SBNMS) and mariculture activities are prohibited.
  - MA Coastal Zone Management requested an Environmental Impact Statement to determine applicability for federal consistency
  - Initial Permit Application submitted to ACOE pursuant to Sec 10 Rivers and Harbors Act (33 USC Sections 401).
- **December 21, 2012:** Submitted Impact Report to ACOE and MA CZM using format similar to other established permitted farms in coastal waters.

# Permitting Process Timeline

- **January 2013:**
  - MA CZM requests federal consistency review to NOAA Ocean Service Office of Ocean and Coastal Resource Management (OCRM).
  - Notified of conflict with federal permitting in Northern Temporary PSP Closure Area.
- **March 19, 2013:** OCRM Denies Commonwealth of MA Review of Unlisted Activity based on permitting of coastal permits previously issued.
- **April 23, 2013:** ACOE issues Public Notice (NAE-2012-1598)
- **May 2013:** Discussed alternate site outside PSP Closure Area at Horseshoe Shoals and preparation to submit an ACOE permit application.
- **May 23, 2013:** Public Comment period ended.

# Permitting Process Timeline

- **June – November 2013:** Resolution of concerns raised by USCG and various NOAA offices.
  - A Navigational Safety Risk Assessment (NSRA) was submitted to the USCG (Aug 1, 2013).
  - NOAA Office of National Marine Sanctuaries questioned potential injury to sanctuary resources and proposed 2 alternate sites
    - Both are in MA state waters
- **July 2013:** Santoro Fishing Corporation submitted an application to ACOE for a permit to farm mussels in a 28.5 acre site near Horseshoe Shoals in Nantucket Sound just east of the permitted Cape Wind farm.
  - ACOE Issues Public Notice (NAE-2013-1584) on September 30, 2013.
- **November 5, 2013:** Based on the information provided in the NSRA, the Coast Guard has no objections to the location of the mussel aquaculture farm, provided prescribed recommendations are met.

# Permitting Process Timeline

- **November 13, 2013:** Meeting at ACOE with NOAA Aquaculture, Protected Resources, Stellwagen Bank National Marine Sanctuary, and Essential Fish Habitats. Determined that a Biological Assessment (BA) in the NOAA prescribed format be submitted for review.
- **January 2014:** ACOE distributes Biological Assessment (BA) for the NEMAC Farm NAE-2012-1598 site to concerned NOAA offices for review.
- **February 4, 2014:** ACOE distributes NAE-2013-1584 Domenic Santoro Aquaculture Biological Assessment to concerned NOAA offices for review.
- **March – Aug 2014:** Requests for BA clarifications made and responses supplied by both permit applicants.
- **August 14, 2014:** NOAA NMFS submits concurrence letter to ACOE for NAE-2013-1584 Horseshoe Shoals site permit

# Permitting Process Timeline

- **August 21, 2014:** NAE-2013-1584 Horseshoe Shoals permit issued by ACOE.
- **Sept – Dec 2014:** Further requests for BA clarifications made by NOAA PRD and SBNMS for NEMAC permit and responses supplied by applicants.
- **October 2014:** Northern and Southern Temporary PSP Closures are lifted.
- **Dec 19, 2014:** NOAA PRD and SBNMS issue Letters of Concurrence that the NEMAC longline project is not likely to adversely affect any NMFS listed species.
- **January 7, 2015:** ACOE issues permit NAE-2012-1598 to NEMAC, Salem State University to establish offshore farm site.

