RULE 5L-3

AQUACULTURE BEST MANAGEMENT PRACTICES

July 2000

Prepared by the Florida Department of Agriculture and Consumer Services
BOB CRAWFORD, Commissioner

Division of Aquaculture
1203 Governor's Square Boulevard, 5th Floor
Tallahassee, Florida 32301
www.FloridaAquaculture.com

CHAPTER 5L - AQUACULTURE BEST MANAGEMENT PRACTICES

5L-3.001 Purpose.

This rule establishes application procedures and best management practices, as provided by Chapter 597, Florida Statutes, to be followed by aquaculture producers in order to obtain an aquaculture certificate of registration from the Florida Department of Agriculture and Consumer Services.

Specific Authority 570.07(23), 597.004(2)(b) FS. Law Implemented 597.002, 597.003(1)(a)(j), 597.004(2) FS. History - New 10-04-00.

5L-3.002 Definitions.

Definitions used in Rule 5L-3, F.A.C.

(1) “Department” means the Florida Department of Agriculture and Consumer Services.

(2) “Individual Production Unit” means any pond, tank, raceway, marine net pen, or integrated aquacultural system constructed and maintained in accordance with Aquaculture Best Management Practices wherein aquatic species are cultured.

Specific Authority 403.0885(5) FS. Law Implemented 570.07(23), 597.002, 597.003(1)(a)(j), 597.004(2) FS. History -- New 10-4-00.

5L-3.003 Requirement for an Aquaculture Certificate of Registration.

All aquaculture producers shall have an aquaculture certificate of registration from the Department and apply the best management practices identified in this rule. The aquaculture certificate of registration shall have a duration as specified in Section 597.004(6), F.S., unless suspended or revoked by the Department for failure to comply with Section 597.004, F.S. and Section 597.0041(1), F.S.

Specific Authority 570.07(23), 597.004(2)(b) FS. Law Implemented 597.003, 597.004, 597.0041 FS. History -- New 10-4-00.

5L-3.004 Aquaculture Best Management Practices Manual.

(1) The Best Management Practices manual used by the Department under Rule 5L-3, F.A.C., is adopted and incorporated by reference in this section. The manual is listed below by subject title and date. Copies of the manual may be obtained by contacting the Department.

(2) Aquaculture Best Management Practices Manual, July 2000.

Specific Authority 570.07(23), 595.004(2)(b) FS. Law Implemented 597.003, 597.004 FS. History New 10-4-00.

5L-3.005 Aquaculture Certificate of Registration.

(1) Any person engaging in aquaculture must be certified by the department. The applicant for a certificate of registration shall submit the following to the department:

(a) Applicant's name/title.
(b) Company name.
(c) Complete mailing address.
(d) Legal property description of all aquaculture facilities.
(e) Actual physical street address for each aquaculture facility.
(f) Description of production facilities.
(g) Aquaculture products to be produced.
(h) Fifty dollar annual registration fee.

(2) The Department shall issue an aquaculture certificate of registration when an applicant:

(a) Has submitted the required information pursuant to Section 597.004(1), F.S.;
(b) Signs a statement of intent to comply with the BMPs in Rule 5L-3.003, F.A.C.; and
(c) Pays the appropriate fee to the Department.

Specific Authority 570.07(23), 597.004(2) FS. Law Implemented 597.003(1)(a), 597.004 FS. History New 10-4-00.

5L-3.006 Minimal Impact Aquaculture Facilities.

(1) When determined by the Division of Aquaculture's evaluation of facility design and on site inspections, the following individual production units are deemed to have minimal impacts on water resources and are not required to follow the effluent treatment BMPs in Rule 5L-3.004, F.A.C. All other applicable Rule 5L-3.004, F.A.C., BMPs must be followed.

(a) Recirculation systems that do not discharge to waters of the state.

(b) A floating native marine bivalve culture system which does not use feed or fertilizer inputs.

(c) Raceway or down-weller systems for native marine bivalves that utilize less than 800 square feet of raceways or down-wellers, and do not add supplemental algae as a food source.

(d) Fee fishing operations with a standing crop of less than 1000 pounds of fish per acre.

(e) Individual production units producing less than 10,000 pounds of product per year that minimize the release of sediments off site by using an on site ditch system with a minimum 100 linear feet of ditch between production water entry point and the discharge point and 1 foot of free board at the discharge point control structure.

(f) Aquaculture systems that do not discharge production unit water to surface waters of the state.

(2) Aquaculture facilities which do not qualify as minimal impact aquaculture facilities are required to follow all applicable BMPs in Rule 5L-3.004 F.A.C., in order to be certified.

Specific Authority 570.07(23), 597.004(2)(b) FS. Law Implemented 597.002, 597.003(1)(a),(j), 597.004 FS. History New 10-4-00.

5L-3.007 Failure to Comply With the Best Management Practices.

If any aquaculture producer fails to comply with the best management practices required for certification, the Department shall take action consistent with its authority to assure proper implementation and compliance with Section 597.0041, F.S. Any person who violates any provision of Chapter 597, F.S. or Rule 5L-3 F.A.C., commits a misdemeanor of the first degree, and is subject to a suspension or revocation of his or her certificate of registration. The Department may, in lieu of, or in addition to the suspension or revocation, impose on the violator an administrative fine in an amount not to exceed $1,000 per violation per day.

(1) First time offenders will receive written notice of the BMP deficiencies and given 60 days to comply.

(2) Operators not in compliance with BMPs after 60 days will be fined $100 - $500 per day per occurrence depending upon the type of violation and circumstances contributing to the violation.

(3) Second time violators will be fined $500 - $750 per day per occurrence depending upon the type of violation and circumstances contributing to the violation.

(4) Third time violators will be fined $750 - $1,000 per day per occurrence depending upon the type of violation and circumstances contributing to the violation.

(5) Continued failure to comply will result in the suspension/revocation of the producer's aquaculture certificate and an administrative fine of $1,000 per day per occurrence until compliance is obtained.

(6) Repeat offenders will be subject to suspension/revocation of the producers aquaculture certificate and an administrative fine of $1,000 per day per occurrence until compliance is obtained and the department will request that legal measures be initiated to impose misdemeanor charges.

(7) Any person failing to meet the BMPs and/or refusing to implement the BMPs must obtain all necessary permits/authorizations required by the Department of Environmental Protection, Water Management District, Florida Fish and Wildlife Conservation Commission and any other appropriate regulatory authority.

Specific Authority 597.07(23), 597.004(2)(b) FS. Law Implemented 597.004, 597.0041 FS. History New 10-04-00 .

AQUACULTURE BEST MANAGEMENT PRACTICES MANUAL

July 2000

Prepared by the Florida Department of Agriculture and Consumer Services
BOB CRAWFORD, Commissioner

Division of Aquaculture
1203 Governor's Square Boulevard, 5th Floor
Tallahassee, Florida 32301
www.FloridaAquaculture.com

TABLE OF CONTENTS

I. INTRODUCTION

The Florida Aquaculture industry has a vested interest in protecting and managing environmental resources. This responsibility lies with each aquatic farmer. This manual establishes the Best Management Practices (BMPs) for Aquaculture facilities in Florida. By legislative mandate, the BMPs in this manual are intended to preserve environmental integrity while eliminating cumbersome, duplicative and confusing environmental permitting and licensing requirements. Aquaculturists following these practices meet the minimum standards necessary for protecting and maintaining offsite water quality and wildlife habitat. These practices represent a mutually beneficial relationship between commercial Aquaculture production and natural resource protection. These BMPs were developed specifically for Florida Aquaculture and are to be applied at all certified Aquaculture operations. As part of the annual Aquaculture certification process, you, the Florida Aquaculturist, have pledged your intention to implement these practices as part of the ongoing daily management practices at your facility.

The BMPs enumerated in this manual do not supersede other applicable federal authorities nor resource collection authorizations. Therefore, Aquaculture facility operators need to be aware of the pertinent environmental regulations that affect navigability, wetland dredge and fill, and/or endangered species issues. Collection of broodstock for aquacultural purposes must obtain permission from the Florida Fish and Wildlife Conservation Commission. Furthermore, operators need to recognize that there also exist other federal and local regulations (not specifically underscored here) which relate to solid and hazardous waste disposal, worker safety and building and zoning considerations.

Specific aquatic species omitted from these BMPs were not intentional. Rather, they are covered under the broad generic categories applicable to all of Florida's Aquaculture. All certified aquaculturists are required to follow the BMPs in Chapters II through X. Those few species specifically identified have unique circumstances requiring more specific management practices mitigating the potential for environmental impacts. For a complete list of BMPs required for your aquatic species, see the Appendix on page 36.

For additional information about these Aquaculture BMPs, general Aquaculture information or assistance in clarifying requirements specific to your Aquaculture operation, please contact the Florida Department of Agriculture and Consumer Services, Division of Aquaculture at 1203 Governor's Square Boulevard, Fifth Floor, Tallahassee, Florida 32301, phone 850/488-4033.

II. FEDERAL PERMITTING

WETLANDS PROTECTION PROGRAMS

The United States Army Corps of Engineers (ACOE) regulatory program is one of the oldest in the Federal Government and includes the Rivers and Harbors Act of 1890 which establishes permit requirements to prevent unauthorized obstruction or alteration of any navigable water of the United States. This navigable water's jurisdiction, also known as the territorial waters or the Exclusive Economic Zone (EEZ), includes all ocean waters three nautical miles to 200 nautical miles from the east coast and nine nautical miles to 200 nautical miles on the west coast. Section 10 of this act covers construction, excavation, or deposition of materials in, over, or under such waters which could affect the course, location, condition, or capacity of those waters. Section 9 of this act routinely applies to dams and dikes.

The Federal Water Pollution Control Act as amended in 1977 and commonly referred to as the Clean Water Act (CWA), includes section 404 authorizing the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into waters of the United States. Section 404 jurisdiction is defined as "encompassing the territorial seas plus their tributaries, adjacent wetlands, and isolated waters where the use, degradation or destruction of such waters could affect interstate or foreign commerce." While the ACOE acts as the lead permitting agency, the Environmental Protection Agency has veto powers and may invoke this authority at any time

The basic form of authorization used by the ACOE is the Individual Permit. Another form of authorization is the General Permit which typically covers activities the ACOE has identified as substantially similar in nature and causing only minimal environmental impacts. Nationwide General Permits may be applicable to some aquaculturists contemplating activities in the defined waters.

The Coastal Zone Management Act of 1972 (Section 307) requires applicants to certify that projects are in compliance with an approved State Coastal Zone Management Program and that the State concurs with the applicant's certification prior to issuance of an ACOE permit. Pursuant to Chapter 380, Florida Statutes, Coastal Zone means "an area of land and water from the territorial limits to the most inland extent of marine influences." The Florida Department of Environmental Protection considers Florida's coastal zone to be the geographical area encompassed by 35 Florida coastal counties listed in the Final Environmental Impact Statement for the Florida Coastal Management Program. Moreover, an aquaculturist proposing works in these waters or any state sovereign lands would also be required to obtain a state sovereign land's authorization and are required to contact the FDACS Division of Aquaculture before commencing activities.

The federal definition for agriculture does not include Aquaculture. Therefore, regarding wetlands protection, the ACOE is the lead agency. As such, many of the conventions developed by the NRCS pursuant to the Food Security Act (Swamp buster provisions) do not apply; thus, wetland determinations (i.e., prior converted) should not be taken for granted and you should receive all Corps approvals/permits before construction activities commence. **IF THERE IS ANY DOUBT WHETHER THE PROPOSED ACTIVITIES WILL IMPACT WETLANDS,** contact either the FDACS, Water Management Districts or ACOE for assistance.

III. CONSTRUCTION

EROSION CONTROL GUIDELINES

During the construction phase of your project, care must be taken to prevent or control erosion and sediment deposition and potential adverse effects downstream from your facility. Sediment loads to aquatic environments can block waterways, kill aquatic plants and reduce oxygen levels. Sediments from stormwater runoff may also be associated with the transport of unwanted chemicals and nutrients to aquatic environments. **Be sure to obtain all necessary construction and zoning permits before site clearing and construction commence.**

Note: Pursuant to section 604.50, Florida Statutes, any nonresidential farm building located on a farm is exempt from the Florida Building Code and any county or municipal building code. This does not supersede requirements of local Comprehensive Plans and/or local zoning codes.

Best Management Practices:

- Select a site where the natural drainage patterns can be incorporated into the facility design to move water more effectively.

- Use *swales* and/or *berms* to direct surface water flow through, or around your property in order to maintain natural drainage patterns. Criteria for these and other surface water control techniques can be obtained from the local Natural Resources Conservation Service (NRCS) office.

- Stabilize exposed soils to prevent erosion and use silt barriers around wetlands to prevent inadvertent filling by sedimentation.

- Use recommended methods to reduce surface water velocity in order to prevent erosion, and to promote the removal of suspended solids. These methods are described in the *Erosion Control* manual available from the Florida Department of Environmental Protection. Phone 850/488-0130.

IV. COMPLIANCE MONITORING

The Best Management Practices (BMPs) in this manual are intended for implementation by all holders of Aquaculture certificates of registration. Anyone conducting aquacultural activities not in compliance with this manual and/or not certified by the FDACS is in violation of Florida Law, and is subject to the penalties described below and required to obtain any and all permits required by the appropriate state regulatory agencies (i.e., FDEP, WMD, FWC).

Under the law, certified aquaculturists complying with the BMPs described in this manual are absolved from costs for evaluation, assessment, and/or remediation of contamination of groundwater or surface water determined to be a result of aquacultural practices. As referenced in Chapter 597, Florida Statutes, the Florida Aquaculture Policy Act, states: **Notwithstanding any provision of law, the Department of Environmental Protection is not authorized to institute proceedings against any holder of an Aquaculture Certificate of Registration to recover any costs or damages associated with contamination of groundwater or surface water, or the evaluation, assessment, or remediation of contamination of groundwater or surface water, including sampling, analysis, and restoration of potable water supplies, where the contamination of groundwater or surface water is determined to be the result of aquaculture practices. In addition, there is a presumption of compliance with state groundwater and surface water standards if the holder of an Aquaculture Certificate of Registration implements the BMPs described in this Manual.**

Pursuant to Chapter 597, Florida Statutes, certified aquaculturists must fully implement all applicable BMPs described in this manual. The BMPs must be implemented immediately by the holder of an Aquaculture certificate of registration and followed for the term of the certificate. As such, FDACS authorized representatives will periodically visit the site to inspect the facility and records as required herein.

In order to remain in good standing with the Department's Aquaculture Certification Program, the following compliance requirements are minimum expectations and should be fully understood and adhered to:

<u>COMPLIANCE REQUIREMENTS</u>

- All applicable BMPs must be implemented immediately and followed for the full term of the certificate.

- Upon signature and submission of an application for Aquaculture Certification, the applicant has filed a notice of intent that he or she will comply with the BMPs described in this manual.

- Representatives of the Department will periodically conduct a physical inspection of the farm and a review of records (where required), to ascertain compliance with Best Management Practices.

INSPECTION PROTOCOL

- The Department will conduct on site inspections and reinspections as needed.

- The certified facility must maintain and provide access to copies of pertinent records as required by subsequent sections in this manual.

If the certified facility is unable to comply with BMPs, the FDACS will direct the aquaculture farmer to the appropriate regulatory agencies for permitting. The aquaculture farmer may still be subject to enforcement actions described in 5L-3.007 F.A.C.

