LOW INTEREST LOAN PROGRAM FOR SHELLFISH AQUACULTURE STUDY

Citation of Law or Resolution: S.L. 2019-648  
Section Number: Section 11  
Submission Date: March 22, 2020

Receiving Entities:
The Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources

The Chairs of the House of Representatives Appropriations Committee on Agriculture and Natural and Economic Resources

The Chairs of the Senate Appropriations Committee on Agriculture, Natural, and Economic Resources

The Fiscal Research Division Department of Commerce reports@ncleg.net

Submitting Entity:
North Carolina Coastal Federation  
3609 N.C. 24  
Newport (Ocean), NC 28570

Prepared by:
Ana Zivanovic-Nenadovic, Assistant Director of Policy North Carolina Coastal Federation

With contributions from:
Jonathan Brereton, Executive Director, Thread Capital  
Tom Looney, North Carolina Coastal Federation Board of Directors  
Chris Matteo, President, North Carolina Growers Association
Table of Contents

Summary .............................................................................................................................................. 3

Shellfish Aquaculture Strategy - Legislative Action ................................................................................ 4

Shellfish Aquaculture Holds Important, Yet Unrealized Potential for the State’s Economy .......... 4

Opportunity Zones Increase Investment Opportunities....................................................................... 6

Without a Stronger State Support the Shellfish Aquaculture Industry in N.C. Cannot Achieve the $100 Million in Value by 2030.............................................................................................................. 7

Comprehensive Crop Insurance Plan is Essential for a Successful Loan Program ......................... 8

Low-Interest Loan Program is Essential for Industry Growth................................................................. 9

Findings .................................................................................................................................................. 9

About the North Carolina Coastal Federation...................................................................................... 14

About NC Rural Center and Thread Capital.......................................................................................... 14

About NCIFund ..................................................................................................................................... 15
Summary
In an unprecedented display of bipartisanship, the North Carolina General Assembly has recognized potential shellfish aquaculture offers to a uniquely economically stressed region of the state. Following the Legislative mandate to study and recommend a shellfish aquaculture strategy ("the Strategy"), the North Carolina GeneralAssembly unanimously (in both houses) adopted many of the key recommendations of that Strategy in 2019. The Strategy set out an ambitious goal for the shellfish aquaculture industry: **achieve $100 million in value and creating 1000 jobs by 2030.**

Findings
Despite the strong State support, two major barriers still stand in the way of achieving the ten-year goal:

1) Lack of access to capital for shellfish growers;
2) Lack of comprehensive federal crop insurance plan.

The North Carolina General Assembly can provide the critical assistance necessary to reduce these barriers and vigorously engage the private sector in establishing the industry.

Recommendation
The North Carolina Coastal Federation recommends that the North Carolina General Assembly:
1) Appropriate **$1 million** for the establishment of the low-interest loan program for the shellfish industry and direct funds to the **Thread Capital** to set up a lending fund as described in the summary table.
2) Dedicate $30,000 from the appropriation to the North Carolina Shellfish Growers Association as matching funds for the development of the federal crop insurance program.
3) Ensure effective use of public funds by requiring annual evaluation of the loan program performance.

Summary table of the proposed loan program structure

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>PHASE I*</th>
<th>PHASE II**</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARGET AUDIENCE</td>
<td>New and existing small N.C. shellfish growers</td>
<td>Mid and large size N.C. shellfish growers</td>
</tr>
<tr>
<td>LOAN SIZE</td>
<td>Up to $50,000</td>
<td>Over $50,000</td>
</tr>
<tr>
<td>INTEREST RATE</td>
<td>5.5%</td>
<td>TBD</td>
</tr>
<tr>
<td>LENDER</td>
<td>Thread Capital &amp; NCIFund</td>
<td>Thread Capital &amp; Other Lenders</td>
</tr>
</tbody>
</table>

