NC Shellfish Leases

• The State of North Carolina has provided for the private use of public trust waters for the production of shellfish by the cultivation of unproductive bottom by allowing this bottom to be leased to residents of North Carolina since 1858.

• In 1989 legislation was enacted to allow the use of the water column above existing shellfish leases. The first water column lease was issued in 1991.

<table>
<thead>
<tr>
<th>Lease Type</th>
<th>Total</th>
<th>Total Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franchise</td>
<td>51</td>
<td>519.66</td>
</tr>
<tr>
<td>Shellfish Bottom Lease</td>
<td>224</td>
<td>1271.93</td>
</tr>
<tr>
<td>Water Column</td>
<td>79</td>
<td>228.49</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>354</td>
<td><strong>2020.08</strong></td>
</tr>
</tbody>
</table>

* Current as of Jan 9, 2019

Department of Environmental Quality
## NC Shellfish Leases

<table>
<thead>
<tr>
<th>Year</th>
<th># of Leases scheduled for renewal</th>
<th>Terminated/ Relinquished Leases</th>
<th>New Lease Applications</th>
<th>New Water Column Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>20</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>20</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>19</td>
<td>8</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>2013</td>
<td>23</td>
<td>10</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>2014</td>
<td>21</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>2015</td>
<td>29</td>
<td>5</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>2016</td>
<td>26</td>
<td>13</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>2017</td>
<td>38</td>
<td>8</td>
<td>52</td>
<td>46</td>
</tr>
<tr>
<td>2018</td>
<td>45</td>
<td>13</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>2019</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Nationwide #48 Regional Conditions

• Prior Notice of Construction (PCN) with USACE
• 1/3 of waterbody for other than cultch or clam on bottom methods
• Submerged aquatic vegetation (SAV):
  • 15% or less of samples contain submerged aquatic vegetation (SAV)
  • SAV density is very sparse (15% or less)
  • Sample during growing season (April – October)
  • NOAA consistent methodology
• 250 ft. minimum from any USCG navigational aid
• Not in USACE Setbacks
• Consistency/applicable permits by DCM/CAMA
• 20 foot buffer from marsh for water column/cage use
• No siting in marked or unmarked navigation channels
Types of Leases

• Shellfish Bottom Lease:
  • On or within 18 inches of leased bottom (2015 S.L.)

• Water Column Amendment:
  • Devices or equipment not resting on the bottom or extending more than 18 inches above the bottom
  • Bottom lease is also required
Shellfish Lease Application Process
(4-6 months)

• Site Selection – Applicant picks site. There are no pre-designated areas.

• Complete and submit Application Package
  • Application fee – $200 for bottom lease, $100 for water column

• Site marked with Proposed Lease signs provided by DMF (up to applicant)
  • Applicant contacts DMF to indicate

• Formal site investigation (1-4 weeks) April – October Only

• Internal review: Fisheries Management, Shellfish Sanitation, Marine Patrol, DCM, DWR, NMFS. NW 48 - PCN with Corps (7 weeks unless E or T consultation with NMFS)

• Recommendation to Fisheries Director on site suitability (1-2 weeks)

• Public Comment and Public Hearing (4-6 weeks)
  • 2 legal notices in local paper, 30 day public comment period

• Director approves, approves w/conditions, denies proposed lease based on compliance with standards, internal review, and public comment. (1-2 weeks)
  • Any change in corner markers verified by DMF (add time)

• Lease contract sent to applicant; sign, notarize and mail back (2 weeks+/-)

• Director signs lease and mailed to applicant (2 week)
Shellfish Lease Standards

• **Authority:** N.C. §113 – 202

• **General Standards:**
  - NC Resident
  - Area must not contain a natural shellfish bed (10 bushels/acre)
  - Suitable for culture and harvest of shellfish in commercial quantities
  - Compatible with other uses – navigation, fishing, recreation
  - 100 foot developed shoreline setback
  - Shellfish Management Program
  - Closed for shellfish harvest due to pollution
  - Individual lease area 1/2 – 10 acres
  - Cannot have interest in more than 50 acres.
Siting Criteria for Applicants