PENALTIES

Any person who violates any provision of Chapter 597, Florida Statutes, or Rule 5L-3, Florida Administrative Code, commits a misdemeanor of the first degree, and is subject to a suspension or revocation of his or her certificate of registration. The Department may, in lieu of, or in addition to the suspension or revocation, impose on the violator an administrative fine in an amount not to exceed $1,000 per violation per day.

(1) First time offenders will receive written notice of the BMP deficiencies and will be given 60 days to comply.

(2) Failure to comply after 60 days may result in an administrative fine of up to $1,000 per day per occurrence until compliance is obtained.

(3) Continued failure to comply may result in the suspension/revocation of the producers Aquaculture certificate and an administrative fine of up to $1,000 per day per occurrence until compliance is obtained.

(4) Repeat offenders may be subject to suspension/revocation of the producers Aquaculture certificate and an administrative fine of up to $1,000 per day per occurrence until compliance is obtained and the Department will request that legal measures be initiated to impose misdemeanor charges.

(5) Any non certified aquaculturist who violates the above Statutes, rules or these BMPs may not be afforded protection from costs for evaluation assessment, and/or remediation of contamination of groundwater or surface waters determined to be a result of non-compliance with these BMPs.

V. SHIPMENT, TRANSPORTATION AND SALE

During shipment and transportation care must be taken so that potential for escape is minimized, and state laws are met in the identification of products. The following BMPs will apply to all certified aquaculturists.

Best Management Practices:

- Aquaculture products will be identified while possessed, transported or sold by an Aquaculture certificate of registration number from harvest to point of sale. The receipt, bills of sale, bills of lading, or other such manifest must show the certificate number, where the product originated, and if sold to a Florida grow-out facility, the Aquaculture certificate number of the buyer.

- Aquaculture products will be transported in containers that separate aquaculture products pursuant to Chapter 597, Florida Statutes, from wild stocks, and such containers will be identified by tags or labels that are securely attached and clearly displayed.

- Records of all live purchases and/or all live sales of restricted species, sturgeon, marine shrimp and marine bi-valves must include the date of shipment, name, address, and Aquaculture Certification Number(s) of the supplier and the recipient if purchased or sold in Florida. Records should be retained by the hatchery or farm for at least two years. Invoices or bills of lading containing the above information is sufficient to meet this BMP requirement.

- Snook and any fish of the genus *Micropterus* may be cultured for stocking purposes only. Sales of these fish for consumption are prohibited.

VI. WATER RESOURCES

A. EFFLUENT TREATMENT

The following effluent treatment BMPs are required of all certified aquaculturists with the following exceptions: 1) those individual production units whose annual production and water discharge exceed the National Pollutant Discharge Elimination System thresholds of annual production exceeding 100,000 pounds and water discharge of more than 30 days per year excluding rainfall events; or 2) those certified facilities, as specified in 5l-3.006 F.A.C., that are determined to have a minimal impact on the surrounding environment. Facilities falling into exception number one need to work through the FDACS, Division of Aquaculture to obtain the permits required for operation. Facilities that meet either of these two exceptions must follow all other applicable BMPs.

Effluent or production water discharge from culture systems normally contain suspended and settleable solids, both organic and inorganic, as well as other dissolved compounds as a result of feeding and other farm activities. It is necessary to manage Aquaculture effluent to prevent or minimize environmental impact to receiving waters. Because of the variety of production systems (e.g., ponds, cages or net pens, tanks and raceways) and stocking rate, feed type and intensity; combined with variable site characteristics; several options in management of effluents are recommended as best management practices. Contact the Division of Aquaculture for assistance in determining which option is most appropriate for your aquaculture operation.

Best Management Practices:

- DETENTION FACILITY OPTION: Treatment of effluent prior to discharge to waters of the state by detention or temporary storage in a pond or ditch system is an acceptable practice. Maximum feeding rates for production units utilizing a detention pond system are: 1) 180 pounds/acre/day for a one day detention period; and 2) 360 pounds/acre/day for a five day detention period. The detention ponds may be aerated to improve water quality prior to discharge. Aquaculturists interested in this option should work with FDACS, Division of Aquaculture staff.

- FILTER STRIP OPTION: Treatment of effluent by passing it through a constructed filter strip prior to discharge to waters of the state is an effective means of reducing a variety of effluent pollutants. A constructed strip of vegetated land is designed such that water will flow in a thin sheet slowly across it. This strip allows for capture of sediment, organic matter and other pollutants by deposition, infiltration, absorption, decomposition and volatilization. Aquaculturists interested in this option should contact FDACS, Division of Aquaculture staff for additional information to determine site specific specifications.

- WETLAND TREATMENT OPTION: Discharge, of effluent from a detention facility, filter strip or minimal impact facility into or through a constructed or natural wetland prior to discharge to surface waters of the state provides an effective and environmentally sound means of providing additional treatment.

- INTEGRATED PRODUCTION OPTION: Effluent from aquaculture production units can be re-used for the purposes of producing a secondary aquaculture crop, agronomic crops or aquatic plants or combinations thereof. This option allows for numerous design opportunities including water recirculation. Preliminary research has shown highly promising results in improving water quality. This type of practice may provide adequate treatment itself or improvements in water quality allow for a reduction in the scale of effluent treatment option infrastructure.

- RETENTION OPTION OR ZERO SURFACE WATER DISCHARGE: Retention of all production unit effluent on site is considered proper management of effluent. This may be a viable option for certain facilities and can be accomplished by a variety of methods:

    1. RETENTION, EVAPORATION OR PERCOLATION PONDS - In site locations where the soil is highly porous allows water infiltration, a pond may be constructed to hold all required discharge and allow for percolation. The volume of the pond is determined by the expected quantity of discharge and the evaporation and percolation rate of the soil as determined by the USDA Natural Resources Conservation Service soil survey data or independent testing.

    2. FIELD APPLICATION - Applying effluent (freshwater only) to fields for irrigation purposes is an acceptable method in handling production unit discharges.

    3. SEPTIC SYSTEM - In those situations where the effluent volume and the rate of discharge is determined appropriate by the Division of Aquaculture, a septic system is a suitable option for handling effluent.

- OTHER WATER QUALITY ENHANCEMENT PRACTICES: Several management practices exist which can be utilized in conjunction with the treatment options to improve water quality of effluent. These include: 1) aeration within detention facility to increase dissolved oxygen, volatilization of gases and enhance bacterial oxidation of organic matter; 2) use of biological filtration to enhance conversion of ammonia to nitrite and finally to nitrate. This practice has potential for small volumes of water such as small tank production systems; 3) chemical treatments may be effective to reduce concentrations of certain parameters of concern such as using alum to reduce

clay turbidity, and addition of beneficial bacteria supplements to enhance organic matter oxidation and other nutrients (this method may only be effective in long water residence times and the cost effectiveness is unknown).

- In lieu of the preceding effluent treatment BMPs, an aquaculture facility permitted as of June 30, 1998 may submit to FDACS, on a semi-annual basis, the water quality analysis of their facility's wastewater discharge. Sample collection protocol must follow accepted Quality Assurance (QA) standards. The samples must be analyzed for total ammonia nitrogen, pH, water temperature, BOD5, total suspended solids, total phosphorus, total kjeldahl nitrogen, and nitrate and nitrite nitrogen. The wastewater discharge must meet state water quality standards effective on June 30, 1998.

B. WATER QUALITY TREATMENT AND ATTENUATION CRITERIA

As a requirement of Florida Law, aquaculture BMPs are primarily designed to replace the existing pertinent industrial wastewater requirements under Chapter 403, Florida Statutes, and the existing pertinent Environmental Resource Permits requirements under Chapter 373, Part IV, Florida Statutes.

STORMWATER SOURCES AND MANAGEMENT

Florida receives an average 50" of rainfall from about 120 storms a year. Given the intensity and frequency of these storms, the resulting stormwater runoff can present a risk to sensitive downstream receiving water bodies both in terms of its potential to transport pollutants (natural or synthetic) from the land and in the volume/rate of discharge. Of primary importance is the so-called "first flush." This term describes the washing action that stormwater has on accumulated pollutants in a watershed. Studies in Florida have determined that the first one inch of runoff generally carries 90% of pollutants released by virtue of the storm induced discharge.

Before you settle on a final design for your facility, consider the following issues and the impact each may have on your design and the impact your design may have on your site and on surrounding properties.

Where and how much water flows onto your property?

Where and how much water flows off your property?

What are the predominant soil types on your property?

Are your soils susceptible to excessive runoff?

How much new impervious surface are you adding to your operation/property?

Will the proposed activity significantly increase or decrease the flow and timing off your property?

Best Management Practices:

- Where appropriate incorporate in the final design and any design modifications, features that would minimize the potential impacts of commingling surface water and production water.

- Utilize and adhere to the recommendations in the Erosion Control guidelines of the Construction chapter of this BMP manual before starting construction.

- Know your operation - proper characterization of production pond water effluent, fully employing the other water quality BMPs enumerated in this manual, and having a good understanding of local rainfall patterns will benefit you in terms of design efficiency.

INDUSTRY SPECIFIC CRITERIA

All new construction activities which will have more than two acres of impervious surface must provide Storm water treatment holding capacity for the 25 year, 24 hour rainfall event. For assistance in determining the needed holding capacity, contact the FDACS or retain an engineer.

Besides complying with the specific criteria outlined below, aquacultural operators must also comply with all BMPs appearing in their respective "tabbed" section(s), if applicable, appearing at the back of this manual. For purposes of this BMP manual, the water quality and attenuation (flood protection) criteria have been grouped together; moreover, rather than deal with each aquaculture industry differently, the criterion is further segmented and arranged on the basis of *earthen aquacultural systems and recirculating intensive aquacultural systems*.

EARTHEN AQUACULTURAL SYSTEMS

There are two subcategories recognized here.

Category No. 1: New construction of excavated Ponds with no more than 5% Associated Impervious Areas.

NOTE: Production pond water surface area is not to be included in the total impervious area calculations.

Best Management Practices:

- Ponds must be constructed in accordance with the USDA-NRCS Field Office or IFAS guidelines or an approved engineering design and should maintain a minimum one foot of freeboard.

- New construction activities exceeding the 5% impervious standard must hire a Professional Engineer registered in the State of Florida to demonstrate that there will be no adverse downstream impacts as a result of the operation.

- Ponds should generally be constructed to not discharge; ponds reasonably expected to discharge should demonstrate the ability to follow the Effluent Treatment BMPs.

- Residence times can be accomplished either by in-pond treatment, swale treatment, ditch system treatment, filter strip treatment, wet detention, and/or constructed wetlands, singly or in combination.

- Single inlet detention facilities will have a length to a width ratio of at least 1:1; multi-inlet facilities will maintain at least 100 linear feet between the outlet and inlet.

- For maintenance or harvesting purposes, scheduled pond drawdown(s) should be routed to existing surface water management facilities or distributed to adjacent ponds.

Category No. 2: New construction of above ground levee ponds with no more than 5% associated impervious areas.

NOTE: Production pond water surface area is not to be included in the total impervious area calculations.

Best Management Practices:

- Ponds must be constructed in accordance with the USDA-NRCS Field Office or IFAS guidelines or an approved engineering design and should maintain a minimum one foot of freeboard.

- Water quality treatment is to be accomplished via a combination of in-pond treatment, such as described in University of Florida IFAS Circular No. 334, and utilization of a vegetated filter strip with a minimum 15 minute travel times, or by using classic wet detention facilities with one or five day residence times tied to feed rates.
  For maintenance or harvesting purposes, scheduled pond drawdown(s) shall be accomplished in the following manner:

  Only drain the pond(s) for harvesting and maintenance as necessary.

  Drain the pond(s) during the dry season when possible.

  Route production pond water to existing surface water management facilities, dry pond cells, filter strips via a pulsed dry season discharge or distribute to adjacent crops at the proper agronomic rate.

- Routinely maintain pond/dike facilities to minimizes seepage.

RECIRCULATING AQUACULTURAL SYSTEMS

These systems generally rely on the construction of permanent structures, recirculation apparatus, tanks, and other features. These systems treat and reuse all, or a major portion of their production water. While the volume of effluent from a recirculating/intensive system does not typically approach the quantity associated with the more traditional forms of aquaculture, the concentration of nutrients associated with the effluent is usually greater.

Best Management Practices:

- New construction activities which will have more than two acres of impervious surface must provide stormwater treatment holding capacity for the 25 year, 24 hour rainfall event. For assistance in determining the needed holding capacity, contact the FDACS or retain an engineer.

- Design the system for no direct off-site discharge of production water. Effluents must either be treated and retained on a site, or discharged to a permitted sanitary sewer system. Treatment techniques include, but are not limited to percolation ponds, irrigation systems or filter strips. These techniques may be utilized either individually or in combination. Please note that discharging production water to a sanitary sewer system will require authorization/permitting from the local authority.

- Design a waste treatment system to handle the semi solid waste stream and non recycled production effluent from filters and solids separators. Dispose of waste

solids in a legal manner that will not cause environmental degradation. Potential options for solids treatment and disposal include; composting followed by appropriate land application as a soil amendment or disposal at a sanitary landfill.

- Plant nurseries must follow all applicable BMPs including fertilizer recommendations referred to in the Aquatic Plants Chapter.

C. WETLANDS PROTECTION

Wetlands are important components of Florida's water resources. They serve as spawning areas and nurseries for many species of fish and wildlife, storage of flood waters, an uptake of nutrients in runoff water, habitat for plant and animal biodiversity, and recreational opportunities for the public. Wetlands are complex transitional ecosystems between aquatic and terrestrial environments. Prior to development, Florida's wetlands (including open waters and seasonally flooded areas) covered about half of the state's area. That number has been greatly reduced primarily due to early water management efforts focused on draining wetlands to facilitate development interests and augmentation of agricultural lands. Today, landowners may qualify for various USDA-NRCS incentive programs designed to encourage wetland restoration. Contact the FDACS, Division of Aquaculture or USDA for assistance or additional information.

ELIMINATION/REDUCTION OF WETLAND IMPACTS

Wetlands exist as isolated features in the landscape or contiguous flowing watercourses within a defined channel or within a discernable shoreline. A goal of this manual is to protect them from adverse impacts associated with dredging, filling, hydro-period alteration, expansion or reduction of watersheds, or degradation of water quality. Do not conduct dredge and fill activities in wetlands or wetland buffers. It is the intent of this manual to employ BMPs which should not adversely affect onsite (project area) or offsite wetlands. As such, all proposed aquacultural operation design parameters must first consider elimination and/or reduction of wetland impacts through practicable design alternatives/modifications.

Note: For the purpose of the following Wetland Impact BMPs aquaculture constructed wetlands are excluded.

Best Management Practices:

- Contact the FDACS, Division of Aquaculture to confirm the absence or presence of onsite and adjacent offsite wetlands prior to initiating any aquaculture construction activities.

- All new pond construction must maintain a minimum 50 foot upland buffer from the

boundary of all wetlands and or perennial watercourses.

- Prior to construction of any land-based effluent treatment system (i.e., filter strip) ultimately discharging to surface waters, the determination of the landward extent of any receiving water must be made by FDACS. This determination is necessary to prevent the inclusion of water treatment facilities being classified as jurisdictional wetlands pursuant to Chapter 62-340, Florida Administrative Code.