*First five years of the loan program.
**Contingent upon Phase I evaluation and development of comprehensive federal crop insurance program for shellfish aquaculture crops.
Shellfish Aquaculture Strategy - Legislative Action

In an unprecedented display of bipartisanship, the North Carolina General Assembly (“the NCGA”) has recognized potential shellfish aquaculture offers to a uniquely economically stressed region of the state. Following the Legislative mandate to study and recommend a shellfish aquaculture strategy (“the Strategy”), the NCGA unanimously (in both houses) adopted many of the key recommendations of that Strategy in 2019. The Strategy set out an ambitious goal for the shellfish aquaculture industry: achieve $100 million in value, creating 1000 jobs by 2030. Critical financial elements remain to be addressed—elements the Strategy recommended as necessary to vigorously engage the private sector in establishing this industry. Assistance from the NCGA to encourage private sector engagement, as addressed in this study, would provide the leverage necessary to unlock this potential.

Shellfish Aquaculture Holds Important, Yet Unrealized Potential for the State’s Economy

North Carolina is experiencing a shellfish aquaculture industry boom. With over 1.4 million acres of coastal waters, shellfish aquaculture has the potential to become an important source of income for coastal communities. With the existing support from the State and other partners North Carolina could become the “Napa Valley of Oysters”.1

After several decades of stagnation, the North Carolina’s shellfish aquaculture industry is experiencing an extraordinary growth. Based on N.C. Division of Marine Fisheries’ data the number of shellfish lease permit applications has increased nine-fold between 2015 and 2019 (table 1).2

<table>
<thead>
<tr>
<th>YEAR</th>
<th># OF LEASE APPLICATIONS</th>
<th># OF APPROVED LEASES</th>
<th>RATE OF APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>11</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2016</td>
<td>46</td>
<td>33</td>
<td>72%</td>
</tr>
<tr>
<td>2017</td>
<td>72</td>
<td>52</td>
<td>72%</td>
</tr>
<tr>
<td>2018</td>
<td>69</td>
<td>39</td>
<td>57%</td>
</tr>
<tr>
<td>2019</td>
<td>106</td>
<td>TBD</td>
<td>N/A</td>
</tr>
</tbody>
</table>

There are currently 357 leases in the state (table 2). This number does not include the 106 lease applications in 2019 that are pending approval. Assuming a 67 percent approval rate of lease applications (based on the 2016-2018 data, table 1) it can be estimated that the total number of leases in the state will surpass 400 in 2020.

---


Further, shellfish aquaculture can provide a much-needed economic diversification for coastal communities, many of which are socially and economically vulnerable and have high unemployment rates.

Coastal communities whose livelihoods depend on the ocean can be more socially and economically vulnerable than other communities, including such factors as housing stability, poverty and personal disruption. This means that when faced with economic downturns and/or natural disasters, individuals in these communities are often less resilient than those in other communities and have a more difficult times rebuilding their lives and livelihoods. For example, although North Carolina’s unemployment rate as of January, 2020 is at a national average of 3.4%, it is unequally distributed across the state. Coastal counties in Eastern North Carolina are averaging an unemployment rate of 4%, while Hyde County is leading with 9.8% (figure 1).

Therefore, providing strong economic opportunities to the coastal communities is critical for their survival, resilience and prosperity. Many of the existing shellfish aquaculture leases are located in vulnerable areas.

---

5 NOAA fisheries. Socio-economic dimensions. [https://www.fisheries.noaa.gov/topic/socioeconomics#socio-cultural-dimensions](https://www.fisheries.noaa.gov/topic/socioeconomics#socio-cultural-dimensions)
Opportunity Zones Increase Investment Opportunities

A new program with the potential to attract investment capital into low-income areas of North Carolina was created by recently passed federal tax legislation, known as The Tax Cuts and Jobs Act. The Opportunity Zones Program provides tax incentives for qualified investors to re-invest unrealized capital gains into low-income communities throughout the state. Twenty-two of the state’s certified 252 Opportunity Zones are located in coastal rural North Carolina (figure 2). The program provides significant opportunities for financial investments in these areas.

