

COASTAL RESOURCES DIVISION

SHELLFISH POLICY MANUAL

VERSION 1.2

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Georgia Department of Natural Resources Coastal Resources Division

1 Conservation Way

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www.coastalgadnr.org

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I. Introduction

A. Purpose

The primary objective of the Coastal Resources Division (CRD) Shellfish and Water Quality Program (the Program) is to ensure the safety of public health as it pertains to water quality and the sanitary control of molluscan shellfish produced and sold for human consumption. The policies and procedures outlined in this manual allow the Program to follow the requirements necessary to regulate the interstate commerce of molluscan shellfish from safe sources as described in the Model Ordinance produced by National Shellfish Sanitation Program (NSSP) and updated via the Interstate Shellfish Sanitation Conference (ISSC), both to which Georgia is a participating member. The guidelines set forth in the Model Ordinance must be followed to ensure that members of Georgia's shellfish industry can sell products to other states and countries.

Many of the requirements described in this document are established in the Official Code of Georgia Annotated Title 27 Chapter 4 Article 4 Part 4 to ensure sustainable management of the natural resources of the state of Georgia. The Program enforces many of the policies in this manual to limit the adverse impacts of commercial shellfish production on native shellfish, wetlands, other organisms, and ecosystems and to strongly encourage the use of sustainable farming techniques. Additionally, CRD considers the potential impact of commercial shellfish production on other uses of the public waterways on which these activities occur, including recreation, navigation, and riparian viewsheds, and attempts to limit adverse effects.

This policy manual was created to help current and potential shellfish farmers better understand the requirements set forth by the Program to properly regulate industry members in accordance with the requirements stated above and by other applicable local, state, and federal agencies. For the most up-to-date information (applications, interactive checklists, leasing opportunities, and the most recent version of this manual), please contact the CRD Shellfish and Water Quality Program at (912)264-7218 or visit the CRD website designated for commercial shellfish activities: www.coastalgadnr.org/commercialshellfishharvest.

B. Definitions

Approved Growing Area: that area or areas approved by the Department in conformance with the National Shellfish Sanitation Program which supports or could support the propagation of wild or mariculture shellfish that may be harvested and directly marketed for human consumption.

Cage: a containment unit of any size that contains or may contain shellfish for commercial sale.

Commingling: the act of combining different lots of shellfish.

Cultch: includes, but is not limited to, oyster shells, clam shells, and other shellfish shells when those shells originated from Georgia salt waters; oak brush, nongalvanized wire fencing, small gravel, and any other material approved by the Department.

Dealer: a person to whom certification is issued for the activities of shell-stock shipper, shucker-packer, repacker, reshipper, or depuration processor.

Department: refers to Georgia Department of Natural Resources Coastal Resources Division.

Growing Area: any site which supports or could support the propagation of shell-stock by natural or artificial means.

Hatchery: a facility where shellfish are bred, spawned, and reared.

Harvest: the act of removing shell-stock from growing areas and its placement on or in a manmade conveyance or other means of transport.

Harvest Area: an area that contains commercial quantities of shell-stock and may include aquaculture sites and facilities.

Harvester: A person that has been permitted by GADNR to propagate and harvest wild or maricultured shellfish in a harvest area at the request of a master harvester.

Landing: the point at which shellstock is put on land or a dock.

Mariculture: the controlled cultivation of shellfish in confinement from seed size until harvest for commercial purposes.

Master Harvester: a person who has acquired a lease with permission to grow or harvest shellfish from the state or from an owner with exclusive rights to shellfish pursuant to Code Sections 44-8-6 through 44-8-8, who has been permitted by the Department.

Nursery: a facility where hatchery-produced seed are reared using semi-controlled confinement systems.

Seed: juvenile shellstock intended for growth to market size.

Shellfish: all species of oysters, clams, mussels, or scallops.

Shellstock: live molluscan shellfish in the shell.

Transplant: the act of moving Molluscan shellstock from one harvest area to another.

Water Bottoms: the lands within this state covered at mean high water from the saltwater and freshwater demarcation line seaward to the state boundary.

C. Acronyms

CDF: Cultch Deployment Form

CRD: Coastal Resources Division

GADNR: Georgia Department of Natural Resources

FDA: United States Food and Drug Administration

GDA: Georgia Department of Agriculture

ISSC: Interstate Shellfish Sanitation Conference

MHHW: Mean Higher High Water

MHP: Master Harvester Permit

MLLW: Mean Lower Low Water

NSSP: National Shellfish Sanitation Program

OCGA: Official Code of Georgia Annotated

PCN: Pre-Construction Notification

SMP: Shellfish Mariculture Permit

USACE: United States Army Corps of Engineers



COASTAL RESOURCES DIVISION

ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

II. Shellfish Permitting Policy

Statutory Authority: O.C.G.A. Title 27 Chapter 4 Article 4 Part 4, and Georgia Department of Natural Resources Coastal Resources Division, Saltwater Fishing Regulations, Chapter 391-2-4-.19

This policy describes the permits and authorizations granted by the Department for an individual to harvest shellfish in commercial capacities in the state of Georgia. Most harvest activities do not require all the permits or authorizations described in this document, but the Master Harvester is responsible for obtaining all of those which are applicable.

A. Harvest Area Types

Harvest Area means an area that contains commercial quantities of shellstock and may include aquaculture sites and facilities. In Georgia, Harvest Areas are authorized via Master Harvester Permit (MHP). MHPs are authorized following the policy below.

Harvest Areas are described using three different attributes: designated use (wild harvest vs. mariculture), water bottoms type (intertidal vs. subtidal), and ownership of rights to shellfish (State Harvest Area vs. Private Harvest Area).

Wild Harvest & Mariculture

The wild harvest of shellfish is defined as the harvesting of any shellfish that are not contained in confinement at any life stage. This includes the harvesting of oysters from beds that were cultured or “cultched”. The placement of cultch materials requires submission and approval of a Cultch Deployment Form (CDF) to the Department and authorization from the United States Army Corps of Engineers (USACE) before placing materials into the waters of the state.

Mariculture activities are defined as the controlled cultivation of shellfish in confinement from seed size until harvest for commercial purposes. This includes any shellfish cultivation that uses bags, cages, coverings, racks, or any other placement of gear that is not considered cultch. Mariculture activities require a Shellfish Mariculture Permit (SMP) from the Department and approval from the USACE before gear may be placed in the waters of the state.

Intertidal & Subtidal Harvest Areas

Intertidal Harvest Areas include rights to conduct shellfish operations within all unvegetated water bottoms located between mean lower low water (MLLW) and mean higher high water (MHHW). Wild harvest and mariculture are both permitted on intertidal Harvest Areas. No

floating gear will be permitted on intertidal Harvest Areas. Master Harvesters must obtain proper authorizations from the Department and the USACE before conducting shellfish operations.

Subtidal Harvest Areas are for mariculture purposes only and require an SMP from the Department and a permit from the USACE. These Harvest Areas allow the use of floating gear such as floating cages, floating bags, and any other gear for shellfish mariculture purposes. Subtidal shellfish operations shall only be permitted in areas deeper than six feet at mean low water and will only be considered as State Harvest Areas.

State Harvest Areas & Private Harvest Areas

State-owned water bottoms are leased at the discretion of the Department and permitted as State Harvest Areas. State Harvest Areas can be designated as intertidal (wild harvest or mariculture) or subtidal (mariculture only). State Harvest Areas are subject to the Department's State Harvest Area Leasing Policy (III). State Harvest Areas are pre-screened prior to leasing to mitigate conflicts with critical habitat, historic sites, federal or state managed lands, and other known conflicts of interest. However, the Department does not guarantee that no conflicts exist.

Water bottoms where rights to shellfish belong to private individuals, such as those recognized through verified Crown/State grants or riparian ownership, may be considered as Private Harvest Areas if they are fully contained within the boundaries of Shellfish Growing Areas. The Harvest Area must contain non-vegetated, intertidal water bottoms. If the Harvest Area is deemed eligible by the Department, an MHP must be obtained from the Department prior to any commercial activity within the area of question. Private Harvest Areas may be leased to an individual who is not the landowner for commercial shellfish activities, but a legal, notarized contract must be provided to the Department that contains a specific description of the Harvest Area to be leased, the term of lease, a description of rent payments, contact information of both parties, and a clause requiring the lessee to adhere to all state laws, rules and regulations. If the Harvest Area lease contract expires without providing evidence of renewal to the Department, the MHP will be revoked on the end date of the last known contract. All commercial shellfish operations on Private Harvest Areas must first receive proper authorizations from the Department. Authorization from the Department does not relieve you from obtaining any other required federal, state, or local permits.

B. Harvest Area Permitting

Individuals who have rights to commercial shellfish operations within eligible water bottoms as described above shall apply for an MHP from the Department. Issuance of an MHP authorizes the permit holder (Master Harvester) to conduct commercial shellfish operations as described in the permit. The MHP contains five different authorizations:

- **Shellfish Harvest:** The harvest of shellfish shall be granted via the MHP once the permittee has acquired all necessary certifications from the Georgia Department of Agriculture (GADOA) and purchased a Seafood Dealer License from the Georgia Department of Natural Resources (GADNR), or if permission to take and possess shellfish has been granted by the Department. If the Master Harvester has not met the

requirements, an MHP may be issued without this authorization and will display “Not Certified” as the GADOA Certification Number.