PRODUCTION WATER DISCHARGES INTO WETLANDS

Wetlands may be used for water quality treatment purposes provided the aquaculture facility owner and the owner/operator are operating the facility in compliance with all applicable BMPs.

Best Management Practices:

- If applicable, consider designing and installing upland excavated sediment sumps outside of wetland buffers to minimize scouring and sediment transport.

- Use spreader swales and other devices to mimic sheetflow into wetlands.

- Maintain watersheds and point(s) of discharge during pre and post development conditions.

- If your production exceeds 10,000 pounds/year, avoid direct discharge of any untreated effluents into wetlands.

- Use a controlled method of discharge to assure the flow into the wetland will mimic predevelopment flow patterns.

D. SPECIAL WATER RESOURCE CONSIDERATIONS

While the preceding *Water Resources* chapters address most aquaculture facilities, there are a few categories which have specific applications in Florida landscapes. These special categories are: Watershed Production Ponds, Pit Ponds and Flood Plain Production Facilities. Because each new proposed production facility in these special categories is unique unto itself, you must submit your facility plan to the FDACS, Division of Aquaculture for approval. Where required obtain all necessary zoning and construction permits, prior to site clearing and construction.

WATERSHED PRODUCTION PONDS

Watershed fish production ponds have limited use and design opportunities. In hilly terrain, pond builders may take advantage of runoff from rainfall within the watershed. Watershed to water surface acreage ratios vary from site to site, with soil types being the determining factor. When ponds are built in series, less water is required for maintenance, and the last pond in the series may be used for one (1) day production water treatment; alternatively, filter strip treatment or constructed wetlands treatment may be used either alone or in combination. Supply water for aquaculture watershed fish production ponds usually comes from watershed runoff and springs, but ground water wells are also recommended as supplementary water supplies. Because each site will have specific requirements, you must submit your facility plan to the FDACS, Division of Aquaculture for approval prior to beginning any construction. Some options to consider in your planning process are:

Create harvest and access areas during pond construction and provide erosion controls and stabilize pond banks.

If planning on drain-harvesting, construct catch basins and holding structures either at the drain intake or outfall.

Follow recommended pond dam construction requirements and procedures. The Division of Aquaculture staff will provide guidelines for your site.

Utilize cage culture in deep and/or irregular shaped ponds.

Determine the potential for impact upon surrounding property and historical water flow rates.

Determine if the impounded water poses a safety hazard to downgrade residents and/or property.

Best Management Practices:

- Prior to beginning any construction, submit your facility plan to the Division of Aquaculture for approval.
- Limit crop biomass to 1,500 pounds per surface acre.*
- Limit feeding to five percent (5%) of biomass per day.*

** Higher stocking and feeding rates may be used, provided you are in compliance with the effluent treatment section of the Water Resources BMP.*

PIT PONDS

Rock, sand and phosphate mining operations throughout the state have resulted in the

construction of thousands of “pit” ponds in Florida. These pits are very common in southern Florida where large quantities of fill material have been excavated for use in road construction. The vast acreage and tremendous water volume in these water bodies have sparked a great deal of interest from prospective fish culturists. If you are new to this industry or have limited Aquaculture experience, **don’t be deceived**, these systems may be an inexpensive source of vast quantities of water, however, they also involve significant challenges in terms of animal containment, animal harvest, water quality, and animal health. Inexperienced culturists often greatly overestimate the production capacity of these systems and fail to recognize the significant disadvantages. Limitations on biomass are included to minimize eutrophication and associated fluctuations in water quality. It is important to prevent overfeeding which is costly and can lead to water quality issues. Adhering to the following BMPs will assist you in maintaining water quality and decrease the chance of a catastrophic crop loss due to oxygen depletion.

Best Management Practices:

For pit ponds with a crop biomass of less than 2000 pounds per surface acre:

- Contact the DACS – Division of Aquaculture before conducting any pit pond activities.

- Limit feeding to five percent (5%) of biomass per day.

- If non-native or restricted species are to be cultured in the system, refer to the containment section of the “Non-native and Restricted Non-native Species” chapter of this manual.

For pit ponds with a crop biomass greater than 2000 pounds per surface acre or ponds with feeding rates that exceed a five percent (5%) of biomass per day.

- Contact the DACS – Division of Aquaculture before conducting any pit pond activities.

- Utilize aerators, pumps, or other destratification methods to eliminate pond stratification.

- Establish a feeding protocol that eliminates overfeeding.

- Use cage systems designed to minimize feed loss and to allow for the collection and removal of waste. Floating cage technology is encouraged.

- If non-native or restricted species are to be cultured in the system, refer to the

containment section of the "Non-native and Restricted Non-native Species" chapter of this manual.

FLOODPLAIN ISSUES

Floodplains are normally dry or semi-dry areas around rivers, lakes and near the coast, where water naturally ponds as water levels rise periodically. Flooding is a natural occurrence and happens when the amount of water flowing into an area exceeds the land's ability to store and convey the water. Facilities must be designed to reasonably prevent an increase in flooding of adjacent properties both up gradient and down gradient of the proposed aquacultural activity. Flood information can be obtained by contacting the FDACS, Division of Aquaculture.

Best Management Practices:

- For all new construction within the 100-year flood zone, contact the Division of Aquaculture for approval of your facility plan prior to beginning any construction**.**

E. WATER SUPPLY CONSIDERATIONS

Most aquaculture facility operators will require a water source to either augment existing water supplies or provide makeup water in its entirety. This water source can exist as either groundwater, surface water, or seawater. Regulations/permitted criteria vary among the five water management districts, but, typically before a user can receive a water use/consumptive use permit, the applicant must establish that the proposed water use satisfies the so-called three-prong test found in Chapter 373.223, Florida Statutes. New applicants must demonstrate that the proposed use is reasonable and beneficial, will not interfere with any existing legal use of water, and is consistent with the public interest test.

The Water or Consumptive Use Permit allows a user to withdraw a specified amount of water from either a groundwater well or from an allowable surface water source. These permits are categorized as either Individual Permits (requiring Governing Board approval) or General Permits (staff level approval). They generally are issued for 10 to 20 years, have application fees attached, and may require many months of review to be approved. Moreover, some water management districts have declared certain groundwater basins as severely stressed and named "Water Use Caution Areas" which may have more stringent permit issuance criteria and require well metering to track the amounts withdrawn. Water management districts (in some cases the delegated local county government) also issue Well Construction Permits which are generally required if the aquaculturalist either plans to have a new well constructed, or needs to repair or plug an existing well. ***Please note that the aquaculture BMP manual is not designed to replace the need for water/well permits; therefore, it is imperative that operators contact their local water management district Water Use Permitting Department to determine permitting requirements.***

SALTWATER SOURCES

There may be circumstances where Aquaculture operations located adjacent to the coastline will need saline water to culture certain organisms, especially those that may require a marine environment during a portion of their life cycle (i.e., shrimp or clam hatcheries). There are two potential environmental issues that may arise: (1) potential permitting issues associated with withdrawing saline water (i.e., > 19 parts per thousand chlorides in SFWMD, > 25 parts per thousand in SWFWMD exempt from permitting) and, (2) potential impacts to freshwater systems by virtue of saline discharge effluent.

Best Management Practices:

- Contact the water management district and/or the FDACS, Division of Aquaculture staff before constructing a well or withdrawing water from an unpermitted regulated well. The Division of Aquaculture staff will assist the producer in obtaining a Water Use Permit during the certification process.

- Use a recirculating system technology, when appropriate, to retain production water on site.

F. DUAL USE OF PERMITTED STORM WATER TREATMENT PONDS

Although not encouraged, agricultural operators may look to diversify their business by exploring the use of previously permitted Storm water treatment ponds. These "ponds" may have been permitted by either the regional water management district or the FDEP. These permitted ponds would have been approved as part of either a Management and Storage of Surface Waters (MSSW) Permit or an Environmental Resource Permit (ERP). **FDACS does not recommend Storm water treatment ponds be used for commercial food fish production.**

Best Management Practices:

- Modify existing MSSW or ERP permits before beginning construction.

- Review the permitting history of the existing pond(s) and ascertain any special permitting conditions which may preclude the use of this pond for Aquaculture.

- Limit crop biomass to 1,500 pounds per surface acre and feeding to five percent of biomass per day although aquaculturalists should strive to not introduce feed.

- Contact the Division of Aquaculture before implementing the use of such ponds.

VII. NON-NATIVE AND RESTRICTED NON-NATIVE SPECIES

Non-native species include all species that are not native to Florida waters.

Restricted non-native species include all species that are listed as restricted species in Rule 68A-23.008(2) Florida Administrative Code See the appendix for the complete list.

NON-NATIVE SPECIES CONTAINMENT

Aquaculturists who possess non-native species are responsible for preventing their release to the environment.

Best Management Practices:

- All holding, transport, and culture systems will be designed, operated and maintained to prevent the liberation of non-native aquatic species into waters of the state. Any method of containment reasonably thought to prevent non-native species from being released may be utilized.

- Written authorization may be required by FWC to import non-native aquatic species.

RESTRICTED NON-NATIVE SPECIES CONTAINMENT

Facilities culturing restricted non-native species must adhere to the following BMPs, as well as the BMPs listed for non-native species.

Best Management Practices:

- Restricted non-native species cultured outdoors may only be held in a water body which has the lowest point of its levee, dike, bank, or tank at an elevation at least one foot about the 100-year flood elevation as determined by elevation maps issued by the National Flood Insurance Program of the Federal Emergency Management Agency (FEMA).

- All holding, transport, and culture systems must consist of a solid construction, and be designed to prevent the escape of adult fish, juvenile fish, and eggs.

- The facility must have measures in place to prevent the theft of restricted non-native species.

- Live sale or transfer of restricted non-native aquatic species or their hybrids is limited to those individuals specifically authorized by the Florida Department of Agriculture and Consumer Services (FDACS) or the Fish and Wildlife Conservation Commission (FWC).

- Written records of live restricted species purchases, sales and transfers must be maintained for a period of two years.

- Written authorization must be obtained annually from FDACS to possess restricted non-native species.

- Written authorization may be required by FWC to import restricted non-native aquatic species.

- The culture of an Australian red claw (*Cherax quadricarinatus*) is limited to tank culture only. All systems will be designed to meet the minimum requirements set forth above, as well as preventive measures to assure that the species is not able to crawl out of the tank system.

ALTERNATIVE CONTAINMENT PRACTICES
(Any system may be utilized as long as it meets the containment requirements above)

- No discharge or zero discharge production systems are designed to ensure that water from the production units is not discharged from the facility. This includes design parameters and management practices to ensure that Storm water does not cause the system to discharge.

- Screened discharge systems utilize screen or filter devices either at the point of production unit discharge or at the point of discharge from the operation, effluent treatment facility, such as a detention or retention pond. A variety of screen or filter designs and devices may be used to retain the smallest size fish or egg. Examples of screened/filter systems include a simple series (multiples are used to ensure at least one screen is in place while others are cleaned) of mesh screens capable of screening all water, a dry bed filter constructed of a container with gravel and sand to trap eggs and fish, a commercially available micro screen solids filter, or a pond trap with screened discharge.

- Filtered, disinfected or sterilization techniques vary from ultraviolet light (UV), ozone or chlorine treatment systems. A combination of these treatment systems can also be used.

PROHIBITED SPECIES

Prohibited Aquatic Species are not eligible for culture and may not be possessed in Florida. "Prohibited" and "Restricted" Aquatic Species are identified by s.370.081, Florida Statutes and Rule 68A-23.008(3) Florida Administrative Code and Rule 62C-52.011 Florida Administrative Code and as referenced in the appendix.

Best Management Practice:

- Anytime a prohibited species is discovered at a certified facility, it is to be immediately disposed of according to the Species Disposal BMP.

VIII. HEALTH MANAGEMENT

Good aquatic animal health is necessary for the success of any Aquaculture production facility. A sound management and sanitation program will greatly reduce the risk of pathogens and disease in your facility. Disease prevention is based on reduction of stress in the culture organism, exclusion of pathogens in the culture tank/pond, and containment of sick animals when a disease outbreak occurs. The following and emerging BMPs are intended to support and develop sustainable Aquaculture.

Best Management Practices:

- Contact the Division of Aquaculture in the event of any unusual or abnormal occurrences of disease or pests affecting your aquatic species.

SEE INDIVIDUAL SPECIES SECTIONS FOR SPECIFIC HEALTH BMPS OR CONTACT THE DIVISION OF AQUACULTURE

IX. MORTALITY REMOVAL

DISPOSAL OF DEAD ANIMALS

Normal mortalities, inedible species or animals unacceptable for any use should be removed from the culture system and disposed of in one of the following acceptable sanitary methods.

Best Management Practices:

- Sanitized or disinfected and then disposed in a sanitary and humane fashion in accordance with local rules and regulations.

- Contact the Division of Aquaculture with any questions.

X. AQUACULTURE CHEMICAL AND DRUG HANDLING

Florida's water resources are particularly susceptible to contamination because of the State's unique geology and hydrology. Groundwater supply often lies near the surface, and users of agrichemicals and drugs need to consider the soil's susceptibility to leaching, distance to the water table, slope of the land, and distance to surface water which could provide a direct pathway to ground water. Clay or muck soils are capable of binding certain pesticides with repeated applications. Proper handling, application and disposal practice through the use of BMPs can prevent the contamination of soil, surface waters, and ground water.

CHEMICAL USAGE AND HANDLING

Best Management Practices:

- Follow all product label directions for use, storage and disposal.

- Use in accordance with all applicable Federal and State guidelines and laws.

SPILL MANAGEMENT

Best Management Practices:

- Contain and dispose of spilled or leaking materials by utilizing barriers and/or absorbent material such as activated charcoal, cat litter, dry sand, or soil in accordance with manufacturers' recommendations and/or State and Federal laws and rules..

For additional information about chemical usage, copies of additional chemical data or if you are interested in becoming a licensed chemical applicator, please contact the Florida Department of Agriculture and Consumer Services, Division of Aquaculture at 850/488-4033.

DRUG USAGE AND HANDLING

Best Management Practices:

- Therapeutic drugs must be used in accordance with manufacturers' directions or as prescribed by a licensed veterinarian.

XI. MARINE SHRIMP

Shrimp Aquaculture technology is in a process of continual evolution, evaluation and improvement. These BMPs are intended to help shrimp producers set high standards and maintain environmental compatibility.

SITE SELECTION

Proper site selection can eliminate many potential problems and at the same time will not impact competing users of the coastal zone.

Best Management Practices:

- Systems must comply with local construction and zoning regulations.

CONTAINMENT

Systems should be designed to accommodate storm water and to prevent these storm waters from allowing the escape of shrimp into waters of the state. Similarly, Aquaculture production units and Aquaculture systems should be designed to prevent native species and other unwanted species from entering the system and interacting with domesticated animals.

Best Management Practices:

- Live non-native shrimp cannot be sold or used as live bait.

- All holding, transport, and culture systems will be designed, operated and maintained to prevent the liberation of non-native aquatic species into waters of the state. Any method of containment reasonably thought to prevent non-native species from being released may be utilized.

EFFLUENT TREATMENT

Off site discharges to surface waters of the state must follow these treatment practices.

Best Management Practices:

- Management of effluents of marine shrimp production facilities will adhere to the BMPs stated in Section VI Water Resources, subsection A. Effluent Treatment.

