

# GENERAL ASSEMBLY OF NORTH CAROLINA

Session 2017

## Legislative Fiscal Note

**BILL NUMBER:** Senate Bill 410 (Second Edition)

**SHORT TITLE:** Marine Aquaculture Development Act.

**SPONSOR(S):** Senators Cook, Sanderson, and Tillman

<b>FISCAL IMPACT</b>					
(\$ in thousands)					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Estimate Available					
<b>State Impact</b>	<b>FY 2017-18</b>	<b>FY 2018-19</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
General Fund Revenues:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$13.5 to \$27.0	\$24.0 to \$48.0	\$34.5 to \$69.0
General Fund Expenditures:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$174.1 to \$209.8	\$174.1 to \$209.8	\$174.1 to \$209.8
Special Fund Revenues:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0
Special Fund Expenditures:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0
State Positions:	0.0 to 0.0	0.0 to 0.0	2.0 to 2.0	2.0 to 2.0	2.0 to 2.0
<b>NET STATE IMPACT</b>	<b>\$0.0 to \$0.0</b>	<b>\$0.0 to \$0.0</b>	<b>(\$160.6) to (\$182.8)</b>	<b>(\$150.1) to (\$161.8)</b>	<b>(\$139.6) to (\$140.8)</b>
<b>Local Impact</b>					
Revenues:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0
Expenditures:	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0	\$0.0 to \$0.0
<b>NET LOCAL IMPACT</b>	<b>\$0.0 to \$0.0</b>	<b>\$0.0 to \$0.0</b>	<b>\$0.0 to \$0.0</b>	<b>\$0.0 to \$0.0</b>	<b>\$0.0 to \$0.0</b>
<b>PRINCIPAL DEPARTMENT(S) &amp; PROGRAM(S) AFFECTED:</b>					
Division of Marine Fisheries, Department of Environmental Quality					
<b>EFFECTIVE DATE:</b> Section 1: October 1, 2017; Sections 2 and 3: when they become law					
<b>TECHNICAL CONSIDERATIONS:</b>					
Yes - See Technical Considerations Section					

\* *The fiscal impact of S.B. 410 shown above has not been adjusted for inflation.*

\*\* *The fiscal impact of the criminal penalties included in the bill are addressed in a separate incarceration note.*

**BILL SUMMARY:**

Senate Bill 410 (S.B. 410), Marine Aquaculture Development Act, includes three primary requirements:

- (1) To create a program for the permitting of marine aquaculture activities. The Division of Marine Fisheries (DMF) within the Department of Environmental Quality (DEQ) is currently authorized to lease public trust bottom and water columns for shellfish

aquaculture (G.S. 113-202); S.B. 410 create new authority to implement a general aquaculture leasing program that does not limit leases to specific species.

- (2) To direct DMF to request the Mid-Atlantic and South Atlantic Fisheries Management Councils to develop a Fishery Management Plan for regulating offshore aquaculture in federal waters of the coast of North Carolina, and the National Oceanic and Atmospheric Administration (NOAA) to initiate rule-making to allow for the development of offshore aquaculture in federal waters of the cost of North Carolina; and
- (3) To increase the transparency of the Marine Fisheries Commission (MFC) by utilizing official email accounts for all communications.

**ASSUMPTIONS AND METHODOLOGY:**

S.B. 410 is expected to increase both requirements and receipts for DMF, resulting in the need for additional net appropriation. The components of this analysis are described in detail below.

**Section 1: Marine Aquaculture Leasing Program**

Under S.B. 410, a new leasing program would be established to allow for all marine (or non-shellfish) aquaculture. DMF currently operates a separate program for shellfish leases. S.B. 410 is, generally, compatible with the leasing program outlined in Article 16 of Chapter 113 but several differences are highlighted in the Technical Considerations portion of this fiscal note. These technical considerations could to S.B. 410 could streamline program implementation and operations for DMF.

In order to implement this program, MFC will need to adopt rules, a process that takes approximately two years. However, DMF is concerned that the current version of the bill does not give MFC explicit rulemaking authority for the marine aquaculture program (see Technical Consideration #1). Given rulemaking, no additional requirements or expenditures are expected until FY 2019-20.