- **Cultch Deployment Authorization:** The cultivation/planting of wild shellfish beds and the placement of cultch materials shall be authorized after a CDF supplied by the Master Harvester has been approved by the Department and the placement of cultch materials has been authorized by the USACE.
- **Shellfish Mariculture Permit:** Shellfish mariculture activities shall be authorized upon issuance of an SMP by the Department. Mariculture can be further defined as the use of gear to manipulate shellfish and/or the environment. SMPs are issued by the Department following approval of the Shellfish Mariculture Permit Application and require proof of authorization from the USACE.
- **Closed Season Harvest Permit:** Closed Season Harvest may be authorized according to Board Rules and Regulations with the submission of a Closed Season Harvest application and approved harvest plans.

*General maintenance activities such as the placement of signs, buoys, or other approved demarcation instruments are approved through either the Cultch Deployment Authorization or Shellfish Mariculture Permit described above.

C. Master Harvest General Requirements

Prior to receiving a Harvester Permit, every harvester must purchase a Georgia Commercial Fishing License with a Shellfish endorsement.

The Master Harvester has the responsibility to ensure anyone working their Harvest Area(s) has obtained a Harvester Permit from the Department. **Harvester Permits are supplied by the Department upon submission of a Shellfish Harvester Permit Application with all fields completed and signed by a Master Harvester and completion of Georgia’s Shellfish Harvester Training.** Harvester training must be scheduled at least two working days in advance. All individuals engaging in commercial activities within a Harvest Area are required to have their Harvester Permit in their possession.

A Master Harvester may also apply for a Temporary Harvester Permit. A Master Harvester must submit a Harvester Permit Application to the Department to authorize and permit each harvester on the Master Harvester’s designated harvest area(s). Prior to receiving a Temporary Harvester Permit, every Harvester must purchase a Georgia Commercial Fishing License with a Shellfish endorsement. The Department will issue a Temporary Harvester Permit to the harvester for each requested harvest area for **a period of 30 days.** **The Temporary Harvester must always be under the direct supervision of a permitted harvester that has completed the Department’s Harvester Education and is properly licensed while engaged in shellfish harvesting, handling, and transportation traveling to or from a harvest area.**

Temporary Harvester Permit Request must be submitted by COB Thursday to ensure adequate time for processing by the end of week.

Individuals will only be issued **one** Temporary Harvester Permit each licensing year (April 1st through March 31st). Temporary Harvester Permits will not be issued for Closed Season Harvest.

The Master Harvester is required to notify the Department when a harvester or temporary harvester is no longer employed. Inactive permits are to be mailed back to the Department:

Shellfish and Water Quality Program
One Conservation Way
Brunswick, GA 31520

The Master Harvester is also responsible for reporting landings to the Department monthly and maintaining all required permits and authorizations (lease, gear, etc.). The Department will routinely host meetings to inform and educate Master Harvesters on the status of the shellfish industry. Attendance is required for at least one meeting per year.

All commercial shellfish operations conducted in the state of Georgia must maintain compliance with applicable state and federal agencies, including but not limited to the GADOA, USACE, and the Department. Failure to maintain compliance may result in mandated removal of gear and/or revocation of Harvest Area authorizations.

D. Wild Harvest Requirements

Master Harvesters who wish to engage in wild harvest of shellfish must maintain cultching requirements described in the Department's Cultch Deployment Policy (V). A CDF must be submitted to the Department no later than July 1st each year. Master Harvesters are responsible for obtaining all other pertinent authorizations from other state and/or federal agencies. All contracts pre-dating the policy changes contained herein will be honored by the Department and shall be upheld by the lessee on all intertidal Harvest Areas.

E. Mariculture Requirements

Shellfish Mariculture Permit

Any Master Harvester who wishes to engage in shellfish mariculture activities must obtain an annual SMP from the Department via application. The application requires details on an operation plan including species to be farmed, types and quantity of gear to be used, sources of seed, storm mitigation plans, and other information. Approval of mariculture operations from the Department also requires authorization from the USACE and any other applicable state and/or federal agencies. The SMP and federal consistency will only be issued after the USACE permit has been received by the applicant. Any modifications to the SMP will require submittal of a revised SMP application to the Department and will also require submittal of a revised Pre-Construction Notification (PCN) application to the USACE. Proposed modifications shall not be implemented until all authorizations have been received. SMPs shall be renewed annually through the Department via an SMP Renewal Form submitted by July 1st each year.

Shellfish Importation Permit

Mariculture operations will likely require the purchase of shellfish seed. Seed imported from out-of-state must come from a list of Department-approved hatcheries/nurseries. All seed imports must be inspected by the Department. All shellfish seed importations shall follow the Department's Molluscan Shellfish Importation Policy (VI).

Cage Tagging

In this policy, cage is defined as a containment unit of any size that contains or may contain shellfish for commercial sale. A larger outer unit which holds smaller units inside is considered a single cage. Cage tagging requirements are further defined in the Shellfish Water Bottom Leasing Policy (III).

F. Revocation of Commercial Harvesting Rights

Status Update: As of 07/1/2024, alternative consequences for violation of the article O.C.G.A. §27-4-201 are as follows:

Section 7

Said title is further amended in Code Section 27-4-190, relating to commercial fishing license with shellfish endorsement and master harvester permit or harvester permit, hours for taking shellfish, and recreational harvesting, by revising paragraph (1) of subsection (a) as follows:

“(a)(1)It shall be unlawful to take or possess shellfish in commercial quantities or for commercial purposes without first having obtained a commercial fishing license with a shellfish endorsement and a master harvester permit or harvester permit or without proof of purchase that such shellfish were purchased from a certified shellfish dealer. Master harvester permits shall specify whether the permittee is authorized to take oysters, clams, or other shellfish and shall only be issued to persons certified by the Department of Agriculture to handle shellfish unless permission to take and possess shellfish has been granted by the department as described in subsection (d) of Code Section 27-4-197 and in Code Section 27-4-202. Such permits shall be provided annually. A permittee may request authorization from the department for employees or agents, who shall be referred to as harvesters, of such permittee to take shellfish from permitted areas. Such request shall be in writing to the department and shall include the name, address, and personal commercial fishing license number of the harvester. It shall be unlawful for harvesters to take or possess shellfish as authorized under their employer's master harvester permit unless they carry on their person while taking or in possession of shellfish a harvester permit as provided by the department indicating the exact area and circumstances allowed for taking. Such harvesters' permits and charts shall be provided annually by the department and shall be in a form as prescribed by the department. Harvesters must possess a valid personal commercial fishing license as provided for in Code Section 27-4-110, a shellfish endorsement as provided for in the department's rules and regulations, and, when a boat is used, a valid commercial fishing boat license as provided in Code Section 27-2-8. Master harvester permits and harvester permits may be denied pursuant to Code Section 27-2-25 to persons who have violated this part in the two years immediately preceding the filing of an application for a permit. Permits may be revoked pursuant to Code Section 27-2-25. Master harvester permits and harvester permits issued to master harvesters or agents shall be surrendered to the department

upon termination of Department of Agriculture certification for handling shellfish, or upon termination of right to harvest shellfish pursuant to Code Section 27-4-201. If a harvester is removed from authorization to take shellfish by the master harvester permittee, the master harvester shall immediately notify the department of such removal. In addition, that harvester shall immediately surrender to the department his or her harvester permit. It shall be unlawful to possess unauthorized harvester permits or harvester permits issued to another person."

Section 8

Said title is further amended by revising Code Section 27-4-201, relating to penalty for violation of article and revocation of authorizations, as follows:

"27-4-201.

(a) Except as otherwise provided in this article, any person who violates any provision of this article part shall, upon conviction thereof, be guilty of a misdemeanor of a high and aggravated nature.

(b) Any authorizations issued under this part to any person convicted of violating any provision of this part may be revoked pursuant to Code Section 27-2-25; provided, however, that, upon the first such conviction, a harvester permit shall not be revoked if the harvester satisfactorily completes, within 30 days of notice from the Department, the retraining specified by the Department in accordance with the requirements of the National Shellfish Sanitation Program pursuant to subsection (d) of Code Section 27-4-195."



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III. Shellfish Water Bottoms Leasing Policy

Statutory Authority: O.C.G.A. Title 27 Chapter 4 Article 4 Part 4, and Georgia Department of Natural Resources Coastal Resources Division, Saltwater Fishing Regulations, Chapter 391-2-4-.19

This policy describes the process utilized by the Department to offer leases of state-owned water bottoms to the public for the purposes of commercial shellfish production and the requirements that must be met by a leaseholder.

A. Lease Advertising and the Leasing of State Water Bottoms

State-owned intertidal water bottoms will be offered via public bid for the purpose of commercial shellfish production.

All available leases will be announced in the newspaper of the county where the lease is located and through public notices on the CRD (Coastal Resources Division) website for a minimum of two consecutive weeks. Additionally, available leases may be advertised in newspapers in neighboring counties or through other notification methods, such as press releases and social media. The advertisement shall include a description of the area(s) proposed to be leased, the date, time and place, when and where bids will be received, and the minimum acceptable bid(s) as determined by the Department.