- Shrimp production facilities are required to place screens with mesh sizes proportional to the size of the cultured shrimp at all discharge control points.

- In the event of an outbreak of “Yellow Head”, “White Spot”, “Taura Syndrome,” or any other harmful pathogen, as determined by the State Veterinarian, all water from production ponds and facilities, which may discharge into marine estuarine watersheds, must be contained and chlorinated (recommended calcium hypochlorite) prior to discharging into retention (detention) ponds or facilities.

- Use redundant barrier, containment or disinfecting procedures.

MARINE SHRIMP HEALTH

Aquatic animal health is a critical concern of all shrimp farmers. Good aquatic animal health practices begin in the hatchery and continue on the farm. Aquatic animal health protocols for marine shrimp are in a developing stage which will be refined by continuous research, new sampling technology, and health practices.

Best Management Practices:

- Broodstock, nauplii and post larvae (PLs) must only be obtained from facilities whose health records document the absence of disease manifestations and/or outbreaks within the past 8 months which include “Yellow Head”, “White Spot”, “Taura Syndrome” or any other harmful pathogen as determined by the State Veterinarian. Verification may include those records maintained by the seller and outside certification provided by a licensed veterinarian.

- Broodstock brought into a facility must be isolated from the remaining stocks in the hatchery until their disease free health status is verified.

- All live shrimp, regardless of life stage, sold to a Florida facility/operator must be accompanied by a signed "Certificate of Health" from a licensed veterinarian.

- All health management documentation and records must be retained for at least two years by certified aquaculturists.

- Any aquacultured shrimp released into waters of the state must be reported, as soon as practical, to the FDACS, the Division of Aquaculture, with details of the release.

- Certified aquaculturists will notify the Florida Department of Agriculture and Consumer Services, Division of Animal Industry, State Veterinarian's Office, 407/846-5200 Ext. 226, 2700 N. John Young Parkway, Kissimmee, Florida 34741, in the event of an outbreak of "Yellow Head", "White Spot", "Taura Syndrome"or any other harmful pathogen as determined by the State Veterinarian.

See Appendix for complete list of all required BMPs for shrimp.

XII. STURGEON CULTURE

Sturgeon culture has the potential to become synonymous with Florida aquaculture. Sturgeon is a high value food product in addition to producing the even higher value caviar. These BMPs are designed to help farmers get started with this new type of aquaculture product.

FACILITY OPERATIONS

Best Management Practices:

- Operators culturing native sturgeon (shortnose and Gulf sturgeon) must comply with resource management policies and recommendations, which prohibit the capture of wild native anadromous sturgeon, regardless of life stage, for broodstock or seedstock and prohibits the release of sturgeon fry, fingerlings, juveniles, or adults.

- Live Atlantic sturgeon, including non U.S. origin Atlantic sturgeon can not be sold or transferred to the aquarium/ornamental fish trade.

SITE SELECTION/FACILITY DESIGN

Best Management Practices:

- Facilities should be designed, operated and maintained with geographical and/or physical barriers in place to prevent the release of a cultured sturgeon.

- Outside facility construction within the 100-year flood zone as delineated by FEMA - Flood Insurance Rate Maps is discouraged. However, if any portion of the outside facility is to be constructed within the 100-year flood zone, the facility must be designed so that the minimum control elevation is at least 1 foot above the 100-year flood elevation.

- Facility design should give consideration to the possible risk of fish being released into surface waters of the state. Physical barriers or management practices should be designed/implemented to prevent entry of all life stages of sturgeon to surface waters of the state. Biosecurity features include but are not limited to:

  Covered tanks/ponds containing fish weighing less than 4 lbs.
  Containment berms
  Predator stocked retention/detention ponds
  Screen discharge pipes with proportionately sized screen mesh to contain all life stages in the pond.
  Redundant barrier, containment or disinfecting procedures

- Facilities must meet all zoning and construction requirements.

REPORTING

Best Management Practices:

- All imports of live sturgeon must be accompanied by a signed "Certificate of Health" attesting to the good health of the sturgeon.

- Facilities should notify the Florida Department of Agriculture and Consumer Services, Division of Animal Industry, State Veterinarian's Office in the event that diseases or other suspected pathogens are observed in cultured stocks, and before disposing of sturgeon that manifest symptoms of disease.

- Health management records should be retained for at least two years to document any significant behavioral changes, clinical signs of disease, or unusual mortality rates that are noted during daily health monitoring procedures.

- In the event of a release of sturgeon into surface waters for the state, the facility manager or designated representative will report, within 24 hours, the release to the Florida Department of Agriculture and Consumer Services, Division of Aquaculture. The report should include the species released, the approximate size and number of fish released, the exact location of the released, the name of the receiving body of water, and the approximate volume of water released.

- The facility should maintain documentation identifying the source of all adult fish, fingerlings, fry, and eggs of sturgeon imported into the state for at least two years.

See Appendix for complete list of all required BMPs for sturgeon.

XIII. MARINE BIVALVES

Marine bivalve production is the fastest expanding sector of Florida aquaculture. These BMPs are designed to maintain a viable marine bivalve industry.

SITE SELECTION

Best Management Practices:

- Required authorizations must be obtained for structures located on or above state-owned submerged lands. Contact the FDACS, Division of Aquaculture for information.

- The facility must be located such that it minimizes environmental impacts, minimizes risks to public health and does not create an impediment to navigation.

- Facilities must meet all local zoning and construction requirements.

FACILITY OPERATIONS

Best Management Practices:

- Facilities must be designed and operated in a manner that minimizes adverse impacts to the receiving waters, adjacent wetlands, and uplands.

- Pumping, intake and discharge systems must be designed such that they do not create currents that increase sedimentation, scouring, turbidity, or in anyway damage the surrounding habitat.

- Sediment removal and disposal must be conducted in a manner that eliminates or minimizes adverse impacts to the receiving waters.

PIPE PLACEMENT

Best Management Practices:

- Pipes must be placed in a location and in a manner that minimizes environmental and aesthetic impacts.

- Discharge pipes must be situated to prevent excessive scouring of the bottom in the receiving waters.

PUBLIC HEALTH PROTECTION

Best Management Practices:

- Follow all National Shellfish Sanitation Program criteria.

- Seed clams (*Mercenaria spp.*) must be relocated to an approved grow-out location prior to reaching 16mm in shell length.

- Seed oysters (*Crassostrea virginica*) must be relocated to an approved grow-out location prior to reaching 25mm in shell length.

- All other species of bivalves must obtain authorization from the FDACS, Division of Aquaculture and adhere to the conditions of that authorization.

GENETIC PROTECTION

Best Management Practices:

- Hatchery operators who intend to sell or use clam seed stocks for further grow-out in the State of Florida must use broodstock that originated from Florida waters in their genetic selection program. Hatchery operators, located on Atlantic coast waters, who intend to sell or use oyster seed stocks for further grow out in the State of Florida must use broodstock that originated from Florida Atlantic coast waters in their genetic selection program. Hatchery operators, located on Gulf Coast waters, who intend to sell or use oyster seed stocks for further grow-out in the State of Florida must use broodstock that originated from Florida waters of the Gulf of Mexico in their genetic selection program. Documentation of brood stock origin must be obtained by the hatcheries.

- Oyster seed for grow-out in Gulf Coast waters must originate from Florida Gulf Coast hatcheries and nurseries. Sale of Atlantic Coast waters oyster seed is prohibited for use in Florida Gulf Coast waters.

- Bivalves shipped from a hatchery will be in distinct containers identified by the producer's Aquaculture Certificate Number.

- If nursery operators buy clam seed stocks from an out-of-state hatchery, the hatchery must be utilizing Florida broodstock in their genetic selection program. If nursery operators buy oyster seed stocks from an out-of-state hatchery, the hatchery must be utilizing brood stock from the Florida waters of the Gulf of Mexico in their genetic selection program. Documentation of brood stock origin must be obtained from the hatchery.

DISEASE PREVENTION

Best Management Practices:

- Bivalves imported from out-of-state for aquacultural purposes must be accompanied by documentation from a recognized a licensed veterinarian certifying that the stock does not show clinical signs of any disease pathogen that may pose a threat to natural shellfish populations. Stock must be free of the following pathogens: Quahog Parasite Unknown (QPX) in clams; *Haplosporidium nelsoni* (MSX), and *Perkinsus marinus* (Dermo) in oysters. If future additional pathogens are identified as posing a threat to natural stocks, this list may be updated.

- Hatchery operators will maintain records of all brood stock purchases and seed sales for a period of two years. These records will be available for inspection by the FDACS upon request.

- The producer's Aquaculture Certification Number must identify bivalves being transported from a hatchery or nursery.

- All bivalve facility operators will notify the Florida Department of Agriculture and Consumer Services, Division of Animal Industry, State Veterinarian's Office, 2700 N. John Young Parkway, Kissimmee, FL 32741, phone 407/846-5200 Ext. 226, within 24 hours of any suspected disease outbreaks, (specifically, MSX and Dermo in oysters and QPX in clams).

SHELLFISH GROW OUT

- Follow all the terms and conditions of the Sovereignty Submerged Land Aquaculture Lease.

See Appendix for complete list of all required BMPs for clams/shellfish.

XIV. LIVE ROCK CULTURE

Live rock culture is a relatively new venture on sovereign submerged lands. Production has targeted the aquarium trade to fill market demand created by the restrictions on live rock collections from the wild. The use of sovereign submerged state lands for Aquaculture requires that the operator obtain a submerged land's Aquaculture lease. Persons interested in conducting Aquaculture activities on or above state lands should contact the FDACS, Division of Aquaculture for an "Aquaculture Lease Information Package."

Best Management Practices:

- Natural rock used for a substrate must be geologically distinguishable from naturally occurring rock in the area of the lease.

- Substrate materials, natural or artificial rock must be approved by the Division of Aquaculture, prior to deposition on submerged lands or in an upland facility.

- Substrate material should be sufficiently free of sediment and fines so that the deployment does not result in visible turbidity outside of the lease boundary for more than 30 minutes.

- Substrate deployment should be conducted in a manner that minimizes turbidity and does not result in adverse impacts to natural fishery habitats.

- Substrate materials should be handled and stored in a manner that minimizes on-site and off-site impacts.

See Appendix for complete list of all required BMPs for live rock.

XV. AQUATIC PLANTS

The aquatic plant industry in Florida produces high quality plants for three primary markets: aquariums, water gardening and wetland mitigation and restoration.

FERTILIZER APPLICATION

Best Management Practices:

- Apply fertilizer to substrate during preparation of the grow-out tank while it is dry. Use a slow release fertilizer and evenly incorporate it into the soil.

- If it is necessary to apply fertilizer into a grow-out tank or pond which is inundated, use fertilizer spikes that can be pushed into the substrate near the target plant. Once the "food spike" is below the surface, it should be covered with soil; this helps prevent the loss of nutrients to the water column.

- Minimize the need for additional fertilizer by maintaining a static water level in the production tanks or ponds.

REGULATORY REQUIREMENTS

Aquatic plant nurseries are regulated by two divisions within the Florida Department of Agriculture and Consumer Services, the Division of Aquaculture (DOA) and the Division of Plant Industry (DPI). The DOA reviews all aquaculture activities, including aquatic plants to insure compliance with all aspects of this BMP manual. The DPI regulates the horticulture sector which propagates plants for resale.

The primary role of the DPI, with respect to the aquatic plant industry, is to oversee the import and export of non-native species. The purpose of this oversight is to prevent the introduction and spread of nuisance plants or disease which may displace native species and negatively impact Florida's ecosystems. There are two classes of "Prohibited Aquatic Plants":

Class I – These plants may <u>not</u> be possessed, collected, transported, cultivated or imported.

Class II – These plants may be cultured in an aquatic plant nursery for sale out of state, and only with approval of DPI.

A listing of all Class I and Class II Prohibited Aquatic Species is found in Rule 62C-52.011 Florida Administrative Code and is referenced in the appendix.

Best Management Practices:

- It is prohibited to posses and culture Class I aquatic plants. If you discover a Class I species in a shipment you receive, or on your facility, contact DPI at once.

- Do not import, cultivate or export Class II Prohibited Species without prior authorization from DPI. If you intend to handle Class II Prohibited Species, you must provide the necessary measures to ensure that these plants do not escape your facility into the surrounding environment. These methods are outlined in the containment section of the "Non-native and Restricted Non-native Species" chapter of this manual. While the aforementioned chapter primarily addresses biosecurity for nonnative fish species, the containment strategies are also applicable to the containment of non-native plants.

  See Appendix for complete list of all required BMPs for aquatic plants.

APPENDIX

This section can be used as a cross reference guide for the specific BMPs required by a particular specie or system.

BMP REQUIREMENTS

Aquatic plants:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VIII - Health Management
Chapter X - Aquaculture Chemical and Drug Handling
Chapter XV – Aquatic plants

Cages:

Chapter VI – Water Resources, Subsection C – Special Water Resource Considerations

Catfish:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling

Clams/Shellfish:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling
Chapter XIII – Marine Bivalve Facilities

Hybrid Striped Bass:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling

Live Rock:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter XIV - Live Rock Culture

Marine Ornamentals:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VII - Non-native and Restricted Non-native Species
Chapter VIII - Health Management
Chapter IX - Mortality Removal

Freshwater Ornamental/Tropical Fish:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VII - Non-native and Restricted Non-native Species
Chapter VIII - Health Management
Chapter IX - Mortality Removal

Ponds:

Chapter III - Construction
Follow IFAS Guidelines
Follow NRCS Guidelines

Raceways:

Chapter VI - Water Resources, Subsection A – Water Quality Treatment and Attenuation Criteria

Recirculating Water Systems:

Chapter VI - Water Resources, Subsection A – Water Quality Treatment and Attenuation Criteria

Saltwater/Marine Systems:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VII - Non-native and Restricted Non-native Species
Chapter VIII - Health Management
Chapter X - Aquaculture Chemical and Drug Handling
Chapter XI - Marine Shrimp
Chapter XIII - Marine Bivalve Facilities
Chapter XIV - Live Rock Culture

Shrimp:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VII - Non-native and Restricted Non-native Species
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling
Chapter XI - Marine Shrimp

Sturgeon:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling
Chapter XII - Sturgeon Culture

Tilapia:

Chapter II - Federal Permitting
Chapter III - Construction
Chapter IV - Compliance Monitoring
Chapter V - Shipment and Transportation
Chapter VI - Water Resources
Chapter VII - Non-native and Restricted Non-native Species
Chapter VIII - Health Management
Chapter IX - Mortality Removal
Chapter X - Aquaculture Chemical and Drug Handling

RESOURCES FOR AQUACULTURE INFORMATION

Division of Aquaculture – Division Office

Florida Department of Agriculture and Consumer Services
Division of Aquaculture
1203 Governors Square Boulevard, 5th Floor
Tallahassee, Florida 32301
(850) 488-4033
www.floridaaquaculture.com

Natural Resources Conservation Service (NRCS) Area Offices -

State Office
P.O. Box 141510
Gainesville, Florida 32614-1510
(352) 338-9500

Area 1 Administrative Office
4155 Hollis Drive
Marianna, Florida 32448-2708
(850) 482-2002

Area 2 Administrative Office
3804 South First Street
Lake City, Florida 32025-4212
(904) 755-5100

