

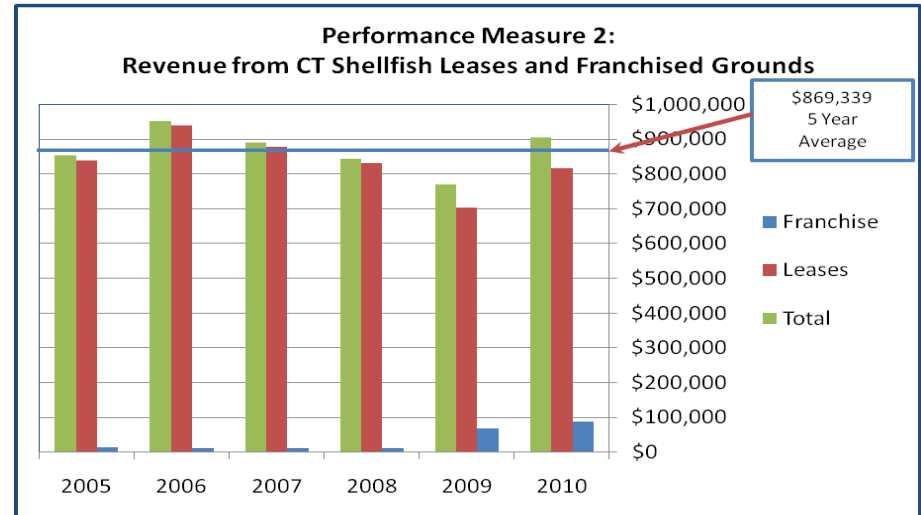
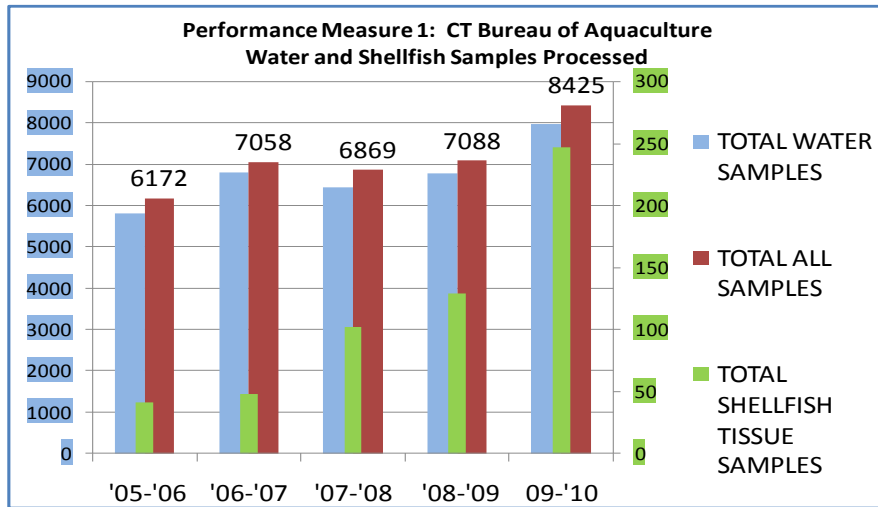
Program Report Card 2010: CT Shellfish Sanitation Program: Water Quality for Shellfish Harvest (CT Department of Agriculture Bureau of Aquaculture)

Quality of Life Result: All CT residents have access to safe, local, high-quality seafood harvested from a “Clean and Healthy” Long Island Sound

Contribution to Result: The CT Shellfish Sanitation Program identifies safe shellfish growing areas (through pollution source assessment and water quality and shellfish monitoring) which provide CT residents and commercial shellfish harvesters with a source of fresh and wholesome clams and oysters.

Partners: CT DEP, CT Department of Public Health, CT Sea Grant, Local Shellfish Commissions, Shoreline Health Departments, Harbor Management Commissions, Marine Police, Public Works, CT Seafood Council.

Total Program Funding (Average FY07-FY09):\$140,142 Requested State Funding FY12/13: \$145,000 Federal Funding: \$0 Other Funding: \$0



Performance Measure 1-Water Quality Monitoring: Improve water quality and shellfish tissue monitoring to ensure a safe and wholesome shellfish product
Story behind the baseline:

- Bacteriological water quality in the shellfish beds must be monitored and regulated carefully in order to ensure that the product that is harvested from these beds is safe to eat.
- In 2010, the Bureau processed 8425 samples, which was the greatest number of samples ever processed by the program.

Proposed actions to turn the curve:

- Perform administrative closures of areas lacking significant shellfish resource or activity
- Change classification of growing areas that due to poor water quality, require extensive monitoring. This action may significantly impact recreational programs and commercial harvest.
- CT Shellfish Sanitation Program is always responding to emerging pathogens, and must evaluate all potential public health threats. The Bureau has begun sampling for Vibrio, a marine bacteria that can cause illness or death, and anticipates an increased need for expanded Vibrio, Hazardous Algal Bloom, and Virus indicator sampling in the upcoming fiscal years.