Additional information about vacant leases is available year-round on Georgia's Shellfish Leasing Dashboard, located on CRD's website, including an estimate of acreage of the intertidal, non-vegetated water bottoms and aerial imagery. Further information can also be provided by the Department upon request.

Application packages shall include an Intertidal Shellfish Lease Application, and a refundable certified check or cashier's check valued no lower than the minimum bid of the advertised lease. Application packages are evaluated by a committee of CRD staff outside of the Shellfish and Water Quality program (the Program) based on a combination of factors including husbandry techniques, knowledge of applicable laws and requirements, certifications held, and goals for the property using a scoring matrix. Ranking of management plans is used as the primary means to decide who will be offered leases. In the event of a tie, the highest bid (measured as a percent over minimum bid) submitted will be used as the tie breaker. If a bid package is accepted, the bid offered will serve as the annual lease fee for the 10-year duration of the contract. Right of first

refusal may be offered to leaseholders at the end of a contract term, but the contract offered may differ due to changes in Department policy or market value of leased areas.

Subtidal leases are given via a lottery system established and managed by the Department. All available leases will be announced in the newspaper of the county where the lease is located and through public notices on the CRD website for a minimum of two consecutive weeks. Additionally, available leases may be advertised in newspapers in neighboring counties or through other notification methods, such as press releases and social media.

The lottery has minimum requirements for entry and candidates will be ranked using priority points. Priority points will be awarded based primarily on characteristics that make an applicant more likely to succeed, such as experience in the industry. These priority points have been vetted through CRD's Shellfish Mariculture Advisory Panel. Further information can be found in the Lottery Application for Subtidal Shellfish Mariculture Leases and the attached Guidance Document (Appendix C). Winners will be chosen at random from candidates within the highest tier of priority points, moving down by tier until all leases have been awarded. The Department reserves the right to change lottery entry and priority point requirements. Subtidal leases shall be leased for a contract term of 10 years. Right of first refusal may be offered to leaseholders at the end of a contract term, but the contract offered may differ due to changes in Department policy or market value of leased areas.

State leaseholders must be in good standing with the Department before being considered for any additional leases.

B. Lease Pricing

Water bottoms will be leased at the following per acre rates:

Lease Type	Annual Rent Fee
<i>Intertidal Wild Harvest</i>	Bid of no less than \$15 per acre serves as annual rent fee
<i>Intertidal Mariculture</i>	Bid of no less than \$100 per acre serves as annual rent fee
<i>Subtidal Mariculture</i>	Set rate of \$150 per acre

C. General Lease Requirements

- Within 30 days of the execution of any shellfish lease, a lessee shall have a copy of the lease recorded by the Clerk of the Superior Court of the county or counties in which the leased area is located.
- Each person granted a shellfish lease shall pay an annual lease fee. If the annual lease fee is not paid by August 1, the Department shall assess a late penalty of 10% of the annual lease fee. If the Department does not receive the fee and any penalty before September 1, the lease shall be void.
- Annual lease fees shall be prorated as determined necessary by the Department.

- The lessee (Master Harvester) shall maintain and provide the Department by the tenth (10th) day of each month the landing records required by O.C.G.A. § 27-4-136. If no landings occur during a month, lessee shall likewise maintain and provide to the department landing records showing that no landings occurred.

D. Intertidal Lease Requirements

Wild Harvest

All shellfish leaseholders on state leases that participate in the wild harvest of oysters and clams are contractually obligated to meet the minimum cultching requirements set by the Department's Cultch Deployment Policy on each of their Harvest Areas. If a shellfish lease holder wants to conduct mariculture activities on their intertidal wild harvest lease, he/she must receive a Shellfish Mariculture Permit (SMP) before any mariculture activities can be conducted. There are no seed planting requirements for the mariculture activity, but the lease holder must meet the minimum cultching requirements for their lease.

Minimum Planting Requirement (Mariculture-Designated Leases Only)

After all authorizations have been obtained, all intertidal State Harvest Areas designated for mariculture use are held to a minimum cultivation requirement that must be met annually to maintain the right to conduct commercial shellfish operations on the lease. State leases designated for intertidal shellfish mariculture must plant 50,000 clam seed or 50,000 oyster seed per acre per year. A weighted combination of the two may also be accepted. Receipts from all seed purchases or transfers shall be provided to the Department to verify compliance with minimum planting requirements. The Department reserves the right to alter the minimum planting requirement based on Harvest Area acreage, seed availability, market volatility, natural disasters, or any other event the Department deems qualifying.

If an intertidal lease designated for mariculture is also used to conduct wild harvest, the Master Harvester must also meet the cultching requirement of 1/3 bushel of cultch deployed per bushel of wild oyster harvested.

E. Subtidal Lease Requirements

Minimum Planting Requirement

Once all authorizations have been obtained, subtidal State Harvest Areas will be held to a minimum planting requirement of 10,000 oyster seed per acre within the first year. Planting requirements will increase by 10,000 per acre each year until the maximum requirement of 50,000 oyster seed per acre is reached and maintained for the remainder of the lease contract. Renewed lease contracts will maintain the 50,000 seed per acre per year requirement for the remainder of the lease contract and upon lease renewal. See the table below for an example of planting requirements on leases of different sizes.

Year	Planting Requirement (per acre)	5 Acre Lease Requirement	10 Acre Lease Requirement
1	10,000	50,000 (~50 cages)	100,000 (~100 cages)
2	20,000	100,000 (~100 cages)	200,000 (~200 cages)
3	30,000	150,000 (~150 cages)	300,000 (~300 cages)
4	40,000	200,000 (~200 cages)	400,000 (~400 cages)
5+	50,000	250,000 (~250 cages)	500,000 (~500 cages)

Minimum oyster seed requirements may be reevaluated by the Department on an annual basis and may be changed based on seed availability, market volatility, natural disasters, encouraging maximal use of the area of the lease, or for another reason the Department deems necessary. The Department reserves the right to reduce the lease area if the leaseholder has failed to meet the minimum production standard or upon a leaseholder’s request. All forfeited lease areas must go through a lottery process before being leased again; the former leaseholder would be allowed to participate in the lottery but would receive no preference for being the prior leaseholder.

Performance Bond Requirement

Subtidal leases require a performance bond of \$20,000 per lease provided to the Director of CRD by the Master Harvester to ensure compliance with the procedures and standards set by the Department. The performance bond must be provided to the Director prior to issuance of a SMP.

Cage Tagging Requirement

Only the outermost cage, as defined in O.C.G.A. 27-4-188, that is used for subtidal shellfish mariculture operations must be tagged by the leaseholder. Cage tags must be approved by the Department before being affixed to the cage. Each tag is required to have the Department-issued Harvest Area Code and the Master Harvester’s phone number. The tag shall be a contrasting color and attached in a manner so that the tag is easily visible. The minimum surface area of the tag shall be no less than 4 square inches

F. Maximum Lease Allotment

For state intertidal lease allotment, preference may be given to applicants that lease less than half of the state-leased water bottoms within a Growing Area, by lease quantity or leased acreage. No Master Harvester shall hold more than 30 acres of subtidal water bottoms. For either lease type, the Department may grant an exception if there are no other applicants for any advertised Harvest Area. The Department reserves the right to change maximum Harvest Area quantities if deemed necessary.

G. Grounds for Removal

In instances where Master Harvesters are found in breach of contract, written warning may be administered via certified mail at two-week intervals until any issues have been corrected.

Accrual of written warnings within any lease term may result in revocation of leasing rights. Written warnings may be issued for the following offenses:

- Failure to apply for Master Harvester Permit (MHP) renewal by the deadline
- Failure to apply for SMP renewal by the deadline
- Failure to submit Cultch Deployment Forms (CDF) by the deadline
- Failure to pay rent fees by the date specified in the contract
- Failure to meet production standards or minimum cultch requirements

Master Harvesters on new state leases will be held to a set of deadlines similar to those found in the Section below. The exact deadlines will be listed in the lease contract and may vary due to pertinent circumstances. The Department reserves the right to extend leniency to these deadlines when deemed appropriate.

Any violation of Georgia laws or regulations may be deemed guilty of a misdemeanor of a high and aggravated nature. Any person convicted of violating the law.

H. Example Deadlines

Master Harvesters on state leases shall be contractually obligated to follow a set of deadlines similar to those below (as applicable):

- Lease contracts for State Harvest Areas must be signed within 30 days of winning the public bid process or lottery.
- Lessee shall have a copy of the lease contract recorded within 30 days of its execution by the Clerk of the Superior Court of the county or counties in which the Harvest Area is located.
- An SMP application/CDF must be submitted to the Department within 60 days of the execution of the lease contract.
- Pre-construction notifications (PCNs) shall be submitted to the United States Army Corps of Engineers (USACE) within 60 days of initial review of an SMP application or CDF by the Department. The Department shall be notified upon submission.
- Master Harvesters shall obtain all applicable Georgia Department of Agriculture (GADOA) certification(s) to handle shellfish, or a Department-approved alternative, within one year of signing a wild harvest lease contract or within six months of receiving all state and federal permits for a mariculture lease.