Area 3 Administrative Office
5700 Lake Worth Road, Suite 100
Lake Worth, Florida 33463-3213

University of Florida (IFAS)

Mitchell Aquaculture Farm (food fish)
Route 2, Box 754
Blountstown, Florida 32424
(850) 674-3184
(850) 674-3366 FAX

Tropical Aquaculture Laboratory (ornamental fish)
1408 24th Street, Southeast
Ruskin, Florida 33570
(813) 671-5230
(813) 671-5234 FAX

Cedar Key Field Station (shellfish)
P.O. Box 89
Cedar Key, Florida 32625
(352) 543-5057
(352) 543-6958

Department of Fisheries and Aquatic Sciences
7922 Northwest 71st Street
Gainesville, Florida 32606
(352) 392-9617

State of Florida Veterinarian's Office

Dr. Michael Slayter
Florida Department of Agriculture and Consumer Services
Division of Animal Industry
2700 N. John Young Parkway
Kissimmee , Florida 34741
(407) 846-5200 Ext. 226

Water Management District Offices –

Northwest District
Rt. 1 Box 3100
Havana, Florida 32333-9700
(850) 539-5999

St. Johns River District
P.O. Box 1429
Palatka, Florida 32178-1429
1 (800) 725-5922

Suwannee River District
9225 County Road 49
Live Oak, Florida 32060
1 (800) 226-1066

South Florida District
3301 Gun Club Road
West Palm Beach, Florida 33416-4680
1 (800) 432-2045

Southwest Florida District
U.S. Highway 41 South
Brooksville, Florida 34609-6899
1 (800) 423-1476

Department of Environmental Protection – District Offices

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794
(850) 444-8300

Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
(904) 448-4300

Central District
33319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
(407) 894-7555

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8318
(813) 744-6100

South District
2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33901
(941) 332-6975

Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401
(561) 681-6600

U.S. Army Corps of Engineers, District Offices –

Mobile District Regulatory Office – SAMOP-S
P.O. Box 2288
Mobile, Alabama 36628
(334) 690-2658

Jacksonville District Regulatory Office – SAMOP-S
P.O. Box 4970
Jacksonville, Florida 32232-0019
(904) 232-1666

AQUACULTURE AUTHORITY

Rule 62C-52.011, Florida Administrative Code
Prohibited Aquatic Plants

(1) Class I Prohibited Aquatic Plants -- Under no circumstances will these species be permitted for possession, collection, transportation, cultivation, and importation except as provided in Rule 62C-52.004, F.A.C.:

SCIENTIFIC NAMES	COMMON NAMES
Alternanthera philoxeroides	Alligatorweed, green lead plant
Casuarina spp.	Australian Pine
Crassula helmsii	Swamp stone crop
Eichhornia spp.	Waterhyacinth
Hydrilla verticillata	Hydrilla, Florida elodea, stargrass, oxygen grass
Ipomoea aquatica	Water spinach
Ipomoea fistulosa	
Lagarosiphon spp.	African elodea
Limnocharis flava	Sawah flowing rush
Lythrum salicaria	Purple loosestrife
Melaleuca quinquenervia	Melaleuca
Mimosa pigra	Giant sensitive plant, cat>s claw
Monochoria hastata	
Monochoria vaginalis	
Myriophyllum spicatum	Eurasian watermilfoil
Nechamandra alternifolia	
Oryza rufipogon	Wild Red rice
Pontederia rotundifolia	Tropical pickerelweed
Salvinia spp., (excluding S. minima)	
Schinus terebinthifolius	Brazilian-pepper
Sparganium erectum	Exotic bur-reed
Stratiotes aloides	Water-aloe, soldier plant
Trapa spp.	Water chestnut
Vossia cuspidata	Hippo grass

(2) Class II Prohibited Aquatic Plants -- These species are considered to be highly invasive and noxious in localized areas of the State of Florida. These plants may be cultured in a nursery regulated by the Department of Agriculture and Consumer Services pursuant to s. 581.031, 581.131, and 581.145, F.S., and shall only be sold out of state upon approval by the Department of Agriculture and Consumer Services. These species shall

not be imported or collected from the wild. They must be contained in such a manner so as to prevent the dissemination from the nursery premises.

SCIENTIFIC NAMES	COMMON NAME
Hygrophila polysperma	Hygro
Limnophila sessiliflora	Ambulia
Pistia stratiotes	Waterlettuce

(3) The department is authorized to designate additional plants to be prohibited by emergency order as provided in Rule 62C-52.012, F.A.C.

(4) The prohibited aquatic plant list comprises the most recent and accepted scientific and common names of the prohibited aquatic plant species. However, the prohibited status also applies to any synonyms.

(5) The department is authorized to consider a plant for inclusion on the prohibited plant list when it displays, or when there is scientific evidence to believe it could display in the Florida environment, one or more of the following characteristics:

(a) The tendency to spread or become invasive in an ecosystem, sometimes in a rapid manner, so as to impair the ecosystem=s ability to function by altering its productivity, decomposition, water fluxes, nutrient cycling and loss, soil fertility, erosion, dissolved oxygen concentrations, or its ability to maintain its existing species diversity.

(b) The propensity to invade and disrupt aquatic and wetland ecosystems in other areas or in other countries with climates similar to that of Florida.

(c) The ability to create dense, monospecific stands or monotypic stands which displace or destroy native plant habitat, destroy fish and wildlife habitats, inhibit water circulation, hinder navigation and irrigation, or severely restrict the recreational use of waterways.

(d) The ability to resist effective management by present technology or available management agents so that only extraordinary efforts, such as repeated chemical treatments at high dosage rates, can bring about effective management.

Specific Authority 369.25, 369.251 FS.
Law Implemented 369.25, 369.251 FS.
History--New 8-11-86, Amended 6-13-93, Formerly 16C-52.011.

Chapter 68-23.008, Florida Administrative Code
Restricted and Prohibited Non-native Freshwater Species

Introduction of Freshwater Non-Native Aquatic Species in the Waters of the State; Provisions for Sale and Inspection of Fish for Bait or Propagation Purpose; Diseased Fish.

(1) No person shall transport into the state, introduce, or possess for any purpose that might be reasonably expected to result in liberation into the waters of the state, any freshwater aquatic species not native to the state, without having secured a permit from the Commission, except:

(a) Fathead or tuffy minnow (*Pimephales promelas*)

(b) Variable platy (*Xiphophorus variatus*)

(2) Restricted non-native aquatic species:

(a) The following aquatic species or hybrids thereof may be possessed only under permit from the executive director.

1. Bighead carp (*Aristichthys nobilis*)

2. Bony-tongue fishes [family Osteoglossidae, all species except Silver arowana *(Osteoglossum bicirrhosum)*]

3. Dorados (genus *Salminus,* all species)

4. Freshwater stingrays (family Potamotrygonidae, all species)

5. Grass carp (*Ctenopharyngodon idella*); restrictions and requirements described in Rule 68A-23.088

6. Nile perches (genus *Lates,* all species)

7. Silver carp (*Hypophthalmichthys molitrix*)

8. Snail or black carp (*Mylopharyngodon piceus*)

9 Tilapias [*Tilapia (Oreochromis) aurea, T. (O.) hornorum, T. (O.) mossambica* and *Tilapia (O.) nilotica]*. *T. (O.) aurea* may be possessed, cultured, and transported without permit in the Central, South and Everglades regions.

10. Walking catfish (*Clarias batrachus*)

11. Australian red claw crayfish (*Cherax quadricarinatus*; tank culture systems only)

12. Blue catfish (*Ictalurus furcatus*), except north and west of the Suwannee River blue catfish may be possessed without permit.

13. Red swamp crayfish (*Procambarus clarkii*) and white river crayfish (*Procambarus zonangulas*), except that pond aquaculture is prohibited. Red swamp crayfish and white river crayfish may be possessed west of the Apalachicola River or imported for direct sale to food wholesalers and food retailers for re-sale to consumers without permit.

(b) Prior to the issuance of such permit, the facilities where the restricted aquatic species are to be kept and waters where their use is intended may be inspected by Commission personnel to assure that adequate safeguards exist to prevent escape or accidental release into the waters of the state. Permits for restricted aquatic species may be issued by the Commission subject to the following:

1. Restricted aquatic species held outdoors may only be held in a water body that has the lowest point of the top edge of its levee, dike, bank, or tank at an elevation of at least one foot above the 100-year flood elevation determined by reference to elevation maps issued by the National Flood Insurance Program, U.S. Department of Housing and Urban Development. Such water body shall have no water discharge or shall be constructed with a fish barrier system designed to prevent escape of adult fish, juvenile fish and fish eggs in the water effluent discharged from the permittee's property. Such water body also shall be inaccessible to the public.

2. Restricted aquatic species held indoors may only be held in culture systems having no water discharge, having a water discharge through a closed drain system, or other system designed to prevent discharge of water containing adult and juvenile fish and fish eggs from the permittee's property.

(c) Permits may be granted for research or aquacultural purposes and to commercial import or export facilities or public aquaria involved in educational efforts. Permit shall not be issued for display in private aquaria.

(3) Prohibited non-native aquatic species:

(a) No person shall import, sell, possess or transport in state any of the following live aquatic species or hybrids thereof:

1. African electric catfishes (family Malapteruridae, all species)

2. African tigerfishes (subfamily Hydrocyninae, all species)

3. Airbreathing catfishes (family Clariidae, all species except *Clarias batrachus*)

4. Candiru catfishes (family Trichomycteridae, all species)

5. Freshwater electric eels (family Electrophoridae, all species)

6. Lampreys (family Petromyzonidae, all species)

7. Piranhas and pirambebas (subfamily Serrasalminae, all species)

8. Snakeheads (family Channidae, all species)

9. Tilapias [(*Tilapia, Sarotherodon* and *Oreochromis genera*) all species except *Tilapia (Oreochromis) aurea, T. (O.) hornorum, T. (O.) mossambica* and *Tilapia (O.) nilotica*]

10. Trahiras or tigerfishes (family Erythrinidae, all species)

11. Airsac catfishes (family Heteropneustidae, all species)

12. Green sunfish (*Lepomis cyanellus*)

13. Australian crayfish (Genus *Cherax,* except for tank aquaculture of *Cherax quardricarinatus*)

14. Zebra mussels (*Dreissena polymorpha*)

(b) Limited exceptions to this subsection may be made by permit for viewing at large public aquaria or for research, provided Commission-approved maximum security requirements are met. Research permits for prohibited aquatic species shall be subject to the following:

1. The research permit shall expire 12 months from the date of issuance.

2. A detailed research proposal shall accompany the application for the research permit. Such proposal shall state with particularity the research objectives, methodology and study duration, and outline planned safeguards that shall assure proper containment of the species.

3. A detailed annual report of research findings, which shall include a description of activities undertaken in the permit period, progress toward research project objectives and proposed activities to be undertaken in the

ensuing months, shall be submitted prior to renewal of the research permit. Receipt and approval by the Commission is a condition precedent to renewal of the research permit. This information shall be available for public dissemination.

4. All research on prohibited fishes shall be conducted in indoor facilities in containers or tanks having no water discharge or having a water discharge through a closed drain system that terminates in a dry-bed, wastewater pond.

5. No research, or viewing at large public aquaria, permits shall be granted for piranhas and pirambebas (subfamily Serrasalminae, all species).

(4) No person shall allow or permit any freshwater aquatic organism not native to the state to remain in the waters of any propagating pool or pond which is no longer maintained or operated for the production of such non-native species.

(5) The presence of any species designated in subsections (2) or (3) in any propagating pool or pond shall constitute possession by the owner or operator of the pool or pond.

(6) Hatcheries shall maintain written records such as shipping tickets, invoices, bills of lading, or other records of sales, purchases, or transfers showing numbers of organisms in the shipment, source of supply or disposition of imported freshwater fish. Such records shall be maintained until December 31 of the following year.

(7) Any representative of the Commission may inspect all records, ponds, pools, vehicles and other facilities used to produce, grow, store or transport freshwater fish. Inspection may be made of such facilities wherein foreign or non-native species of freshwater fish are propagated for any commercial purpose so as to determine that such species or their eggs are not allowed to escape into the waters of the state or to determine whether freshwater aquatic organisms are infected or diseased. In the event that an epizootic aquatic disease among cultured aquatic organisms presents a threat to public health or to the fish or wildlife resources, freshwater aquatic organisms exposed or exhibiting such disease may be quarantined, confiscated or destroyed as a public nuisance without compensation to anyone having a financial interest in such organisms.

(8) Any fish or aquatic organism which may be discovered in ponds, pools, vehicles or other facilities and which in the determination of the executive director would be detrimental to freshwater fish if released or placed in the waters of the state, shall be confiscated and destroyed as a public nuisance.

Specific Authority Art. IV, Sec. 9, Fla. Const.
Law Implemented Art. IV, Sec. 9, Fla. Const.
History--New 8-1-79, Amended 6-4-81, 6-21-82, 7-1-84, Formerly 39-23.08, Amended 4-13-88, 7-1-89, 10-30-89, 7-1-92, 7-1-94, 4-12-98, Formerly 39-23.008.

Chapter 370.081, Florida Statutes
Non-native Marine Plants and Animals

Illegal importation or possession of nonindigenous marine plants and animals; rules and regulations.

(1) It is unlawful to import or possess any marine plant or marine animal, not indigenous to the state, which, due to the stimulating effect of the waters of the state on procreation, may endanger or infect the marine resources of the state or pose a human health hazard, except as provided in this section.

(2) Marine animals not to be imported shall include, but are not limited to, all species of the following:

(a) Sea snakes (Family Hydrophiidae), except as provided in subsection (4);

(b) Weeverfishes (Family Trachinidae); and

(c) Stonefishes (Genus Synanceja).

(3) The Fish and Wildlife Conservation Commission is authorized to adopt, pursuant to chapter 120, rules and regulations to include any additional marine plant or marine animal which may endanger or infect the marine resources of the state or pose a human health hazard.

(4) A zoological park and aquarium may import sea snakes of the family Hydrophiidae for exhibition purposes only under the following conditions:

(a) Only male sea snakes may be possessed.

(b) A zoological park and aquarium possessing sea snakes shall not be located in a coastal county and shall have no contiguous connection with any waters of the state.

(c) Each zoological park and aquarium possessing sea snakes shall provide quarterly reports to the department regarding the number of each species of sea snakes on the premises and any changes in inventory resulting from death or additions by importation.

(d) Sea snakes shall not be released into the waters of the state.

(e) Each zoological park and aquarium possessing sea snakes shall post with the commission a $1 million letter of credit. The letter of credit shall be in favor of the State of Florida, Fish and Wildlife Conservation Commission, for use by the commission to remove any sea snake accidentally or intentionally introduced into waters of the state. The letter of credit shall be written in the form determined by the commission. The letter of credit shall provide that the zoological park and aquarium is responsible for the sea snakes within that facility and shall be in effect at all times that the zoological park and aquarium possesses sea snakes.

(f) A zoological park and aquarium shall not barter, sell, or trade sea snakes within this state.

(g) A zoological park and aquarium that imports sea snakes may bring the sea snakes into this state only by airplane that may only land at an airport located in a noncoastal county within this state.

(h) A zoological park and aquarium possessing sea snakes shall abide by all statutory and regulatory requirements of the Fish and Wildlife Conservation Commission with respect to venomous reptiles.