- Bottom habitat, depth, current
- Adjacent land use
- Waterbody conditions
- Water quality and environmental parameter data
  - (salinity, DO, etc.)
- Long term suitability
- Restrictions, closures, moratoriums
- Access – Protection from theft

- Consultation with DMF, other growers
- The North Carolina Shellfish Siting Tool
  - http://uncw.edu/benthic/sitingtool/
Marking Requirements

• Each corner shall be marked with stakes of wood or plastic 4” or less in diameter and extending at least 4’ above high water (> 4” ok with CAMA permit)

• Each corner shall have the lease # and leaseholder name

• Water column leases shall be marked by anchoring 2 yellow buoys or as approved by division

• It is unlawful to exclude the public from allowable public trust use of navigable waters on leases

• The Division has no duty to protect leases that are not in compliance with marking requirements
# Shellfish Lease Fees

<table>
<thead>
<tr>
<th></th>
<th>Bottom Lease</th>
<th>Water Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent prorated until June 30</td>
<td>$1 per acre</td>
<td>$100 per acre</td>
</tr>
<tr>
<td>Annual rent</td>
<td>$10 per acre per year</td>
<td>$100 per acre per year</td>
</tr>
<tr>
<td>Renewal fee (10 year contract)</td>
<td>$100</td>
<td>$100</td>
</tr>
</tbody>
</table>
**Minimum Production Requirements**

<table>
<thead>
<tr>
<th>Bottom Lease</th>
<th>Water Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produce and Market:</td>
<td></td>
</tr>
<tr>
<td>10 bushels per acre</td>
<td>40 bushels per acre</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td><strong>OR</strong></td>
</tr>
<tr>
<td>Plant:</td>
<td></td>
</tr>
<tr>
<td>25 bushels of seed per acre per year</td>
<td>100 bushels of seed or cultch per acre per year</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>50 bushels of cultch per acre per year</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 bushel of shellfish</th>
<th>1 bushel of cultch</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 oysters</td>
<td>60 pounds of oyster shell</td>
</tr>
<tr>
<td>400 clams</td>
<td>75 pounds of clam shell</td>
</tr>
<tr>
<td>400 scallops</td>
<td>40 pounds of scallop shell</td>
</tr>
<tr>
<td></td>
<td>90 pounds of fossil stone</td>
</tr>
</tbody>
</table>

Production is managed through the Trip Ticket System by local dealers.
Appeal Rights

• Appeal rights under OAH
• Applicant can appeal denial
• Citizen can appeal granting lease
• Lease cannot be denied during appeal process
• Appeals are becoming more common (similar for other states)

Common Issues:
• Existing uses: Fishing, Recreation, Navigation
• Viewshed Issues
• Public Trust waters shouldn’t be used for private aquaculture
Conflicting Uses

- Navigation - boating
- Fishing - commercial or recreational
- Recreation - swimming, kayaking, etc.
- Hunting - duck blinds
- Waterfront development
Changes in shellfish aquaculture

- Traditional use was for *Extensive* Culture Methods:
  - Mostly clams, some oysters
  - Low yield/acre, low cost
  - Moderate labor
  - Volume market/bushel
  - Clam seed or natural oyster set

- Almost all new applications are for *Intensive* Culture Methods:
  - Mostly oysters, few clams
  - High yield/acre, higher cost
  - Intensive labor
  - Half Shell market/count
  - Purchase seed for growout
    - Diploid
    - Triploid
Intensive Shellfish Aquaculture Gear
Bottom Lease

Bottom Cages

Rack and Bag

Spat on Shell
Intensive Shellfish Aquaculture Gear
Water Column

LowPro Grow

OysterGro

Floating Bags/Flip Bags

Hanging system
Leasing Program Staff

• Program Coordinator: **Mike Graven**

• Program Assistant: **Marla Chuffo**

• Biologist: **Vacant**

• Mapping Technicians:
  • Jerry Spencer
  • Anthony Frost
  • Dustin Walters
  • Scottie Tripp
Shellfish Lease Program Contacts

Shellfish Lease Program
1-800-682-2632
726-7021
Shellfish.Lease.Permits@ncdenr.gov

Mike Graven
Shellfish Lease Coordinator
Michael.graven@ncdenr.gov

http://portal.ncdenr.org/web/mf/habitat/enhancement/shellfish-leases
Questions?