# Biological Assessment

## I. Background / History

### A. Project History

#### i Documentation of Relevant Correspondence

## II. Description of the Action and Action Area

### A. Discussion of Federal Action and Legal Authority / Agency Discretion

### B. Description of the Project Purpose and Objectives

### C. Project Descriptions

#### i. Description of Project Activities

#### ii. Operational Characteristics of the Proposed Project

#### iii. Description of Proposed Conservation Measures

#### iv. Discussion of Underlying Action / Broader Context / Interdependent and Interrelated Actions

### D. Discussion of Known Ongoing and Previous Projects in the Action Area

#### i Fishing Activity In Area

#### ii Vessel Traffic

#### iii Fishing Closures

### E. Project Area and Action Area Defined

### F. Maps of Project Area and Action Area

## III. Status of Species and Critical Habitat

### A. Essential Fish Habitat (EFH) Designation

### B. Endangered Species Act (ESA) Species Plan

## IV. Environmental Baseline

### A. Description of the Action Area and Project Area

### B. Description of the Environmental Baseline

#### i Site profile

#### ii Faunal Analysis

## V. Effects of the Action

### A. Direct Effects

### B. Indirect Effects

### C. Effects from Interdependent and Interrelated Actions

### D. Effects from Ongoing Project Activities

#### i Fishing Activities

#### ii Vessel Traffic

### E. Use of Best Scientific and Commercially Available Data Monitoring Protocols:

#### i Biological Monitoring

#### ii Monitoring For Interactions With Protected Species

#### iii Actions To Be Taken In The Event Of A Marine Mammal Or Sea Turtle Entanglement

#### iv Monitoring Of Gear

#### v Invasives Monitoring And Prevention

#### vi Shipboard Testing Of Mussel Meat For Saxitoxins (PSP)

#### vii Data Sharing Plan

### G. Effects Determination for Listed Species and Designated Critical Habitat

### H. Decommissioning

# Permitting Concerns

## Impacts To Current Fisheries

- Minimal impact to established fisheries
  - Vessel Trip Reports (NOAA/NMFS)

## Navigation

- USCG Navigation Safety Risk Assessment (NSRA) required to determine possible impacts to vessel traffic and set conditions to assure navigation safety.

## Endangered Species Protection

## Essential Fish Habitats

## National Marine Sanctuaries

- Not Likely to Adversely Affect (NLTA) determination desired.

## Environmental Protection Agency

- Water quality issues

## Federal Consistency – State Agencies

- Review by NOAA Ocean Service Office of Ocean and Coastal Resource Management (OCRM).

# Permitting Concerns

## Endangered Species Protection

- **Not Likely to Adversely Affect (NLTA) determination desired**
  - Longline under tension
  - break away links on marker lines
  - Longline submerged at least 25 ft (surface feeding)
  - Bottom clearance at least 60 ft (bottom feeding)
  - Mussel grow lines less than 26 ft (8M)
  - Report observations
  - Frequent site visits
  - No reported entanglements in other NE mussel farms

# **Permitting Concerns**

## **Navigation Safety**

- The header ropes and submerged floats are submerged to a minimal depth of 50ft.
- All surface buoys have breakaway links installed and configured to be in compliance with 50 CFR 229.32.
- The mussel farm is properly charted though National Oceanic and Atmospheric Administration (NOAA) prior to any installation of gear.
- A notice of the mussel farm is advertised in the Coast Guard Local Notice to Mariners at least 30 days prior to the installation of gear.
- The site corners are clearly marked with non-lateral lighted Private Aids to Navigation.

# Summary/Recommendations

- ACOE should require submission of a Biological Assessment (BA) concurrently with permit application.
  - The BA should be submitted in the standardized format acceptable to NOAA Protected Resources Department (PRD)
- Upon receipt of permit application and supporting documents (BA), the ACOE should begin informal consultations with appropriate federal and state agencies.
  - Supply agencies with the BA to be reviewed for concurrence that the project will not adversely effect resources or activities under the agencies purview.
  - Agencies need to be held to a response time table.
  - Agencies with similar interests need to communicate with each other.
  - Informal versus Formal consultations????
- ACOE should post application, BA and other supporting documents on a web site with links to download these documents for review and comment.

# Useful Resources

- **ACOE Seattle District Permit Guidebook**
  - **Chapter VI: Endangered Species and Related Wildlife Laws**
    - <http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx>
    - ESA BA Template
    - [http://www.nws.usace.army.mil/Portals/27/docs/regulatory/ESA%20forms%20and%20templates/BA\\_template.pdf](http://www.nws.usace.army.mil/Portals/27/docs/regulatory/ESA%20forms%20and%20templates/BA_template.pdf)
  - **Chapter IX: Aquaculture**
    - <http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook.aspx>
- **The Northeast Ocean Data Viewer**  
<http://www.northeastoceandata.org/viewer/>
  - an easy-to-use interactive map of data on human uses, environmental features, and political and administrative boundaries. It enables state, federal, and local decision-makers to visualize, query, map, and analyze data for ocean planning in the northeast region.

# Acknowledgements

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