Expected Revenue

Per S.B. 410, the application filing fee and rent for an initial bottom lease are set at \$200 and \$10 per acre per year, respectively. Leases are for a term of ten years. Lease renewals will require a filing fee of \$100 and the rent remains at \$10 per acre per year. Application and rental rates for column leases are not specified in S.B. 410 (see Technical Consideration #2f). Assuming these rates are set at the rates used in the shellfish leasing program, column lease application fees will be the same as those used for bottom leases and rent will be \$200 per acre of water column per year. Marine aquaculture allowed per S.B. 410 will primarily require water column leases. In order to lease a water column, the bottom subjacent to the column must also be rented, meaning a water column lease requires both a water column lease and a bottom lease.

**Table 1: Assumed Application Filing Fee and Rental Rates for Marine Aquaculture Leases**

Type of Lease	Initial Filing Fee	Annual Rent	Renewal Filing Fee
Bottom Lease	\$200	\$10/ acre	\$100
Column Lease*	\$100	\$200/acre	\$100

*\*Assumed rates based on shellfish leasing program; rates are not specified in S.B. 410*

Using the rates shown in Table 1, the Division anticipates 10 to 20 lease applications for non-shellfish aquaculture beginning in FY 2019-20 (when rulemaking is complete), resulting in annual application filing fee revenue of \$3,000 to \$6,000. This estimate of applications assumes that “coastal fishing waters” as referenced in S.B. 410 has the same definition as in G.S. 113-129(4), which includes the sounds, estuaries, and the ocean out to three nautical miles.

Currently, MFC limits the size of shellfish leases to five to ten acres depending upon the location; most leases are five acres. While there is no rule in place for non-shellfish leases, the Division has assumed an average marine aquaculture lease of five acres based on this date. Thus, assuming 10 to 20 new applications and an average lease of five acres, the Marine Aquaculture Leasing Program is expected to bring in annual rent of \$10,500 to \$21,000 annually for the first several years of the program.

**Table 2a: Low-end Expected Revenue for Marine Aquaculture Leasing Program**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Application Revenue	-	-	3,000	3,000	3,000
Rental Revenue*	-	-	10,500	21,000	31,500
<b>Total Revenue</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 13,500</b>	<b>\$ 24,000</b>	<b>\$ 34,500</b>

**Table 2b: High-end Expected Revenue for Marine Aquaculture Leasing Program**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Application Revenue	-	-	6,000	6,000	6,000
Rental Revenue*	-	-	21,000	42,000	63,000
<b>Total Revenue</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 27,000</b>	<b>\$ 48,000</b>	<b>\$ 69,000</b>

*\*Revenues are not expected to continue to grow at the rate shown in Table 2 in perpetuity but given the low cost of entry, the Division expected applications at this level for the first few years.*

At some point, demand for the marine aquaculture leases will decline, resulting in a reduced annual application fees and slower growth in annual rental revenue, if any. Based on DMF’s experience with the shellfish leasing program, it is difficult to determine demand for aquaculture. Leases can be surrendered voluntarily or terminated for lack of production. Revenue for the program will depend heavily upon the success of applicants in permitting with the United States Army Corps of Engineers (USACE) (see Technical Consideration #3) and resource protection issues, both of which are outside of DMF’s control.

Expected Costs

As noted previously, DMF already operates a leasing program for shellfish aquaculture. This division can take on many of the functions required by S.B. 410. However, leasing for marine aquaculture will vary substantially from leasing for shellfish aquaculture in one major way: site investigation. Marine aquaculture is typically carried out in deep-water fish net pens or corrals while shellfish aquaculture is done in shallow water (usually only two to four feet in depth).

Investigating deep-water lease locations will require SCUBA-certified biologists who can conduct the required benthic surveys that the Division expects will be necessary to satisfy State and federal requirements. This assumption is based on Maine’s successful marine aquaculture program and the site investigations required by Maine’s USACE district. DMF expects that the Wilmington

USACE District Office will look for similar information as USACE district office for Maine but, ultimately, the level of information required is up to the Corps and other federal agencies.

