



ROY COOPER
Governor

ELIZABETH S. BISER
Secretary

KATHY B. RAWLS
Director

Aquaculture Operation Permit 2023 New Application

Dear Permit Holder:

Enclosed is the 2023 application for the Aquaculture Operation Permit (AOP). The AOP is required for conducting aquaculture operations utilizing marine and estuarine resources, or other non-native species that may thrive if introduced into Coastal Fishing Waters. Activities requiring an AOP include: 1) rearing marine or estuarine resources on private bottom (with or without the superadjacent water column) 2) harvesting undersized shellfish, or 3) using a high-ground facility for the grow-out of marine or estuarine organisms. **As a result of the September 2022 MFC Rule Supplement, all shellfish leases now require an AOP (whether or not gear is being used).** There is no fee for the permit which expires annually on December 31st. Failure to comply with all permit conditions will result in suspension or revocation of the permit. Conducting aquaculture operations without the proper permits will result in a citation and could shut down the aquaculture operation.

A new specific permit condition for 2023 now requires a Storm Preparedness Plan for all shellfish leases to include storm preparations and gear debris management. For more information on Storm Preparedness Plans please see the [North Carolina Aquaculture Gear Management and Storm Preparedness Resource Guide](#) on the NCDMF Shellfish Lease website.

Please review the new AOP application form carefully and fill out all fields pertaining to your type of aquaculture. If you are applying for more than one AOP, you can fill out the first page of the application once, and fill out a Site Specific Page/Appendix A for each location. **Also included in the application package is Storm Preparedness Plan which must be filled out for all shellfish leases and a General Permit Conditions form that must have a notarized signature before you can receive your AOP.** If you have already submitted a notarized General Permit Conditions form to the Aquaculture Program or the License Program you can disregard this form. If additional operators are added (for shellfish leases only) they must submit a Work Authorization form to Marla.Chuffo@ncdenr.gov.

If AOP applications are not submitted by the deadline, **Thursday December 1**, Marine Patrol will be notified for enforcement actions. Please mail or email the application and supporting documents to:

NC Division of Marine Fisheries
Habitat and Enhancement - AOP Renewal
P.O. Box 769
Morehead City, NC 28557

or

Zach.Harrison@ncdenr.gov

Should you have any questions, please contact me at (252) 808-8056.

Sincerely,

Zach Harrison
Aquaculture Permit Coordinator



North Carolina Department of Environmental Quality

Division of Marine Fisheries

AQUACULTURE OPERATION PERMIT APPLICATION

****Please note changes to the 2023 application****

This application can apply to one or more Aquaculture Operation Permits. For multiple permits, please fill out the first page using the information for overall operation. Information specific to each permitted site will be completed on the site specific page and Appendix A and B. Fill out completely and initial the bottom of each page.

Application Date	
Participant I.D.	
Ph. Number	
Email	

Record Most Recent Licenses	
Fish Dealer License	
SCFL / RSCFL	
SCFL w/ Shellfish Endorsement	
RSCFL w/ Shellfish Endorsement	
Shellfish License	
Recreational Commercial Gear Lic.	

<input type="checkbox"/>	New	<input type="checkbox"/>	Update
<input type="checkbox"/>	Renew	<input type="checkbox"/>	Replace

Individual Participant Information (Fill out if lease/previous AOP was in participant's name)

First Name	Middle Name	Last Name	Suffix	Date of Birth

Operation Information - Check All Operation Types That Apply

Primary Operator Full Name		Date of Birth		Telephone	
Operation Mailing Address:					
Operation Physical Address:					
In-Water (Shellfish Lease)			Land Based		
Bottom/Franchise		Water Column		Tank	
				Ponds	
				Other:	

Business Participant Information (Fill out if shellfish lease/previous AOP was in business's name)

Business Name	Business Agent Name (First, MI, Last)

Operation Type - Check All That Apply: Species - Check All That Apply:

<input type="checkbox"/>	Hatchery/Nursery	<input type="checkbox"/>	Shellfish/Molluscs	<input type="checkbox"/>	Shellfish/Crustaceans	<input type="checkbox"/>	Finfish
<input type="checkbox"/>	Field Growouts	<input type="checkbox"/>	Other - Specify:				
<input type="checkbox"/>	RAS	<input type="checkbox"/>	Product to be imported from other states?	<input type="checkbox"/>	Specify:		
<input type="checkbox"/>	Other - Specify:	<input type="checkbox"/>	Market goal, e.g., retail sale, wholesale, etc.:				

THIS SECTION IS ONLY FOR: Upland Systems, including RAS, Raceways, Ponds, Pools, etc.

