



Massachusetts Division of Marine Fisheries

Shellfish Planting Guidelines

J.M. Hickey

T. Shields, J. Kennedy, K. Ford

**Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Department of Fish and Game
Massachusetts Division of Marine Fisheries**

3rd Edition: March 2015
2nd Edition: September 2014
1st Edition: December 2011

Executive Summary

Shellfish planting is conducted to enhance natural shellfish resources to maintain commercial and recreational fisheries, restore historic populations, mitigate for adversely impacted resources, commercially produce shellfish by private aquaculture, or for ecological services. There is increasing interest in planting shellfish to improve water quality in degraded coastal water bodies. The Division of Marine Fisheries (*Marine Fisheries*) is interested in balancing the interest in shellfish restoration with the important goals of protecting human health, protecting wild shellfish stocks, enabling opportunities for commercial and recreational shellfishing and fostering development of shellfish aquaculture in Massachusetts. As a result, *Marine Fisheries* developed shellfish planting guidelines based on six overarching principles that describe allowable practices, statutory and regulatory authority, permit requirements and types of available permits.

The intent is to clarify and enumerate considerations for review of shellfish planting projects to benefit project applicants, as well as local, state and federal resource and permitting agencies.

Introduction

Shellfish planting is conducted to enhance natural shellfish resources to maintain commercial and recreational fisheries, restore historic populations, mitigate for adversely impacted stock, commercially produce shellfish by private aquaculture, or for ecological services. In Massachusetts there is a long history of protecting public access to marine resources (Colony Ordinances of 1640 – 1647). Planting activities have been performed primarily to benefit commercial and recreational harvesters by municipal shellfish departments with assistance from *Marine Fisheries*. Private aquaculture has been in existence since the mid 1800's growing tremendously in the last 20 years. Mitigation for resource and habitat loss associated with marine construction projects has become common in the last decade or so. More recently, there is increased interest in shellfish planting for restoration purposes.

Massachusetts ranked first in the nation in the value of fish and shellfish landings in 2009 (NOAA 2009). Given the size and importance of the shellfisheries and associated shore based industry, it is an economic necessity to protect the wholesome reputation of the Commonwealth's shellfish industry.

Shellfish are prolific in coastal waters accessible by small boat and by wading. Shellfishing in Massachusetts is both a lucrative commercial industry and a popular recreational pastime. Due to their proximity to the coast, shellfish grow in waters susceptible to pollution from sewer systems, combined sewer overflows, septic systems, and other sources of human waste. These waste streams can contain pathogens that cause a variety of human illnesses. Shellfish are filter feeders and when exposed to pathogens they have a high risk of becoming contaminated and unsafe for human consumption. Some water bodies are contaminated all of the time and other water bodies are only contaminated as a result of run-off from rain storms. Other water bodies that have no sewage pollution or are very well-mixed and do not retain the pathogens are not contaminated.

Because of the potential severity of human illness as a result of eating contaminated shellfish, many statutes and regulations are in place to protect public health by preventing harvesting from areas contaminated with human pathogens. The National Shellfish Sanitation Program (NSSP) has established a rigorous classification, monitoring, and closure system that states with shellfish in interstate commerce are required to follow. In addition to routine monitoring for fecal coliform contamination, the program specifies closure conditions and requires that states adequately patrol areas closed for public health reasons or take measures to remove shellfish from those areas (U.S. FDA 2009).

The Massachusetts Office of Environmental Law Enforcement (OLE) is responsible for enforcement of state statutes and regulations in the 1.7 million acres of shellfish growing waters of which 190,000 acres are closed to shellfishing due to contamination and is assisted locally by municipal shellfish constables where present. The Commonwealth's compliance with the NSSP is evaluated annually by the U.S. Food and Drug Administration (FDA). State evaluations are reported to the Interstate Shellfish Sanitation

Conference (ISSC) for potential sanctions up to and including removal of a state's shellfish from interstate commerce.