The cost of two SCUBA-certified biologist positions to support this program is expected to be \$174,058 including the cost of salaries, benefits, and operating for the positions. It is the Fiscal Research Division’s practice to budget positions at the minimum of the salary grade, which, in this case, is a salary grade 67 with a minimum salary of \$35,474. However, because these positions are required to be SCUBA-certified, this estimate is based upon the mid-point of the Marine Fisheries Biologist I salary grade, \$45,467.

DMF has requested \$50,000 total operating expenses for these two positions. The Research and Management Fund of DMF has average operating expenses of \$42,861 per full-time equivalent (FTE). These positions will require significant operating costs given the need for SCUBA equipment and fuel for vehicles and vessels for site investigations. Table 3a and 3b provides a detailed account of salaries, benefits, and operating expenses per position based on DMF’s requested operating costs per position (\$25,000 per FTE) and the average for the Section (\$42,861 per FTE).

**Table 3a: Low-end Expected Costs for the Marine Aquaculture Leasing Program**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
2 FTE Salaries	-	-	90,934	90,934	90,934
Position Benefits	-	-	33,124	33,124	33,124
\$50k Expenses	-	-	50,000	50,000	50,000
<b>Total Revenue</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 174,058</b>	<b>\$ 174,058</b>	<b>\$ 174,058</b>

**Table 3b: High-end Expected Costs for the Marine Aquaculture Leasing Program**

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
2 FTE Salaries	-	-	90,934	90,934	90,934
Position Benefits	-	-	33,124	33,124	33,124
Operating Expenses	-	-	85,722	85,722	85,722
<b>Total Revenue</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 209,780</b>	<b>\$ 209,780</b>	<b>\$ 209,780</b>

**Section 2: Rule-making Requests**

Section 2 of the S.B. 410, which requires DMF to request rule-making and Fishery Management Plans needed to implement the Marine Aquaculture Leasing Program, will have no fiscal impact.

**Section 3: MFC Transparency**

Section 3 of the S.B. 410, which requires DMF increase transparency of the MFC by creating and using official email addresses for MFC member, will have no fiscal impact.

**SOURCES OF DATA:**

Division of Marine Fisheries, Department of Environmental Quality  
Office of State Human Resources, 2016 Salary Schedule

**TECHNICAL CONSIDERATIONS:**

1. The PCS that created this version of S.B. 410 removed the explicit authority for MFC to adopt rules for the Marine Aquaculture Leasing Program.
2. The language in S.B. 410 and existing statutes for the shellfish leasing program are very similar but there are a few technical adjustments that would streamline program operations. DMF has highlighted the changes in order to conform the Marine Aquaculture Leasing Program to the existing shellfish leasing statutes:
  - a. Add “The Secretary may not grant a new lease in an area heavily used for recreational purposes” to proposed G.S. 113-216
  - b. In the Shellfish Leasing Program, there is a restriction of 50 acres total that an individual may hold. DMF recommends adding a cap to the Marine Aquaculture program in S.B. 410 to prevent speculation.
  - c. The Shellfish Leasing Program was amended in 2016 to bring the rent due date to June 30. DMF recommends changing S.B. 410 language to be June 30 to be compatible with shellfish leases.
  - d. There is no language discussing exemptions to lease production requirements for the marine aquaculture in S.B. 410; this language exists for shellfish in G.S. 113-202(11).
  - e. Change the lease rent deadlines to match the shellfish program by changing G.S. 113-216(n) to begin “Every year between April 1 to May 15, ...”
  - f. The General Statutes for the shellfish program have several sections addressing annual rent, lease terms, renewal and transfer, and public hearing requirements for water column leases that are not addressed here.
3. According to DMF, any lease granted under S.B. 410 will require the applicant to obtain an individual permit from USACE as well as a lease from the Division. DMF recommends updating this language to direct them to work with USACE to develop a programmatic permit for non-shellfish aquaculture in lieu of a MOA.
4. S.B. 410 references Article 16A in at least two places (G.S. 113-216(k)(7) and G.S. 113-217(b)(5)). This license requirement was in the previous version of S.B. 410 (as Article 16A), but has been deleted in this current version. The division already permits marine and estuarine aquaculture facilities.

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**DATE:** May 1, 2017



**Signed Copy Located in the NCGA Principal Clerk's Offices**