(5) It is unlawful to release into the waters of the state any nonindigenous saltwater species whether or not included in subsection (2) or prohibited by rules and regulations adopted pursuant to subsection (3) or authorized by subsection (4).

History.--s. 1, ch. 71-68; s. 1, ch. 77-65; s. 1, ch. 92-60; s. 220, ch. 94-356; s. 11, ch. 98-333; s. 102, ch. 99-245.

CHAPTER 597
AQUACULTURE

597.001 Florida Aquaculture Policy Act; short title.--This chapter may be cited as the "Florida Aquaculture Policy Act."

History.--s. 1, ch. 84-90; s. 1, ch. 93-152.

597.0015 Definitions.--For purposes of this chapter, the following terms shall have the following meanings:

(1) "Aquaculture" means the cultivation of aquatic organisms.

(2) “Aquaculture producers" means those persons engaging in the production of aquaculture products and certified under s. 597.004.

(3) "Aquaculture products" means aquatic organisms and any product derived from aquatic organisms that are owned and propagated, grown, or produced under controlled conditions. Such products do not include organisms harvested from the wild for depuration, wet storage, or relay for purification.

(4) "Commissioner" means the Commissioner of Agriculture.

(5) "Department" means the Department of Agriculture and Consumer Services.

History.--s. 7, ch. 91-187; s. 23, ch. 96-247; s. 10, ch. 99-390.

597.002 Legislative declaration of public policy respecting aquaculture.--The Legislature declares that aquaculture is agriculture and, as such, the Department of Agriculture and Consumer Services shall be the primary agency responsible for regulating aquaculture, any other law to the contrary notwithstanding. The only exceptions are those areas required by federal law, rule, or cooperative agreement to be regulated by another agency. The Legislature declares that, in order to effectively support the growth of aquaculture in this state, there is a need for a state aquaculture plan that will provide for the coordination and prioritization of state aquaculture efforts and the conservation and enhancement of aquatic resources and will provide mechanisms for increasing aquaculture production which may lead to the creation of new industries, job opportunities, income for aquaculturists, and other benefits to the state. The state aquaculture plan shall guide the research and development of the aquaculture industry. Funds designated by the Legislature for aquaculture research and development or for contracting for aquaculture research and development shall be used to address the projects and activities designated in the state aquaculture plan. Any entity receiving legislative funding for aquaculture research and development programs shall report annually to the department all activities related to aquaculture to facilitate coordination and compliance with the state aquaculture plan.

History.--s. 2, ch. 84-90; s. 3, ch. 90-92; s. 8, ch. 91-187; s. 24, ch. 96-247; s. 24, ch. 98-333.

597.0021 Legislative intent.--

(1) It is the intent of the Legislature to enhance the growth of aquaculture in this state, while protecting Florida's environment.

(2) It is also the intent of the Legislature to give the department the duty to coordinate and assist the development of aquaculture.

(3) It is the intent of the Legislature that the Aquaculture Review Council and the Aquaculture Interagency Coordinating Council are established to provide a means of communication between the aquaculture industry and the regulatory agencies.

History.--s. 1, ch. 87-367; s. 4, ch. 90-92; s. 9, ch. 91-187; s. 29, ch. 91-201; ss. 2, 6, ch. 93-152; s. 25, ch. 96-247.

597.003 Powers and duties of Department of Agriculture and Consumer Services.--

(1) The department is hereby designated as the lead agency in encouraging the development of aquaculture in the state and shall have and exercise the following functions, powers, and duties with regard to aquaculture:

(a) Issue or deny aquaculture certificates that identify aquaculture producers and aquaculture products, and collect all related fees.

(b) Coordinate the development, annual revision, and implementation of a state aquaculture plan. The plan shall include prioritized recommendations for research and development as suggested by the Aquaculture Review Council, the Aquaculture Interagency Coordinating Council, and public and private institutional research, extension, and service programs.

(c) Develop memoranda of agreement, as needed, with the Department of Environmental Protection, the Fish and Wildlife Conservation Commission, the Florida Sea Grant Program, and other groups as provided in the state aquaculture plan.

(d) Provide staff for the Aquaculture Review Council and the Aquaculture Interagency Coordinating Council.

(e) Forward the annually revised state aquaculture plan to the commissioner and to the chairs of the House Committee on Agriculture and Consumer Services and the Senate Committee on Agriculture 1 month prior to submission of the department's legislative budget request to the Governor.

(f) Submit the list of research and development projects proposed to be funded through the department as identified in the state aquaculture plan, along with the department's legislative budget request to the Governor, the President of the Senate, and the Speaker of the House of Representatives. If funded, these projects shall be contracted for by the Division of Aquaculture and shall require public-private partnerships, when appropriate. The contracts shall require a percentage of the profit generated by the project to be deposited into the General Inspection Trust Fund solely for funding aquaculture projects recommended by the Aquaculture Review Council.

(g) Provide developmental assistance to the various sectors of the aquaculture industry as determined in the state aquaculture plan.

(h) Assist persons seeking to engage in aquaculture when applying for the necessary permits and serve as ombudsman to resolve complaints or otherwise resolve problems arising between aquaculture producers and regulatory agencies.

(i) Develop and propose to the Legislature legislation necessary to implement the state aquaculture plan or to otherwise encourage the development of aquaculture in the state.

(j) Issue or deny any license or permit authorized or delegated to the department by the Legislature or through memorandum of understanding with other state or federal agencies that furthers the intent of the Legislature to place the regulation of aquaculture in the department.

(k) Make available state lands and the water column for the purpose of producing aquaculture products when the aquaculture activity is compatible with state resource management goals, environmental protection, and 1proprietary interest and when such state lands and waters are determined to be suitable for aquaculture development by the Board of Trustees of the Internal Improvement Trust Fund pursuant to s. 253.68; and be responsible for all saltwater aquaculture activities located on sovereignty submerged land or in the water column above such land and adjacent facilities directly related to the aquaculture activity.

1. The department shall act in cooperation with other state and local agencies and programs to identify and designate sovereignty lands and waters that would be suitable for aquaculture development.

2. The department shall identify and evaluate specific tracts of sovereignty submerged lands and water columns in various areas of the state to determine where such lands and waters are suitable for leasing for aquaculture purposes. Nothing in this subparagraph or subparagraph 1. shall preclude the applicant from applying for sites identified by the applicant.

3. The department shall provide assistance in developing technologies applicable to aquaculture activities, evaluate practicable production alternatives, and provide agreements to develop innovative culture practices.

(l) Act as a clearinghouse for aquaculture applications, and act as a liaison between the Fish and Wildlife Conservation Commission, the Division of State Lands, the Department of Environmental Protection district offices, other divisions within the Department of Environmental Protection, and the water management districts. The Department of Agriculture and Consumer

Services shall be responsible for regulating marine aquaculture producers, except as specifically provided herein.

(2) The department may employ such persons as are necessary to perform its duties under this chapter.

History.--s. 3, ch. 84-90; s. 1, ch. 86-111; s. 5, ch. 87-367; s. 2, ch. 88-377; s. 10, ch. 91-187; s. 3, ch. 93-152; s. 467, ch. 94-356; s. 26, ch. 96-247; s. 25, ch. 98-333; s. 225, ch. 99-245; s. 25, ch. 2000-364.

1Note.--The word "proprietary" was substituted for the word "propriety" by the editors.

597.004 Aquaculture certificate of registration.--

(1) CERTIFICATION.--Any person engaging in aquaculture must be certified by the department. The applicant for a certificate of registration shall submit the following to the department:

(a) Applicant's name/title.

(b) Company name.

(c) Complete mailing address.

(d) Legal property description of all aquaculture facilities.

(e) Actual physical street address for each aquaculture facility.

(f) Description of production facilities.

(g) Aquaculture products to be produced.

(h) Fifty dollar annual registration fee.

(i) Documentation that the rules adopted herein have been complied with in accordance with paragraph (2)(a).

(2) RULES.--

(a) The department, in consultation with the Department of Environmental Protection, the water management districts, environmental groups, and representatives from the affected farming groups, shall adopt rules to:

1. Specify the requirement of best-management practices to be implemented by holders of aquaculture certificates of registration.

2. Establish procedures for holders of aquaculture certificates of registration to submit the notice of intent to comply with best-management practices.

3. Establish schedules for implementation of best-management practices, and of interim measures that can be taken prior to adoption of best-management practices. Interim measures may include the continuation of regulatory requirements in effect on June 30, 1998.

4. Establish a system to assure the implementation of best-management practices, including recordkeeping requirements.

(b) Rules adopted pursuant to this subsection shall become effective pursuant to the applicable provisions of chapter 120, but must be submitted to the President of the Senate and the Speaker of the House of Representatives for review by the Legislature. The rules shall be referred to the appropriate committees of substance and scheduled for review during the first available regular session following adoption. Except as otherwise provided by operation of law, such rules shall remain in effect until rejected or modified by act of the Legislature.

(c) Notwithstanding any provision of law, the Department of Environmental Protection is not authorized to institute proceedings against any person certified under this section to recover any costs or damages associated with contamination of groundwater or surface water, or the evaluation, assessment, or remediation of contamination of groundwater or surface water, including sampling, analysis, and restoration of potable water supplies, where the contamination of groundwater or surface water is determined to be the result of aquaculture practices, provided the holder of an aquaculture certificate of registration:

1. Provides the department with a notice of intent to implement applicable best-management practices adopted by the department;

2. Implements applicable best-management practices as soon as practicable according to rules adopted by the department; and

3. Implements practicable interim measures identified and adopted by the department which can be implemented immediately, or according to rules adopted by the department.

(d) There is a presumption of compliance with state groundwater and surface water standards if the holder of an aquaculture certificate of registration implements best-management practices that have been verified by the Department of Environmental Protection to be effective at representative sites and complies with the following:

1. Provides the department with a notice of intent to implement applicable best-management practices adopted by the department;

2. Implements applicable best-management practices as soon as practicable according to rules adopted by the department; and

3. Implements practicable interim measures identified and adopted by the department which can be implemented immediately, or according to rules adopted by the department.

(e) This section does not limit federally delegated regulatory authority.

(f) Any aquatic plant producer permitted by the department pursuant to s. 369.25 shall also be subject to the requirements of this section.

(g) Any alligator producer with an alligator farming license and permit to establish and operate an alligator farm shall be issued an aquaculture certificate of registration pursuant to this section. This chapter does not supersede the authority under chapter 372 to regulate alligator farms and alligator farmers.

(3) FEES.--Effective July 1, 1997, all fees collected pursuant to this section shall be deposited into the General Inspection Trust Fund in the Department of Agriculture and Consumer Services.

(4) IDENTIFICATION OF AQUACULTURE PRODUCTS.--Aquaculture products shall be identified while possessed, processed, transported, or sold as provided in this subsection.

(a) Aquaculture products shall be identified by an aquaculture certificate of registration number from harvest to point of sale. Any person who possesses aquaculture products must show, by appropriate receipt, bill of sale, bill of lading, or other such manifest where the product originated.

(b) Marine aquaculture products shall be transported in containers that separate such product from wild stocks, and shall be identified by tags or labels that are securely attached and clearly displayed.

(c) Each aquaculture registrant who sells food products labeled as "aquaculture or farm raised" must have such products containerized and clearly labeled in accordance with s. 500.11. Label information must include the name, address, and aquaculture certification number. This requirement is designed to segregate the identity of wild and aquaculture products.

(5) SALE OF AQUACULTURE PRODUCTS.--

(a) Aquaculture products, except shellfish, snook, and any fish of the genus Micropterus, and prohibited and restricted freshwater and marine species identified by rules of the Fish and Wildlife Conservation Commission, may be sold by an aquaculture producer certified pursuant to s. 597.004 without restriction so long as product origin can be identified.

(b) Aquaculture shellfish must be sold and handled in accordance with s. 597.020.

(6) REGISTRATION AND RENEWALS.--

(a) Each aquaculture producer must apply for an aquaculture certificate of registration with the department and submit the appropriate fee. Upon department approval, the department shall issue the applicant an aquaculture certificate of registration for a period not to exceed 1 year. Beginning July 1, 1997, and each year thereafter, each aquaculture certificate of registration must be renewed with fee, pursuant to this chapter, on July 1.

(b) The department shall send notices of registration to all aquaculture producers of record requiring them to register for an aquaculture certificate. Renewal notices shall be sent to the registrant 60 days preceding the termination date of the certificate of registration. Prior to the termination date, the registrant must return a completed renewal form with fee, pursuant to this chapter, to the department.

(c) Any person whose certificate of registration has been revoked or suspended must reapply to the department for certification.

History.--s. 27, ch. 96-247; s. 54, ch. 97-98; s. 26, ch. 98-333; s. 11, ch. 99-390; s. 78, ch. 2000-158; s. 27, ch. 2000-364.

597.0041 Prohibited acts; penalties.--

(1) It is unlawful for an aquaculture registrant to:

(a) Commingle in the same container any shellfish aquaculture product with any wild product;

(b) Transport by vessel over water both wild and aquaculture products of the same species at the same time; or

(c) Violate any provision of this chapter or chapter 500.

(2) (a) Any person who violates any provision of this chapter or any rule promulgated hereunder is subject to a suspension or revocation of his or her certificate of registration or license under this chapter. The department may, in lieu of, or in addition to the suspension 1or revocation, impose on the violator an administrative fine in an amount not to exceed $1,000 per violation per day.

(b) Except as provided in subsection (4), any person who violates any provision of this chapter, or rule hereunder, commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

(3) Any person certified under this chapter who has been convicted of taking aquaculture species raised at a certified facility shall have his or her certificate revoked for 5 years by the Department of Agriculture and Consumer Services pursuant to the provisions and procedures of s. 120.60.

(4) Any person who violates any provision of s. 597.010 or s. 597.020, or any rule adopted under those sections, commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083 for the first offense; and for the second or any subsequent offense within a 12-month period, commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

History.--s. 28, ch. 96-247; s. 12, ch. 99-390; s. 28, ch. 2000-364.

1Note.--Substituted by the editors for the word "of" to improve clarity and facilitate correct interpretation.

597.0045 Cultured shellfish theft reward program.--There is created a cultured shellfish theft reward program, to be administered by the department, for the purpose of granting rewards to persons who provide information leading to the arrest and conviction of individuals illegally possessing, harvesting, or attempting to harvest cultured shellfish.

(1) Each person who provides information leading to the arrest and conviction of an individual or individuals for illegally possessing, harvesting, or attempting to harvest cultured shellfish and for whom the respective state attorney notifies the department of such assistance, in writing, shall be eligible for a reward of up to $2,500; except

that law enforcement officers and department personnel, and members of their immediate families, shall not be eligible for rewards under the program. The department shall, by rule, establish a graduated reward payout schedule.

(2) The General Inspection Trust Fund of the department may be used for the cultured shellfish theft reward program, for deposit of general revenue funds and donations received from interested individuals, and for granting rewards to persons who provide information leading to the arrest and conviction of persons illegally possessing, harvesting, or attempting to harvest cultured shellfish. The granting of rewards shall be subject to legislative appropriations to fund the program.

(3) The department may promote the cultured shellfish theft reward program to provide for public recognition of the rewards and to improve compliance with laws prohibiting illegal possession and harvesting of cultured shellfish.

History.--s. 13, ch. 99-390.

