#### **Division of Aquaculture**

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# Shellfish Aquaculture

FDACS-P-01758 Technical Bulletin #06 - June 2020

#### Overview:



Statutory Authority and Federal Permits Lease Application Process Lease Site Suitability Requirements Lease Administration Frequently Asked Questions

Safeguarding the public and supporting Florida's agricultural economy.

This publication is meant to provide a basic overview of the leasing process and operating requirements of a shellfish aquaculture lease. Refer to the variety of fact sheets referenced throughout for more detailed information about specific topics.

#### Important Resources

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#### <u>Aquaculture Certificate of</u> <u>Registration</u>

Certification and annual renewal is required for all shellfish farmers.

- ◆ <u>Aquaculture Best Management</u> <u>Practices Manual</u> Rule manual for shellfish aquaculture activities, including docks, upland facilities and leases.
- <u>Shellfish Aquaculture Lease</u> <u>Management</u> Guide to lease site management and harvesting sales requirements for aquaculture
- Shellfish Harvesting Area and Aquaculture Lease Maps

Interactive map of all harvesting areas, lease and processing facilities in Florida.

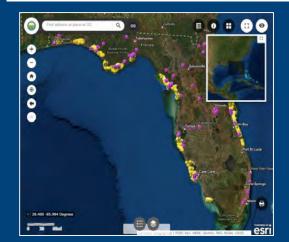


Marine aquaculture is an environmentally-sustainable commercial activity that fosters jobs and income for working waterfront communities. The Florida legislature has declared that marine aquaculture is in the public interest because of the benefits it provides, such as food production, economic activity and environmental quality. To promote marine aquaculture production on state submerged lands, the Florida Department of Agriculture and Consumer Services (FDACS), Division of Aquaculture facilitates the application, review and approval process for leasing sovereignty submerged lands and water column for the culture of native marine organisms.

This publication is meant to provide an overview of Florida's aquaculture leasing process for potential applicants seeking authorization to use state-owned submerged lands for aquaculture commodities, such as the culture of marine shellfish (clams, oysters or scallops), food, bait or ornamental fish, crustaceans (shrimp, lobster or crabs) and live rock. In all instances, only native species can be cultured in Florida waters. This information is intended to help an applicant understand the laws, rules and policies guiding Florida's aquaculture leasing program and to assist in successfully completing the aquaculture lease application process.

## **Statutory Authority**

<u>State Lands, Chapter 253, Florida Statutes (F.S.)</u>, provides the authority and conditions for leasing sovereignty submerged lands and the water column for the purpose of aquaculture. Subject to the limitations contained in sections 253.67-253.75, F.S., the Board of Trustees of the Internal Improvement Trust Fund may lease submerged lands to which it has title for



An <u>interactive map</u> of locations and information about all aquaculture leases, shellfish harvesting areas and processing facilities can be found on the Division homepage.

aquaculture activities and grant use of the bottom and the water column. The Florida Aquaculture Policy Act, Chapter 597, F.S., provides the authority to FDACS to accept applications to lease sovereignty submerged lands, determine lease locations and sizes, execute lease agreements, collect rent, fees and surcharges, establish cultivation requirements, manage lease transfers and cancellations and require commercial aquaculturists to acquire an annual Aquaculture Certificate of Registration and implement Best Management Practices (BMPs) on their leases. Aquaculture BMPs, Chapter 5L-3, Florida Administrative Code (F.A.C.), describes the annual certification requirement and the BMPs.

Florida Department of Agriculture and Consumer Services

## *About the Division of Aquaculture*

As described in the Florida Aquaculture Policy Act, Chapter 597, F.S., FDACS is the primary agency responsible for regulating aquaculture and is responsible for enhancing the growth of aquaculture in Florida while protecting the environment. In 1999, the Florida Legislature amended Chapter 597, F.S., to create the Division of Aquaculture within FDACS. The Division conducts numerous activities to promote the development of aquaculture, including regulatory and technical assistance functions to ensure aquaculture operations are compatible with the Aquaculture Certificate of **Registration BMP program and** natural resource and public health protection.