These deadlines have been created to ensure state leases are utilized in a timely manner. After receiving all required authorizations, Master Harvesters shall be held to the minimum planting requirements described in this policy. The amount of time given in the deadlines above is subject to change at the Department's discretion.

I. Lease Inspections

Lease inspections will be performed routinely by the Department along with its partner agencies (Georgia Department of Agriculture, and Law Enforcement). The purpose of these inspections will be to verify the adherence to the conditions of your lease contract as well as your permits.



COASTAL RESOURCES DIVISION

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IV. Commercial Shellfish Signage Policy

Statutory Authority: O.C.G.A. § 27-4-198

Navigational/obstruction markers are required on commercial shellfish leases depending on the type of gear utilized and the location of the project. This policy describes the conditions that require the placement of signage or markers, the material or design of said signage or markers, and information on where signage and markers shall be placed. The information and graphics in this document serve as guidance only; requirements may vary on a case-by-case basis depending on the unique conditions of each lease and should be coordinated with the Department.

Signage and locations must be submitted to and approved by the Department (may be submitted using a Private Aids to Navigation (PATON) Application Form). The Department will be available by appointment to assist with signage plans as necessary.

All navigational markers require additional approval from the United States Army Corps of Engineers (USACE) and the U.S Coast Guard prior to placement. Details regarding your navigational markers and their locations should be included in your USACE Pre-Construction Notification (PCN) form containing the rest of the details of your project, and a USCG PATON Application (available at <https://homeport.uscg.mil/my-homeport/coast-guard-prevention/waterway-management?cotpid=29>) may be submitted to SMB-D7-PATON@uscg.mil.

The Department reserves the right to require additional signs or markers as deemed necessary. Alternate signage and markers may be approved by the Department.

A. Signage/Marker Requirements

See attached diagrams for information on marker types

Intertidal Leases

Master Harvesters must place hazard posts on the channel-ward side of any gear or cultch materials deployed on intertidal water bottoms along a shoreline, spit, or flat. Hazard posts shall be placed at each corner of deployment areas and at least every 200 yards in between.

Navigational signs shall be placed at the entrances of any navigable streams where gear or cultch is to be deployed. Private Harvest Areas shall also use navigational signs at each corner of any area where cultch or gear is deployed and may be attached to hazard posts. Additional navigational signs may be required depending on the size of a deployment area. If any markers

or signs placed by Master Harvesters are removed, carried away or no longer a visual aid that distinguishes a boundary or obstruction, Master Harvesters shall replace them at their expense.

On intertidal State Harvest Areas, boundary markers shall be placed by the Department along lease boundaries at both the mean low water (MLW) and mean high water (MHW) line to demarcate the usable extent of each lease. On intertidal leases in mariculture zones, the Department shall place parcel posts at the corner of each lease and, depending on the size of the lease, extra marking or signage may not be required by Master Harvesters. It is the leaseholder's responsibility to notify the Department if a marker or sign placed by the Department is removed, carried away, or no longer a visual aid so the sign or marker can be repaired or replaced.

Subtidal Leases

A designated buoy or a piling with a sign warning of navigational hazards is required on each of the four corners of any subtidal lease and shall be placed at the expense of the Master Harvester. The Department must be present to observe the accurate placement of each corner prior to installation. If any markers or signs are removed, carried away or no longer a visual aid that distinguishes a boundary or obstruction, Master Harvesters shall replace them at their expense.

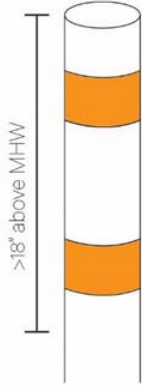
The Department may deploy pilings at each corner of established mariculture zones with signs to notify the public of potential hazards.

Shellfish Harvest Area Markers and Signage Guidance Document

This guidance document provides example markers and minimum dimensions, but permitted markers may vary. All markers must be approved by the USCG.

Information Markers (Installed by Master Harvester)

Hazard Post (Intertidal Harvest Areas Only)



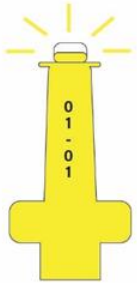
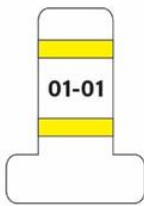
- Hazard posts shall be placed by MHPs to mark any deployed gear or cultch with a spacing of no more than 200 yards between posts.
- Posts should not be deployed below the mean low water (MLW) line.
- At least 18 inches of the hazard post should be visible at mean high water (MHW).
- Hazard posts should be at least 3-5 inches in diameter.
- Hazard posts should be marked with two bands of 3" retroreflective orange tape.
- PVC is the recommended material to use for hazard posts, but other materials may be approved by the department.

Navigation Signs (Intertidal or Subtidal Harvest Areas)



- Minimum size: 12" x 18"
- Navigation signs shall be printed on yellow, retroreflective material with black font.
- Lease Code must be visible on all private and subtidal harvest areas but is optional on intertidal state leases (provided on CRD-installed Boundary Signs).
- Signs must contain language describing submerged hazards or floating hazards depending on the type of hazard present.
- Signs may be mounted to galvanized signposts or PVC on intertidal leases and attached to piles or buoys on subtidal leases. Other materials for installation may be approved by the department.
- Signs must be visible at high water with a minimum of 3' between the bottom of the sign and the water at MHW.

Lease Buoys (Subtidal Leases Only)



- All buoys must be a minimum height of 24 inches above the water line with at least two four-inch retroreflective yellow stripes.
- Buoys must remain at the water surface during all tide stages and be adequately anchored to remain in place even during extreme weather.
- Harvest Area Codes shall be listed on each corner buoy.
- If piles have been installed on a subtidal lease, an outward-facing navigation sign can be mounted to the corner piles instead of installing lease buoys.
- A flashing yellow light with a 2.5 second interval is the only lighting configuration that will be approved for the marking of shellfish leases, and the use of lanterns must be approved by the Department.

CRD Installed Shellfish Markers Boundary Markers (Intertidal)

Parcel Posts and Boundary Signs are installed by the Department on state owned leases to inform the general public of land-use and to inform leaseholders of the geographic extent of their lease boundaries.



Boundary Sign



Shellfish Mariculture Zone Signage (CRD Installed and Pile Supported)

Pile-supported signs have been installed at each mariculture zone established by the department to inform the general public of potential hazards in the water column and to aid with informational requirements of leaseholders.