---

8 Ibid.
Without a Stronger State Support the Shellfish Aquaculture Industry in N.C. Cannot Achieve the $100 Million in Value by 2030

In the past several years the state government and other partners have shown a strong commitment in supporting the rapidly-growing shellfish aquaculture industry. A wide array of regulatory, scientific and legal support has contributed to the industry’s expansion.

1) In 2016 the NCGA mandated a multi-stakeholder project to study and advance efforts to ecologically restore and achieve economic stability of the shellfish industry. In partnership with the North Carolina Policy Collaboratory the North Carolina Coastal Federation (“Federation”) led the two-year multi-stakeholder endeavor that resulted in the state’s first Shellfish Aquaculture Strategic Plan. The Plan sets out an ambitious goal to sustainably grow the industry to $33 million in landings generating 1000 jobs by 2030. This will make shellfish farming worth approximately $100 million to the coastal economy of North Carolina.

2) In 2018, North Carolina became the sixth of eight states to join the National Shellfish Initiative. The National Oceanic and Atmospheric Administration (NOAA) established the National Shellfish Initiative in 2011 with the goal to increase populations of bivalve shellfish in our nation’s coastal waters—including oysters, clams, and mussels—through both sustainable commercial production and restoration activities. By joining the Initiative, the state recognized the value and importance of shellfish to its economy, cultural heritage, and environmental health. In launching a state initiative, North Carolina galvanized the support of local, state, and federal leadership in promoting sustainable seafood, shellfish restoration, and clean water. The Initiative will:

- Help create new jobs in North Carolina’s coastal communities while protecting and restoring its environment.
- Protect and restore water quality to allow natural reefs to thrive and markets to grow.
- Safeguard industry growth in a sustainable and socially-acceptable manner.

3) The Federation is finalizing a feasibility study with the support from the U.S. Economic Development Administration to develop a network of shellfish aquaculture hubs that support the shellfish aquaculture industry with land-based facilities. The study has identified major industry limitation to be lack of storage and refrigeration and processing of the product. The study has also identified three locations that should host these hubs. With proper funding the facilities should be constructed in the next several years.

---

4) In 2019 the State showed further support for advancing the shellfish aquaculture industry by ratifying the Shellfish Legislation (SB 648). This legislation implemented many of the Strategic Plan’s recommendations:

- Allowed establishment of Shellfish Aquaculture Enterprise Areas that will group shellfish leases in large prior-designated leases. This will reduce user conflicts and speed up permitting of leases.
- Established a pilot project for large leases allowing up to three 50-acres leases in Pamlico Sound. This would attract large aquaculture operations.
- Increased production requirements for shellfish leases ensuring efficient use of public trust bottom.
- Allowed transplanting oyster seeds from prohibited growing waters to open waters increasing the areas available for aquaculture.
- Established a Review Committee within Marine Fisheries Commission with the goal of reducing third party lawsuits.
- Mandated a number of studies, including this one with the goal of better understanding the industry: how to reduce user conflicts around shellfish aquaculture; how to implement proper measure for theft of aquaculture gear and products; and how to set up a successful shellfish crop insurance program.

However, important work still remains to be done to achieve the 2030 goal set by the Strategic Plan. Two major and intricately connected barriers to entry for the new growers and thus important impediments for the industry growth are:

1) Limited crop insurance program for shellfish products; and
2) Lack of financing opportunities for shellfish aquaculture businesses.

**Comprehensive Crop Insurance Plan is Essential for a Successful Loan Program**

Compared to traditional agricultural crops shellfish aquaculture crops have had limited insurance options. Federal and private insurers have been reluctant to provide insurance for aquaculture operations due to the inherent, yet difficult to qualify risk associated with shellfish aquaculture. Eighteen month growing period during which crops are susceptible to natural hazards such as hurricanes and crop diseases present high risk for the lenders. While some limited insurance exists through the Noninsured Crop Disaster Assistance Program (NAP) there is a pressing need to develop a comprehensive method of insuring shellfish aquaculture crops.

