LEASE PRODUCTION REQUIREMENTS AND MANAGEMENT PLANNING INFORMATION

PRODUCTION
Shellfish Leases in NC must meet Production Standards by rule. Failure to meet production standards is the number one reason for leases being terminated. Proper sizing of the lease and a sound management plan are key to meeting your production standards.

Extensive Culture Methods- Traditional cultch on bottom
Intensive Culture Methods- Involves the use of any gear type bottom or floating

The following are the minimum Shellfish Lease Production Standards in statute:

**Bottom and Franchises:**
- Average 20 bushels / acre average over 3 year period beginning year 5
  OR
- Extensive Methods show proof of purchase for 15,000 seed per acre per year (50 bu)
  Intensive Methods show proof of purchase for 23,000 seed per acre per year (77 bu)

**Water Column Lease:**
- Average 50 bushels / acre average over 3 year period beginning year 5
  OR
- Show proof of purchase for 23,000 seed per acre per year (77 bu)

Note: The Shellfish Lease Program uses the following conversion numbers to determine bushels in planting and marketing. *These numbers apply to all sizes; seed to market size:*

- Clams and Scallops: 1 bu. = 400 count
- Oysters: 1 bu. = 300 count

LEASE MANAGEMENT PLAN
The Lease Management Plan details what type of aquaculture operation you plan. This is an important step when planning your shellfish lease activities. When your shellfish lease is approved by the division director, the Lease Management Plan will become a part of the legal lease contract by reference. Significant changes to grow-out methods, species, and navigational clearance will require submission of a modified management plan and approval by the division.

When your shellfish lease is approved by the division director, the Lease Management Plan will become a part of the legal lease contract by reference. Significant changes to grow-out methods, species, and navigational clearance will require submission of a modified management plan and approval by the division.

AQUACULTURE TECHNICAL ASSISTANCE:

NOAA The data is available via NOAA’s Marine Cadastre national mapper and viewer. The specific data are for Vessel Traffic density. Generalized summaries are available in the Marine Cadastre viewer. For a good sample of data, check out the 2011 or 2013 Vessel Density dataset. Marine Cadastre: [https://marinecadastre.gov/nationalviewer/](https://marinecadastre.gov/nationalviewer/). Vessel Traffic Data: [https://marinecadastre.gov/ais/](https://marinecadastre.gov/ais/). *Note this does not apply to kayaks or similar.

North Carolina Sea Grant can provide valuable assistance in helping you determine capital investment, lease size, grow-out methods, seed sources, and many other important items that will help your aquaculture venture succeed.
[https://ncseagrant.ncsu.edu/aquaculture/](https://ncseagrant.ncsu.edu/aquaculture/)


The North Carolina Shellfish Growers Association, is an industry group that shellfish growers can join and network with other growers. [http://www.ncshellfish.org/](http://www.ncshellfish.org/)

The East Coast Shellfish Growers Association, is a regional association that includes great information on shellfish aquaculture including Best Management Practices. [http://ecsga.org/](http://ecsga.org/)
The following information is to provide awareness of the public health risks with shellfish as well as causes and impacts from temporary and permanent shellfish closures. An illness from your product or growing area closures can have a significant impact on your shellfish aquaculture business. We encourage applicants to review and consider the permanent and temporary closure status where you site your lease and implement safe handling practices.

Because shellfish are filter feeders, they provide valuable water quality benefits by filtering up to 40 gallons of water per day. However, they can also concentrate potential pathogens (bacteria and viruses) that cause illness in consumers, particularly when shellfish are consumed raw or undercooked. The DMF Shellfish Sanitation and Recreational Water Quality Section continuously sample waters to ensure the shellfish harvest areas of the coast are properly classified.

Classification maps showing permanent closure areas can be viewed at: [http://portal.ncdenr.org/web/mf/shellfish-closure-maps](http://portal.ncdenr.org/web/mf/shellfish-closure-maps)

In addition to the permanent closures, heavy rainfall and the resultant runoff, or other events such as septic or sewage failures, chemical spills, etc. may cause temporary shellfish water closures. These events result in heavy pollutant loads washing into growing areas and may close growing areas for days to weeks depending upon the event. No shellfish harvest is allowed during this time. An interactive map of current temporary shellfish closures can be viewed at: [https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=5759aa19d7484a3b82a8e440fba643aa](https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=5759aa19d7484a3b82a8e440fba643aa)

Not all pathogenic bacteria are associated with polluted waters. The National Shellfish Sanitation Program (NSSP) Model Ordinance and the US Food and Drug Administration require safe harvest and handling practices to reduce illness caused by post-harvest growth of **Vibrio** bacteria. Two species of concern are *Vibrio vulnificus* and *Vibrio parahaemolyticus*.