MARICULTURE ZONE



HARVEST BY PERMIT ONLY

Subtidal

ENTERING SHELLFISH ZONE



REMAIN IN CHANNEL • HARVEST BY PERMIT

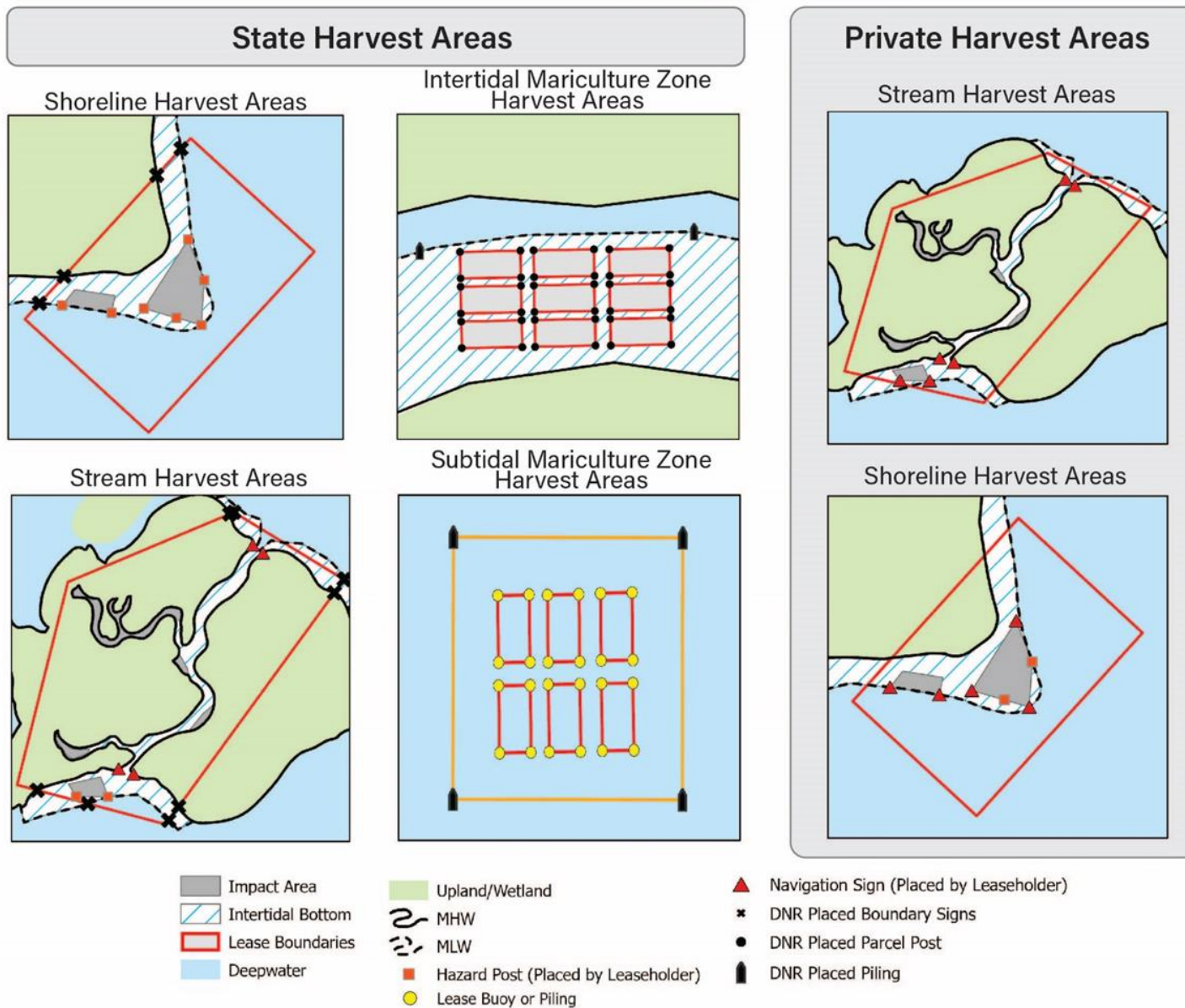
Intertidal

EXITING SHELLFISH ZONE

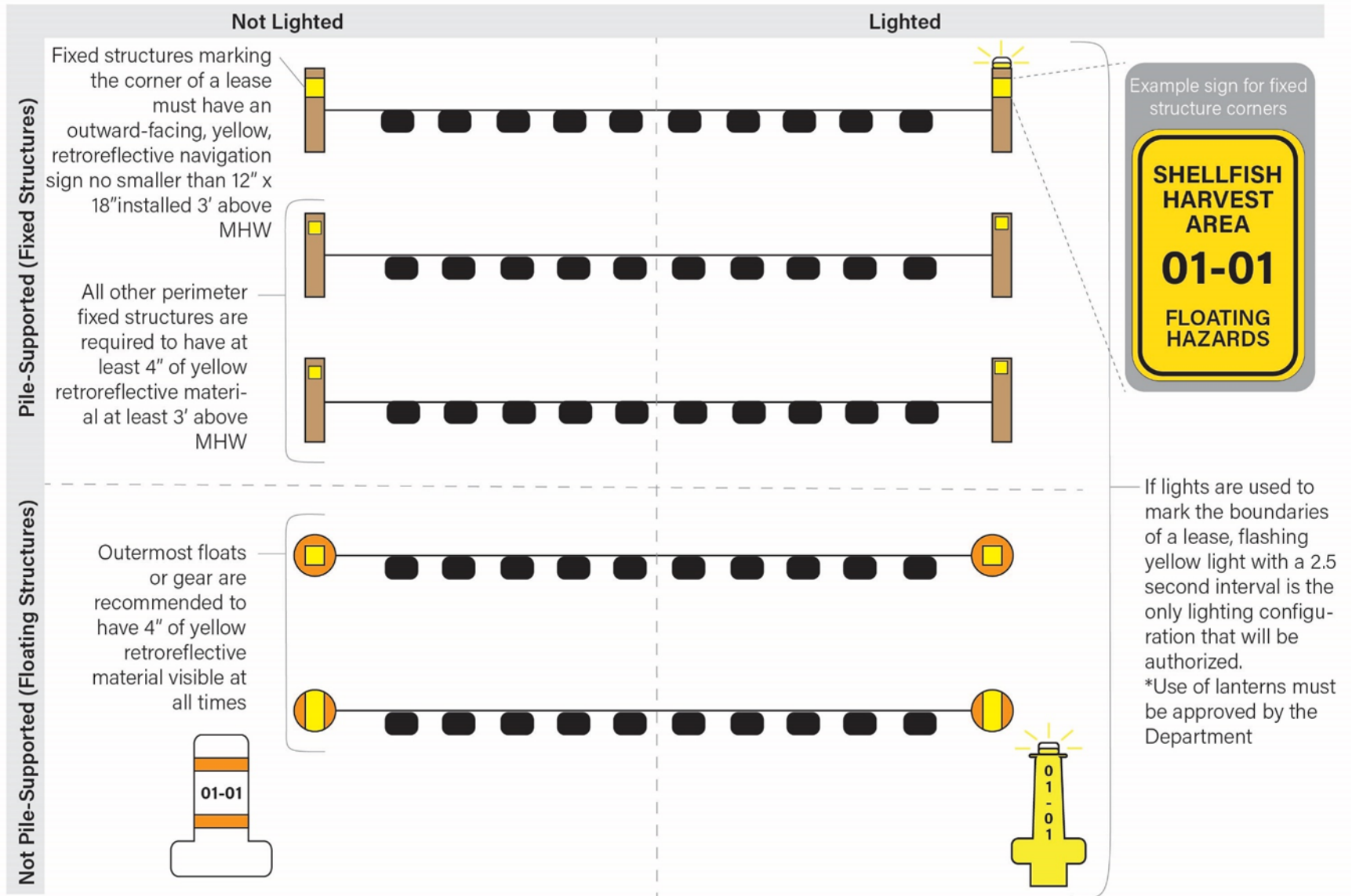


RESUME NORMAL OPERATION

Shellfish Harvest Area Marker Deployment Diagrams



Subtidal Aquaculture Farm Marking Requirements



V. Clutch Deployment Policy

Statutory Authority: O.C.G.A. § 27-4-196

This policy establishes guidelines for cultching and planting activities in Harvest Areas in accordance with O.C.G.A. §27-4-196. The Department must approve a Cultch Deployment Plan before any activities are performed in the Harvest Area(s). All Cultch Deployment Forms (CDFs) must be submitted annually by July 1st for Department review and approval. A Pre-Construction Notification (PCN) must also be submitted to and approved/acknowledged by the United States Army Corps of Engineers (USACE) prior to cultch deployments. Signage or hazard markers may be required to mark cultch depending on the cultch material and relief from natural sediment bottoms. Failure to adhere to this policy could result in a violation of O.C.G.A. §27-4-196.

A. Wild Harvest Clutch Requirements

Cultch, as defined by this policy, includes but is not limited to oyster shells, clam shells, other shellfish shells that originate from Georgia salt waters, oak brush, nongalvanized wire fencing, small gravel, or any other material approved by the Department.

All shellfish lease holders on State Harvest Areas that participate in the wild harvest of oysters and clams are contractually obligated to meet minimum cultching requirements on each of their Harvest Areas.

Wild Oyster Harvest

The Master Harvester must place the equivalent of at least 10 bushels of cultch per acre of leased intertidal bottom OR the quantity of cultch equivalent to at least 33 ⅓ percent by volume of the landings reported from that Harvest Area from the previous year, whichever is greater, on each Harvest Area.

Wild Clam Harvest

The Master Harvester must annually replant seed clams no smaller than four millimeters in width, or transplant larger clams in the amount of at least a two to one (2:1) ratio of planted clams to harvested clams, from the previous year from that Harvest Area. If smaller seed clams are planted, additional cultch will be required to establish viable clam habitat and serve as a protective barrier from predators.

Wild Oyster Harvest on State and Private Harvest Areas

All Master Harvesters on State Mariculture Harvest Areas and Private Harvest Areas that participate in the wild harvest of oysters are also obligated to meet minimum cultching requirements on each of their Harvest Areas:

- The Master Harvester is required to place the quantity of cultch equivalent to at least 33 ⅓ percent by volume of the landings reported from that Harvest Area from the previous year.

B. Achieving Clutch Requirements

Several approved techniques meet the required planting quotas that are covered in this policy. The Department must be notified five working days before any cultching or planting activities occur on a Harvest Area to receive credit towards the cultch requirement. The Department may supervise the deployment to ensure cultching activities are performed in accordance with the approved Cultch Deployment Plan. Cultch or planting site conditions may need to be assessed before the placement of cultch or planting occurs. The Department will notify the Master Harvester if a pre-evaluation site visit is necessary with the approval of their plan.

Cultch Bushel Values

A U.S. bushel is equal to 1.25 cubic feet. One cubic yard of shell is equal to 27.1 U.S. bushels. Other materials may be approved by the Department only if first requested in writing by the Master Harvester. If a Master Harvester plans to use a cultch material not listed in the conversions below, the Department must assess the cultch for volume and assign a bushel credit value.

- Recycled Oyster Shell 60LBS = 1 BU.
- Recycled Clam Shell 75LBS = 1 BU.
- Recycled Scallop Shell 40LBS = 1 BU.
- 2 in. Fossil Stone (Marl) 90LBS = 1 BU.
- Wood Bundles 3'H x 10'L 1 BUN = 10 BU.
- Crab Trap (non-fishing) 1 Trap = 1 BU.

No cultch materials shall be deployed at a height of greater than 24 inches from the sediment it is placed on.