The current lack of the viable insurance program for shellfish aquaculture crops is a major deterrent for many existing and potential new investors and businesses. It is also closely tied to the lack of financing opportunities for the potential and current industry participants.
For the proposed loan program to enter Phase II (loan program Phases described below) and start offering larger loans to big-size leasing operations, fostering the industry growth the State needs to support the industry with developing the Pilot Crop Insurance program by providing matching funds. The Strategy identified creation of a shellfish crop loss insurance program as a key need for the state’s shellfish industry. Following the Strategy’s recommendation the NCGA’s FY2019-2020 budget provided $30,000 to match federal funds to create this program. The NC Shellfish Growers Association has been awarded federal funding for this program but requires the $30,000 state match to draw down the federal funds. By investing in the Pilot Crop Insurance Program, the State will transfer the burden of after disaster payouts to the federal government’s crop insurance program.

**Low-Interest Loan Program is Essential for Industry Growth**

Lack of financing opportunities for the shellfish aquaculture industry has historically represented an important barrier for business start-up and expansions. Approximately 40 percent of surveyed shellfish lease holders in 2011 in North Carolina identified lack of capital as the major factor limiting the growth of industry.\(^{10}\) Considering that access to capital has since not changed this is still likely to be a major constraint for the industry. It is estimated that establishing a water column lease requires between $20,000 and $60,000 per acre.\(^{11}\) As discussed previously, commercial lenders have been hesitant to lend money to growers given the inherent risk associated with the trade. The few existing programs require high collateral and the participation of commercial creditors that are often unwilling to take the actuarial risk for any unsecured portion of a loan.

Current statutes recognize aquaculture as an important element on North Carolina *agriculture*. Terrestrial based agriculture is afforded with financial incentives encouraging the entry into this industry by new (and often inexperienced) farmers, but these same incentive programs are closed to shellfish aquaculture.

**Findings**

Given the dependencies between a comprehensive crop insurance plan and the ability for financing aquaculture businesses, we recommend a two-phased low-interest loan program (table 3):

- **Phase I** would be implemented before the crop insurance program is in place. During this phase small loans would be available to new and emerging growers.
- **Phase II** would be implemented after the crop insurance program is implemented and risks to lenders are reduced. During this phase larger loans would be available to mid-sized and large growers.

---


Table 3: Summary characteristics of the two loan program phases.

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>PHASE I*</th>
<th>PHASE II**</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARGET AUDIENCE</td>
<td>New and existing small N.C. shellfish growers</td>
<td>Mid and large size N.C. shellfish growers</td>
</tr>
<tr>
<td>LOAN SIZE</td>
<td>Up to $50,000</td>
<td>Over $50,000</td>
</tr>
<tr>
<td>INTEREST RATE</td>
<td>5.5%</td>
<td>TBD</td>
</tr>
<tr>
<td>LENDER</td>
<td>Thread Capital &amp; NCIFund</td>
<td>Thread Capital &amp; Other Lenders</td>
</tr>
</tbody>
</table>

*First five years of the loan program.
**Contingent upon Phase I evaluation and development of comprehensive federal crop insurance program for shellfish aquaculture crops.

Description of Phase I
This phase of the program will significantly reduce barriers to entry for new growers and help existing small growers expand their operations and grow the industry. This phase is contingent upon legislative appropriation of $1 million.

Target audience
The target audience for this phase of the program is the existing small size growers and growers entering the market. Also, the loan program will target growers engaged in intensive aquaculture activities. It is estimated that out of 357 currently existing leases (table 2), and after eliminating duplicates (more than one lease owned by a single grower) around 75 growers are practicing intensive aquaculture. In addition, there are 48 pending lease application for water column leases and 58 for bottom culture leases. When their lease applications are approved these lease holders will add to the overall pool of potential borrowers.

Optimal loan terms
Loans will be directed at new and emerging growers that are seeking less than $50,000 in financing. Loans will be priced at 5.5% interest rate with no fees charged to the borrower. Loans will be fully amortized and will stretch between 12 and 60 months depending on the use of the proceeds. Working Capital loans will be 12 to 24 months and equipment loans will be up to 60 months. There will be no prepayment penalties for borrowers.

Proposed administrative structure for the program
Loans will be made by non-profit organizations Thread Capital and NCIFund initially but may expand to a larger group of lenders in a future phase. Both organizations are experienced in lending to small businesses and rural areas and in leveraging private funds.

---

12 Personal conversations with the North Carolina Shellfish Growers Association
13 Personal communication with N.C. Division of Marine Fisheries’ shellfish leasing division staff.
For example, in 2018 Thread Capital issued 135 loans totaling close to $5 million and created/retained 1,318 jobs.\textsuperscript{14} Its holding company, NC Rural Center, issued 250 loans during the same year totaling over $15 million and leveraging $98 million in private funds. NCIFund, since its creation in 2001, invested $59.1 million in 392 loans to 301 businesses and nonprofits. Among its top lending sectors are local foods and value-added agriculture (16\% of total loans), breweries and cideries (14\%) and production agriculture (6\%).\textsuperscript{15}

Working with non-profit partners will keep costs low. However, a desire to keep the cost of funds to borrowers as low as possible will require subsidizing the activity of the non-profit lenders. Funding would be provided to Thread Capital to reimburse them for two costs:

- First, a fee totaling 7.5\% of the loan amount will be provided to the lender to cover the cost of acquiring the customer, underwriting the loan, and providing one-on-one support to the entrepreneur.
- Second, losses on loans made to shellfish growers would be covered by the program. In order to ensure sufficient personal dedication growers would be asked to provide collateral and personal guarantees, but first loan losses (after crop insurance) would be covered by the program funds.

**Limitations on loan amounts and on uses of loaned funds necessary to maximize public economic benefits and target funding support where need is greatest**

Loans would be directed at small and emerging growers. Crop insurance coverage is the greatest single barrier to investment in existing and larger scale growers. All borrowers would be required to have crop insurance. Currently, free crop insurance coverage is available for newer growers through U.S. Department of Agriculture and Consumer Services (USDA). However, this insurance is available only up to $117,000. Lender risk will be mitigated by this insurance, but existing limits of USDA coverage will prevent lenders from advancing more than $50,000 in capital. During Phase II of the program, when crop insurance solutions have been established, and a track record of lending has been built, lenders should be more comfortable advancing additional funds. Private capital is also more likely to flow to these businesses as sufficient crop insurance solutions are established.

**Scenarios**

Tables 4, 5 and 6 show three loan program scenarios over a five-year period.

Scenario 1 estimates that in year one of the program loans will be issued to 10\% of the existing intensive growers, at $20,000 each (table 4). The number of loans issued in every

\textsuperscript{14} NC Rural Center 2018-2019 Impact Report
https://documentcloud.adobe.com/link/track?uri=urn%3Aaid%3Ascds%3AUS%3Ab918834b-ab24-4744-89a4-b88d2c2c891a

\textsuperscript{15} NCIFund Partnering for Impact 2018
Subsequent year would grow by approximately 20 percent leading to a total of 17 loans in year five of the program. The average loan size is also estimated to increase to approximately $30,000 by year five. Assuming a conservative loan default rate of 5 percent in year one and 15 percent in subsequent years shows that by the end of year five close to $350,000 would be drawn from the appropriated fund.

Table 4: Scenario 1 - Proposed low-interest loan program structure with 10% of borrowers.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transactions</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Avg. Loan Size</td>
<td>20,000</td>
<td>20,000</td>
<td>30,000</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>Dollars Disbursed</td>
<td>160,000</td>
<td>192,000</td>
<td>345,600</td>
<td>414,720</td>
</tr>
<tr>
<td></td>
<td>Interest Rate</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td></td>
<td>Admin Fee (charged to amount raised)</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>Defaults*</td>
<td>5.0%</td>
<td>15.0%</td>
<td>15.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td></td>
<td>Admin Fee Total</td>
<td>12,000</td>
<td>14,400</td>
<td>25,920</td>
<td>31,104</td>
</tr>
<tr>
<td></td>
<td>Defaults Total</td>
<td>8,000</td>
<td>28,800</td>
<td>51,840</td>
<td>62,208</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>20,000</td>
<td>43,200</td>
<td>77,760</td>
<td>93,312</td>
</tr>
<tr>
<td>Running Total Charged to Fund</td>
<td>20,000</td>
<td>63,200</td>
<td>140,960</td>
<td>234,272</td>
<td>346,246</td>
</tr>
<tr>
<td></td>
<td>* Charged to amount raised</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Scenario 2, keeping all else at constant and assuming a 15 percent of existing intensive growers as borrowers, shows that by the end of year five a little over $500,000 would be drawn from the fund (table 5).

Table 5: Scenario 2 - Proposed low-interest loan program structure with 15% of borrowers.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transactions</td>
<td>12</td>
<td>14</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Avg. Loan Size</td>
<td>20,000</td>
<td>20,000</td>
<td>30,000</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td>Dollars Disbursed</td>
<td>240,000</td>
<td>288,000</td>
<td>518,400</td>
<td>622,080</td>
</tr>
<tr>
<td></td>
<td>Interest Rate</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td></td>
<td>Admin Fee (charged to amount raised)</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>Defaults*</td>
<td>5.0%</td>
<td>15.0%</td>
<td>15.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td></td>
<td>Admin Fee Total</td>
<td>18,000</td>
<td>21,600</td>
<td>38,880</td>
<td>46,656</td>
</tr>
<tr>
<td></td>
<td>Defaults Total</td>
<td>12,000</td>
<td>43,200</td>
<td>77,760</td>
<td>93,312</td>
</tr>
<tr>
<td></td>
<td>Total:</td>
<td>30,000</td>
<td>64,800</td>
<td>116,640</td>
<td>139,968</td>
</tr>
<tr>
<td>Running Total Charged to Fund</td>
<td>30,000</td>
<td>94,800</td>
<td>211,440</td>
<td>351,408</td>
<td>519,370</td>
</tr>
<tr>
<td></td>
<td>* Charged to amount raised</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scenario 3 assumes 30 percent of intensive growers will borrow money. Maintaining all else constant this scenario would deplete the fund by the end of year five (table 6).

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transactions</strong></td>
<td>23</td>
<td>28</td>
<td>33</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td><strong>Avg. Loan Size</strong></td>
<td>20,000</td>
<td>20,000</td>
<td>30,000</td>
<td>30,000</td>
<td>30,000</td>
</tr>
<tr>
<td><strong>Dollars Disbursed</strong></td>
<td>460,000</td>
<td>552,000</td>
<td>993,600</td>
<td>1,192,320</td>
<td>1,430,784</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Admin Fee (charged to amount raised)</strong></td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>7.5%</td>
</tr>
<tr>
<td><strong>Defaults</strong></td>
<td>5.0%</td>
<td>15.0%</td>
<td>15.0%</td>
<td>15.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td><strong>Admin Fee Total</strong></td>
<td>34,500</td>
<td>41,400</td>
<td>74,520</td>
<td>89,424</td>
<td>107,309</td>
</tr>
<tr>
<td><strong>Defaults Total</strong></td>
<td>23,000</td>
<td>82,800</td>
<td>149,040</td>
<td>178,848</td>
<td>214,618</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>57,500</td>
<td>124,200</td>
<td>223,560</td>
<td>268,272</td>
<td>321,926</td>
</tr>
</tbody>
</table>

* Charged to amount raised

**Description of Phase II**
Phase II of the low-interest loan program would target mid-size and large shellfish growing operations and offer large loans (over $50,000). This phase is contingent upon the implementation of a comprehensive federal crop insurance program which would reduce risks to lenders.

When crop insurance solutions have been developed, and a track record of lending has been established, lenders should be more comfortable advancing additional funds. Private capital is also more likely to flow to these businesses as sufficient crop insurance solutions are established.

**Recommendations**
Based on the findings presented in the study the Federation recommends that the NCGA:

1. Appropriate **$1 million** to allow for the startup of a low-interest loan program. The appropriation should be directed to **Thread Capital** instructing the organization to set up a lending fund with a structure described above.
2. Dedicate **$30,000** from the appropriation to the North Carolina Shellfish Growers Association as **matching funds** for the development of the federal crop insurance program.
3. Ensure effective use of public funds by requiring annual evaluation of the loan program performance.
About the North Carolina Coastal Federation

The coast of North Carolina is one of the healthiest and most spectacular places in the world, and our goal at the North Carolina Coastal Federation is to keep it that way. The Coastal Federation is the state’s only non-profit organization focused exclusively on protecting and restoring the coast through education, advocacy, and restoration of coastal habitats.

Strong coastal economy is at heart of our work. A healthy coastal environment and the economy are intrinsically linked. A productive natural coast supports fisheries, farming, tourism, communities, military training and economic growth. Our work helps create jobs, putting people to work growing oysters, restoring wetlands and improving water quality.

A robust coastal economy depends on and reinvests in environmental protection and restoration. Healthy coastal ecosystems are key to healthy coastal economy which relies on these systems and the services they provide. Investment in coastal restoration creates short-term and long-term jobs, boosts fisheries and ensures a clean environment that benefits the tourism industry. The Federation is working with federal, state and local leaders, economic developers, private businesses and coastal residents to foster this synergistic effect.

Our mission is to empower coastal residents and visitors from all walks of life to protect and restore water quality and critically important natural habitats of the North Carolina coast. Our vision is for a natural, beautiful and productive coast that is a great place to live, work and visit.

Created to give communities a voice in planning the long-term future of our coast, the Federation remains a collaborative, grassroots organization that brings together traditional and nontraditional partners to leave a legacy of clean water and healthy fisheries for future generations.

About NC Rural Center and Thread Capital

Since 1987, the Rural Center has worked to improve the quality of life for the state’s rural people and places. The NC Rural Center’s mission is to develop, promote, and implement sound economic strategies to improve the quality of life of rural North Carolinians. The organization serves the state’s 80 rural counties, with a special focus on individuals with low to moderate incomes and communities with limited resources.

The Rural Center manages and maintains the Loan Participation Program, a program initiated by the Department of the Treasury’s Small Business Credit Initiative that helps provide reduced-risk financial assistance to entrepreneurs by working with community banks to spur more small business lending.

In 2018, the Rural Center launched its nonprofit subsidiary, Thread Capital, to expand its direct small business lending capacity across the state. As NC Rural Center’s subsidiary Thread Capital
assists North Carolina’s entrepreneurs in gaining access to the critical capital and resources needed to start, sustain, or expand their businesses.

**About NCIFund**

Natural Capital Investment Fund is a small business loan fund that supports entrepreneurs who are creating jobs and businesses in underserved communities in central Appalachia and the Southeast. By providing flexible capital and advisory services to small businesses, agricultural enterprises and community organizations, the organization catalyzes environmentally and socially responsible business development and wealth creation in rural, minority and low-wealth communities. NCIFund was founded in 2000 with the goal to address the lack of access to capital for small businesses and farms that sought to grow while being responsible stewards of natural resources. Since 2001, the organization has invested $59.1 million in 392 loans to 301 businesses and nonprofits helping create 5,368 jobs.