Vibrio bacteria occur naturally in our warm coastal waters and multiply rapidly once shellfish are removed from the water and exposed to warm ambient air temperatures.

In order to decrease the risk of Vibrio illnesses, which are rare in NC, Shellfish Sanitation and the DMF have developed Time to Temperature limits for harvesting oysters and clams. Lease holders harvesting oysters outside of the regular oyster season from shellfish leases must document time of harvest and follow restrictions set forth in DMF annual proclamations. Shellfish dealers must also document time to temperature for receiving, storage and shipping. Current (Shellfish Sanitation) proclamations specifying time to temperature controls can be viewed on the DMF website: [http://portal.ncdenr.org/web/mf/proclamations-current#shellfish-san](http://portal.ncdenr.org/web/mf/proclamations-current#shellfish-san)

In some instances, a portion or the entire lease may be closed when the surrounding growing area is later reclassified and permanently closed by reason of pollution. Staff from DMF Shellfish Sanitation and Resource Enhancement work closely to notify lease holders that are impacted by these reclassification closures so they can relay material off before the closure takes place. At this point, the lease may either be relinquished by the leaseholder or it will either be terminated for lack of production over time, or automatically expire at the end of the contract period and may not be renewed. No shellfish harvest is allowed once the permanent closure goes into effect.

Contact the Shellfish Sanitation & Recreational Water Quality Section for up-to-date information at (252) 726-6827. Subscribe to DMF and/or Polluted Area proclamations at: [http://portal.ncdenr.org/web/mf/email-subscribe](http://portal.ncdenr.org/web/mf/email-subscribe)
Keep for Your Records

North Carolina Shellfish Lease Application Renewal Checklist

Primary Applicant Information:

☐ Individual: Complete Section 1.
☐ Business Entities: Complete Section 2.
☐ Address must include a physical address in addition to a PO Box.

Lease Site Information:

☐ Application and Rent fees made out to NC Division of Marine Fisheries
☐ Ensure that your coordinates reflect the enclosed map

Lease Management Plan:

☐ Complete all information in Section 5.
☐ Sign that you acknowledge Lease Cleanup Provisions

Site Diagrams:

☐ Attach maps and diagrams or provide them in the space provided
☐ Location Diagram
☐ Top View Diagram
☐ Side View Diagram

Consent Form from Riparian Property Owners/ Submerged Land Claims:

☐ Lease boundaries within 100 feet of a developed shoreline must fill out and have this form signed and notarized.
☐ Leases on existing Submerged Land Claim need the rightful heirs' notarized permission

Public Health Information:

☐ Read over Public Health Information-Time to temperature harvest and handling restrictions are implemented that could impact your business planning. If you have questions regarding Vibrio plans or harvest restrictions, please contact the Shellfish Sanitation and Recreational Water Quality Section.

Final Signature:

☐ Read over and sign application and have notarized.
☐ Mail rent and application with application fee to:

NC Division of Marine Fisheries Attention: Shellfish Lease Program
PO Box 769
Morehead City, NC 28557-0769


Lease Application Process

Once your application is received the process generally follows this process:

1. The application is checked to ensure it is complete and the proper application fee is attached.
2. The application fee is processed.
3. Temporary lease signs are mailed to the applicant with a letter requesting the proposed site be marked on each corner throughout the lease application process.
4. Lease applicant notifies Lease Program that the site is marked. Staff will not proceed with a site investigation until notified the lease is marked with the temporary signs.
5. Lease Program staff will conduct an investigation on your proposed site. This investigation includes determining criteria for marsh setback, channel locations, percentage of water body the proposed site occupies, shellfish present and SAV present.
6. Site investigation data is compiled into a report by a biologist.
7. The proposed site map including the investigation report is sent out for review to internal agencies from whom the division director desires comment.
8. Internal comments are compiled and summarized in a report to the DMF director. At this point the director can recommend:
   a. The Lease Program take the application to public hearing as submitted;
   b. The site or application be conditioned or modified prior to going to public hearing;
   c. The application be denied.
9. 30-day public comment period. By law the division must run two public notices in a local newspaper. The division also issues a press release and notifies DMF proclamation lists of the proposed site. At the end of the public comment period, a public hearing is scheduled in the county where the proposed lease is located. All comments received must either be in writing, or submitted verbally or in writing at the public hearing.
10. Public hearing comments are summarized in a report to the director for consideration. The director then does one of the following:
    a. Approves the lease as submitted or as modified in #8;
    b. Approves the lease with conditions;
    c. Denies the lease.
11. Once the lease is approved, the Lease Program will draw up a contract for the lease site. DMF staff will verify corner markers and applicant installs permanent markers and signage as required. The contract will be mailed to the lease applicant with instructions. The first year’s rent is due in advance.
12. The lease applicant reads the lease contract and signs and dates with a notarized signature, indicating agreement with the lease contract terms. The applicant mails the signed contract back to DMF with the appropriate lease rent.
13. The lease rent is processed and the DMF director signs the contract which is mailed back to the leaseholder.
Aquaculture Permits
Certain types of activities associated with shellfish aquaculture require additional permits. These permits provide leaseholders with tools to access public resources, produce and market shellfish while ensuring protection of public health, native species and habitats. Filling out your Lease Renewal Application completely will help DMF staff identify what permits you will need so we can bundle those with the application. Permits are available at no cost and it is unlawful to conduct these activities without the proper permit. For more detailed information, contact the Aquaculture Permit Coordinator, Tere Barrett at (252) 726-7021.

- **Aquaculture Operation Permit (AOP)**
An AOP is required for any lease/operation that meets the definition of aquaculture in the Marine Fisheries Commission rules. If you are providing any technology not found in nature (feeding, predator protection, salinity or temperature control, etc.) you will need an AOP. All intensive culture methods will require an AOP. An AOP also gives you the ability to harvest product under the size limit for natural wild harvest stock if your product is properly identified with your AOP number. This is an annual permit expiring on December 31st.

- **Aquaculture Collection Permit (ACP)**
This permit is rarely issued and is for collection of small numbers of organisms from state waters for aquaculture purposes, typically brood stock or breeding. You must have an AOP prior to applying for an ACP.

- **Aquaculture Seed Transplant Permit (ASTP)**
This permit allows the transfer of seed from a permitted nursery or hatchery using waters that are classified as Restricted or Conditionally Approved Closed by Shellfish Sanitation. To be eligible for this permit, oysters must be 25 mm or less and clams must be 12.5 mm or less.

- **Introduction and Transfer Permit (Intro)**
This permit allows introduction and transfer of organisms such as seed clams or oysters into North Carolina from another state. Only native shellfish species may be transferred for placement into state waters. The transfer of organisms is carefully monitored to ensure no unwanted shellfish diseases or pests are introduced into North Carolina waters. A pathological report on the lot to be shipped is required by the Division prior to issuance of a permit.

- **Mechanical Harvest Permit (Mechanical)**
This permit allows lease holders to use select mechanical gears on their lease, even outside the regular seasons for mechanical harvest. If your lease is in a Primary Nursery Area (PNA) you are not allowed to use bottom disturbing gear, but you may use a winch and davit system or similar to lift and place cages or bags.
Keep for Your Records

- **Polluted Area Relay Permit (Relay)**

This permit allows leaseholders to harvest oysters or clams of any size in designated polluted areas and relay them to their lease. The lease is then closed for a period of time to allow the shellfish to “depurate” or cleanse themselves. The relay period takes place after the close of the regular oyster season.

- **Seed Oyster Management Area Permit (SOMA)**

This permit allows leaseholders to go into designated oyster management areas open for relay to seed their leases. This activity takes place outside of the regular oyster season.

**LEASE SITING INSTRUCTIONS AND INFORMATION**

It is the responsibility of the applicant to site the lease. Shellfish Leases are a special use of Public Trust submerged land and waters that allow individuals to grow shellfish for commercial production only. To protect access to Public Trust resources the Division Director is given broad authority to ensure that leases are granted in areas that will be compatible with the lawful utilization of marine and estuarine resources. The UNC Wilmington Aquaculture Siting Tool is an excellent resource to assist you with Site Selection. [http://uncw.edu/benthic/sitingtool/](http://uncw.edu/benthic/sitingtool/)

