



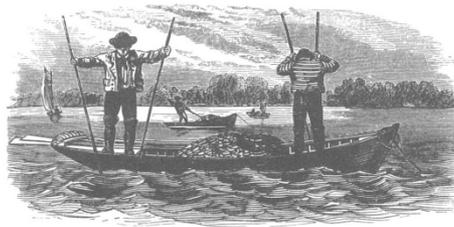
## Shellfish Lease Program

2019

*Department of Environmental Quality*



# 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.

Lease Type	Total	Total Acreage
Franchise	51	519.66
Shellfish Bottom Lease	224	1271.93
Water Column	79	228.49
<b>Totals</b>	<b>354</b>	<b>2020.08</b>

\* Current as of Jan 9, 2019

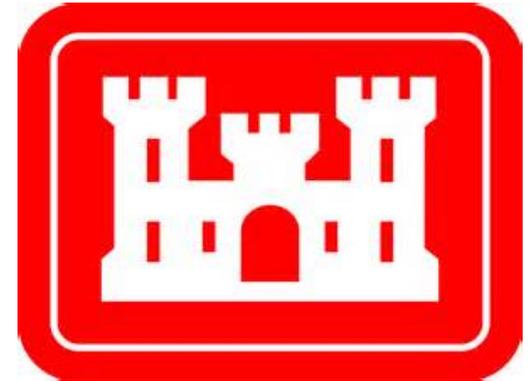
# *NC Shellfish Leases*

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



## *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*

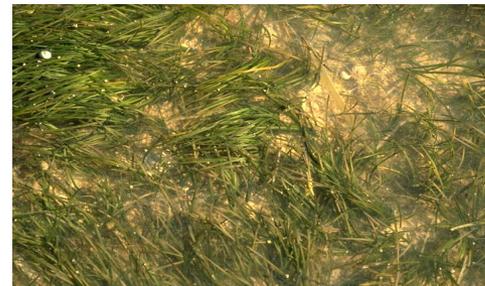
## *(4-6 months)*

- 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)



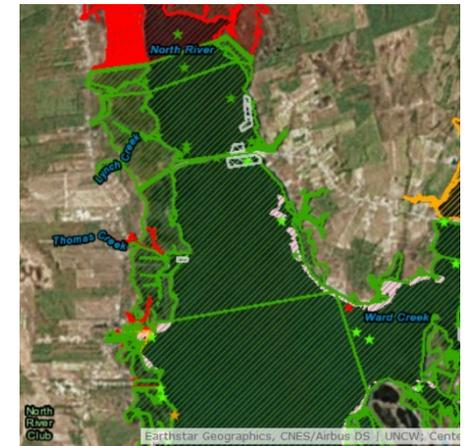
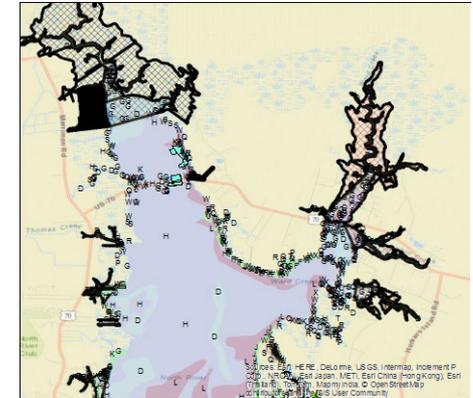
# *Shellfish Lease Standards*

- **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

	Bottom Lease	Water Column
Rent prorated until June 30	\$1 per acre	\$100 per acre
Annual rent	\$10 per acre per year	\$100 per acre per year
Renewal fee (10 year contract)	\$100	\$100



# Minimum Production Requirements

	Bottom Lease	Water Column
Produce and Market:	10 bushels per acre	40 bushels per acre
	<b>AND</b>	<b>OR</b>
Plant:	25 bushels of seed per acre per year OR 50 bushels of cultch per acre per year	100 bushels of seed or cultch per acre per year

1 bushel of shellfish	1 bushel of cultch
300 oysters 400 clams 400 scallops	60 pounds of oyster shell 75 pounds of clam shell 40 pounds of scallop shell 90 pounds of fossil stone

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)

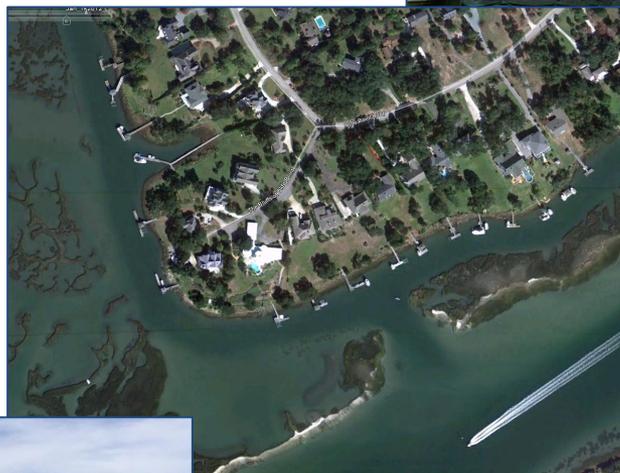
## Common Issues:

- 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

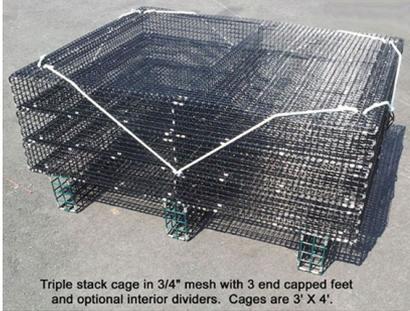


- Almost all new applications are for *Intensive Culture Methods*:
- Mostly oysters, few clams
- High yield/acre, higher cost
- Intensive labor
- Half Shell market/count
- Purchase seed for growout
  - Diploid
  - Triploid



# *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

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<http://portal.ncdenr.org/web/mf/habitat/enhancement/shellfish-leases>



*Questions?*

