ShellfAST-MA: A Shellfish Aquaculture Siting Tool for Massachusetts

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Marine Affairs Institute
Rhode Island Sea Grant Legal Program
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The Marine Affairs Institute

We are:
- a partnership among RWU School of Law, Rhode Island Sea Grant, and URI
- home to the Rhode Island Sea Grant Legal Program
- an academic and research institute: we do not advocate or litigate

Our mission:
- educate the next generation of marine law and policy professionals
- serve as a legal and policy resource on marine and coastal issues
- convene experts to address issues in marine law and policy
Creating a Spatially-Defined Tool for Marine Shellfish Aquaculture Siting and Permitting

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Shellfish Aquaculture in MA

MA Oyster Aquaculture Production - $Value
(Source: DMF annual reports)

$0
$5,000,000
$10,000,000
$15,000,000
$20,000,000
$25,000,000

2011 2012 2013 2014 2015

1128+ acres, 1000+ jobs
Where Can New Farms Go?

Many potential conflicts:
- Waterfront property owners
- Navigation
- Wild shellfishing
- Protected habitat/species
- Water quality
- Legal prohibitions/barriers
GIS Siting Tools for Aquaculture

North Carolina Shellfish Lease Siting Tool

Maryland Aquaculture Siting Tool

Connecticut Aquaculture Mapping Atlas
Shellfast-MA: Project Concept

A GIS-based tool to improve commercial shellfish aquaculture siting in Massachusetts

- Decision support and conflict avoidance for industry and regulators
- **Legal** analysis + biophysical information
- Simple and user-friendly
- Replicable beyond Massachusetts
Timeline

- **Fall 2016**
  - Kickoff

- **Winter 2017**
  - Advisory Board Meeting

- **Summer 2017**
  - Draft tool and report

- **Winter 2018**
  - Advisory Board Meeting
  - Pilot Testing

- **Summer 2018**
  - Final tool released
Overview

- Background, tutorial video, instructions, documentation
- Online viewer

Disclaimer:

The tool covers all species currently grown in shellfish aquaculture—most notably, oysters (Crassostrea virginica) and...
Data Layers in MA-ShellfAST
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Data Layers in MA-ShellfAST
• Background and context for design and development
• Project Overview
• Legal and Regulatory Context for Shellfish Aquaculture Siting and Permitting in Massachusetts
• Shellfish Aquaculture Licensing, Navigation, and Wetlands Requirements in Massachusetts Coastal Municipalities
• Case Studies for Pilot Municipalities
• Prospects for Application in Other States
• MA-ShellfAST Technical Report
Legal Integration - Context
Legal Integration - Guidance

Site areas must be a minimum of 25 feet from eelgrass beds.

Survey Year: 2,013

This layer was compiled by SeaPlan and represents the most current data available covering the coast of Massachusetts. It is possible that eelgrass may no longer be present in some areas depicted here. It is also possible eelgrass may be present in areas not included in this layer. Therefore, a site survey is necessary to determine if there is eelgrass present in your area of interest.

See sections in Legal and Regulatory Context for Shellfish Aquaculture and Permitting in Massachusetts.
Legal Integration: Permitting
Massachusetts Aquaculture: The Local Government Challenge

- Home rule: out to 3nm
- Local ordinances updated annually
- Multiple sets of ordinances/regulations
  - Aquaculture
  - Shellfishing
  - Wetlands
Thank you!

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