On the east coast of the U.S., most states have sole authority to manage shellfish. In contrast, the Commonwealth of Massachusetts shares management and control with municipalities. Under various sections of Massachusetts General Laws Chapter 130 (G.L. c. 130), municipalities control shellfisheries management in clean (Approved) waters while the state controls shellfisheries management in contaminated waters (all classifications other than Approved). The Commonwealth also has control of the shellfish resources in certain areas outside of municipal boundaries but within the jurisdiction of the Commonwealth. Such areas include but are not limited to the center of Cape Cod Bay, an area off of Boston Harbor, and an area in Nantucket Sound west of Monomoy Island. Additionally, the Commonwealth has jurisdiction over fisheries management in the federal waters of Nantucket Sound.

This document represents *Marine Fisheries*' definitions and policy framework relative to all types of shellfish planting, including shellfish propagation and enhancement, restoration, mitigation, and aquaculture in state managed waters. The intent is to clarify and enumerate considerations for review of shellfish planting projects to benefit project applicants, as well as local, state and federal resource and permitting agencies. The guidance outlined is intended as a supplement to regular reviews and consultations with resource and permitting agencies. In all cases, the shellfish planting must be deemed appropriate by both the municipality and *Marine Fisheries*. Further, if any structures are created or anchoring systems used, additional permits may be required by the U.S. Army Corps of Engineers (U.S. ACE), the Massachusetts Department of Environmental Protection (MA DEP), the local conservation commission, and possibly other permitting agencies. The guidelines within this document are based on state and federal statutes and regulations that are current as of September 2014 governing shellfish management and aquaculture.

Definitions

Marine Fisheries' uses the following definitions throughout this document and in practice to describe various shellfish planting activities. Since the closure status is an important part of how shellfish planting activities are managed, the closure definitions are provided first.

Shellfish Growing Area Classifications

The state is divided into 303 Shellfish Growing Areas (SGA), which are broken up into classification areas (Figure 1). Classification is based on an extensive evaluation of local environmental conditions, pollution sources and an assessment of potential impacts to water quality in the area. The assessments are conducted by FDA-trained *Marine Fisheries* staff and are summarized in a written sanitary survey report according to NSSP guidelines. SGA maps are available on the *Marine Fisheries* website (<http://www.mass.gov/dfwele/dmf/programsandprojects/dsga.htm>) and sanitary surveys are available upon request to the *Marine Fisheries* Shellfish Program.

2. **Conditionally Approved:** Closed some of the time to rainfall or seasonally poor water quality or other predictable events. When open, it is treated as an Approved area.
3. **Restricted:** Contains a limited degree of contamination at all times. This classification is used for areas where shellfish can be relayed to a less contaminated area or harvested for depuration.
4. **Conditionally Restricted:** Contains a limited degree of contamination at all times, subject to intermittent pollution events and may be closed some of the time to rainfall or seasonally poor water quality. In Massachusetts, when open, only softshell clams may be harvested by Master/Subordinate Diggers for depuration at the *Marine Fisheries* Shellfish Purification Plant.
5. **Prohibited:** Area closed to the harvest of shellfish under all conditions, except the gathering of seed for municipal propagation programs under *Marine Fisheries* transplant permits.

Massachusetts utilizes all five classifications. Any SGA not in the Approved classification is considered contaminated. Formal classification definitions can be found in Section 2, Chapter 4.03 of the NSSP Guide for the Control of Molluscan Shellfish (U.S. FDA 2009).

Each shellfish classification area within an SGA is also assigned a status. The status of an SGA or classification area is separate and distinct from its classification and may be opened, closed or inactive for the harvesting of shellfish.

Massachusetts utilizes two NSSP status designations:

1. **Open Status:** Except for an area in the prohibited classification, any growing area is normally open for the purposes of harvesting shellfish subject to the limitations of its classification.
2. **Closed Status:** Any classified growing area may be closed for a limited or temporary period because of an emergency situation, biotoxins, conditions stipulated in a management plan of a conditionally classified area or failure of the state to complete NSSP classification and monitoring requirements. Any area in the closed status is considered contaminated.