The Division is also responsible for administering and managing aquaculture submerged land leases throughout the state, now encompassing more than 700 aquaculture leases over about 2,600 acres. In response to local government requests, multiple and individual lease applications, the Division assesses tracts of submerged lands throughout the state that are suitable for aquaculture. Currently, there are aquaculture leases located in 19 coastal counties and 24 Aquaculture Use Zones located in 10 coastal counties.





Clams are farmed on bottom leases in nylon mesh bags aligned in rows (Above). Live rock is lowered onto water column lease sites via a wench (Below).





Oyster farms require the full use of the water column for floating or suspended culture gear.

## *Aquaculture on State-Owned Submerged Lands*

Aquaculture activities on sovereignty submerged lands currently consists of growing shellfish and live rock. Producing shellfish (clams and oysters) on submerged lands is the largest marine aquaculture business in Florida. The latest data from the National Agricultural Statistics Service indicated farm-gate value of \$15.5 million for shellfish in 2018. Live rock is the term used to describe porous, calcareous rock, colonized over time with sessile marine organisms (corals, anemones, sea fans, algae, etc.), which is sold as a marine aquarium product. Live rock farm-gate value was \$373,000 in 2012. Marine aquaculture production is different from many other agricultural activities in that cultivation usually requires the use of public lands that are held in a trust by the state of Florida.

## Federal Permitting

#### **U.S. Army Corps of Engineers**

Section 10 of the Rivers and Harbors Act authorizes the U.S. Army Corps of Engineers (USACE) to issue permits regulating the discharge of dredge or fill material. The USACE has issued a statewide programmatic general permit (SAJ-99) to FDACS. The SAJ-99 permit authorizes activities associated with the culture of marine shellfish and live rock in Florida waters. The permit encompasses the Department's activities and authorizes the activities of Florida shellfish (clam, oyster, and mussel) and live rock farmers when they are in compliance with the sovereignty submerged lands lease agreement and the Aquaculture Best Management Practices. The programmatic general permit covers the majority of the leaseholders in Florida, thus eliminating the need to apply for individual permits.

Applicants interested in culturing different species, using production equipment different from that covered by the programmatic general permit or proposing a lease in endangered species critical habitat may need to apply for an individual permit from USACE. Contact the Division for more information about the individual permit application process.

#### **U.S. Environmental Protection Agency**

The U.S. Environmental Protection Agency derives its authority for issuing a permit for marine aquaculture in Florida waters from Section 404 of the Clean Water Act. Their regulations are focused on concentrated aquatic animal production facilities that discharge wastewater directly to waters of the United States. Aquaculturists interested in growing marine animals such as fish or shrimp in net pens with an annual production that exceeds 100,000 pounds must acquire a National Pollution Discharge Elimination System (NPDES) permit. Contact the Division about this permit process.



US Army Corps of Engineers ®



#### Florida Department of Agriculture and Consumer Services

#### U.S. Coast Guard

The design and location of a marine aquaculture production facilities may pose a navigational hazard to boaters. The U.S. Coast Guard communicates the potential hazard to the boating public through a notice to mariners, and coastal navigation charts are amended to depict the hazard. The marks used by aquaculturists are called Private Aids to Navigation (PATON) and may consist of buoys, signage or lights established and maintained by the lessee after configuration and installation is approved by the U.S. Coast Guard. Contact the Division



for additional information about PATONs and the U.S. Coast Guard application process. Example graphics of lease markers can be found on the <u>Aquaculture Lease Marker</u> Examples fact sheet.

## Lease Application Process

Section 253.69, F.S., requires that any individual or company wishing to conduct aquaculture activities on sovereignty submerged lands file a written application that contains the following information:

- (1) The name and address of the applicant, including how the lease should be titled (i.e. company name, personal name, etc.);
- (2) A description of the location and amount of submerged lands desired;
- (3) A description of the proposed aquaculture activity; and
- (4) Other information required pursuant to <u>Rule Chapter 18-21.021, F.A.C.</u>

Aquaculture lease application guidelines have been developed pursuant to Section 253.68, F.S., to assist applicants. These guidelines are summarized below and are provided as part of the lease application package.

**To download a lease application**, visit the <u>Aquaculture Submerged Land</u> <u>Leasing webpage or contact Aquaculture\_Web@FDACS.gov.</u>

#### Site Selection

Applicants may apply for any vacant lease in an existing Aquaculture Use Zone (AUZ) or individual sites. If you would like to nominate a new lease site, please review the new site nomination information in the column on the right and the process detailed on <u>pages 4-5</u>.