**Areas where leases cannot be sited:**

- In areas unsuited to the species of shellfish or grow-out method you have selected.
- In areas closed by Shellfish Sanitation because of pollution.
- Within 10 feet a natural shellfish bed.
  - By MFC rule, a natural shellfish bed is defined as 10 bushels of shellfish (oysters, clams, mussels) per acre.
  - The US Army Corps of Engineers Nationwide Permit #48 sets strict limits for the placement of aquaculture sites near naturally occurring oyster reefs, oyster aggregations and shell bottom
- On areas containing significant Submerged Aquatic Vegetation (SAV, i.e. sea grasses).
  - The US Army Corps of Engineers Nationwide Permit #48 sets strict limits for the placement of aquaculture sites where the presence of SAV is greater than very sparse coverage on a small percentage of the applied for site.
- Where the lease site extends more than one-third the distance across any water body (creek, bay, river, etc.); *except* where the aquaculture method only uses cultch-on-bottom, or clam-on-bottom methods.
- In areas incompatible with traditional uses such as, but not limited to; commercial or recreational fishing, swimming areas, navigational channels (marked and unmarked), areas designated as shellfish management areas and enhancement sites including cultch planted sites.
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☐ In areas where leases are otherwise prohibited by law.

☐ Over recognized Submerged Land Claims. For a map listing any recognized claims in your county link here: http://portal.ncdenr.org/web/mf/submerged-lands-maps

Shellfish Leases must:

☐ Be as compact as possible and be compatible with the Lease Management Plan
☐ Not impinge upon the rights of riparian property owners.
  ▪ Within 100 feet of a developed shoreline you will need written and notarized consent of the riparian property owner.
  ▪ All riparian property owners near your proposed lease will be notified by the division of your application during the public comment period.
☐ Not be sited within 20 feet of a vegetated marsh to allow public access to the marsh or 5 feet where the aquaculture method only uses cultch-on-bottom, or clam-on-bottom methods.
☐ Not exclude or attempt to exclude the public from allowable public trust use of navigable waters on shellfish leases and franchises including, but not limited to, fishing, hunting, swimming, wading and navigation.
  o Lease sites using bottom or floating cages must place them in parallel rows with at least 10 feet between each row to allow for navigation by the public. Rows may be configured in any direction.
☐ Be continuously marked with proper legible signage on all corner markers. All corner markers shall be marked with either reflective tape or reflectors.
☐ Not conduct development activities listed below without permitting by the Division of Coastal Management.

*NOTE: The Division of Marine Fisheries has no authority to permit the following structures on a lease. If you intend to use these structures, they will require a CAMA permit from the NC Division of Coastal Management. For more information, contact DCM at (252) 808-2808.

• Lease markers greater than 4 inches X 4 inches or > 4 inches in diameter
• Floating Upwelling Systems (FLUPSYs) not on lease site, tank downwellers, upwellers, raceways, etc.
• Docks, Piers, Bulkheads, or other development activities
• Permanently anchored barges or platforms
• Dredging or Fill activities or Utilities
# North Carolina Shellfish Lease Application

## Section 1. Individual Primary Applicant Information (If this is a business, skip to Section 2)

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<th>Race:</th>
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<th>Weight:</th>
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<th>Gender: □ Male □ Female</th>
<th>Eye Color:</th>
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Have you been a legal resident of the state of North Carolina for at least 6 months? □ No □ Yes


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<th>Number:</th>
<th>Expiration Date:</th>
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Are you related by blood or marriage to any person now working for the North Carolina Division of Marine Fisheries? □ No □ Yes: Name and Relationship

Do you hold a Standard Commercial Fishing License? □ No □ Yes: SCFL #

Do you currently own a vessel with current registration? □ No □ Yes: Vessel ID#

Do you have four or more convictions of DMF fisheries violations in the past three years? □ No □ *Yes

*If Yes you may not be eligible to obtain needed permits to work a lease other than cultch on bottom

Do you currently have or hold an interest in any other shellfish leases? □ No □ Yes

*IF Yes list the lease numbers of leases you are associated with.

---

### G.S. 113-202

(c): No person, including a corporate entity may acquire and hold by lease, lease renewal, or purchase more than 50 acres of public bottoms under shellfish cultivation leases. For purposes of this subsection, the number of acres of leases held by a person includes acres held by a corporation in which the person holds an interest.