C. Accepted Clutching Techniques

Shell Cultch

Shell used for cultching may include oyster, clam, whelk, mussel, scallop and any other shell species native to Georgia. Shell coming from out-of-state sources must be placed on land to draw moisture from the shell for a minimum of six months, or cured, before use. Shell may be deployed using a variety of methods including scattering loose shell on suitable bottom, bagging with Department-approved materials, and/or placing bags on untreated pallets on the bottom. The scarcity of shell may restrict this method, and the Master Harvester is encouraged to develop recycling strategies with customers who purchase shell stock to ensure future access to shell. Shell cultch can account for up to 100% of the annual cultch requirement.

Alternative Cultch

Due to limited sources and the high cost of available shell cultch, the Department will grant credit for the use of alternative cultch materials. Examples of materials that have been approved and used include untreated wood (tree limbs, pallets, and wooden stakes), bamboo, recycled/reused non-fishing crab traps, nongalvanized wire, crushed aggregate (gravel, limestone, etc.) and bio-concrete (oyster reef balls, oyster restorations tiles, etc.). Requests for approval of other alternative cultch materials must be submitted in writing and may be approved

by the Department. Items composed of entirely nonbiodegradable, synthetic materials (such as PVC or other plastics) will not be permitted as alternative cultch materials.

Prior to granting any credit for the deployment of alternative cultch material, the Department requires the submission and approval of a Cultch Deployment Plan. This plan should include precise specifications on the material's configuration and application. The Department will evaluate the alternative cultch in terms of volume and assign an associated bushel credit value. Alternative cultch can account for up to 100% of the annual cultch requirement.

Rake-Down or Breaking Clusters

Rake-down of oyster beds is a method of breaking down clusters of small or unmarketable oysters and placing the oysters in the lower intertidal zone. Research has shown that oysters thrive and are most productive along the lower portions of the intertidal slope. This activity generally creates a reduction in the numbers of animals per square meter which results in accelerated growth of marketable oysters and promotes new growth for the oyster bed. Before this technique can be used, the Department must complete an evaluation of the beds considered and may be present during the rake-down process. A cultch credit amount will be given during the evaluation process. Oysters may only be raked down to the lowest layer of shell material above the sediment level. No rake-down area shall be left entirely bare of shell material or rake-down rights may be revoked by the Department. Rake-down may account for up to 50% of the annual cultch requirement.

Clam Seed Planting

Clam seed no smaller than four millimeters in width should be planted in areas with a protective overburden. To create an area of protective overburden, the bottom may be planted with oyster shell, seed oysters, gravel, limestone aggregate, etc. to a depth of approximately 3.5 inches. The protective overburden area establishes a habitat favorable to the survival of seeded clams by providing protection against predators, thereby enhancing their chances of survival. This technique is best accomplished during January and February as predator activity is limited. CRD will validate an area of protective overburden before clam seed can be planted. Any seed purchased must come from an approved in-state or out-of-state source and follow the Molluscan Shellfish Importation Policy. Clam seed planting must meet 100% of the annual cultch requirement.

D. Request to Reduce Culch Requirements

A Master Harvester may initiate a request for an annual cultch requirement reduction. This request must be formally submitted in writing to the Department. The Department shall assess the request in accordance with current principles of wildlife research and resource management to determine its validity and its alignment with the sustainable yield criteria for the property. It is imperative to note that a certain percentage of the cultch requirement must be fulfilled each year, even in instances of substantial oyster mortalities or other natural catastrophic events.

VI. Molluscan Shellfish Importation Policy

Statutory Authority: O.C.G.A. § 27-4-203 and Georgia Department of Natural Resources Coastal Resources Division, Saltwater Fishing Regulations, Chapter 391-2-4-.19.

This policy addresses the protection of the natural ecosystems of the state of Georgia with emphasis on preserving the health and genetic integrity of native molluscan shellfish. It exclusively pertains to the importation of molluscan shellfish intended for aquaculture purposes. This includes hatchery/nursery operations as well as intertidal and subtidal mariculture operations. It does not extend to cover the importation of shellfish intended for direct human consumption. The Department must approve the importation of all molluscan shellfish from out-of-state sources. The Department shall not approve importation of any non-indigenous species of molluscan shellfish. Relevant examples of such non-indigenous species for this policy would include, but not be limited to, the Pacific oyster (*Crassostrea gigas*) and Suminoe oyster (*Crassostrea ariakensis*). No molluscan shellfish will be allowed into the state without an Importation Permit approved by the Department. Non-compliance with this policy may lead to the revocation of hatchery/nursery certification, Master Harvester Permit (MHP), and any other relevant authorizations, as determined by the Department. Molluscan shellfish imported in violation of this policy will be removed and destroyed as directed by the Department.

A. General Requirements

An Importation Permit Application must be submitted to the Department by the importing party at least five working days before importation and approved by the Department prior to the importation of seed. Shellfish intended for importation into the state of Georgia must be native to Georgia. Out-of-state hatcheries/nurseries must be on the “List of Approved Out-of-State Hatcheries and Nurseries” provided by the Department (contact the Department for an up-to-date list) to allow importations into the State. Out-of-state hatcheries/nurseries must submit an annual application and undergo an inspection by the Department to be placed on this list. Any hatchery or nursery that wishes to be added to this list may contact the Department for Georgia’s Out-of-State Molluscan Shellfish Hatchery and Nursery Approval Application. If there is an interest in being added to this list, industry members are advised to encourage prospective hatcheries/nurseries to reach out to the Department.

Molluscan shellfish seed must be under the maximum seed size set for that shellfish species. All parties shall maintain records of all shellfish and shellfish gamete importations

for at least two years. These records must be made available for inspection by the Department upon request.

B. Eastern Oyster (*Crassostrea virginica*)

Maximum Seed Size: 1 inch

Seed exceeding the maximum seed size must obtain special permission from the Department.

Eastern oyster seed imported from out-of-state sources for aquaculture purposes must be accompanied by diagnostic results from a Department-approved source (contact the Department for an up-to-date list). The diagnostic results must document that the stock shows no evidence of

the following pathogens: *Haplosporidium nelsoni* (MSX), *Haplosporidium costale* (SSO), *Perkinsus marinus* (Dermo), *Roseovarius crossostreae* (ROD), and *Bonamia exitiosa* (Bonamiosis). Additional pathogens as identified by the Department may require additional testing. Pathogen testing results are valid for 30 days following issuance and must be provided to the Department prior to shipment.

For non-diploid shellfish, the suppliers must test and verify the ploidy of the shellfish or gametes to be imported, and results sent to the Department prior to shipping.

Triploid seed suppliers must provide written documentation including:

- Methods used to create the triploid (tetraploid x diploid breeding or chemical induction of triploidy).
- How the ploidy of the seed will be tested.
- Provide ploidy test results from a representative sample of seed purchased.
- Provide guarantee of triploid sterility.

Hatchery Seed

In the hatchery inspection process, the Department shall determine the classification of seed produced as hatchery seed or nursery seed. Eastern oyster seed produced in a closed system with water filtered to one micron or less and supplied a diet of cultured or purchased algae/microalgae shall be considered hatchery seed. Hatchery seed shall remain in the closed system while cohorts from the batch to be shipped (no less than 60 individuals per batch) are sent off for pathogen testing. Once results are deemed acceptable, a Shellfish Importation Permit may be approved.

Nursery Seed

Oyster seed from outside the state of Georgia that has been exposed to raw water (any unfiltered water or water filtered at greater than one micron) or fed with naturally occurring algae sourced from outside Georgia shall be considered nursery seed. Nursery seed must be quarantined in a closed system with water filtered at less than or equal to one micron while cohorts from that batch (no less than 90 individuals per batch) have been sent off for pathogen testing. Once results are deemed acceptable, a Shellfish Importation Permit may be approved.

C. Hard Clam (*Mercenaria mercenaria*)

Maximum Seed Size: ½ inch

Seed exceeding the maximum seed size must obtain special permission from the Department.

Clam seed imported from out-of-state sources for aquaculture purposes must be accompanied by diagnostic results from a Department approved source (no less than 50 individuals per batch shall be tested). The diagnostic results must document that the stock shows no evidence of the following pathogens: Quahog Parasite Unknown (QPX) and *Perkinsus marinus* (Dermo). Additional pathogens as identified by the Department may require additional testing. Pathogen testing results are valid for 30 days following issuance and must be provided to the Department prior to shipment.

D. Acceptance Criteria

All molluscan shellfish importations require an inspection from the Department. An appointment with the Department shall be arranged no less than five working days prior to importation. The Department reserves the right to waive inspection requirements. Each batch of shellfish seed within an importation shipment shall be inspected using the following criteria:

- **Hatchery Seed:**
 - PASS: No non-target organisms per batch.
 - FAIL: Greater than or equal to one non-target organism per batch.

- **Nursery Seed:**
 - PASS: Less than 5% non-target organisms per batch.
 - CONDITIONAL: 5-20% of batch is non-target organisms. Non-target organisms shall be removed from shipment and the shipment shall be inspected again. All non-target organisms shall be disposed/destroyed.
 - FAIL: Greater than 20% non-target organisms in batch.

Failed Shipments

Any batch of shellfish within a shipment that fails inspection must be removed from the state or disposed/destroyed. The inspection agent may escort the shipment out of Georgia but must witness disposal/destruction if that method is chosen.

