The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Environmental Preservation and Conservation

BILL:	CS/SB 1318
INTRODUCER:	Agriculture Committee and Senator Dean
SUBJECT:	Shellfish Harvesting
DATE:	February 8, 2016
REVISED:	

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Akhavein	Becker	AG	**Fav/CS**
2.	Hinton	Rogers	EP	**Pre-meeting**
3.			FP	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/SB 1318 makes changes to shellfish harvesting provisions by:

- Authorizing the harvesting of shellfish from a sovereign submerged land lease;
- Authorizing the Board of Trustees of the Internal Improvement Trust Fund (BOT) to permit the harvest of shellfish using a dredge or mechanical harvesting device in a submerged lands lease under certain conditions;
- Defining "shellfish" and "dredge or mechanical harvesting device;"
- Prohibiting the use of dredge of mechanical harvesting devices on public shellfish beds;
- Authorizing individuals to use one dredge or mechanical harvesting device per lease at any one time;
- Providing that violations of shellfish harvesting statutes, rules or lease conditions will result in revocation of the violator's lease and denial of any future application to use sovereign submerged lands;
- Removes the following provisions relating to harvesting in Apalachicola Bay:
  - A prohibition on mechanical dredging of shellfish from Apalachicola Bay;
  - A requirement that the Fish and Wildlife Conservation Commission (FWC) set noncultured shellfish harvesting seasons;
  - An allowance for using means other than hand tongs to harvest in certain leased areas;
  - A reporting requirement; and
  - Conditions to be included in approvals for harvest of shellfish by dredge or other mechanical means;

- Removing a provision authorizing harvesting oysters from natural or public or private leased or granted grounds by hand tongs or by hand, scuba diving, free diving, leaning from vessels, or wading;
- Shifting the responsibility for setting the amount of oysters, clams, and mussels to be obtained for relaying or transplanting from the Department of Agriculture and Consumer Services (DACS) to FWC; and
- Removing a prohibition on dredging of dead shell deposits;
- Deleting the specific authorization for FWC to issue, except for in Apalachicola Bay, a special activity license costing $25 for vessels or boats using a dredge or machinery in gathering clams or mussels.

II. Present Situation:

History of Shellfishing

Shellfish, such as oysters, scallops, clams, and mussels occur throughout Florida waters. Evidence suggests that humans harvested shellfish as far back as 150,000 years ago. Native Americans hand collected clams and oysters in shallow coastal waters and later fished with rakes and tongs from canoes and skiffs to access deeper waters.[1]

Shellfish Aquaculture

Over the past century, aquacultural cultivation of shellfish has increasingly replaced direct harvest of natural stocks.[2] Currently, there are two main approaches to commercial aquaculture cultivation for production in the United States. Some spatially-intensive, shallow-water operations cultivate hatchery-reared seed by using bags, cages, or nets to exclude predators. Other more spatially extensive operations rely on natural set or hatchery seed that are planted on leased beds, which are eventually dredge harvested.[3] Shellfish aquaculture often involves "planting" empty shells on the beds of submerged lands and "seeding" the shells with larva.[4] The shellfish grow to maturity and are then harvested. The University of Florida Institute of Food and Agricultural Sciences provides that in the case of hard clam aquaculture, benefits of clam farming include clearing suspended particles from water as they feed, removing nitrogen from coastal waters, and sequestering carbon from the atmosphere.[5]

[1] National Oceanic and Atmospheric Administration (NOAA), *Technical memorandum NMFS-NE-220, Review of the Ecological Effects of Dredging in the Cultivation and Harvest of Molluscan Shellfish, available at* http://www.nefsc.noaa.gov/publications/tm/tm220/ (last visited Feb. 4, 2016).
[2] *Id.*
[3] *Id.*
[4] University of Florida Institute of Food and Agricultural Sciences, *About the Industry, available at* http://shellfish.ifas.ufl.edu/industry/ (last visited Feb. 4, 2016).
[5] University of Florida Institute of Food and Agricultural Sciences, *Environmental Benefits, available at* http://shellfish.ifas.ufl.edu/environmental-benefits/ (last visited Feb. 4, 2016).

Methods of Harvest

Contemporary on-bottom shellfish cultivation uses rake-like dredges to harvest planted shellfish seed or to collect naturally recruited stocks from leased beds.[6] The type of mechanical dredge used depends on the type of shellfish harvested. Oysters may be collected by dragging behind the boat a steel frame with bladed teeth and a collection bag or using a suction dredge. Clams may be collected by a hydraulic dredge which loosens the clams with high pressure jets and collects the clams in chain mesh bags. Hydraulic escalator dredges are also used to collect clams that dislodge the clams via water pressure. Harvesters collect scallops with a steel-framed structure with a cutting bar on the leading edge which rides above the surface of the substrate, kicking up sea scallops and collecting them into an attached bag.[7]

Permitting

National Pollutant Discharge Elimination System (NPDES)

The Clean Water Act prohibits anybody from discharging pollutants through a point source into a water of the United States unless they have an NPDES permit. The permit will contain limits on what may be discharged, monitoring and reporting requirements, and other provisions to ensure that discharges do not hurt water quality or people's health. In essence, the permit translates general requirements of the Clean Water Act into specific provisions tailored to pollutant discharging operations.[8]

Aquaculture is considered a point source, subject to industrial waste water rules under the Clean Water Act.[9] A NPDES permit is required for an aquaculture facility that produces more than 100,000 pounds of live weight per year and discharge 30 or more days from a farm, excluding rainfall events. Otherwise, following aquaculture effluent BMPs will suffice.[10]

Requirements for Engaging in Aquaculture

To conduct aquaculture activities on sovereign submerged lands in Florida, an individual must obtain a lease from the BOT.[11] DACS accepts and reviews applications and provides recommendations to the BOT for consideration. The BOT may approve, approve with modifications, or deny the application.[12] Individuals may not remove oysters from natural or

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[6] National Oceanic and Atmospheric Administration (NOAA), *Technical memorandum NMFS-NE-220, Review of the Ecological Effects of Dredging in the Cultivation and Harvest of Molluscan Shellfish, available at* http://www.nefsc.noaa.gov/publications/tm/tm220/ (last visited Feb. 4, 2016).
[7] *Id.*
[8] EPA, *National Pollutant Discharge Elimination System (NPDES): NPDES Frequent Questions*, *available at* http://www.epa.gov/npdes/npdes-frequent-questions#pane-1 (last visited Feb. 5, 2016).
[9] Department of Agriculture and Consumer Services, *Aquaculture Best Management Practices Manual, September 2015* pg. 5, *available at* https://www.flrules.org/gateway/readRefFile.asp?refId=5760&filename=BMP%20RULE%20AND%20MANUAL_FINAL.docx (last visited Feb. 4, 2016).
[10] *Id.*
[11] Sections 253.67 through 253.75 and 597.010, F.S.
[12] Fla. Admin. Code R. 18-21.021(1)(q).

artificial reefs by dredge or other mechanical devices, except in Apalachicola Bay on private grounds leased or granted by the state prior to July 1, 1989.[13]

Certified aquaculture activities that apply appropriate best management practices (BMPs) adopted by DACS are exempt from obtaining an ERP from the DEP or a WMD.[14] The following are examples of BMP requirements for aquaculture:

- Land-based facilities must be designed and operated in a manner which minimizes adverse impacts to the receiving waters, adjacent wetlands, and uplands.[15]
- Sediment removal and disposal must be conducted in a manner that eliminates or minimizes adverse impacts to the receiving waters.[16]
- Prior to commencement of the aquaculture activities on the approved grow-out site, post the grow-out boundaries to delineate the corners and perimeters, per the lease agreement.[17]
- No vessel of any description shall be moored on or adjacent to the grow-out premises for a period exceeding 24 hours, regardless of whether the vessel is periodically moved.[18]
- Culture materials placed on the grow-out area must be a suitable substrate for attachment of oyster larvae.[19]
- Shellfish farmers are permitted to sell only to a certified shellfish processor or must become a certified shellfish processor to sell shellfish for human consumption to a retailer or the consumer.[20]

An individual who engages in aquaculture must be certified by DACS.[21] A shellfish endorsement is not necessary for harvest from aquaculture leases pursuant to a certificate issued by DACS[22] or under an Apalachicola Bay Oyster Harvesting License issued by DACS.[23] A certificate is necessary for culturing shellfish on submerged lands leased from the State of Florida.[24]