### Mailing Address

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### Physical Address

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### Day Phone

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### Co-Applicant Information

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Check One: Driver’s License □ State I.D. □ Number: Expiration Date:
Are you related by blood or marriage to any person now working for the North Carolina Division of Marine Fisheries?
☐ No  ☐ Yes: Name and Relationship _

Do you hold a Standard Commercial Fishing License?  ☐ No  ☐ Yes: SCFL 

Do you currently own a vessel with current registration?  ☐ No  ☐ Yes: Vessel ID#

Do you have four or more convictions of DMF fisheries violations in the past three years?  ☐ No  ☐ Yes *(If Yes you may not be eligible to obtain needed permits to work a lease other than cultch on bottom)*

Do you currently have or hold an interest in any other shellfish leases?  ☐ No  ☐ Yes
If Yes List lease numbers you hold or have an interest in:

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Section 2 Business Entity Information

Business Name

Type of Business Entity:
☐ Corporation (Please attach copy of current articles of incorporation and list of corporate officers)
☐ Partnership (Please attach a current copy of your partnership agreement)
☐ Sole Proprietorship
☐ LLC

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<th>Business Mailing Address</th>
<th>PO Box</th>
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<th>Zip Code</th>
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<td>--------------------------------------------------</td>
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<tr>
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G.S. 113-202 (c): No person, including a corporate entity may acquire and hold by lease, lease renewal, or purchase more than 50 acres of public bottoms under shellfish cultivation leases. For purposes of this subsection, the number of acres of leases held by a person includes acres held by a corporation in which the person holds an interest.

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<th>Section 3. Applicant Qualifications (Optional)-</th>
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<td>Describe your capability to conduct the proposed aquaculture activities (including training, experience and education that you have obtained or will obtain)</td>
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Section 4 Lease Site Information

Check one that you are reapplying for:  *The designated, nonrefundable renewal application fee must accompany each application.

☐ Bottom Lease ($200.00): A bottom lease primarily uses cultch, or low profile structures to cultivate shellfish. Cages and gear are limited to a maximum height of 18” above the bottom. Rent: $10/acre per year.

☐ Water Column Amendment ($100.00): A water column lease amends all or part of an existing bottom lease footprint. Floating bags, cages greater than 18” above the bottom or any other use of the water column will require this type of lease. Rent: $100/acre per year.

Lease County:  Closest Town:  Waterbody:

Estimated acreage

Note: Acreage allowed must be consistent with the Lease Management Plan, prior lease production history, public trust use of the area, etc. Single lease acreage is currently limited to 10 acres. If you have applied for or received a lease 5 acres or greater, it must meet production.

Does the lease site contain known sea grasses or Submerged Aquatic Vegetation (SAV)?  ☐ No ☐ Yes

Leases are restricted on sites with areas of SAV.

Approximate closest distance to existing shellfish bed or oyster rock? ______________ ft.

Leases must not be located on or within 10 ft. of existing natural shellfish beds or oyster rocks or seagrass beds.

Approximate distance from any duck blinds (if applicable) ___________ ft.

Approximate distance to marked navigational channel

Approximate distance to any unmarked navigational channel

Leases cannot block navigation.

Does the applicant or co-applicant own all of the shoreline adjacent to the proposed lease?  ☐ No ☐ Yes

Has there been any changes to any previous undeveloped shoreline near the lease?  ☐ No ☐ Yes

If there are changes within 100 ft to any previous undeveloped shoreline and applicant or any co-applicant is not the sole riparian owner, the riparian consent form in Section 7 of this application must be filled out and notarized.

Approximate minimum distance of proposed lease from shoreline ft.

Approximate minimum distance of proposed lease from vegetated marsh ft.

Please list the coordinates for the proposed lease. The minimum number of coordinates required is three and the maximum is eight: A survey is not required by law but is suggested as a best management practice. Any costs of a survey are the responsibility of the lease holder. The lease site must be as compact as possible. Corner Coordinates:

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**Section 5 Management Plan**

**Shellfish species to be grown:** ☐ Oysters  ☐ Clams  ☐ Scallops  ☐ Other

**Capital Investment:** Year 1: $ _______ Year 2-10: $ _______

**Vessel Available:** Vessel: ☐ N  ☐ Y Length: ____ Power: _______ Trailered?  ☐ N  ☐ Y

If other vessels will be used, please list here: __________

What types of harvest gears will you use?

Will you require the use of mechanical harvest gear? (dredge, power rake, etc.)  ☐ N  ☐ Y

*Mechanical gears are not allowed on leases located in Primary Nursery Areas*

**Shellfish Grow-out Method:** Please check the grow-out method(s) you propose to use on your lease and the estimated amount of equipment and effort.