E. Importations Other than Eastern Oyster and Hard Clam Seed

Species of Molluscan Shellfish other than Eastern Oysters and Hard Clams

Importation of shellfish other than Eastern oysters and Hard clams for commercial and/or research purposes will require a separate authorization from the Department and will be handled on a case-by-case basis.

Broodstock & Gametes

Importation of broodstock and gametes for commercial or research purposes will require a separate authorization from the Department and will be handled on a case-by-case basis.

Out-of-State Shell Importation

Shell coming from out-of-state sources must be cured before deployment in state waters. Purchase and shipping receipts of out-of-state shell imports shall be provided to the Department upon purchase to verify shell is purchased six months before deployment.



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VII. Molluscan Shellfish Hatchery/Nursery Policy

Statutory Authority: O.C.G.A. Title 27 Chapter 4 Article 4 Part 4 (§ 27-4-203) and Georgia Department of Natural Resources Coastal Resources Division, Saltwater Fishing Regulations, Chapter 391-2-4-.19

This policy outlines the process utilized by the Department to certify in-state hatcheries/nurseries for molluscan shellfish seed production and to approve out-of-state hatchery/nurseries for importation of molluscan shellfish seed into the State of Georgia in conjunction with the Coastal Resources Division's (CRDs) Molluscan Shellfish Importation Policy.

In-state Hatchery/Nursery Operators shall notify the Department to be certified for in-state production, holding, sale or transfer of molluscan shellfish seed. Out-of-State hatcheries/nurseries must be approved by the Department prior to providing shellfish seed within the State of Georgia. Master Harvesters are encouraged to refer Hatchery/Nursery Operators to contact the Department accordingly.

All hatcheries/nurseries must complete a Hatchery/Nursery Application to be certified/approved. The Department will review the application and conduct a site visit prior to the certification to ensure the hatchery/nursery is operating in compliance with the rules and regulations set by the State of Georgia and the National Shellfish Sanitation Program (NSSP) Model Ordinance.

*The Department will not certify/approve the hatchery until a site visit can be conducted while the hatchery/nursery is operational.

A. In-State Hatcher/Nursery Certification

Any shellfish that are artificially bred, spawned, reared or held in waters classified as Prohibited or Unclassified must be certified by the Department as required by the NSSP Model Ordinance. In-State hatcheries and nurseries must provide USACE Permits for any gear in the waters of the U.S., any required authorizations from the Department for any nursery gear, and evidence that the dock has been permitted for commercial use. Hatcheries must also provide a property zoning letter from the county of operation and copies of Environmental Protection Division's (EPDs) Withdrawal and Discharge Permits for the hatchery location (see Hatchery/ Nursery Checklist). Any hatchery/nursery located in waters classified as Prohibited by the NSSP Model Ordinance for molluscan shellfish production must provide corrective actions for addressing seed that exceeds the maximum seed size for that species. The maximum seed size for the eastern oyster (*Crassostrea virginica*) is 1 inch in length, and the maximum seed size for the northern hard clam

(*Mercenaria mercenaria*) is ½ inch at its widest point. The Department must inspect the facility once per year but reserves the right to perform additional announced or unannounced inspections as the Department deems necessary. If a hatchery/nursery is found to have deficiencies during an inspection, the Department will notify the hatchery/nursery in writing of the corrective action needed including any follow-up inspections. Hatcheries/nurseries must maintain records of all purchases, sales, and/or transfers of molluscan shellfish for a period of two years and make them available to the Department upon request. In-State Hatchery/Nursery Certifications are valid for one year from the certification date (see example of Nursery Seed Log).

B. Out-of-State Hatchery/Nursery Approval

Out-of-State hatcheries/nurseries will be evaluated for the biosecurity risk associated with the importation of molluscan shellfish to ensure the protection of the State of Georgia's existing natural shellfish resources. Seed can only be imported from hatcheries that are able to meet the Molluscan Shellfish Importation Policy as prescribed by the Department. Out-of-State hatcheries/nurseries must provide a copy of their state authorizing agency permit/certification. The Department will inspect the hatchery/nursery initially before approving the hatchery/nursery for importation of seed and reserves the right to perform additional announced inspections as the Department deems necessary. If a hatchery/nursery has been inspected by another state regulatory agency, the Department may accept that state's inspection instead of performing its own inspection. Hatcheries must maintain records of all sales or transfers of molluscan shellfish sent to the State of Georgia for a period of two years and make them available to the Department upon request. Out-of-State Hatchery/Nursery approvals expire May 31st and must be renewed annually.

Industry members are encouraged to identify out-of-state seed sources that are not approved and recommend contacting the Department to begin the approval process.

C. Hatchery/Nursery Standard Operating Procedures

All Certified/Approved Hatcheries must follow the following BMPs:

a. Water Supply

The external water supply is assumed contaminated. Steps must be taken to remove this contamination to protect the hatchery organisms.

- Water intake should be positioned such that it is not entraining hatchery discharge.
- Hatchery water should be filtered to 1 micron.
- Filtration material must be cleaned/changed on a regular basis dependent upon volume of water filtered.
- Distribution pipes must be regularly sterilized.

b. Algal Culture

Contaminated algal cultures can spread disease.

- Water for algal culture should be sterilized in addition to filtration.

- Algal cultures should be covered to prevent contamination.
- Air supply to algal culture should be filtered to reduce contamination.

c. Air Supply

Disease outbreaks in hatcheries are often caused by contaminated air. Air supply has potential to contaminate all aspects of hatchery.

- Air intake must be filtered.
- Filters on air pump must be cleaned regularly.
- Air distribution pipes must be sterilized at least once a year.
- Air stones should be cleaned and sterilized on a regular basis dependent upon number of cultures.
- Air filters must be cleaned regularly – whenever signs of dirt, mold or moisture are observed or between cultures.

Hatchery Tanks

Care must be taken to prevent tanks and their contents from becoming contaminated and to prevent spreading of contamination to other tanks or batches.

- Hatchery tanks should be covered, if possible, to prevent airborne contamination.
- When water is changed, the tank should be thoroughly cleaned.
- Tanks should be sterilized between culture batches.

d. Segregation of Stocks/Life Stages

- Broodstock are an obvious source of contamination and should be segregated from larval and post-set culture areas. Only native species may be used in the State of Georgia's hatchery/nursery operations. Out-of-State hatchery/nursery operations should keep all non-indigenous species quarantined from all other native broodstock.
- If discharge water from broodstock tanks is running in open floor drains and not hard plumbed out of the building, care must be taken to ensure hoses or other items are not on the floor and contaminated. If so, they must be properly sterilized before use in other tanks or areas of the hatchery.
- Different cohorts and/or stocks should be segregated.
- Different species should be segregated.

e. General Cleanliness

- Footbaths should be used when coming into the hatchery from outside or when entering the larval area from the broodstock area.
- Hoses which have been on the floor should not touch tank water.
- All equipment to be cleaned and/or sanitized must adhere to its own strict hatchery cleaning/sanitizing schedule.
- Floors and floor drains should be cleaned on a regular basis.

- Ensure that employees working with untreated (raw) water, in the seed nursery or out in the field, do not transfer potential disease agents to the treated systems.



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VIII. Shellfish Transplant Policy

Statutory Authority: O.C.G.A. Title 27 Chapter 4 Article 4 Part 4

This policy establishes the guidelines and requirements for the transplanting of shellfish shellstock. Shellstock, as defined in this policy, is any shellfish above the maximum seed size. Currently, the maximum seed size for oysters is 1 inch and ½ inch for hard clams. For the purposes outlined in this policy, the Department defines a transplant as the act of moving any shellstock from one harvest area to another. Transplant activities are only permitted in waterbodies that are classified as Approved. Such activities may occur from intertidal-to-intertidal harvest areas, subtidal to subtidal harvest areas, and intertidal to subtidal harvest areas.

Only maricultured oyster shellstock that has been planted as seed and grown in confinement is eligible to be transplanted from an intertidal lease area to a subtidal lease area. Wild shellstock (shellstock originating from an intertidal lease area) will not be permitted for transplant activities. Oyster shellstock transplanting activities will only be permitted annually from November 1st through March 31st. Transplanting activities will not be permitted during periods of emergency and/or precautionary closures. All transplanted shellstock must remain in the harvest/lease area for a minimum of 21 days before it may be harvested.

Prior to any transplant activities, the Master Harvester must apply for and obtain a transplant permit. Shellfish Transplant Permit Applications are accessible on the Coastal Resources Division (CRD) website or upon request. The Department reserves the right to be present during all oyster transplanting activities. The Master Harvester will be informed in advance if a pre-site evaluation is necessary.

All transplanted shellstock must be documented on a transplant log and records must be maintained for at least six months. The Master Harvester is required to maintain detailed records of every transplant activity to document the disposition of all shellstock and to ensure that it remains traceable in the event that it becomes implicated in potential outbreak event. A transplant log is available on the CRD website or upon request. The Department reserves the right to request these documents if necessary.