Flood Zone	FIRM Panel and ID#
How will product be transferred from nursery to grow-out area?	
How will deceased product be handled, disposed?	
How will oversized (over seed-size) product be handled, disposed?	
How will the product be harvested? Will holding containers be drained?	
Describe the water quality/chemical treatment and monitoring system.	
Describe the effluent system for liquid and solid waste, including storage and disposal.	
Please attach escapement plan as approved by NCWRC.	

Applicant Signature: _____



AQUACULTURE OPERATION PERMIT APPLICATION SITE SPECIFIC INFORMATION

- PLEASE FILL OUT A SEPARATE APPENDIX SHEET FOR ADDITIONAL LOCATIONS

Shellfish Bottom Lease/Franchise # _____

Shellfish Water Column Lease # _____

Non-Shellfish Lease Operational Address _____

Species _____

Waterbody _____

County _____ Zip Code _____

Waterbody Classification: Approved Conditionally Approved Restricted Prohibited

Materials, methods, and equipment to be used on the permit area:

Type	Dimensions	Quantity
Bottom material enhancement (shell, alternative substrate)		
Soft bags		
Hard cages		
Floating cages, Upwellers, etc.		
Land-based structures		
Buoys		
Cover Nets		
Harvest of undersized product	N/A	Shellfish Lease size:

Method of transport and placement: _____

Harvest Methods: _____

Ploidy Status:	Diploid		Triploid	
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**AQUACULTURE OPERATION PERMIT APPLICATION
APPENDIX A: ADDITIONAL LOCATIONS**

Shellfish Bottom Lease/Franchise # _____

Shellfish Water Column Lease # _____

Non-Shellfish Lease Operational Address _____

Species _____

Waterbody _____

County _____ Zip Code _____

Waterbody Classification: Approved Conditionally Approved Restricted Prohibited

Materials, methods, and equipment to be used on the permit area:

Type	Dimensions	Quantity
Bottom material enhancement (shell, alternative substrate)		
Soft bags		
Hard cages		
Floating cages, Upwellers, etc.		
Land-based structures		
Buoys		
Cover Nets		
Harvest of undersized product	N/A	Lease size:

Method of transport and placement: _____

Harvest Methods: _____

Ploidy Status:	Diploid		Triploid	
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**AQUACULTURE OPERATION PERMIT APPLICATION
APPENDIX B: ADDITIONAL OPERATORS**

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

Operator Full Name		Date of Birth		Telephone			
Shellfish Lease/Franchise #:		Land Based					
Shellfish Water Column Lease #:		Tank		Ponds		Other:	

N.C. Division of Marine Fisheries
P.O. Box 769
Morehead City, NC 28557
Main Office: 252-726-7021
<http://portal.ncdenr.org/web/mf/shellfish-sanitation-and-recreational-water-quality>

Commercial Shellfish Harvest

VIBRIO AND SHELLFISH RESUBMERGENCE



Overview:

Shellfish Resubmergence Facts
Vibrio Bacteria Facts
Tagging Requirements

***Vibrio* bacteria can become elevated in shellfish during both pre-harvest culture activities and during harvesting leading to illness in shellfish consumers**



Resubmergence allows *Vibrio* bacteria that may have become elevated due to air exposure to return to background levels prior to harvest

For more information, see Proclamations SS-1 and SS-2:

<http://portal.ncdenr.org/web/mf/proclamations-current#shellfish-san>

Helpful Resource Links:

Shellfish Lease and Aquaculture Program

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

Vibrio Bacteria Information

<https://www.cdc.gov/vibrio/faq.html>

<https://www.cdc.gov/vibrio/vibrio-oysters.html>

National Shellfish Sanitation Program

<https://www.fda.gov/food/federalstate-food-programs/national-shellfish-sanitation-program-nssp>

Q: What pre-harvest activities can result in *Vibrio* increases in oysters?

A: During the warmer months, exposure to air and sunlight during out of water activities such as tumbling and grading. It may also include air-drying and defouling gear use such as OysterGro® and long line operations.

Q: How can excessive *Vibrio* growth be prevented during oyster culture and harvest activities?

A: Exposure to air in pre-harvest activities could be limited to less than 5 hours between May 1st and Oct 14th. Harvested oysters during this time period must be landed at a certified dealer and placed within refrigeration within 5 hours of the start of harvest.