***Poles or Pilings over 4 inches require a permit from DCM, which applicant is responsible for obtaining.***

*Floating Upweller Systems (FLUPSYs), tank downwellers, upwellers, raceways, etc.... are restricted to 18” maximum height unless otherwise conditioned in the lease contract.*

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<tr>
<th>Bottom Methods</th>
<th>Year 1</th>
<th>Years 2-10</th>
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<tr>
<td>☐ Cultch on-bottom only</td>
<td>bushels/acre</td>
<td>bushels/acre</td>
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<tr>
<td>☐ Spat-on-shell/clam seed</td>
<td>spat/seed/acre</td>
<td>spat/seed/acre</td>
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<tr>
<td>☐ Predator netting/bags</td>
<td>#Units</td>
<td>#Units</td>
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<tr>
<td>☐ Rack and bag system</td>
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<td>Racks/ Bags <strong><strong>/</strong></strong>_</td>
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<tr>
<td>☐ Cage system</td>
<td>#Cages</td>
<td>#Cages</td>
</tr>
<tr>
<td>☐ Tray culture</td>
<td>#Trays</td>
<td>#Trays</td>
</tr>
<tr>
<td>☐ Solar Floating Upweller</td>
<td>Dimensions:</td>
<td>Materials</td>
</tr>
</tbody>
</table>

**Water Column Methods**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Years 2-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Floating bags <em>(Taylor float™, mesh bags, flip bags, etc.)</em></td>
<td># Floating Bags</td>
</tr>
<tr>
<td>☐ Floating cages <em>(Oyster Gro™, etc.)</em></td>
<td># Floating Cages</td>
</tr>
<tr>
<td>☐ Suspended system, long line</td>
<td>#Units</td>
</tr>
<tr>
<td>☐ Rack and bag system &gt;18”</td>
<td>Racks/ Bags <strong><strong>/</strong></strong>_</td>
</tr>
<tr>
<td>☐ Bottom Cage system &gt;18”</td>
<td>#Cages</td>
</tr>
<tr>
<td>☐ Type of Anchor used <em>(screw anchors, rods, etc.)</em></td>
<td># Anchors</td>
</tr>
</tbody>
</table>

Grow out Methods will be specific to the contract. If you change methods you must notify the division for approval prior to and complete another management plan.
5. Lease Management Plan (continued)

Do you plan to participate in the following permit relay DMF activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polluted Area Relay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seed Oyster Mgt. Relay</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Hatchery Name</th>
<th>Hatchery Phone</th>
<th>Address</th>
<th>City, State Zip</th>
<th>Hatchery Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-state hatchery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Out of state hatchery*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Require an Introduction Permit

Do you plan to harvest oysters anytime during April – September? □ No □ Yes

*Closed oyster season harvest requires a Closed Oyster Harvest Certification.

Will you operate as a Shellfish Dealer? □ No □ Yes

A Shellfish Dealer must have a Certification from Shellfish Sanitation (252) 726-6827, and a DMF Dealer License to operate.

Do you plan to move shellfish from your lease to another lease prior to harvest? □ No □ Yes

Do you plan to conduct pre-harvest activities such as culling off-site of your lease? □ No □ Yes

*A Commercial Fishing Vessel Registration will be required annually for boats used to harvest or transport seafood. The registration is separate from the NC Wildlife Resource Commission’s registration.

**Lease Marking**

Lease corners must be marked and proper durable signage attached including all lease numbers, reflective tape, and the name of the leaseholder. Water Column leases must also have yellow floats marking each corner. Boundary markers should be every 150 feet. See example in the Keep for Your Records packet.

