Shellfish Planting Guidelines

Outlining Principles to Which Shellfish Planting Programs Should Adhere

MarineFisheries
Commonwealth of Massachusetts

Planting Guidelines

- Why did we write the Guidelines?
  - To clarify the regulations that *MarineFisheries* operates under
  - To clarify the vocabulary associated with shellfish planting
  - To identify and clarify the best practices *MarineFisheries* promotes for shellfish planting activities

Planting Guidelines

- Who wrote the guidelines?
  - *MarineFisheries* Shellfish Program wrote the guidelines
  - The Nature Conservancy received a grant from MassBays to support the public review of the guidelines and application of the guidelines

Shellfish Management

- Humans consume shellfish, in some cases uncooked.
- Shellfish grow in waters that are susceptible to pollution by human pathogens.
- The main focus of shellfish management is on protecting human health.
- A related goal is to ensure the quality and reputation of Massachusetts shellfisheries.

MA ranked first in the nation in the value of fisheries landings in 2009

How We Protect Human Health

- Massachusetts is a member of the National Shellfish Sanitation Program under FDA
  - sanitary control of shellfish produced and sold for human consumption
  - promote and improve the sanitation of shellfish (oysters, clams, mussels and scallops) moving in interstate commerce
- *MarineFisheries* monitors bacteria levels and classifies the waters of the Commonwealth

Classification Levels

- **Approved**: Open to the harvest of shellfish for direct human consumption subject to local rules and regulations and only closed during major coast wide events (e.g. an oil spill or red tide event).

- **Conditionally Approved**: Closed some of the time due to rainfall or seasonally poor water quality or other predictable events. When open, it is treated as an Approved area.

- **Restricted**: Contains a limited degree of contamination at all times. Open to harvest only for the relay of shellfish to a less contaminated area or harvest for depuration.

- **Conditionally Restricted**: Contains a limited degree of contamination at all times and is subject to intermittent pollution events. May be closed some of the time to rainfall or seasonally poor water quality (during which no harvest is allowed). When open, only softshell clams may be harvested by Master/Subordinate Diggers for depuration at the *MarineFisheries* Shellfish Purification Plant.

- **Prohibited**: Area closed to the harvest of shellfish under all conditions.

Closure Status

- In addition to the classification level, an area can be in an
  - Open Status: open to harvest