Q: What if 5 hours air exposure is exceeded during the warmer months?

A: The oysters would need to be **resubmerged** on the shellfish lease for a minimum of 7 days prior to final harvest.

All resubmerged oyster containers must be tagged and shall be:

- Orange in color
- Waterproof and legible
- Recorded with the date of resubmergence and shellfish lease or franchise #
- Recorded with the # of containers (if bulk-tagged)

All resubmerged oysters must be recorded in a logbook with the following info:

- Date oysters resubmerged
- Shellfish lease or franchise #
- Quantity, type and # of containers
- Location on the shellfish lease
- Date resubmergence tags are removed



N.C. Division of Marine Fisheries
P.O. Box 769
Morehead City, NC 28557
Main Office: 252-726-7021
<https://deq.nc.gov/about/divisions/marine-fisheries/shellfish-sanitation-and-recreational-water-quality>

Commercial Shellfish Harvest

BIRD MITIGATION PLANS FOR FLOATING GEAR



Overview:
Bird Mitigation Process
Concerns from Bird Interactions
Mitigation Plan Requirements

Floating gear provides opportunity for birds to land, feed, and roost. Waste from birds can build up on gear and in the water leading to major health concerns.



Bird Mitigation Plan includes efforts to deter birds from landing or staying on floating gear.



Birds prevented from staying on floating gear and impacting shellfish health and water quality.

Q: Why do I need a bird mitigation plan?

A: The National Shellfish Sanitation Program (NSSP) requires a written operational plan to mitigate birds being attracted to and remaining on exposed aquaculture operational gear (i.e., floating cages/bags). This written plan must include drawings/photos of deterrent gear and explanations of how deterrents will withstand strong weather conditions.

Q: What is the danger of birds on aquaculture gear?

A: In addition to the negative public perceptions associated with bird waste encrusted aquaculture gear, birds roosting, feeding, and defecating on gear can cause significant public health issues and may lead to harvest closures. Known impacts from bird waste include the introduction of dangerous levels of bacteria and parasites, algal blooms from increased nutrients, and even shellfish or fish kills from decreased oxygen in the water column. As examples, several farms in New York State were recently closed because of impacts from bird wastes, and an illness outbreak in 2021 from Rhode Island shellfish was eventually tied back to bacterial contamination associated with bird waste.

Q: What does the bird mitigation plan need to include?

A: The plan needs to have a description of the mitigation or deterrent measures to minimize the potential pollution impact of birds and/or mammals and how this plan will be implemented and maintained. Mitigation plans need to be implemented prior to receiving an Aquaculture Operation Permit for the 2022 season.

Q: What are examples of commonly used bird deterrents?

A: Common deterrents used on aquaculture gear include scare kites, poles with streamers, zip ties, and gull sweeps.

Resources available to learn about bird mitigation plans:

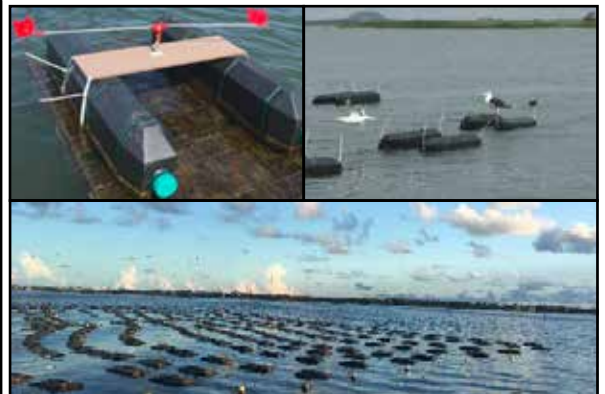
- **National Shellfish Sanitation Program** - <https://www.fda.gov/food/federalstate-food-programs/national-shellfish-sanitation-program-nssp>
- **East Coast Shellfish Growers Association** - <https://ecsga.org/wp-content/uploads/2021/03/BirdInteractions.pdf>

For Questions Regarding Aquaculture Operations Permits:

Shellfish Lease and Aquaculture Program

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

Reach out to the Aquaculture Permit Coordinator at 252-808-8056 or Zach.Harrison@ncdenr.gov





**North Carolina Department of Environmental Quality
Division of Marine Fisheries
PERMIT APPLICATION CERTIFICATION & GENERAL PERMIT
CONDITIONS FORM
(REV 2021-08)**