597.005 Aquaculture Review Council.--

(1) COMPOSITION.--There is created within the department the Aquaculture Review Council to consist of nine members as follows: the chair of the State Agricultural Advisory Council or designee; the chair of the Aquaculture Interagency Coordinating Council; and seven additional members to be appointed by the commissioner, including an alligator farmer, a food fish farmer, a shellfish farmer, a tropical fish farmer, an aquatic plant farmer, a representative of the commercial fishing industry, and a representative of the aquaculture industry at large. Members shall be appointed for 4-year terms. Each member shall be selected from no fewer than two or more than three nominees submitted by recognized statewide organizations representing each industry segment or the aquaculture industry at large. In the absence of nominees, the commissioner shall appoint persons who otherwise meet the qualifications for appointment to the council. Members shall serve until their successors are duly qualified and appointed. An appointment to fill a vacancy shall be for the unexpired portion of the term.

(2) MEETINGS; PROCEDURES; RECORDS.--

(a) The members of the council shall meet at least quarterly; shall elect a chair, a vice chair, a secretary, and an industry representative to the Aquaculture Interagency Coordinating Council; and shall use accepted rules of procedure. The terms of such officers shall be for 1 year.

(b) The council shall meet at the call of its chair, at the request of a majority of its membership, at the request of the department, or at such times as may be

prescribed by its rules of procedure. However, the council shall hold a joint annual meeting with the Aquaculture Interagency Coordinating Council.

(c) A majority of the members of the council constitutes a quorum for all purposes, and an act by a majority of such quorum at any meeting constitutes an official act of the council.

(d) The council secretary shall keep a complete record of the proceedings of each meeting, which record shall include the names of the members present and the actions taken. Such records shall be kept on file with the department, and these records and other documents about matters within the jurisdiction of the council shall be subject to inspection by the members of the council.

(3) RESPONSIBILITIES.--The primary responsibilities of the Aquaculture Review Council are to:

(a) Formulate and recommend to the commissioner rules and policies governing the business of aquaculture by studying and evaluating aquacultural issues.

(b) Provide aquaculture industry recommendations for research and development to be included in the annual revision of the state aquaculture plan.

(c) Submit to the commissioner on an annual basis:

1. A prioritized list of research projects to be included in the department's legislative budget request. Each year, the council shall review the aquaculture legislative budget requests submitted to the department and rank them according to the state aquaculture plan.

2. Recommendations to be forwarded to the Speaker of the House of Representatives and the President of the Senate on legislation needed to help the aquaculture industry.

3. Recommendations on aquaculture projects, activities, research, and regulation and other needs to further the development of the aquaculture industry.

(d) On a quarterly basis, review and discuss problems that serve as barriers to the growth and development of aquaculture.

(e) Assist the department in carrying out duties identified in s. 597.003 by studying aquaculture issues and making recommendations for regulating and

permitting aquaculture and in the development, revision, and implementation of the state aquaculture plan.

(f) Provide input to the department to perform studies, identify needs, research issues, write reports, record actions and meetings of the council and, in general, conduct the business of the council.

(g) Receive input from state agencies and public and private institutions on aquaculture research, service, development, and regulatory needs.

(h) For any problem that cannot be solved through simple cooperation or negotiation, provide an issue analysis to the Aquaculture Interagency Coordinating Council and to the chairs of the legislative appropriations committees. The analysis shall include, but not be limited to, specific facts and industry hardships, regulatory provisions, questions relative to the issue, and suggestions for solving the problem.

(i) Provide the Governor, the President of the Senate, the Speaker of the House of Representatives, and the chairs of legislative committees having primary jurisdiction over either the subject of aquaculture or the budget of the Department of Agriculture and Consumer Services, by August 1 of each year, a list of prioritized research needs critical to development of the aquaculture industry.

(4) EXPENSES; PER DIEM.--Members of the council shall receive expenses and per diem for travel, including attendance at meetings, as allowed state officers and employees pursuant to s. 112.061.

History.--ss. 5, 8, ch. 84-90; s. 7, ch. 87-367; ss. 3, 5, 6, ch. 88-377; s. 5, ch. 90-92; s. 11, ch. 91-187; ss. 4, 6, ch. 93-152; s. 29, ch. 96-247; s. 27, ch. 98-333; s. 29, ch. 2000-364.

597.006 Aquaculture Interagency Coordinating Council.--

(1) CREATION.--The Legislature finds and declares that there is a need for interagency coordination with regard to aquaculture by the following agencies: the Department of Agriculture and Consumer Services; the Office of Tourism, Trade, and Economic Development; the Department of Community Affairs; the Department of Environmental Protection; the Department of Labor and Employment Security; the Fish and Wildlife Conservation Commission; the statewide consortium of universities under the Florida Institute of Oceanography; Florida Agricultural and Mechanical University; the Institute of Food and Agricultural Sciences at the University of Florida; and the Florida Sea Grant Program. It is therefore the intent of the Legislature

to hereby create an Aquaculture Interagency Coordinating Council to act as an advisory body as defined in s. 20.03(9).

(2) COMPOSITION.--The head of each agency listed in subsection (1) shall designate an aquaculture coordinator to act as the aquaculture contact person regarding the statutory responsibilities of the agency and to serve as a member of the Aquaculture Interagency Coordinating Council, except that the Vice President for Agricultural Affairs of the University of Florida or designee shall represent the Institute of Food and Agricultural Sciences.

(3) MEETINGS; PROCEDURES; RECORDS.--The coordinating council shall meet at least quarterly.

(a) A chair and vice chair shall be elected by the membership and shall serve for 1 year, commencing in September. The chair shall preside at all meetings and shall call a meeting of the coordinating council as often as necessary to transact business. Meetings shall include at least one joint annual meeting with the Aquaculture Review Council. The coordinating council may designate subcommittees from time to time to assist in carrying out its responsibilities.

(b) A majority of the members shall constitute a quorum, and action by a majority of a quorum shall be official.

(c) The department shall have primary responsibility for providing administrative and staff support services for the coordinating council and shall maintain a complete record of the proceedings of each meeting, which record shall include the names of members present and the actions taken. Such records shall be kept on file with the department, and these records and other documents about matters within the jurisdiction of the coordinating council shall be subject to inspection by the members of the coordinating council.

(4) PURPOSE AND RESPONSIBILITIES.--The purpose of the coordinating council is to establish positive interagency cooperation to foster the development of the state's aquaculture industry. In carrying out this purpose, the coordinating council shall:

(a) Serve as a forum for the discussion and study of governmental regulations relating to aquaculture.

(b) Review and discuss aquaculture issues developed by the Aquaculture Review Council.

(c) Formulate responses to industry issues, as presented by the Aquaculture Review Council, which include solutions and policy alternatives to facilitate aquaculture development.

(d) Review the recommendations for short-term research projects submitted to the commissioner by the Aquaculture Review Council. The coordinating council shall forward any pertinent comments to the commissioner.

(e) Review the results of the aquaculture research projects funded by the department.

(f) Establish and maintain effective and cooperative linkages between member agencies, the Aquaculture Review Council, and public and private institutional research, extension, and service programs, so that recommendations for improvement are responsive to the needs of aquaculture.

(g) Prepare an annual report to be submitted by December 1 of each year to the Governor, the President of the Senate, the Speaker of the House of Representatives, the chairs of the legislative appropriations and agriculture committees, and the heads of each agency represented on the coordinating council. This report shall describe all actions and include all recommendations of the coordinating council, as well as the responsive actions taken by the agencies. This report shall provide a list of all aquaculture activities undertaken by member agencies. The list shall include the needs each activity is designed to address, the results, the funds expended on each activity, and the source of those funds.

(h) Develop guidelines for use by member agencies when reporting any aquaculture activities.

History.--ss. 6, 8, ch. 84-90; ss. 4, 5, 6, ch. 88-377; s. 6, ch. 90-92; s. 12, ch. 91-187; ss. 5, 6, ch. 93-152; s. 468, ch. 94-356; s. 226, ch. 99-245; s. 30, ch. 2000-364.

597.010 Shellfish regulation; leases.--

(1) LEASE, APPLICATION FORM.--When any qualified person desires to lease a part of the bottom, water column, or bed of any of the water of this state for the purpose of growing oysters or clams, as provided for in this section, he or she shall present to the department a written application pursuant to s. 253.69.

(2) LANDS TO BE LEASED.--The lands leased shall be as compact as possible, taking into consideration the shape of the body of water and the condition of the bottom as to

hardness, or soft mud or sand, or other conditions that would render the bottoms desirable or undesirable for the purpose of oyster or clam cultivation.

(3) SURVEYS, PLATS, AND MAPS OF REEFS.--The department shall accept, adopt, and use official reports, surveys, and maps of oyster, clam, or other shellfish grounds made under the direction of any authority of the United States as prima facie evidence of the natural oyster and clam reefs and beds, for the purpose and intent of this chapter. The department may also make surveys of any natural oyster or clam reefs or beds when it deems such surveys necessary and where such surveys are made pursuant to an application for a lease, the cost thereof may be charged to the applicant as a part of the cost of his or her application.

(4) EXECUTION OF LEASES; LESSEE TO STAKE OFF BOUNDARIES; PENALTY FOR FAILURE TO COMPLY WITH REGULATIONS.--When a survey of the lands to be leased has been completed pursuant to s. 253.69 and filed with the department, and the cost thereof paid by the applicant, the department may execute in duplicate a lease of the water bottoms to the applicant. One duplicate, with a plat or map of the water bottoms so leased, shall be delivered to the applicant, and the other, with a plat or map of the bottom so leased, shall be retained by the department and registered in a lease book which shall be kept exclusively for that purpose by the department; thereafter the lessees shall enjoy the exclusive use of the lands and all oysters and clams, shell, and cultch grown or placed thereon shall be the exclusive property of such lessee as long as he or she shall comply with the provisions of this chapter and chapter 253. The department shall require the lessee to stake off and mark the water bottoms leased, by such ranges, monuments, stakes, buoys, etc., so placed and made as not to interfere with the navigation, as it may deem necessary to locate the same to the end that the location and limits of the lands embraced in such lease be easily and accurately found and fixed, and such lessee shall keep the same in good condition during the open and closed oyster or clam season. All leases shall be marked according to the standards set forth in s. 253.72. The department may stipulate in each individual lease contract the types, shape, depth, size, and height of marker or corner posts. Failure on the part of the lessee to comply with the orders of the department to this effect within the time fixed by it, and to keep the markers, etc., in good condition during the open and closed oyster or clam season, shall subject such lessee to a fine not exceeding $100 for each and every such offense.

(5) LEASES IN PERPETUITY; RENT.--

(a) All leases issued previously under the provisions of s. 370.16 shall be enforced under the authority of this chapter, notwithstanding any other law to the contrary, and shall continue in perpetuity under such restrictions as stated in the lease agreement. The annual rental fee charged for all leases shall consist of the minimum rate of $15 per acre, or any fraction of an acre, per

year and shall be adjusted on January 1, 1995, and every 5 years thereafter, based on the 5-year average change in the Consumer Price Index. Rent shall be paid in advance of January 1 of each year or in the case of a new lease at the time of signing, regardless of who holds the lease.

(b) All fees collected under this subsection and subsection (6) shall be deposited in the General Inspection Trust Fund and shall be used for shellfish aquaculture activities.

(6) FORFEITURE FOR NONPAYMENT.--All leases shall stipulate that failure to timely pay the rent on or before January 1 of each year shall cause the department, at its discretion, to terminate and cancel the lease after the department has given the lessee 30 days' written notice of the nonpayment. If after receiving the notice the lessee chooses to keep the lease, the lessee shall pay the rental fee plus a $50 late fee within the 30-day period. After the 30-day notice has expired, the department may take possession of the lease and all improvements, assets, clams, and oysters thereon.

(7) SURCHARGE FOR IMPROVEMENT OR REHABILITATION.--A surcharge of $10 per acre, or any fraction of an acre, per annum shall be levied upon each lease, other than a perpetual lease granted pursuant to chapter 370 prior to 1985, and deposited into the General Inspection Trust Fund. The purpose of the surcharge is to provide a mechanism to have financial resources immediately available for improvement of lease areas and for cleanup and rehabilitation of abandoned or vacated lease sites. The department is authorized to adopt rules necessary to carry out the provisions of this subsection.

(a) Moneys in the fund that are not needed currently for cleanup and rehabilitation of abandoned or vacated lease sites shall be deposited with the Treasurer to the credit of the fund and may be invested in such manner as is provided for by statute. Interest received on such investment shall be credited to the fund.

(b) Funds within the General Inspection Trust Fund from receipts from the surcharge established in this section shall be disbursed for the following purposes and no others:

1. Administrative expenses, personnel expenses, and equipment costs of the department related to the improvement of lease areas, the cleanup and rehabilitation of abandoned or vacated aquaculture lease sites, and the enforcement of provisions of this section.

2. All costs involved in the improvement of lease areas and the cleanup and rehabilitation of abandoned or vacated lease sites.

3. All costs and damages which are the proximate results of lease abandonment or vacation.

4. Reward payments made pursuant to s. 597.0045.

The department shall recover to the use of the fund from the person or persons abandoning or vacating the lease, jointly and severally, all sums owed or expended from the fund.

(8) CULTIVATION REQUIREMENTS.--

(a) Effective cultivation shall consist of the growing of the oysters or clams in a density suitable for commercial harvesting over the amount of bottom prescribed by law. This commercial density shall be accomplished by the planting of seed oysters, shell, and cultch of various descriptions. The department may stipulate in each individual lease contract the types, shape, depth, size, and height of cultch materials on lease bottoms according to the individual shape, depth, location, and type of bottom of the proposed lease. Each lessee leasing lands under the provisions of this section or s. 253.71 shall begin, within 1 year after the date of such lease, bona fide cultivation of the same, and shall, by the end of the second year after the commencement of such lease, have placed under cultivation at least one-half of the leased area and shall each year thereafter place in cultivation at least one-fourth of the leased area until the whole, suitable for bedding of oysters or clams, shall have been put in cultivation. The cultivation requirements for perpetuity leases granted pursuant to chapter 370 prior to 1985 under previously existing law shall comply with the conditions stated in the lease agreement, and the lessee or grantee is authorized to plant the leased or granted submerged land in both oysters and clams.

(b) These stipulations apply to all leases granted after the effective date of this section. All leases existing prior to the effective date of this section will operate under the law that was in effect when the leases were granted.

(c) When evidence is gathered by the department and such evidence conclusively shows a lack of effective cultivation, the department may revoke leases and return the bottoms in question to the public domain.

(d) The department has the authority to adopt rules pertaining to the water column over shellfish leases. All cultch materials in place 6 months after the formal adoption and publication of rules establishing standards for cultch materials on shellfish leases that do not comply with such rules may be declared a nuisance by the department. The department has the authority to direct the lessee to remove such cultch in violation of this section. The department may

cancel a lease upon the refusal by the lessee violating such rules to remove unlawful cultch materials, and all improvements, cultch, marketable oysters, and shell shall become the property of the state. The department has the authority to retain, dispose of, or remove such materials in the best interest of the state.