**For location and availability information for existing leases**, please visit the <u>Aquaculture Submerged Land Leasing</u> page or view available sites on the Division's interactive <u>Shellfish Harvesting Area and Aquaculture Lease Map</u>.

#### Description of Proposed Activity

The applicant must describe the proposed aquaculture activity in sufficient detail to allow staff to evaluate the application and determine the suitability of the proposed site for the proposed aquaculture activity. The applicant should provide scaled drawing of facilities, structures and culture units to describe the planting and production plans and the harvest method that will be used.

#### **Completed Applications**

Once an application is received and reviewed, the applicant will be informed of the status of the application and if additional information is required. Failure by the applicant to respond to information requests within a timely manner will cause the application to be deactivated and the application fee to be refunded.

## *Nomination of a New Lease Site*

All new lease site nominations trigger a review and approval process by the Board of Trustees of the Internal Improvement Trust Fund, which consists of the Governor, Commissioner of Agriculture, Attorney General and Chief Financial Officer. The Division administrates this review and approval process for each lease applicant. The first step in the process is nomination of a new lease site.

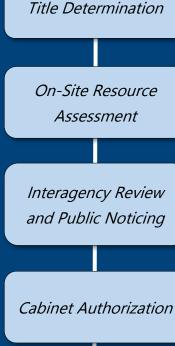
## Required information for new sites includes:

- ⇒ A map (U.S. Geological Survey topographic map or a navigation chart).
- ⇒ The latitude and longitude coordinates, in decimal degrees, of boundary corners.
- ⇒ A statement describing the general site characteristics (water depth, bottom type, submerged resources, current recreational and commercial use, etc.).
- ⇒ A map sketch of all existing structures and resources (navigation channels, docks, reefs, shorelines).
- ⇒ An explanation of any changes to the area that would result from the proposed aquaculture activity.

Following nomination of a site, submission of a complete application and application review by the Division, the Division will move forward with the rest of the new lease approval process. See the next page for more details on this process.

### *Lease Issuance Process From Start to Finish*

Lease Application Received



Professional Site Survey Conducted

*Lease Documents and Aquaculture Certificate of Registration* 

Lease Executed



## *Coordinated Aquaculture Lease Issuance Process*

Note: The process outlined below and in the box to the left is for a new aquaculture parcel or activity. Completed applications for an existing parcel proceed directly to Lease Documents and Aquaculture Certification of Registration step. The timeline for submitting a completed application for a new lease site to receiving that lease is typically six months, but can vary depending on a variety of factors.

#### Title Determination

Once a completed lease application has been submitted, reviewed and approved, Division staff will request a title determination for the site from the Florida Department of Environmental Protection (DEP). If the site is state owned and has no deed encumbrances, a resource assessment will then be scheduled.

#### Site Inspection and Resource Assessment

Division staff will visit the proposed site, preferably with the applicant, to determine whether or not the site is appropriate for leasing. In cases where the proposed site is located in a research reserve, aquatic preserve or sanctuary, staff will request participation from the appropriate entities responsible for managing the aquatic area. Resource assessments provide information about the environment and help determine the suitability of the proposed location and the proposed activity from a resource management perspective. See the next page for detailed information about lease site suitability requirements. The Division may recommend modifications to the proposed lease boundaries and/or recommend special lease conditions to minimize or eliminate potential harmful environmental impacts or to reduce conflicts with area users and residents.

#### Interagency Review and Public Noticing

Once the resource assessment is approved and all of the required information has been received by the Division, including a \$200 application fee, an agency review package is compiled and sent to various entities for review, including DEP, the Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of State and the local Board of County Commissioners. At the same time, the Division will notify riparian property owners who reside within 500 feet of the proposed lease site and notice the site in a local newspaper. If substantial objections are received, particularly from affected upland property owners, a public meeting may be scheduled in the area.

#### Cabinet Authorization

All newly proposed areas of state-owned submerged lands must be approved by the Governor and Cabinet in their role as the Board of Trustees of the Internal Improvement Trust Fund (BOT). The Division will prepare the agenda item and coordinate scheduling the item for consideration with the Office of Cabinet Affairs. Once the item is scheduled and heard at a Cabinet meeting, the BOT will then vote to approve or deny the new lease site as presented, or they may decide to place specific terms and conditions in the lease instrument.