Any movement of shellfish seed (< 1 inch for oysters or < ½ inch for clams) is considered a planting activity and is authorized under the Molluscan Shellfish Importation and Hatchery/Nursery Policies (VI, VII). Any shellstock harvested and graded in an upland facility that is not tagged with a dealer tag and refrigerated for sale, will be considered a plant back and must be documented on the original harvest tag as “PLANT BACKS” including the quantity.

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Appendix A: Shellfish Wild Harvest Checklist



COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

SHELLFISH WILD HARVEST CHECKLIST

- Obtain a Water Bottom for a Shellfish Harvest Area**
 - **State Intertidal water bottom**
 - Leases are advertised by CRD and awarded via a competitive bid process.
 - **Private Intertidal water bottom**
 - Must be inside an Approved Growing Area.
 - Applicant must prove valid ownership and/or lease contract.

Contacts: CRD (912)264-7218
For more information and view current leasing opportunities, visit:
<https://coastalgadnr.org/commercialshellfishharvest>
- Start GA Dept. of Agriculture Certification Process*** *You must be certified by the GADOA before harvesting any product from your Harvest Area**
GADOA Contact: Krissa Jones (404) 657-4801
For more information, visit: <http://www.agr.georgia.gov/seafood.aspx>
- Obtain CRD Commercial Fishing License with Shellfish Endorsement**
Contacts: CRD (912)264-7218
For more information, visit: <https://coastalgadnr.org/CommercialFishing>
- Obtain CRD Master Harvester Permit (MHP)**
Contacts: CRD (912)264-7218
An MHP application will be provided by the department once a valid Harvest Area has been identified.
- Submit a Cultch Deployment Form (CDF)**
Contacts: CRD (912)264-7218
For a digital copy of a CDF, visit: <https://coastalgadnr.org/commercialshellfishharvest>
- Obtain US Army Corps of Engineers Permit**
Contact: Skye Stockel (912)652-5690, Skye.H.Stockel@usace.army.mil
For more information, visit: <https://www.sas.usace.army.mil/Missions/Regulatory/Permitting/>

Before placing cultch in the waters of the state, all state and federal permits must be obtained

Appendix B: Shellfish Mariculture Checklist



COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

SHELLFISH MARICULTURE CHECKLIST

- Obtain a Water Bottom for a Shellfish Harvest Area**
 - **State Intertidal water bottom**
 - Leases are advertised by CRD and awarded via a competitive bid process.
 - **Private Intertidal water bottom**
 - Must be inside an Approved Growing Area.
 - Applicant must prove valid ownership and/or lease contract.
 - **Subtidal water bottom.**
 - Leases are advertised and offered via a lottery by CRD.
- For more information and view current leasing opportunities, visit
<https://coastalgadnr.org/commercialshellfishharvest>
- Start GA Dept. of Agriculture Certification Process**

You must be certified by the GADOA before harvesting product from your Harvest Area
GADOA Contact: Krissa Jones (404) 657-4801 For more information, visit:
<http://www.agr.georgia.gov/seafood.aspx>
 - Obtain CRD Commercial Fishing License with Shellfish Endorsement**

Contacts: CRD (912)264-7218 For more information, visit:
<https://coastalgadnr.org/CommercialFishing>
 - Obtain CRD Master Harvester Permit**

Contacts: CRD (912)264-7218
An MHP application will be provided by the department once an applicable Harvest Area has been identified.
 - Apply for Shellfish Mariculture Permit**

Contacts: CRD (912)264-7218 For a digital copy of an SMP, visit:
<https://coastalgadnr.org/commercialshellfishharvest>
 - Obtain US Army Corps of Engineers Permit**

Contact: Skye Stockel (912)652-5690, Skye.H.Stockel@usace.army.mil
For more information, visit: <https://www.sas.usace.army.mil/Missions/Regulatory/Permitting/>
 - Receive GA DNR Shellfish Mariculture Permit**

Before placing gear in the waters of the state, all State and Federal Permits must be obtained

Appendix C: Lottery Application Guidance Document



COASTAL RESOURCES DIVISION

ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

LOTTERY APPLICATION GUIDANCE

Georgia Code Reference: O.C.G.A 27-4-198 states that subtidal leases must be offered through a lottery devised and operated by the Department. Preference may be given to certified firms, lease holders and state residents.

Lottery Entry Requirements

The Department has established these minimum entry requirements for the lottery to ensure only applicants with adequate financial resources and no recent history of Game and Fish violations are considered. This framework also aims to provide subtidal mariculture opportunities to new participants.

An applicant cannot have any Game and Fish violations from any state within the preceding two years to be considered for the lottery. If the individual has any violations within the two-year period, they will not be eligible for the lottery until the violations exceed two years.

To maintain opportunities for potential lease holders, the Department prohibits applicants from reentering the lottery within three years of winning a subtidal lease. Additionally, the Department has set the maximum subtidal acreage that can be leased to any individual or entity at 30 acres of water bottoms within the State.

The Department, in conjunction with UGA Marine Extension's GA Oyster Crop Budget tool, has determined that the initial cost of establishing a subtidal mariculture farm will cost approximately \$70,000 in the first year. Proof of finances will be required to ensure that lottery winners possess the necessary funds to support farm development. Proof of finances must be provided using the following bank instruments:

- **Pre-Approval Letter:** A preapproval letter is a document from a financial institution stating that the institution is tentatively willing to lend an individual or a company, up to a certain loan amount.
- **Proof of Funds Letter (PoF):** A proof of funds is a document proving that an individual or a company has the financial ability to perform a transaction. The PoF can be issued by a Bank, a financial institution, or a trade finance.
- **Line of Credit:** A line of credit is a credit facility extended by a financial institution to an individual or a company that enables the customer to draw on the facility when the customer needs funds.

Priority Points

Priority points are established by the Department to identify the most qualified individuals with a higher likelihood of success, given the limited availability of opportunities. The following are the priority points that are considered for lottery applicants:

- **State Resident:** For purposes of this lottery, “resident” is defined as having continuous domicile within the state of Georgia for a minimum of three consecutive months immediately preceding participation in the lottery. Individuals may only claim residency in one state.
 - Accepted forms of proof of residency: Copy of Picture ID (choose one): Current GA Driver’s License or Georgia ID Card issued by Department of Driver Services (not including a GA Driver’s License or Georgia ID Card issued pursuant to O.C.G.A. §40- 5-21.1 - temporary license)
- **Certified Shellfish Shipper:** An individual or company that is listed on the FDA Interstate Certified Shellfish Shippers List
 - Accepted forms of proof: Copy of Current Certification
- **Existing Shellfish Lease Holder:** An individual or company that currently holds exclusive rights to a Molluscan shellfish harvest area in any state.
 - Accepted forms of proof: Contracts or Permits from a State Issuing Authority
- **Shellfish Experience:** Time spent working with Molluscan shellfish in a commercial capacity.
 - Accepted forms of proof: Landing Records, Shipment Records, Receiving Records, Employment history with references, Lease Contracts, Dept. of Agriculture Certification, and Records of retail sales.

Applying as an Entity

For the purposes of this lottery application process, individuals are permitted to enter the lottery for a subtidal shellfish mariculture lease as a firm, partnership, corporation, association, LLC, or any other entity. The applying entity must provide all the required information in the lottery application for each partner within the entity, as well as the entity's binding agreement. If any partner has received any Game and Fish violation from any state within two years prior to the lottery, the entity will not be considered for the lottery.

If any partner has been granted a subtidal mariculture lease within three years of the lottery application deadline, the entity shall be disqualified from consideration in the current lottery. Additionally, if the total acreage leased by the entity equals or surpasses the maximum allowable limit of 30 acres of subtidal water bottoms within the state, the entity will not be eligible for participation in the lottery. The entity is permitted to combine the bank instruments of every stakeholder to demonstrate the entity’s financial capacity for lottery entry.

Priority points shall be granted to the entity if any of the partners meet the criteria for earning such points. The entity will receive a single (1) priority point, even if multiple partners fulfill the criteria for that specific priority point. "The Department will assign priority point(s) for shellfish

experience to the entity based on the partner with the highest level of shellfish experience. Cumulative shellfish experience from multiple partners of the entity will not be considered.

Lottery Selection Process

Applicants will be categorized into tiers according to their priority points. Random selection will be used to determine winners from applicants within the highest tier of priority points, proceeding to lower tiers until all leases have been allocated. Winners will only be chosen from the highest remaining priority point tier until all leases have been awarded. Winners will be offered leases in the order determined by the lottery.

- Example: There are 7 leases and 10 applicants. 2 applicants have the maximum allotment of points (6), 2 applicants have 5 points, 2 applicants have 4 points, and 4 applicants have 1 point. Applicants with the same number of points will be pooled together. The applicants with 6 points will be selected from first until no applicants are left, followed by applicants with 5 points, then 4 points. An applicant with 1 point will be selected at random for the last available lease.

For any questions about the lottery application or process, please contact the Department at (912) 264-721

Appendix D: Cultch Deployment Log

Georgia Department of
Natural Resources

Cultch Deployment Log



Master Harvester:

Appendix E: Shellfish Transplant Log

Georgia Department of
Natural Resources

Cultch Deployment Log



Master Harvester:
