

**Oyster Blueprint 2021-2025
Shellfish Aquaculture Strategy
Draft Recommendations April 2020**

Overarching Goal:

Build the shellfish aquaculture industry to create a \$100 million industry by 2030.

Workgroup members:

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Background:

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 North Carolina General Assembly 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 1,000 jobs by 2030.**

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 Strategy).¹ The Plan sets out an ambitious goal to sustainably grow the industry to \$33 million in landings generating 1,000 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

¹ North Carolina Strategic Plan for Shellfish Mariculture: A Vision to 2030. <https://www.nccoast.org/wp-content/uploads/2019/01/NC-Strategic-Plan-for-Shellfish-Mariculture-Final-20181230.pdf>

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.

Accomplishments thus far:

- 1) In 2019, the State showed further support for advancing the shellfish aquaculture industry by ratifying the Shellfish Legislation (SL 2019-37; SB 648). This legislation implemented many of the Strategy's recommendations:
 - Allowed establishment of Shellfish Aquaculture Enterprise Areas that will group shellfish leases in large prior-designated leases. This will speed up the permitting of leases and potentially reduce user conflicts.
 - 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 seed oysters or seed clams from certain prohibited growing waters to private beds in open waters increasing the areas available for aquaculture.
 - Established a Shellfish Cultivation Lease Review Committee within the 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.
- 2) The North Carolina Coastal 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.
- 3) Mandated by the NCGA the Federation finalized the Low-Interest Loan Program study in March 2020. The federation recommended a two-phased program. The study also recognized and emphasized the intricate relationship between the low-interest loan

program and the comprehensive crop insurance for shellfish. Without a federal crop insurance for shellfish there cannot be a meaningful loan program. Thus, the federation recommended the NCGA appropriate \$1 million for the establishment of the two phased loan program:

Summary table of the proposed loan program structure

CHARACTERISTICS	PHASE I*	PHASE II**
TARGET AUDIENCE	New and existing small N.C. shellfish growers	Mid and large size N.C. shellfish growers
LOAN SIZE	Up to \$50,000	Over \$50,000
INTEREST RATE	5.5%	TBD
LENDER	Thread Capital & NCFund	Thread Capital & Other Lenders

*First five years of the loan program.

**Contingent upon Phase I evaluation and development of comprehensive federal crop insurance program for shellfish aquaculture crops.

In addition to these successes more steps need to be taken in order to reach the \$100 million in sales by 2030 goal established by the Strategy. The draft Oyster Blueprint goal for shellfish aquaculture outlines tasks to achieve by 2025.

Draft Recommended Actions:

1. Monitor and Report on Industry Growth

- a. Ensure the 2030 goal. Report shellfish aquaculture landings each year and report progress in State of the Oyster Report.²

Year	Estimated Landings Range (in millions)
Year 1 - 2021	\$6.2 - \$7
Year 2 – 2022	\$7 - \$8.6
Year 3 – 2023	\$8.6 - \$10.4
Year 4 - 2024	\$10.4 - \$12.5
Year 5 - 2025	\$12.5 - \$15

2. Support and Assist the Shellfish Growers Economically

- a. Develop low-interest loan program for shellfish growers (Year 1)
- b. Include farmed shellfish products into Federal Crop Insurance (Year 2)
- c. Achieve eligibility of farmed shellfish products for future disaster relief funds (Year 2)
- d. Implement findings of the study of penalties associated with theft of shellfish aquaculture gear and product (Year 3)

² The projected landings are calculated using the 20% annual growth rate and the starting value of current estimated landings value \$5 - \$6 million.

- e. Develop a nutrient reduction mitigation payment program (Year 4).
- f. Establish Shellfish Aquaculture Resource Grant Program administered by N.C Sea Grant (Year 5)
- g. Establish an Aquaculture Business Agent at North Carolina Sea Grant to aid the existing Marine Aquaculture Extension Specialist (Year 5)

3. Improve Marketing, Promotion and Distribution of Shellfish Products

- a. Develop a network of shellfish aquaculture incubator hubs along the coast to support the industry (Year 2&3).
- b. Perform a market study analysis for N.C shellfish aquaculture products, both in and out of state (Year 3).
- c. Establish a Shellfish Aquaculture Advisory Panel at the N.C. Department of Agriculture and Consumer Services with the following roles: fulfill mandate to promote the industry; develop an annual assessment report to guide adaptive management (Year 3).
- d. Appropriate funding for the NCDA&CS and NCDOC to develop NC Oyster Trail (Year 3).

4. Modernize Regulatory Scheme and Reduce User Conflicts

- a. Implement the findings of the study on how to reduce user conflicts related to shellfish cultivation (Begin implementing by Year 2).
- b. Develop criteria for Shellfish Enterprise Areas (Year 2).
- c. Reevaluate Strategic Plan's Recommendation #10 in light of the findings of the user conflict study ("Amend North Carolina General Statute §113-202 to afford the Secretary of the Department of Environmental Quality substantial discretion in balancing public trust uses.) (Year 2).
- d. Establish SEAs in compliance with existing shellfish lease statutes (Years 3-5).
- e. Amend the statute to increase the duration of the lease from 10 to 20 years (by Year 5).

5. Support Shellfish Aquaculture-Related Research

- a. Develop list of research needs and progress for annual report (Year 2).
- b. Fund a Shellfish Aquaculture Grant Program administered by N.C. Sea Grant (Year 4)
- c. Provide guidance and support efforts for the UNCW Shellfish Research Hatchery and other possible/future hatcheries (Year 4)
- d. Research environmental and economic benefits of shellfish aquaculture (Year 4)