*NOTE: Leases may be conditioned to reduce or increase the number of markers required depending upon location, navigational issues, etc.*

<table>
<thead>
<tr>
<th>Type and number of markers to be used</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Wood post (3-4 inch) ___________ #________</td>
</tr>
<tr>
<td>□ Plastic/PVC dia. __ size________</td>
</tr>
<tr>
<td>□ Other (composition and dimension):</td>
</tr>
</tbody>
</table>

*Markers greater than 4x4 inches may require a permit from the Division of Coastal Management.*

*The DMF has no duty to protect any lease or franchise that is not properly marked.*

**Land/Dock Based Facilities**

Land/Dock Based Facilities: (check all that apply) and indicate if these are lease or land based

<table>
<thead>
<tr>
<th>Facility</th>
<th>Lease Based</th>
<th>Land Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dock __________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floating Upweller _______________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tank Upweller or Downweller ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumps _________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raceway/trays _________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graders/Sorters ________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumblers ______________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage facilities, sheds, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*NOTE: These structures, if proposed may require a permit from the Division of Coastal Management*
5. Lease Management Plan (continued)

If you propose floating gear or intertidal gear, describe the mitigation or deterrent measures you will take to minimize the potential pollution impact of birds and/or mammal waste.
5. Lease Management Plan (continued)

Lease Cleanup Provisions

*If your lease is surrendered, cancelled, terminated for lack of production or failure to pay rent, or you simply choose to relinquish the lease, the leaseholder is responsible for removing all markers, posts, and aquaculture gear except planted cultch. You will be given a 30-day notice to remove all posts, markers, and aquaculture gear. If you do not remove the markers, posts, and gear after the 30-day notification, the Division of Marine Fisheries may pursue legal action to have it removed at your cost. These provisions will be included in the lease contract.

The leaseholder is also responsible for collecting any gear that is displaced due to storm events. It is highly recommended that all lease equipment is labeled with your contact information to facilitate collection in case of storm loss.

By signing I agree that I have read and understand the Lease Cleanup Provisions:

| Signature: | Date |

Section 6 Proposed Lease Site Diagrams

If the management plan indicates that you will be adding gear or changing the current plan to include intensive methods, you must fill out the top view and side view diagrams. On the following pages or separate pieces of 8 1/2 X 11 paper, please provide accurate drawings or maps showing the following three diagrams. Drawings and maps do not have to be drawn to scale but must be clear and easy to understand. Maps that are incomplete may delay the application process or be returned for completion. Any modifications made to the original request will require the applicant to resubmit diagrams. These are submitted to the Army Corps as part of the joint process to issue a Prior Construction Notice (PCN).

Can be drawn, Google Map™, or NOAA Chart. Hand drawn maps need to be traced with black marker to ensure they are legible when copied. Navigational charts are available for free at https://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html

#1 LOCATION MAP – Map must show North arrow; proximity to identifiable markers or landmarks, corner markers of the lease, water body width in relation to the lease. Can be drawn, Google Map™, or NOAA Chart. Navigational charts are available for free at https://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html

#2 TOP VIEW DIAGRAM – Must show North arrow; indicate lease corners with approximate boundary distance measurements; proposed configuration and alignment of any aquaculture gear such as floating cages or bottom cages

#3 SIDE VIEW DIAGRAM – Must indicate minimum and maximum water depth at mean low water; maximum height in inches of any bottom structure including shell, cages, rack and bags; clearance in feet above such structures at the shallowest and deepest part of the lease at mean low water.
EXAMPLE: LOCATION MAP (using Google Earth map example)

Proposed Lease Site Diagrams #1

LOCATION MAP: (Insert below or on a separate piece of paper)
EXAMPLE: TOP VIEW DIAGRAM

Marsh

250 ft.

N

Min 20 ft. buffer

110 ft.

Clam netting

125 ft

lat/long for each corner

Floating cage lines 250 ft.

Cultch Bottom cage lines

Distance from developed shoreline _____ ? ft.

Oyster Creek

body

Est. distance across water

_____ ? ft.

Dock

Channel

Shoreline
Proposed Lease Site Diagrams #2

TOP VIEW DIAGRAM: (Insert below or on separate piece of paper)
EXAMPLE: SIDE VIEW DIAGRAM

Mean Low Water

Floating Cages

4 ft. MLW

Indicate Clearance in ft.

6.5 ft. MLW

6.3 ft. MLW

8 ft. MLW

Water Column structure >18” Cultch or Shell

Bottom Lease structure 18” max ht.

Deep End

Shallow End
Proposed Lease Site Diagrams #3

SIDE VIEW DIAGRAM (insert below or on separate piece of paper)
7. Consent Form for Riparian Property Owners

I/We, the undersigned, hereby give my/our consent to (Name) _____________________________

who resides at (Physical Address:)
____________________________________________________________ to lease:

☐ Shellfish bottom
☐ Shellfish bottom and the water column within 100 feet of my/our shoreline.

________________________________________  ________________________________
Signature                               Name (Please Print)

________________________________________  ________________________________
Signature                               Name (Please Print)

________________________________________  ________________________________
Street Address or PO Box                City                        State/Zip                Phone

SWORN to and subscribed before me
This the__________ day of______________, 20__

________________________________________
NOTARY PUBLIC

My Commission Expires: _______________________

8. Public Health Information
Public Health Information

The following information is to provide awareness of the public health risks with shellfish as well as causes and impacts from temporary and permanent shellfish closures. An illness from your product or growing area closures can have a significant impact on your shellfish aquaculture business. We encourage applicants review and consider the permanent and temporary closure status where you site your lease and implement safe handling practices.

Because shellfish are filter feeders, they provide valuable water quality benefits by filtering up to 40 gallons of water per day. However, they can also concentrate potential pathogens (bacteria and viruses) that cause illness in consumers, particularly when shellfish are consumed raw or undercooked. The DMF Shellfish Sanitation and Recreational Water Quality Section continuously sample waters to ensure the shellfish harvest areas of the coast are properly classified. Classification maps showing permanent closure areas can be viewed at: http://portal.ncdenr.org/web/mf/shellfish-closure-maps

In addition to the permanent closures, heavy rainfall and the resultant runoff, or other events such as septic or sewage failures, chemical spills, etc. may cause temporary shellfish water closures. These events result in heavy pollutant loads washing into growing areas and may close growing areas for days to weeks depending upon the event. No shellfish harvest is allowed during this time. An interactive map of current temporary shellfish closures can be viewed at: https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=5759aa19d7484a3b82a8e440fba643aa

Not all pathogenic bacteria are associated with polluted waters. The National Shellfish Sanitation Program (NSSP) Model Ordinance and the US Food and Drug Administration require safe harvest and handling practices to reduce illness caused by post-harvest growth of Vibrio bacteria. Two species of concern are Vibrio vulnificus and Vibrio parahaemolyticus. Vibrio bacteria occur naturally in our warm coastal waters and multiply rapidly once shellfish are removed from the water and exposed to warm ambient air temperatures.

In order to decrease the risk of Vibrio illnesses, which are rare in NC, Shellfish Sanitation and the DMF have developed Time to Temperature limits for harvesting oysters and clams. Lease holders harvesting oysters outside of the regular oyster season from shellfish leases must document time of harvest and follow restrictions set forth in DMF annual proclamations. Shellfish dealers must also document time to temperature for receiving, storage and shipping. Current (Shellfish Sanitation) proclamations specifying time to temperature controls can be viewed on the DMF website: http://portal.ncdenr.org/web/mf/proclamations-current#shellfish-san

In some instances, a portion or the entire lease may be closed when the surrounding growing area is later reclassified and permanently closed by reason of pollution. Staff from DMF Shellfish Sanitation and Resource Enhancement work closely to notify lease holders that are impacted by these reclassification closures so they can relay material off before the closure takes place. At this point, the lease may either be relinquished by the leaseholder or it will either be terminated for lack of production over time, or automatically expire at the end of the contract period and may not be renewed. No shellfish harvest is allowed once the permanent closure goes into effect. Contact the Shellfish Sanitation & Recreational Water Quality Section for up-to-date information at (252) 726-6827. Subscribe to DMF and/or Polluted Area proclamations at: http://portal.ncdenr.org/web/mf/email-subscribe
9. Final Signature

By signing below, the Applicant hereby states that the information included in the application is true and correct, and that the Applicant(s) understand the following:

1. The Applicant will accept the lease or franchise subject to all the provisions of the North Carolina Marine Fisheries Commission Rules and applicable General Statutes 113-201, 113-202 and 113-202.2.

2. The annual Lease rental fee shall be $10.00 per acre for bottom leases and $100.00 per acre for water column leases. Lease rent is prorated for the first year, and is due prior to the issuance of the lease contract. Annual rent shall be paid a year in advance on or before June 30. Unpaid or delinquent rent will result in the termination of the lease.

3. The applicant agrees to use the lease for commercial production of shellfish and shall provide annual production reports as required by the division. Failure to meet production requirements may result in the termination of the lease.

Applicant Name:______________________________ Date: ____________

Co-Applicant: ________________________________ Date: ____________

OR

Business Agent: ________________________________ Date: ____________

SWORN to and subscribed before me

This the_____ day of____________________ , 20_____

__________________________________________

NOTARY PUBLIC

My Commission Expires: __________________________