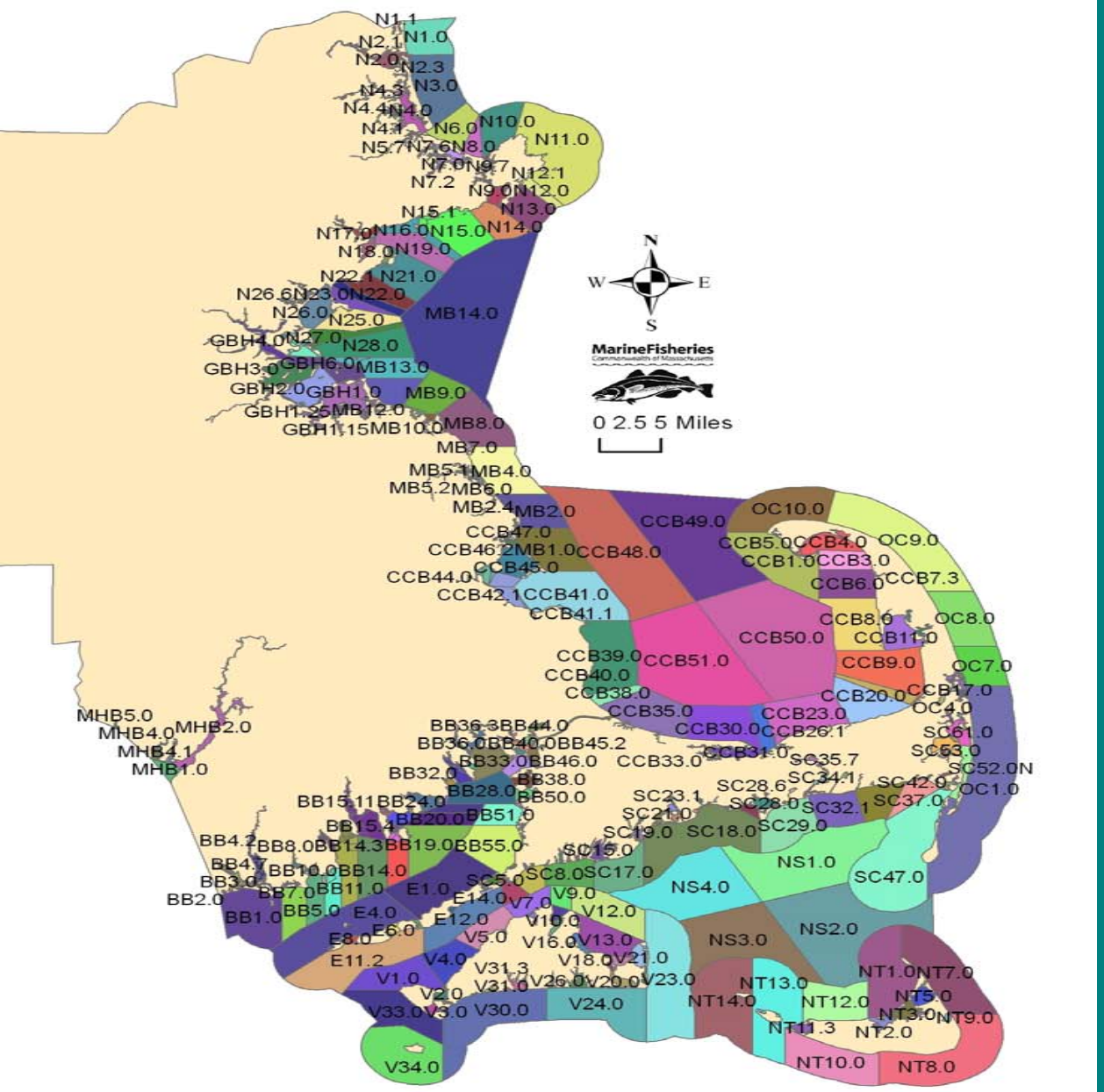
    or

  - Closed Status: closed to harvest
- Examples
  - An Approved area can be in Closed Status if there is an oil spill or red tide event
  - Conditionally Restricted areas enter Closed Status after a rainfall event or seasonal closure

Shellfish Jurisdiction

- Municipalities have jurisdiction over waters that are not contaminated (Approved waters).
- The state has jurisdiction over waters that are contaminated (anything other than Approved waters).

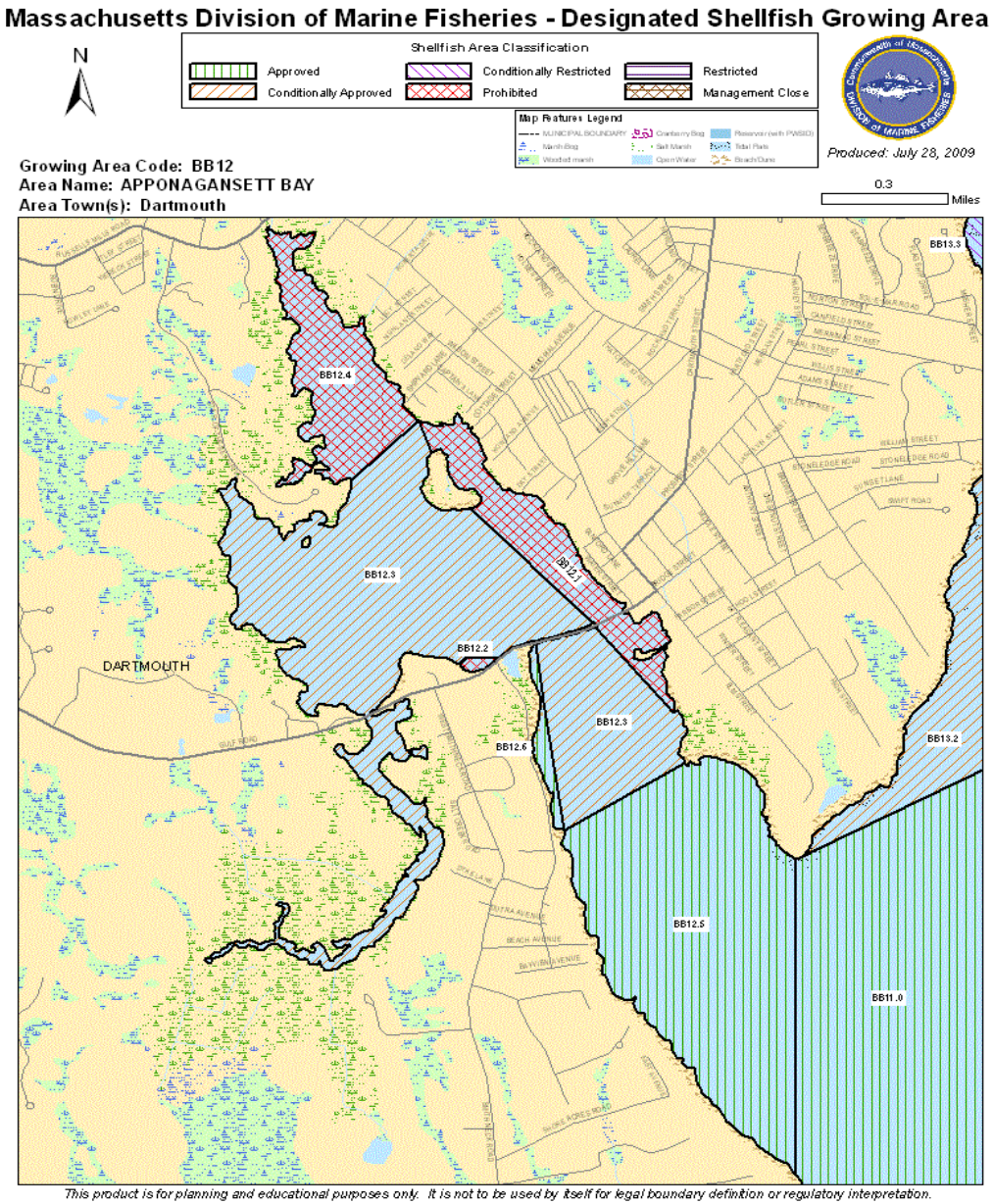
Shellfish Growing Areas (SGAs)



There are 303 SGAs in Massachusetts.

Within each SGA are distinct classification areas.

Classification Areas



Shellfish Growing Area BB12 with six classification areas.

Each classification area is assigned a classification and a status based on NSSP guidelines.

This map is from July 2009 and may not represent the current status of the classification areas.

Definitions

Planting:
increasing or creating
shellfish resources

1. **Propagation:** conducted by municipalities or the state to increase the supply of shellfish available to the public fisheries.

2. **Aquaculture:** the planting of shellfish at a specific privately licensed location resulting in the commercial production of shellfish.

3. **Research Project:** any planting activity designed for hypothesis testing, experimentation, scientific research or education, permitted annually by *MarineFisheries.* These permits include a monitoring and reporting component.

Types of Propagation

Propagation: conducted by municipalities or the state to increase the supply of shellfish available to the public fisheries.

Short term Relays:

The transfer of shellfish by municipalities from growing areas classified as Restricted or Conditionally Restricted to growing areas classified as Approved or Conditionally Approved to reduce pathogens in the shellfish. Shellfish may be harvested after 90 days and usually one spawning season

Long term Transplants:

The transfer of shellfish by municipalities from growing areas classified as Prohibited to growing areas classified as Approved or Conditionally Approved to reduce pathogens in the shellfish. Transplants require one or more spawning seasons and a minimum of one year of natural depuration before harvest.

Restoration:

Recreating a shellfish resource that is historically known to have occurred in a water body but no longer exists as a naturally sustaining population. This term generally includes any propagation effort done for ecosystem service benefits.

Mitigation:

Propagation done as compensation for alterations resulting in losses or damage to existing shellfish resources or habitat.

MarineFisheries Principles

1. Minimize conflict between user groups.
2. Support and participate in propagation and enhancement efforts, encourage private aquaculture while protecting the right of access to a public shellfishery.
3. Do not disrupt traditional fishing practices, do not adversely effect existing shellfish populations or habitat, and do not create enforcement or potential public health problems.
4. All planting activities require a permit from *MarineFisheries*.

Allowable Shellfish Planting Practices

1. Planting may be conducted in Approved or Conditionally Approved waters.

    a. Planted areas cannot be closed in excess of three years.

    b. Aquaculture in Conditionally Approved areas is not generally encouraged due to enforcement and public health concerns while these areas are in a closed status.

Allowable Shellfish Planting Practices

2. Shellfish planting is not allowed in areas classified as Prohibited or Restricted except as follows:

a. Mitigation overseen or conducted by *MarineFisheries* for losses to existing shellfish resources.

b. Propagation conducted by *MarineFisheries* and/or municipalities in Restricted or Conditionally Restricted areas to support depuration fisheries.

c. Municipalities may utilize contaminated waters as nursery areas to raise seed shellfish for eventual transplant to Approved or Conditionally Approved waters under a management plan approved by the director of *MarineFisheries*. Nursery products would then be transplanted or relayed under provisions of the management plan and an NSSP required *MarineFisheries* Contaminated Transplant Permit for contaminated transplants.

Allowable Shellfish Planting Practices

3. Research Projects may be conducted in all waters regardless of NSSP classification.
   a. Not to exceed three years.
   b. Cannot establish new shellfish populations in contaminated waters.

4. In waters under municipal control, private propagation activities (e.g. not aquaculture and not research) are conducted in partnership with the city or town.

Allowable Shellfish Planting Practices

5. Shellfish planting by private citizens or private property owners (i.e. shellfish or oyster gardening) may be conducted under the auspices of the local shellfish department in common areas of Approved waters set aside by the municipality under their shellfish management authority

   a. A municipality may allow this activity in contaminated waters under a contaminated area management plan approved by *Marine Fisheries*.

   b. This activity is conditioned by *MarineFisheries* on the municipal propagation permit. Shellfish produced are used to augment the public fishery.

Allowable Shellfish Planting Practices

6. Construction of artificial reefs to increase shellfish habitat and resource may be conducted under the auspices of the local shellfish department in common areas of Approved waters set aside by the municipality under their shellfish management authority.

   a. A municipality may allow this activity in contaminated waters under a contaminated area management plan approved by *Marine Fisheries*.

   b. This activity is conditioned by *MarineFisheries* on the municipal propagation permit.

   c. All reefs should not adversely affect other fisheries and shall conform to the *MarineFisheries* Artificial Reef Policy (Rousseau 2008).

   d. Reefs cannot be closed for more than three years.

Permitting

- All planting activities (e.g. propagation, aquaculture, and research) require a **Special Project** Permit from *MarineFisheries*
  - Depending on the purpose and methods of the planting activity, various conditions may be required.
- All planting activities require permission from the municipality in which the planting will occur.
  - Aquaculture requires a municipal site license (grant)
  - *MarineFisheries* will consult with the local shellfish constable for other activities
- All planting activities must follow the statutes and regulations in MGL Chapter 130 and 322 CMR
- No invasive or non-indigenous species
- Transplants must be tested for disease or come from an approved source
- If the culture technique involves rafts, racks, floats, bags, moorings, placement of cultch or protective netting, then additional permits may be required from the U. S. Army Corps of Engineers and /or the Massachusetts Dept. of Environmental Protection.
- Shell cultch must be aged for one year

Next Steps

- Assemble feedback from public listening sessions and comments submitted by mail or email.
- Review and edit the Draft Guidelines.
- Release Final Guidelines in December.