Shellfish Planting Definitions

Planting means any type of human induced or assisted method of increasing or creating shellfish resources regardless of the purpose

Propagation means any planting activity conducted by municipalities or the state to increase the supply of shellfish available to the public fisheries

Short term Relays means the transfer of any sized shellfish by municipalities from growing areas classified as Restricted or Conditionally Restricted to growing areas classified as Approved or Conditionally Approved to reduce pathogens. Shellfish may be harvested after 90 days and usually one spawning season. Shellfish are typically relocated (relayed) in late spring and opened to harvest in the fall. Areas used as a source of

shellfish for relays must have a current sanitary survey and shellfish must meet NSSP and MA DPH guidelines for suitability. Testing must demonstrate that the shellfish are free of shellfish diseases prior to relaying.

Long term Transplants means the transfer of seed shellfish only by municipalities from growing areas classified as Prohibited to growing areas classified as Approved or Conditionally Approved to reduce pathogens. Transplants require one or more spawning seasons and a minimum of 6 months of natural depuration before harvest. Areas used as a source of shellfish for transplants must have acceptably low levels of poisonous or deleterious substances as defined by the NSSP and any other contaminants of concern to MA DPH. Testing must demonstrate that the shellfish are free of shellfish diseases prior to transplanting. The NSSP defines seed as shellstock (shellfish) which is less than market size.

Restoration means propagation to recreate 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 means propagation done as compensation for alterations resulting in losses or damage to existing shellfish resources or habitat.

Aquaculture means the planting and raising of shellfish at a specific privately licensed location resulting in the commercial production of shellfish.

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

Principles

Six overarching principles form the basis of the guidelines:

- Protect public health by citing and managing planting activities to be consistent with enforcement capabilities of municipalities and the state and avoiding planting practices that could result in contaminated shellfish being consumed by the public.
- Minimize user conflict by protecting the right of access to a public shellfishery and avoiding the disruption of traditional fishing practices.
- Enable successful development of shellfish resources through a transparent and timely permitting process.
- Avoid impact to other marine fisheries resources and habitats by appropriate siting of planting activities.
- Encourage research designed to improve our understanding of shellfish and shellfish habitat by cooperating with researchers.

- Seek compensatory mitigation for unavoidable impacts to existing shellfish resources and habitat by participating in the technical review of coastal construction projects.

Allowable Shellfish Planting Practices

Based on these principles, the following is a list of allowable activities consistent with state statutes, regulations and the NSSP:

1. Planting may be conducted in marine waters with an NSSP classification of Approved or Conditionally Approved. Pursuant to G.L. c. 130 § 54, municipalities are limited to closing planted areas for periods not to exceed three years, whereas, pursuant to G.L. c. 130 § 20, *Marine Fisheries* may close a planted area on an extended basis, subject to petition by a municipality and public hearings (Appendix 1). In the case of Aquaculture, license of sites in Conditionally Approved areas is not encouraged due to enforcement and public health concerns while these areas are in a closed status. In some instances, this may be the only alternative and in these situations it is allowed with appropriate conditions to ensure public health protection.
2. Shellfish planting is not allowed in areas classified as Prohibited or Restricted except as follows:
 - a. Mitigation overseen or conducted by *Marine Fisheries* for losses to existing shellfish resources.
 - b. Propagation conducted by *Marine Fisheries* and/or municipalities, in Restricted or Conditionally Restricted areas to support depuration fisheries.¹
 - 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 *Marine Fisheries*. Seed shellfish would then be transplanted or relayed under provisions of the management plan and an NSSP required *Marine Fisheries* Contaminated Transplant Permit.
3. Research Projects permitted by *Marine Fisheries* may be conducted in all waters regardless of NSSP classification by qualified local, state or federal agencies, research institutions and private non-governmental agencies. These projects are of limited duration, and cannot establish new permanent shellfish populations in contaminated waters.² Research Projects in municipal controlled waters are

¹ *Marine Fisheries* does not support planting activities that create new, self-sustaining populations in Prohibited or Restricted waters due to the risk of attractive nuisance and other enforcement and public health concerns. Without a municipal contaminated area management plan in place, these activities are not allowed.

