

# Facts about Shellfish Aquaculture in Delaware's Inland Bays



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## Fact 1

Delaware is the only coastal state without a shellfish aquaculture industry.

## Fact 2

In 2011, the US East Coast shellfish aquaculture industry was valued at **\$119 million with 10% annual growth.**

## Fact 3

If the Inland Bays were to have a shellfish industry comparable to Rhode Island, which has 160 acres in production and 84 full and part-time jobs, we could achieve the following benefits **using just 1% of the total bottom area of the Inland Bays:**

- Every day, 9%–22% of the total volume of water in the Bays would be filtered by the shellfish
- Over 2300 pounds of nutrients could be removed from the Bays; based on a 3-year harvest cycle
- \$2.4–\$11.2 million in gross income from shellfish aquaculture could be realized
- Total economic impact amounting to \$6–\$28 million could be realized for the region

## Fact 4

Nutrient pollution continues to be the number one problem for Delaware's Inland Bays.

While aquaculture will not solve all the problems of the Bays, the nutrient removal capacity of shellfish could significantly **improve water quality at lower costs** than other cleanup technologies and also provide economic development opportunities.

**In recognition of these facts, the Delaware Center for the Inland Bays, a private non-profit organization formed by the Delaware General Assembly to oversee the implementation of the management plan for the Inland Bays, convened a public, multi-disciplined effort to plan for shellfish aquaculture in the Inland Bays.**

## Step 1

A Shellfish Aquaculture Tiger Team was formed in March 2012 with representatives from: Delaware Center for the Inland Bays, Department of Natural Resources and Environmental Control (DNREC), Delaware Department of Agriculture, University of Delaware Sea Grant, Sussex County Economic Development, recreation interests, commercial clammers, shellfish aquaculture interests, the Delaware Shellfish Advisory Council, and the University of Maryland Extension Service.

## Step 2

The Tiger Team and its subcommittees met publicly over 20 times from March 2012 to March 2013 to suggest revisions to existing Delaware code and draft proposed new code.

## Step 3

The final report was unanimously approved by both the Tiger Team and the CIB Board of the Directors. Information on the initiative was disseminated and public input was received throughout this process.

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## Major points of agreement on the Tiger Team

1. That there would be a review and approval process per applicant for leasing bay bottom to grow native oysters and hard clams.
2. Identified up to 261 acres (or 2.8%) of Rehoboth Bay, 125 acres (or 1.3%) of Indian River Bay, and 227 acres (or 10%) of Little Assawoman Bay as areas compatible with other bay uses that could be leased.
3. That there would be a permanent cap on total lease area by Bay at: 5% of Rehoboth Bay, 5% of Indian River Bay and 10% of Little Assawoman Bay.
4. That a minimum lease size of 1 acre and a maximum of 5 acres for each lease applicant be set.
5. That there be a one-time lease fee of \$300 per applicant and an annual lease renewal fee of \$100 per acre for residents, and \$1000 per acre for non-residents. Leases would be issued for 15 years, but must be renewed annually.
6. That potential lease sites be assigned by lottery in the first year, and on a first-come, first-served basis thereafter. DNREC regulations would address specific requirements, such as, applicants having to work their lease site or relinquish it.
7. That DNREC should have authority to develop regulations to administer the program and establish how lease sites would be marked.



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For more information go to  
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## Answers to Frequently Asked Questions

**Q:** Would aquaculture conflict with other water uses?

**A:** Lease areas recommended in the report were carefully considered to avoid boating channels, shorelines, and areas of intense recreation use. Recommended sites also avoid areas where wild hard clams were abundant using data from general hard clam surveys of the bay bottom. Lease sites would be marked so boaters can avoid navigation hazards. Recreational fishing may improve around aquaculture sites.

**Q:** Is hard clam aquaculture included in the proposed code?

**A:** The code includes hard clam aquaculture, but does not specify in which bays hard clam aquaculture would be permitted; DNREC would determine this in the development of the regulations.

At this time, DNREC is inclined to limit hard clam aquaculture to Little Assawoman Bay to avoid potential risks to existing hard clam populations and conflicts with current recreational and commercial hard clam fisheries. Others on the Tiger Team expressed a preference for clam aquaculture in all three Bays.

**Q:** Would the farmed shellfish be native species or genetically-modified organisms?

**A:** Farmed shellfish would be native species that are bred for desirable traits such as disease resistance. This is the standard in East Coast shellfish aquaculture.

**Q:** What is the dockside value (total price paid to harvesters) of the Inland Bay's wild-caught commercial clams?

**A:** \$142,518 in 2011.

**Q:** If the water in the Bays is so dirty, will the shellfish be safe to eat?

**A:** Yes, leases would only be granted in areas approved by the State of Delaware as safe for shellfish harvest. The State would also inspect the harvests for safety.

**Q:** If the Aquaculture bill is approved this spring, when could the first shellfish come to market?

**A:** Regulations would take about six months to develop. Once leases are awarded and established, it would take 15–36 months to grow oysters to market-size.

**Q:** Who will be eligible for a lease?

**A:** Anyone with an interest and desire.