#### Professional Site Survey

Following BOT approval, the leaseholder must provide FDACS with two copies of a survey that meets minimum technical standards and is prepared by a licensed surveyor. Division staff will then review the submitted survey for completeness before final approval or denial.

#### Lease Documents, Aquaculture Certification of Registration and Lease Execution

Once the site survey is complete, the leaseholder can apply for an Aquaculture Certificate of Registration and sign, before a notary, the prepared lease documents. The leaseholder must agree to comply with the terms and conditions of their aquaculture lease including payment of lease fees, marking the lease, performing effective cultivation, providing the required production information, maintaining an active Aquaculture Certificate of Registration (renewed annually) and following all applicable Best Management Practices. Review the <u>Shellfish Aquaculture Lease Management</u> technical bulletin for more details about shellfish lease requirements.

#### Florida Department of Agriculture and Consumer Services

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## Lease Site Suitability

#### Public Health

Shellfish harvesting and processing are subject to the requirements of the National Shellfish Sanitation Program in order to ensure product quality and protect public health. Shellfish produced in aquaculture operations follow the same stringent regulations. Because poor water quality and potential presence of bacteria represents a valid concern for aquaculture development, leases must be located in waters classified as Approved or Conditionally Approved Shellfish Harvesting Areas.

Maps showing the classification of shellfish harvesting areas are available on the Division's website: <a href="http://www.FDACS.gov/Agriculture-Industry/Aquaculture/Shellfish/Shellfish-Harvesting-Area-Classification/Shellfish-Harvesting-Area-Maps">www.FDACS.gov/Agriculture-Industry/Aquaculture/Shellfish-Harvesting-Area-Classification/Shellfish-Harvesting-Area-Maps</a>

#### Natural Resource Management

Efforts to protect or conserve marine animals, plants and their essential habitat represent a comprehensive approach, including: 1) evaluating environmental and ecological factors that may be affected by aquaculture activities and 2) implementing lease configurations and production practices to mitigate any potential negative impacts. Proposed lease boundaries may be modified to establish a buffer to protect or conserve natural resources or reduce public exclusion from significant harvestable resources.

#### Seagrasses, Live Bottom and Shellfish

The Division will conduct a resource assessment during the lease site evaluation process. The delineation and protection of seagrasses, live bottom (coral or rock reef) and shellfish reefs or beds are important elements in the evaluation of potential lease sites. **Proposed leases cannot contain seagrasses, live bottoms or harvestable shellfish resources**, and activities associated with marine aquaculture must not adversely affect marine resources. When a proposed site is located within a research reserve, aquatic preserve or sanctuary, staff from the appropriate managing agency are asked to participate in the resource assessment in order to assist in the evaluation of the potential lease site location and management in the area under consideration.

#### **Endangered Species**

Generally, the Division encourages applicants to propose lease sites outside of manatee protection and manatee speed zones. A USACE individual permit may be required for lease sites that occur within the critical habitat of Gulf sturgeon, smalltooth sawfish or other endangered species.

Other mitigation steps are required to protect threatened or endangered species and critical habitat, such as the **Standard Manatee Conditions for In-Water Work**, available at: <u>SAJ.USACE.army.mil/Portals/44/Docs/Regulatory/Sourcebook/</u> Endangered Species/Manatee/2011\_StandardConditionsForIn-WaterWork.pdf and the **Sea Turtle and Smalltooth Sawfish Construction Conditions**, available at: <u>SAJ.USACE.army.mil/Portals/44/Docs/Regulatory/Sourcebook/</u> Endangered Species/Sea Turtles/InwaterWorkSeaTurtle032306.pdf.

#### **Commercial Production Potential**

Division staff conduct a general review of proposed new lease sites to determine suitability for the marine aquaculture activities described by the applicant. Sites will be examined from an environmental perspective, including bottom characteristics and water depth. Biological, geological and chemical conditions are dynamic and subject to short- and long-term changes. These changes may only become evident after years of experience at any particular site. Sites will also be examined for potential use conflicts such as riparian rights issues, zoning and other local ordinances, accessibility, aesthetics, navigation and public safety.