² These types of projects should not be designed to create a new, self-sustaining population of shellfish in contaminated waters. If they do, the population may be removed following the completion of the project. Exceptions will be considered if projects are conducted with municipal approval and under a municipal propagation permit. If in contaminated waters, they may require cooperation of a municipality under a contaminated area management plan. These permits include a monitoring and reporting component.

- conducted with local approval but permitted separately in the name of the researcher.
4. In waters under municipal control, except for Research Projects and Aquaculture, all planting activities involving private entities are conducted in partnership with the city or town and authorized by *Marine Fisheries* in the municipal propagation permit.
 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 authority³. A municipality may allow this activity in contaminated waters per item 2.c. of the Allowable Shellfish Planting Practices, under a management plan approved by *Marine Fisheries*. This activity is conditioned by *Marine Fisheries* on the municipal propagation permit. Shellfish produced are used to augment the public fishery.
 6. Construction of artificial reefs to increase shellfish habitat and resource may be conducted under the auspices of the local shellfish department in Approved waters set aside by the municipality under their shellfish management authority. Structures placed in the water column may be subject to additional permits by the U.S. ACE, MA DEP and the local conservation commission and harbormaster. A municipality may allow this activity in contaminated waters per item 2.c. of the Allowable Shellfish Planting Practices under a management plan approved by *Marine Fisheries*. This activity is conditioned by *Marine Fisheries* on the municipal propagation permit. Shellfish produced are used to augment the public fishery. Reefs should not adversely affect other fisheries and shall conform to the *Marine Fisheries* Artificial Reef Policy (Rousseau 2008).

General Permit Requirements

All planting activities regardless of purpose or proponent require a permit from *Marine Fisheries*. Permits may be conditioned concerning species to be planted, source of shellfish, possession of seed, introduction, movement or transplanting of seed or adult shellfish, use of shellfish, size and season at harvest, and may be further conditioned as deemed necessary to protect the shellfish resources of the Commonwealth and ensure public health protection. All shellfish planting activities must conform to the following general requirements at a minimum:

³ Typically, shellfish gardens are proposed by individuals interested in growing shellfish attached to a dock, float, mooring or on tidal lands they own. However, in Massachusetts, the licensing mechanism for aquaculture is for commercial purposes and there is no riparian ownership of shellfish. Therefore, all gardening activities can only produce a publicly available resource. Further, a permit is required to possess seed shellfish and culture sites need to be licensed. Because enforcement to prevent illegal use is exacerbated by multiple scattered sites, there are significant water quality and shellfish safety concerns related to growing shellfish from docks and in marinas and other areas classified as less than Approved, and the persons involved are often unfamiliar with shellfish sanitation; these activities must be coordinated by the municipality.

1. Proponent must have a Special Project permit from *Marine Fisheries*. Depending on the purpose and methods of the planting activity, various conditions may be required.
2. Proponent must have permission from the municipality⁴. A municipal site license is required for Aquaculture activities (e.g. an aquaculture grant).
3. Planting projects must conform to the Allowable Shellfish Practices and Principles listed above.
4. All planting activities shall conform to applicable provisions of 322 CMR § 15.00: Management of Marine Aquaculture.
5. Introduction of non-indigenous and invasive species is strictly prohibited pursuant to 322 CMR § 15.10.
6. Source and species of shellfish for planting must be approved by *Marine Fisheries*.
7. All shellfish being planted must be tested by a pathologist recognized by *Marine Fisheries* and be found free of known shellfish diseases or come from sources currently approved by *Marine Fisheries*.
8. Planting sites in Approved and Conditionally Approved areas or in Restricted or Conditionally Restricted areas designated for depuration within the borders of coastal city and towns may be closed by such coastal city and town for not more than three years, in accordance with G.L. c. 130 § 54. Whereas, in accordance with G.L. c. 130 § 20, *Marine Fisheries* may close areas to the harvest of shellfish in waters under the jurisdiction of the Commonwealth for longer than three years to increase the supply of shellfish and/or exterminate shellfish predators and pests. At the end of any closure period, these areas may be opened to harvest by the public or by specially permitted diggers engaged in the harvest of clams for depuration pursuant to G.L. c.130 §54.
9. If the culture technique used as part of the planting project involves rafts, racks, reefs, floats, bags, moorings, placement of cultch or protective netting, then additional permits may be required by U.S. ACE, MA DEP and the local conservation commission and harbormaster.
10. Oyster, quahog and softshell clam shell used as cultch shall be aged on land for a minimum of one year. Shell from other species of bivalves such as surf clam, ocean quahog, scallops and mussels may be used without limitations. All issues regarding approved shell cultch must be addressed by *Marine Fisheries* prior to placement into coastal waters.