OFFICE USE ONLY	Year _____
PID # _____	
PERMIT # _____	

DMF Staff: _____	

Certification Statement *(This section must be completed by applicant)*

- I, _____ certify that:
- All the information provided on this application and any supporting documentation provided is true, accurate, and complete. And further, for renewals, any changes in information or supporting documents have been provided at the time of renewal. I understand that any false information or fraudulent disclosures may result in termination of appropriate licenses, permits and related documents, revocation or suspension of marine fisheries licensing and other privileges, and in possible criminal prosecution.
 - I am a resident of the State of: _____
If claiming resident status in North Carolina, I certify further that (check one):
 I have been a legal resident for more than six months, or
 If domiciled in North Carolina between 60 days and six months, I have completed and submitted with this application a notarized Certificate of Eligibility for North Carolina Residency.
 - For permits, I certify that:
 - I currently have no marine fisheries licenses, permits, endorsements, or registrations under suspension or revocation and the privilege to hold such licenses, permits, endorsements, or registrations is not revoked or suspended.
 - I have not been convicted of four or more violations in any jurisdiction related to state or federal law or regulations involving or related to marine or estuarine resources during the previous three years.
 - I understand that as a condition of accepting a permit from the Division of Marine Fisheries, I agree to abide by all conditions of the permit and agree, that if conditions of the permit as identified for the permit are violated, or if false information was provided in the application for initial issuance, renewal or transfer, the permit may be suspended or revoked by the Fisheries Director.
 - NC General Statute §113-221 requires the NC Division of Marine Fisheries to provide a current copy of the rules governing activities authorized by the license you are purchasing. You have the right to request a current rulebook in hardbound. The document is available on the Division of Marine Fisheries website on the "Rules and Regulations" webpage at <http://portal.ncdenr.org/web/mf/rules-and-regulations>.
 - I have been provided a copy of the permit rules and conditions that apply. I acknowledge failure to abide by all permit rules as well as conditions may result in suspension or revocation of the permit. For violation of specific permit conditions, permits may be suspended or revoked for 10 days, 30 days, or up to 6 months depending on the 3-year history of violations.

15A NCAC 030 .0502 Permit Conditions; General

The following conditions apply to all permits issued by the Division of Marine Fisheries:

- It is unlawful to operate under the permit except in areas, at times, and under conditions specified on the permit;
- It is unlawful to operate under a permit without having the permit or copy thereof in possession of the permittee or his or her designees at all times of operation and the permit or copy thereof shall be ready at hand for inspection, except for Pound Net Permits;
- It is unlawful to operate under a permit without having a current picture identification in possession and ready at hand for inspection.
- It is unlawful to refuse to allow inspection and sampling of a permitted activity by an agent of the Division;
- It is unlawful to fail to provide complete and accurate information requested by the Division in connection with the permitted activity;
- It is unlawful to hold a permit issued by the Fisheries Director when not eligible to hold any license required as a condition for that permit as stated in 15A NCAC 030.0501;
- It is unlawful to fail to provide reports within the timeframe required by the specific permit conditions;
- It is unlawful to fail to keep such records and accounts as may be required by the Division for determination of conservation policy, equitable and efficient administration and enforcement, or promotion of commercial or recreational fisheries;
- It is unlawful to assign, or transfer permits issued by the Division, except Pound Net Permits as authorized by 15A NCAC 03J .0504;
- The Division, may, by conditions of the permit, specify any or all of the following for the permitted purposes:
 (a)Species (b)Quantity or Size (c)Time Period (e)Location (d)Means and Methods (f)Disposition of Resources (g)Marking Requirements (h)Harvest Conditions
- Unless specifically stated as a condition on the permit, all statutes, rules and proclamations apply to the permittee and their designees.
- As a condition of accepting the permit from the Division of Marine Fisheries, the permittee agrees to abide by all conditions of the permit and agrees that if specific conditions of the permit and agrees that if specific conditions of the permit, as identified on the permit, are violated or if false information was provided in the application for initial issuance, renewal or transfer, the permit may be suspended or revoked by the Fisheries Director.

I understand that any violation of permit conditions may result in suspension or revocation of the permit.

Signature of Applicant: _____ Date: _____

NOTARY (Only NEW applications must be notarized)

State: _____ County: _____

Sworn to and Subscribed before me this _____ day of _____,

Notary Public: _____ My Commission expires: _____