Any other individuals who commercially harvest, possess, or sell shellfish must obtain a Saltwater Products License[25] and a shellfish endorsement from FWC.[26] Individuals may not commercially harvest bay scallops[27] or freshwater mussels.[28]

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[13] Section 597.010(18)(a), F.S.
[14] Section 373.406(8), F.S.
[15] Department of Agriculture and Consumer Services, *Aquaculture Best Management Practices Manual, September 2015* pg. 45 *available at* https://www.flrules.org/gateway/readRefFile.asp?refId=5760&filename=BMP%20RULE%20AND%20MANUAL_FINAL.docx (last visited Feb. 4, 2016).
[16] *Id.*
[17] *Id.* at 46.
[18] *Id.* at 47.
[19] *Id.* at 47.
[20] *Id.* at 48.
[21] Section 597.004(1), F.S.
[22] Fla. Admin. Code R. 68B-27.018(1)(a).
[23] Fla. Admin. Code R. 68B-27.018(1)(c).
[24] FWC, *Aquaculture Certificate, available at* http://myfwc.com/license/aquaculture-certificate/ (last visited Feb. 4, 2016).
[25] Section 379.361(2)(a), F.S.
[26] Fla. Admin. Code R. 68B-17.009, 68B-27.018(1)(a), and 68B-27.018(1)(a).
[27] Fla. Admin. Code R. 68B-18.004(2).
[28] Fla. Admin. Code R. 68A-23.015(3).

DACS provides that currently, all ch. 253, F.S., submerged land aquaculture leases prohibit the use of dredges or mechanical harvesting devices per Florida Statutes and Florida Administrative Code. Some ch. 379, F.S., shellfish leases[29] do allow the use of dredges or mechanical harvesting devices but only if the lease document specifically allows such harvesting devices.[30]

III. Effect of Proposed Changes:

Section 1 amends s. 597.010, F.S., to make changes concerning shellfish regulation.

Concerning shellfish development, the bill directs DACS to cooperate with FWC and DEP to protect clam beds, oyster beds, shellfish grounds, and oyster reefs from damage or destruction resulting from improper cultivation, propagation, planting, or harvesting. The bill directs the Department of Health to cooperate with DACS and make available its laboratory testing facilities and apparatus. This revises a similar provision concerning oyster culture that is removed in the bill. The bill deletes the provision in current law that includes pollution control as a duty.

The bill removes provisions concerning responsibilities of DACS and FWC with respect to natural oyster and clam reefs and beds, assisting in protecting shellfish aquaculture products, and reporting to the Legislature with recommendations.

The bill defines:
- "Shellfish" as aquaculture oysters, clams, mussels, and scallops; and
- "Dredge or mechanical harvesting device" as a dredge, scrape, rake, drag, or other device that is towed by a vessel or self-propelled and that is used to harvest shellfish. The term does not include handheld or hand drawn hydraulically or mechanically operated devices used to harvest hydraulically or mechanically operated devices used to harvest cultured clams from leased sovereign submerged lands.

The bill allows harvesting of shellfish from a sovereign submerged land lease to be authorized pursuant to ch. 253, F.S.

The bill allows the BOT to authorize the use of a dredge or mechanical harvesting device as a special lease condition of a sovereign submerged land lease issued under ch. 253, F.S., by the BOT if:
- The use of the dredge of mechanical harvesting device does not adversely impact the public health, safety, and welfare of adjacent natural resources;
- The use of the dredge of mechanical harvesting device is an existing condition of a perpetual shellfish lease issued pursuant to former ch. 370; and
- Aquaculture BMPs have been adopted pursuant to ch. 120, F.S., which:
  - Describe the approved size and specifications of the dredge or mechanical harvesting device to be used;

[29] Section 379.2525(2)(a), F.S., allows removing oysters from by dredge in Apalachicola Bay on 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. This mirrors language noted above in s. 597.010(18)(a), F.S.
[30] DACS, *Agency Analysis of SB 1318* (Jan. 19, 2016) (on file with the Senate Committee on Environmental Preservation and Conservation).

- Provide conditions for deploying and using an approved dredge or mechanical harvesting device; and
- Specify requirements for monitoring potential impacts at, and adjacent to, the sovereign submerged land lease site by the leaseholder.