⁴ Once *Marine Fisheries* receives a Special Project permit application, the local shellfish constable is contacted for feedback.

11. If shellfish will be harvested and sold, additional *Marine Fisheries*' and local permits are required. At the local level a municipal commercial shellfish permit is necessary. In addition, a state Commercial Fishermen Permit issued by *Marine Fisheries* pursuant to 322 CMR § 7.01, endorsed for shellfish allows the named individual, either wild harvester or private aquaculture license holder, to harvest, possess, land and sell shellfish using a Shellfish Transaction Card issued with the permit in conjunction with a Massachusetts Drivers License or a Registry of Motor Vehicles identification card.

In order to apply for a permit, a proponent should fill out an Aquaculture permit application if they hold a municipal private aquaculture site license or a Special Project permit application for propagation or research projects. These applications can be found at (http://www.mass.gov/dfwele/dmf/commercialfishing/permit_index.htm) under Special Permits.

Further Information on Permitting and Management

This section contains more detail concerning the permitting mechanisms and specific jurisdictions for the permitting and management of planting activities.

Waters under Municipal Control

The selectmen of a town or the board of aldermen or city council of any city or town bordering on the coastal waters are authorized pursuant to G.L. c.130 §52 to regulate shellfish and shellfishing within their borders, provided that coastal areas so regulated have not been determined to be so contaminated that shellfish from such area(s) are unfit for food and dangerous to the public health pursuant to G.L. c.130 §§74 and 74A. Coastal cities and towns may extend their G.L. c. 130 §52 authority to such areas determined to be contaminated provided that a shellfish management plan has been developed and adopted by the city or town with the assistance and approval of *Marine Fisheries*. Historically, cities and towns have not opted to use this provision of the statute. Instead, coastal communities with softshell clam depuration fisheries have developed conservation and management plans as provided in G.L. c. 130 § 75, which gives municipalities' specific authority to manage this fishery, require permits and collect fees subject to *Marine Fisheries* approval. The authority in G.L. c. 130 §§ 52 and 75 to develop contaminated area management plans is the same. G.L. c. 130 § 75 deals in more detail with the softshell clam depuration fishery and local permitting of master and subordinate diggers that hold state permits.

Under any contaminated area management plan, the municipality is responsible for resource management and enforcement including patrol to prevent illegal harvesting and diversion of shellfish into commerce. Most municipalities do not assume the added responsibility in areas that cannot be harvested for direct shellfish consumption. Most activities such as relaying or transplanting of shellfish from contaminated waters to approved waters are routinely accomplished under *Marine Fisheries* permits as required by the NSSP.

If a municipality wants to grow shellfish to improve water quality and eventually transplant or relay shellfish to remove the nitrogen from contaminated waters, the municipality may assume control of a specific contaminated water body or portion of the contaminated waters within its municipal boundaries under a management plan (G.L. c.130 § 52). Ultimately, the shellfish must be utilized in the public shellfisheries. *Marine Fisheries* approval of a management plan authorizing such activity would be contingent on the ability and commitment of the town to prevent illegal harvest and diversion of contaminated shellfish into commerce. If a municipality is interested in developing a contaminated area management plan, the selectmen or city council should contact the director of *Marine Fisheries*.

Municipal Propagation Authority

Coastal cities and towns may plant, propagate, and protect shellfish in waters and flats within their borders pursuant to the provisions of G.L. c.130 §54, provided that such waters and flats are not subject to a private grant and that any private rights are not impaired. In addition, G.L. c.130 §54 provides future public access to such waters and flats by limiting such closures to no more than three years.