(9) LEASES TRANSFERABLE, ETC.--The leases in chapters 253 and 370 shall be inheritable and transferable, in whole or in part, and shall also be subject to mortgage, pledge, or hypothecation and shall be subject to seizure and sale for debts as any other property, rights, and credits in this state, and this provision shall also apply to all buildings, betterments, and improvements thereon. Leases granted under this section cannot be transferred, by sale or barter, in whole or in part, without the written, express approval of the department, and such a transferee shall pay a $50 transfer fee before department approval may be given. Leases inherited or transferred will be valid only upon receipt of the transfer fee and approval by the department. The department shall keep proper indexes so that all original leases and all subsequent changes and transfers can be easily and accurately ascertained.

(10) CANCELLATION OF LEASES TO NATURAL REEFS OR BEDS.--Any person, within 6 months after the execution of any lease, may file a petition with the department for the purpose of determining whether a natural oyster or clam reef or bed having an area of not less than 100 square yards existed within the leased area on the date of the lease, with sufficient natural or maternal oysters or clams thereon (not including coon oysters) to have constituted a stratum sufficient to have been resorted to by the public generally for the purpose of gathering the same to sell for a livelihood. The petition shall be in writing addressed to the department, verified under oath, stating the location and approximate area of the natural reef or bed and the claim or interest of the petitioner therein and requesting the cancellation of the lease to the natural reef or bed. A petition may not be considered unless it is accompanied by a deposit of $500 to defray the expense of the department's investigation of the matter. Upon receipt of such petition, the department shall cause an investigation to be made into the truth of the allegations of the petition, and, if found untrue, the $500 deposit shall be retained by the department to defray the expense of the investigation, but should the allegations of the petition be found true and the leased premises to contain a natural oyster or clam reef or bed, as described in this subsection, the $500 deposit shall be returned to the petitioner and the costs and expenses of the investigation taxed against the lessee and the lease canceled to the extent of the natural reef or bed and the same shall be marked with buoys and stakes and notices placed thereon showing the same to be a public reef or bed, the cost of the markers and notices to be taxed against the lessee.

(11) WHEN NATURAL REEFS OR BEDS MAY BE INCLUDED IN LEASE.--

(a) When an application for a submerged land lease for cultivating shellfish is filed, and when a resource survey of such lands identifies natural oyster or clam reefs or beds, the department shall determine if such reefs and beds are to be included in the leased area. The department, if it deems it to be in the best interest of the state, may include such natural reefs or beds in a lease. In those cases where a natural area is included in a lease, the department shall fix a reasonable value on the same, to be paid by the applicant for lease of such submerged land. No natural reefs shall be included in any shellfish or aquaculture lease granted in Franklin County.

(b) The department shall determine and settle all disputes as to boundaries between lessees. The department shall, in all cases, determine whether a particular submerged land area contains a natural reef or bed or whether it is suitable for raising oysters or clams.

(12) FRANKLIN COUNTY LEASES.--On and after the effective date of this section, the only leases available in Franklin County shall be those issued pursuant to ss. 253.67-253.75; chapter 370 leases shall no longer be available. The department shall require in the lease agreement such restrictions as it deems necessary to protect the environment, the existing leaseholders, and public fishery.

(13) TRESPASS ON LEASED BEDS; PROTECTION OF LEASE AREAS.--

(a) Any person who willfully takes oysters, shells, cultch, or clams bedded or planted by a licensee under this chapter, or grantee under the provisions of heretofore existing laws, or riparian owner who may have heretofore planted the same on his or her riparian bottoms, or any oysters or clams deposited by anyone making up a cargo for market, or who willfully carries or attempts to carry away the same without permission of the owner thereof, or who willfully or knowingly removes, breaks off, destroys, or otherwise injures or alters any stakes, bounds, monuments, buoys, notices, or other designations of any natural oyster or clam reefs or beds or private bedding or propagating grounds, or who willfully injures, destroys, or removes any other protection around any oyster or clam reefs or beds, or who willfully moves any bedding ground stakes, buoys, marks, or designations placed by the department, commits a violation of this section.

(b) Harvesting shellfish is prohibited within a distance of 25 feet outside lawfully marked lease boundaries or within setback and access corridors within specifically designated high-density aquaculture lease areas and aquaculture use zones.

(14) SHELLFISH DEVELOPMENT.--

(a) The department shall improve, enlarge, and protect the natural oyster and clam reefs and beds of this state to the extent it may deem advisable and the means at its disposal will permit.

(b) The Fish and Wildlife Conservation Commission shall, to the same extent, assist in protecting shellfish aquaculture products produced on leased or granted reefs and beds.

(c) The department, in cooperation with the commission, shall provide the Legislature with recommendations as needed for the development and the proper protection of the rights of the state and private holders therein with respect to the oyster and clam business.

(15) SPECIAL ACTIVITY LICENSES.--The department is authorized to issue special activity licenses, in accordance with s. 597.020, to permit the harvest or cultivation of oysters, clams, mussels, and crabs.

(16) STAKING OFF WATER BOTTOMS OR BEDDING OYSTERS WITHOUT OBTAINING LEASE.--Any person staking off the water bottoms of this state, or bedding oysters on the bottoms of the waters of this state, without previously leasing same as required by law commits a violation of this section, and shall acquire no rights by reason of such staking off. This provision does not apply to grants heretofore made under the provisions of any heretofore existing laws or to artificial beds made heretofore by a riparian owner or his or her grantees on the owner's riparian bottoms.

(17) SHELLFISH HARVESTING SEASONS; SPECIAL PROVISIONS RELATING TO APALACHICOLA BAY.--

(a) The Fish and Wildlife Conservation Commission shall by rule set the noncultured shellfish harvesting seasons in Apalachicola Bay.

(b) If the commission changes the harvesting seasons by rule as set forth in this subsection, for 3 years after the new rule takes effect, the commission, in cooperation with the department, shall monitor the impacts of the new harvesting schedule on the bay and on local shellfish harvesters to determine whether the new harvesting schedule should be discontinued, retained, or modified. In monitoring the new schedule and in preparing its report, the following information shall be considered:

1. Whether the bay benefits ecologically from the new harvesting schedule.

2. Whether the new harvesting schedule enhances the enforcement of shellfish harvesting laws in the bay.

3. Whether the new harvesting schedule enhances natural shellfish production, oyster relay and planting programs, and shell planting programs in the bay.

4. Whether the new harvesting schedule has more than a short-term adverse economic impact, if any, on local shellfish harvesters.

(18) REMOVING OYSTERS, CLAMS, OR MUSSELS FROM NATURAL REEFS; LICENSES, ETC.; PENALTY.--

(a) It is unlawful to use a dredge or any means or implement other than hand tongs in removing oysters from the natural or artificial state reefs or beds. This restriction shall apply to all areas of Apalachicola Bay for all shellfish harvesting, excluding private grounds leased or granted by the state prior to July 1, 1989, if the lease or grant specifically authorizes the use of implements other than hand tongs for harvesting. Except in Apalachicola Bay, upon the payment of $25 annually, for each vessel or boat using a dredge or machinery in the gathering of clams or mussels, a special activity license may be issued by the Fish and Wildlife Conservation Commission pursuant to subsection (15) or s. 370.06 for such use to such person.

(b) Approval by the department to harvest shellfish by dredge or other mechanical means from privately held shellfish leases or grants in Apalachicola Bay shall include, but not be limited to, the following conditions:

1. The use of any mechanical harvesting device other than ordinary hand tongs for taking shellfish for any purpose from public shellfish beds in Apalachicola Bay shall be unlawful.

2. The possession of any mechanical harvesting device on the waters of Apalachicola Bay from 5 p.m. until sunrise shall be unlawful.

3. Leaseholders or grantees shall notify the department no less than 48 hours prior to each day's use of a dredge or scrape in order for the department to notify the Fish and Wildlife Conservation Commission that a mechanical harvesting device will be deployed.

4. Only two dredges or scrapes per lease or grant may be possessed or operated at any time.

5. Each vessel used for the transport or deployment of a dredge or scrape shall prominently display the lease or grant number or numbers, in numerals which are at least 12 inches high and 6 inches wide, in such a manner that the lease or grant number or numbers are readily identifiable from both the air and the water.

Any violation of this paragraph or of any other statutes, rules, or conditions referenced in the lease agreement shall be considered a violation of the license and shall result in revocation of the lease or a denial of use or future use of a mechanical harvesting device.

(c) Oysters may be harvested from natural or public or private leased or granted grounds by common hand tongs or by hand, by scuba diving, free diving, leaning from vessels, or wading. In Apalachicola Bay, this provision shall apply to all shellfish.

(19) FISHING FOR RELAYING OR TRANSPLANTING PURPOSES.--

(a) The department shall designate areas for the taking of oysters and clams to be planted on leases, grants, and public areas. Oysters, clams, and mussels may be taken for relaying or transplanting at any time during the year so long as, in the opinion of the department, the public health will not be endangered. The amount of oysters, clams, and mussels to be obtained for relaying or transplanting, the area relayed or transplanted to, and relaying or transplanting time periods shall be established in each case by the department.

(b) Application for a special activity license issued pursuant to subsection (15) for obtaining oysters, clams, or mussels for relaying from closed public shellfish harvesting areas to open areas or certified controlled purification plants or for transplanting sublegal-sized oysters, clams, or mussels must be made to the department. In return, the department may assign an area and a period of time for the oysters, clams, or mussels to be relayed or transplanted to be taken. All relaying and transplanting operations shall take place under the direction of the department.

(c) Relayed oysters, clams, or mussels shall not be subsequently harvested for any reason without written permission or public notice from the department.

(20) OYSTER AND CLAM REHABILITATION.--The board of county commissioners of the several counties may appropriate and expend such sums as it may deem proper for the purpose of planting or transplanting oysters, clams, oyster shell, clam shell, or cultch or to perform such other acts for the enhancement of the oyster and clam

industries of the state, out of any sum in the county treasury not otherwise appropriated.

(21) DREDGING OF DEAD SHELLS PROHIBITED.--The dredging of dead shell deposits is prohibited in the state.

(22) COOPERATION WITH UNITED STATES FISH AND WILDLIFE SERVICE.--The department shall cooperate with the United States Fish and Wildlife Service, under existing federal laws, rules, and regulations, and is authorized to accept donations, grants, and matching funds from the Federal Government in order to carry out its oyster resource and development responsibilities. The department is further authorized to accept any and all donations including funds, oysters, or oyster shells.

(23) OYSTER AND CLAM SHELLS PROPERTY OF DEPARTMENT.--

(a) Except for oysters used directly in the half-shell trade, 50 percent of all shells from oysters and clams shucked commercially in the state shall be and remain the property of the department when such shells are needed and required for rehabilitation projects and planting operations, in cooperation with the Fish and Wildlife Conservation Commission, when sufficient resources and facilities exist for handling and planting such shell, and when the collection and handling of such shell is practicable and useful, except that bona fide holders of leases and grants may retain 75 percent of such shell as they produce for aquacultural purposes. Storage, transportation, and planting of shells so retained by lessees and grantees shall be carried out under the conditions of the lease agreement or with the written approval of the department and shall be subject to such reasonable time limits as the department may fix. In the event of an accumulation of an excess of shells, the department is authorized to sell shells only to private growers for use in oyster or clam cultivation on bona fide leases and grants. No profit shall accrue to the department in these transactions, and shells are to be sold for the estimated moneys spent by the department to gather and stockpile the shells. Planting of shells obtained from the department by purchase shall be subject to the conditions set forth in the lease agreement or in the written approval as issued by the department. Any shells not claimed and used by private oyster cultivators 10 years after shells are gathered and stockpiled may be sold at auction to the highest bidder for any private use.

(b) Whenever the department determines that it is unfeasible to collect oyster or clam shells, the shells become the property of the producer.

(c) Whenever oyster or clam shells are owned by the department and it is not useful or feasible to use them in the rehabilitation projects, and when no

leaseholder has exercised his or her option to acquire them, the department may sell such shells for the highest price obtainable. The shells thus sold may be used in any manner and for any purpose at the discretion of the purchaser.

(d) Moneys derived from the sale of shell shall be deposited in the General Inspection Trust Fund for shellfish programs.

(e) The department may publish notice, in a newspaper serving the county, of its intention to collect the oyster and clam shells and shall notify, by certified mail, each shucking establishment from which shells are to be collected. The notice shall contain the period of time the department intends to collect the shells in that county and the collection purpose.

(24) OYSTER CULTURE.--The department, in cooperation with the Fish and Wildlife Conservation Commission and the Department of Environmental Protection, shall protect all clam beds, oyster beds, shellfish grounds, and oyster reefs from damage or destruction resulting from improper cultivation, propagation, planting, or harvesting and control the pollution of the waters over or surrounding beds, grounds, or reefs, and to this end the Department of Health is authorized and directed to lend its cooperation to the department, to make available its laboratory testing facilities and apparatus.

(25) REQUIREMENTS FOR OYSTER OR CLAM VESSELS.--

(a) All vessels used for the harvesting, gathering, or transporting of oysters or clams for commercial purposes shall be constructed and maintained to prevent contamination or deterioration of shellfish. To this end, all such vessels shall be provided with false bottoms and bulkheads fore and aft to prevent onboard shellfish from coming in contact with any bilge water. No dogs or other animals shall be allowed at any time on vessels used to harvest or transport shellfish. A violation of any provision of this subsection shall result in at least the revocation of the violator's license.

(b) For the purpose of this subsection, "harvesting, gathering, or transporting of oysters or clams for commercial purposes" means to harvest, gather, or transport oysters or clams with the intent to sell and shall apply to a quantity of two or more bags of oysters per vessel or more than one 5-gallon bucket of unshucked hard clams per person or more than two 5-gallon buckets of unshucked hard clams per vessel.

History.--s. 31, ch. 2000-364.

597.020 Shellfish processors; regulation.--

(1) The department is authorized to adopt by rule regulations, specifications, and codes relating to sanitary practices for catching, cultivating, handling, processing, packaging, preserving, canning, smoking, and storing of oysters, clams, mussels, scallops, and crabs. The department is also authorized to license shellfish processors who handle oysters, clams, mussels, scallops, and crabs when such activities relate to quality control, sanitary, and public health practices pursuant to this section and chapter 500. The department is also authorized to license or certify, for a fee determined by rule, facilities used for processing oysters, clams, mussels, scallops, and crabs, to levy an administrative fine of up to $1,000 per violation per day or to suspend or revoke such licenses or certificates upon satisfactory evidence of any violation of rules adopted pursuant to this section, and to seize and destroy any adulterated or misbranded shellfish products as defined by rule.

(2) A shellfish processing plant certification license is required to operate any facility in which oysters, clams, mussels, scallops, or crabs are processed, including but not limited to: an oyster, clam, mussel, or scallop cannery; a shell stock dealership; an oyster, clam, mussel, or scallop shucking plant; an oyster, clam, mussel, or scallop repacking plant; an oyster, clam, mussel, or scallop controlled purification plant; or a crab or soft-shell crab processing or shedding plant.

(3) The department may suspend or revoke any shellfish processing plant certification license upon satisfactory evidence that the licensee has violated any regulation, specification, or code adopted under this section and may seize and destroy any shellfish product which is defined by rule to be an adulterated or misbranded shellfish product.

History.--s. 1, ch. 65-110; ss. 25, 35, ch. 69-106; s. 6, ch. 83-134; s. 2, ch. 84-121; ss. 4, 5, ch. 86-219; ss. 5, 19, ch. 86-240; s. 218, ch. 94-356; s. 13, ch. 96-247; s. 44, ch. 99-245; s. 32, ch. 2000-364.

Note.--Former s. 370.071.