The bill allows one dredge or mechanical harvesting device per lease to be possessed or operated at any time at a lease site. Additionally, an authorized dredge or mechanical harvesting device may not be used for taking shellfish for any purpose from public shellfish beds in waters of the state. The bill prohibits dredge or mechanical harvesting devices from 5 p.m. until sunrise on waters of the state.

The bill specifies that the provisions detailed above do not authorize harvesting shellfish from natural reefs and provides that violation of the provisions is a violation of the lease agreement and will result in the revocation of all leases held by the violator and denial of any future use of sovereign submerged land.

The bill removes the following provisions applicable to Apalachicola Bay:

- The bill removes a requirement for FWC to set the noncultured shellfish harvesting seasons in Apalachicola Bay by rule and removes a reporting requirement;
- The bill removes a provision providing that it is unlawful to use a dredge or any means or implement other than hand tongs in removing oysters from natural or artificial state reefs or beds. The bill removes a provision stating that this restriction applies to 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;
- The bill removes the specific authorization for FWC to issue, except for in Apalachicola Bay, a special activity license costing $25 for vessels or boats using a dredge or machinery in gathering clams or mussels;
- The bill removes a provision providing that approval by DACS to harvest shellfish by dredge or other mechanical means from privately held shellfish leases or grant in Apalachicola Bay must include, but not be limited to, the following conditions:
  - 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 is unlawful;
  - The possession of any mechanical harvesting device on the waters of Apalachicola Bay from 5 p.m. until sunrise is unlawful;
  - Leaseholders or grantees must notify DACS no less than 48 hours prior to each day's use of a dredge or scrape in order for DACS to notify FWC that a mechanical harvesting device will be deployed;
  - Only two dredges or scrapes per lease or grant may be possessed or operated at any time; and
  - Each vessel used for the transport of 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.
- The bill removes a provision stating that violation of these conditions or of any other statutes, rules, or conditions referenced in the lease agreement is considered a violation of the license

and will result in revocation of the lease or a denial of use or future use of a mechanical harvesting device; and

- Lastly, the bill removes a general provision providing that 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 and that in Apalachicola bay, this provision applies to all shellfish.

The bill shifts the responsibility for setting the amount of oysters, clams, and mussels to be obtained for relaying or transplanting from DACS to FWC.

The bill removes a prohibition on dredging dead shell deposits in the State.

Section 2 provides an effective date of July 1, 2016.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill may have a positive impact on individuals or companies who engage in aquaculture by allowing the harvest of shellfish with a dredge or other mechanical device rather than harvesting shellfish by other less efficient methods.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

Lines 81-83 contain a provision concerning a requirement necessary for the BOT to authorize the use of a dredge or mechanical harvesting device. It states that, “the use of the dredge or

mechanical harvesting device is an existing condition of a perpetual shellfish lease issued pursuant to former chapter 370." This may serve to limit the use of dredge or mechanical harvesting devices to holders of existing permits that already allow the use of a dredge or mechanical harvesting.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends 597.010 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Agriculture on February 1, 2016:
The committee substitute:

- Repeals an outdated provision regarding shellfish development and replaces it with language regarding interagency coordination to protect shellfish beds, grounds, and reefs.
- Defines "dredge or mechanical harvesting device."
- Specifies that best management practices must be used to dredge or mechanically harvest shellfish.
- Authorizes the use of only one dredge or mechanical harvesting device per lease to be possessed or operated at any one time.
- Prohibits the use of dredge or mechanical harvesting devices on public shellfish beds.
- Prohibits the possession of any dredges or mechanical devices on the waters of the state from 5 p.m. until sunrise.
- Prohibits harvesting shellfish from natural reefs.
- Removes the requirement that a harvester must notify the FWC 48 hours in advance of any dredging or mechanical harvesting activity and that each vessel display it lease number in 12-inch high numbers.
- Provides that violations of shellfish harvesting statutes, rules, or lease conditions will result in the revocation of all leases held by the violator and denial of any future use of sovereign submerged land.
- Authorizes, rather than requires, the department to designate areas for the taking of oysters and clams to be planted on public areas.
- Removes provisions relating to dredging of dead shells and oyster culture.

B. Amendments:

None.