From top to bottom: Shellfish harvesting area classification map: Seagrass bed; Manatees; Staff inspecting shellfish for appropriate temperatures

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#### *Advantages of Aquaculture Use Zones*

Aquaculture Use Zones (AUZs) are pre-sited blocks of leases (~1-2 acres each) that are arranged in a highdensity row and column pattern. Most leases in the state exist in an AUZ due to their many advantages.

AUZs are preferred over individual parcels for the following reasons:

1.Facilitates resource assessments
2.Reduces survey costs
3.Reduces potential negative environmental impacts
4.Reduces potential user conflicts
5.Encourages compliance with regulatory policy
6.Facilitates law enforcement

## University of Florida Resources

UF/IFAS Shellfish Extension has a huge variety of Florida specific shellfish aquaculture information, publications and videos available on their webpage: <u>Shellfish.IFAS.UFL.edu/</u>

You can also contact UF/ IFAS Shellfish Extension at (352) 543-5057 for shellfish production technical assistance.



## Administration of Aquaculture Leases

#### Annual Lease Fees

Aquaculture lease fees are assessed annually based on the number of acres leased and the lease type. Lease fees are subject to annual adjustment by the Board of Trustees based on the Consumer Price Index established for the previous five years. Current bottom lease fees are \$16.73 per acre and fraction thereof, plus a \$10.00 surcharge per acre and fraction thereof. Water column lease fees are \$33.46 per acre and fraction thereof, plus a \$10.00 surcharge per acre and fraction thereof. Bayment is due on January 1 of each year, and annual billing statements are mailed to each leaseholder approximately 60 days before the due date.

#### Effective Cultivation

Effective cultivation is required to be performed on all aquaculture leases, including fractional acreage. In January of each year, aquaculture leaseholders are required to complete an audit report detailing planting and harvesting activities on each lease and provide copies of all seedstock receipts. This allows staff to verify whether or not each leaseholder satisfies minimum cultivation requirements. Effective cultivation for clams requires planting a minimum of 100,000 seed clams per acre, per year; oysters require planting a minimum of 70,000 seed oysters per acre, per year. In addition, Division staff perform annual onsite inspections to verify marking and production structures are in compliance with the terms and conditions of the lease agreement.

## Frequently Asked Questions

#### Q: How do I apply for an aquaculture lease?

A: You may apply for an aquaculture lease by completing a lease application form. The lease application form can be downloaded at: <u>Forms.FDACS.gov/15102.pdf</u>.

#### Q: What options are available to obtain a lease?

A: Applicants should contact the Division to determine if unencumbered submerged lands lease parcels are available in their area. Refer to the Aquaculture Use Zone parcel availability maps at <u>www.FDACS.gov/Agriculture-Industry/Aquaculture/Aquaculture-Submerged-Land-Leasing</u>. Existing leases may be transferred or subleased depending on the terms and conditions of the lease agreement. Applicants may also nominate new submerged lands as potential aquaculture leases (refer to pages 4-5).

#### Q: How long does it take to get a lease?

A: Applications for existing parcels can be processed within a few weeks. Applications for new parcels triggering the agenda process can take more than six months to obtain Board of Trustees approval. However, if substantial environmental or local issues arise during the lease application review process, the application may take longer to complete.

## Q: What permits or licenses are required in order to manage and operate an aquaculture lease site?

A: You are required to obtain an Aquaculture Certificate of Registration (AQ Certificate) from the Division before execution of a submerged lands aquaculture lease agreement. The application is available at <u>Forms.FDACS.gov/15106.pdf</u> and requires an annual payment of \$100. The AQ Certificate is the only form of authorization that you need to possess seedstock, plant seed on your lease and harvest aquacultured product on the lease site. The AQ Certificate expires on June 30 of each year, and failure to renew will result in cancellation of a submerged lands aquaculture lease.

An application or renewal for an AQ Certificate that includes shellfish as a product will not be processed without a valid copy of your Annual Certificate of Harvester Education Training. See the <u>Aquaculture Certificate of Registration</u> fact sheet for more information. If your proposed gear or activities are not covered by the Department's general programmatic permit <u>(see page 2)</u>, you will need to apply for an individual USACE permit.

Florida Department of Agriculture and Consumer Services