If a coastal city or town determines that it is necessary or appropriate to further increase the supply of shellfish or continue the extermination or control of shellfish pests and predators by extending a closure of such waters and flats for a period of time that is longer than three years, they may petition *Marine Fisheries* to adopt a regulation, pursuant to G.L. c. 130 § 20 that would maintain or extend the closure for an additional period of time.

Municipalities may rely on various strategies to propagate shellfish ranging from passive natural propagation to intensive shellfish culture techniques. In the former, management openings and closures of harvest areas are rotated consistent with the three year closure restriction and propagation depends on natural spawning and setting. Additionally, towns may plant seed and legal size shellfish from state approved sources utilizing various culture techniques and predator exclusion methods to enhance growth and survival by protecting vulnerable seed and intermediate size shellfish. Any planting method other than natural setting requires a *Marine Fisheries* propagation permit. If the culture technique involves rafts, racks, floats, bags, moorings, placement of cultch or protective netting, then additional permits may be required by the U.S.ACE, MA DEP, and the local conservation commission and harbor master.

Municipalities may conduct propagation efforts with city or town personnel, volunteers other organizations or institutions as deemed appropriate by the selectmen or city council. Non-municipal entities would be covered by the municipal propagation permit as local agents.

Private Shellfish Aquaculture Site License (Shellfish Grants)

Coastal cities and towns may grant to any person a shellfish aquaculture license in accordance with G.L. c. 130 § 57. The license shall authorize the licensee at all times of

year, in, upon, or from a specific portion of coastal waters, tidal flats, or land under coastal waters in the municipality: (1) to plant and grow shellfish both on and off the bottom, (2) to place shellfish in or under protective devices affixed directly to the tidal flats or land under coastal waters, (3) to harvest and take legal shellfish, (4) to plant cultch for the purpose of catching shellfish seed, and (5) to grow shellfish by means of racks, rafts, or floats.

Notwithstanding the activities authorized by an aquaculture license, any use of structures or gear to accomplish off bottom growth and protect shellfish from predators as described above in (1), (2), (4) and (5), may require additional permits from U.S. ACE, MA DEP, the local conservation commission and harbor master.

The licensee has exclusive rights to a specified site to grow shellfish subject to rules and regulations governing aquaculture promulgated by the local authority and *Marine Fisheries* (322 CMR § 15.00) and all terms and conditions made part of the license by both.

The purpose of the license is to grow shellfish to be marketed and the local city council or selectmen may specify a reasonable yearly market value to be produced by each shellfish project licensed (G.L. c. 130 § 65). Any other use of a private shellfish grant license is considered inconsistent with the intent of the statute.

The Director of *Marine Fisheries* has no authority to issue private shellfish grants (private shellfish aquaculture site licenses) in waters under municipal control as provided in G.L. c. 130 § 57, even in situations where the director exercises temporary control of shellfish in a coastal city or town as provided in G.L. c. 130 § 52. *Marine Fisheries* has no authority to license private aquaculture in contaminated waters nor do the coastal cities and towns.

Permits Issued by Marine Fisheries

Marine Fisheries has authority under G.L. c. 130 § 83 to issue various permits including permits for special projects. Special Project permits, issued in accordance with 322 CMR § 7.01(4)(d), authorize an individual *to engage in a specified marine fishery project including but not limited to aquaculture, mariculture, scientific, environmental or biological collection and study, assessments or experimentation, collection and possession for educational purposes, shellfish relay and shellfish propagation.* Authority for specific aquaculture projects or activities is provided for in G.L. c.130, §§17B, 69, 83 which specifies that the Director of *Marine Fisheries* may issue permits with terms and conditions authorizing the possession and taking of fish, including shellfish, at any season and of any size for purposes of propagation, rearing, harvesting or sale in connection with an aquacultural enterprise in which the fish being propagated, reared and harvested are kept separate from natural stocks of the same species. Under authority of G.L. c.130 §§17B, 69, 75, 80 and 83, municipalities may take, possess, relay and transplant contaminated shellfish for propagation and natural purification subject to written conditions established by the *Marine Fisheries* Director and subject to the requirements of the NSSP.

A Special Project Permit is required for all shellfish planting activities. Depending on the type of Special Project being proposed, specific information is required in the application. The following permits are the main types of Special Project Permits *Marine Fisheries* issues relevant to shellfish planting.

- Aquaculture Permit - for private growers
- Contaminated Transplant/Relay Permit - for municipalities
- Propagation Permit - for municipalities or private growers
- Research Project Permit

Marine Fisheries regulates the source and the species of shellfish to be introduced into the marine waters of the Commonwealth pursuant to G.L. c. 130 §§ 57 and 69 and in 322 CMR § 15.00 Aquaculture Regulations at 322 CMR §§ 15.03 (seed) and 15.07 (source). All Special Project permit applications must identify the species to be propagated, source and movement of seed shellfish. Shellfish must be from a source approved by *Marine Fisheries*. Approval is based on the disease history of the source and actual testing of brood stock and seed for known shellfish diseases and parasites. Approved sources are listed annually on the *Marine Fisheries* website at: <http://www.mass.gov/eea/agencies/dfg/dmf/>.

The purpose of these restrictions is to prevent the introduction of shellfish diseases, parasites, pests and competitors that may threaten the diversity or abundance of native species or the ecological stability and/or uses of infested waters that could have adverse impacts on or decimate natural shellfish populations, public shellfish propagation efforts and private shellfish aquaculture.

If a planting activity involves multiple components, a single Special Project Permit is conditioned to allow the entire activity and is all that is required. If harvest or sale of shellfish is anticipated, additional commercial permits are required.

References

- Code of Massachusetts Regulations (CMR). Title 322. Division of Marine Fisheries.
<http://www.lawlib.state.ma.us/source/mass/cmr/322cmr.html>
- Massachusetts General Laws (MGL). Chapter 130. Marine Fish and Fisheries.
<http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter130>
- NOAA. 2009. Fisheries of the United States. U. S. Dept. Commerce, NOAA National Marine Fisheries Service, Office of Science and Technology, Fisheries Statistics Division. 104 pp.
http://www.st.nmfs.noaa.gov/st1/fus/fus09/fus_2009.pdf
- Rousseau, M.A. 2008. Massachusetts Marine Artificial Reef Plan. Boston, MA. 61 pp.
http://www.mass.gov/dfwele/dmf/programsandprojects/artificial_reef_policy.pdf
- U. S. FDA. 2009. National Shellfish Sanitation Program, Guide for the Control of Molluscan Shellfish 2009 Revision. 504 pp. <http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/NationalShellfishSanitationProgram/ucm046353.htm>

Appendix 1

Procedure for Petitions to the Marine Fisheries to Close Planted Shellfish Areas under G.L. c. 130 § 20

Any municipality may petition the *Marine Fisheries* to close an existing planted shellfish area in that municipality's waters for a period longer than three years under the agency's authority at G.L. c. 130 § 20. The petition must be made and filed in accordance with 322 CMR § 2.02. As such, the petition must be signed by the petitioner and contain their address; the petition must be delivered by mail or in person to the Division's Boston office during normal work hours; the petition must set forth clearly and concisely the text of the proposed regulation that would enact the closure; and the petition may include any supporting data, view or arguments.

Upon receipt of the petition, the *Marine Fisheries* shall schedule a preliminary meeting to consider the petition and determine whether the petition should be scheduled for further proceedings. This preliminary meeting is subject to the state's Open Meeting Laws at G.L. ch 30A §§ 18-25. While this preliminary public meeting is open to the public, it does not serve as a public hearing and public participation and comment is up to the discretion of the agency. Within 10-days following the preliminary public meeting the agency must notify the petitioner of the decision to adopt, adopt in part or reject the petition.

If the petition is adopted or adopted in part, the *Marine Fisheries* will begin rule making subject to the provisions of G.L. c. 30A §§ 2 and 3. This will allow for a minimum 21-day comment period and a public hearing(s). A public hearing will be held in the petitioning municipality. Following the public hearing, the *Marine Fisheries* will review the public testimony received and based on this testimony may elect to promulgate final regulations at 322 CMR.