- Fill vacant positions: In the face of ever-increasing federal regulations, the CT Shellfish Sanitation Program must continue to meet the requirements of the National Shellfish Sanitation Program (NSSP), which is regulated by the FDA. While we do currently meet the requirements of the Program, it will be unlikely that we can continue to do so unless vacant laboratory positions are filled.

Performance Measure 2-Economic Benefits: Increase the amount of revenue brought into the state from the CT Shellfish Industry directly through Lease and Franchise fees paid for the use of shellfish grounds

Story behind the baseline:

- The CT Shellfish Industry pays Lease and Franchise fees for shellfish beds on an annual basis which generate an average of \$870,000 per year.
- In order to maintain revenue from Shellfish Leases, water quality must be monitored and regulated carefully in order to ensure that the product that is harvested from these beds is safe for human consumption and meets the requirements of the National program. Without the CT Shellfish Sanitation Program to perform this monitoring, there would be no harvest allowed from shellfish beds, and no income generated for the state from leases and other shellfish-related economic benefits.
- The value of the beds is directly related to the number of

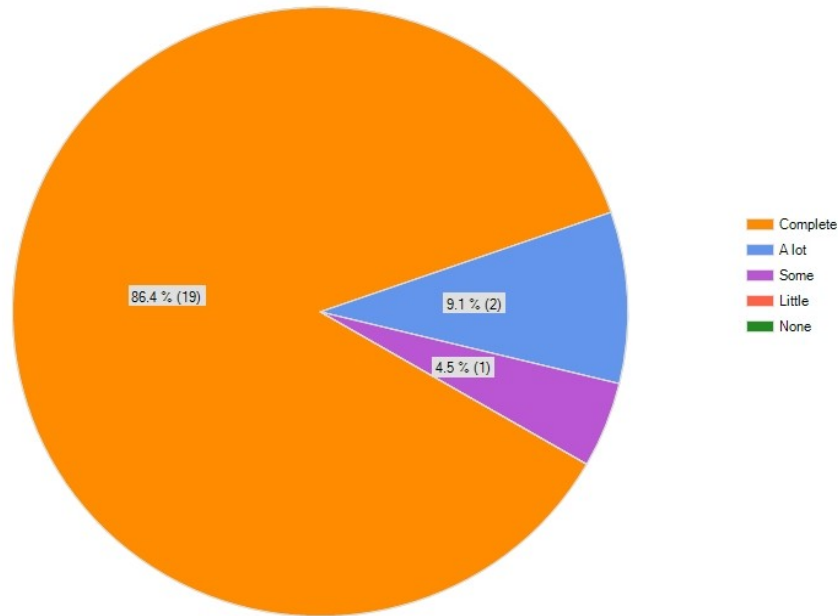
days the beds are open. The DA/BA responds immediately to water quality impacts to collect and analyze samples in order to reopen beds in a timely manner.

Proposed actions to turn the curve:

- The CT Shellfish Sanitation Program will soon be required to increase the types of monitoring that are performed to include virus indicator studies, and a wider range of bacteriological, molecular, and chemical analyses, including Vibrio and Paralytic Shellfish Poisoning, in order to meet the requirements of the program. The Bureau is currently attempting to locate alternative sources of funding for equipment to process these samples, so that there will be no need for additional budget expenditures for equipment.
- The DA/BA has developed an extensive Geographic Information Systems (GIS) database of shellfish grounds, water quality classifications, and sampling stations that will allow us to identify potential areas for expansion of leased grounds
- The DA/BA is in the process of developing an alternative leasing mechanism in order to make lease opportunities available to new Aquaculture businesses. Currently all leases are subject to a sealed bid process that statutorily awards leases to highest bidder, effectively eliminating businesses with limited cash flow from obtaining leases.

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What level of confidence do you have in the safety of your product due to the water quality and shellfish meat testing performed by the Bureau of Aquaculture?



Performance Measure 3-Industry Confidence: Improve communication regarding the importance of monitoring water quality and shellfish meat quality testing performed by the Bureau of Aquaculture staff as part of the Shellfish Sanitation Program. The Bureau would like to see a high percentage of shellfish harvesters who have “Complete” or “A lot” of confidence in the safety of their product due to DA/BA monitoring. **Story behind the baseline:** The Bureau staff monitor water quality in the shellfish growing areas, open and close shellfish beds based on water quality, and license and inspect CT’s 46 shellfish harvest operations and facilities and 32 wholesale shellfish dealers. The pie chart below shows that 95.5% (orange and blue segments together) of shellfish harvesters have either “Complete” or “A Lot” of confidence in the safety of their shellfish product due to the water quality and shellfish meat testing performed by Bureau of Aquaculture’s Shellfish Sanitation Program.

Proposed actions to turn the curve: A 95.5% Confidence rating is very high, particularly considering that the actions the Bureau must take to open and close areas based on the water quality directly and immediately impact their harvest operations. This high rating shows that the industry understands and appreciates that the Bureau must take action to close areas to ensure the safety of the shellfish product in order to protect public health.

- The Bureau is in the process of updating the Aquaculture

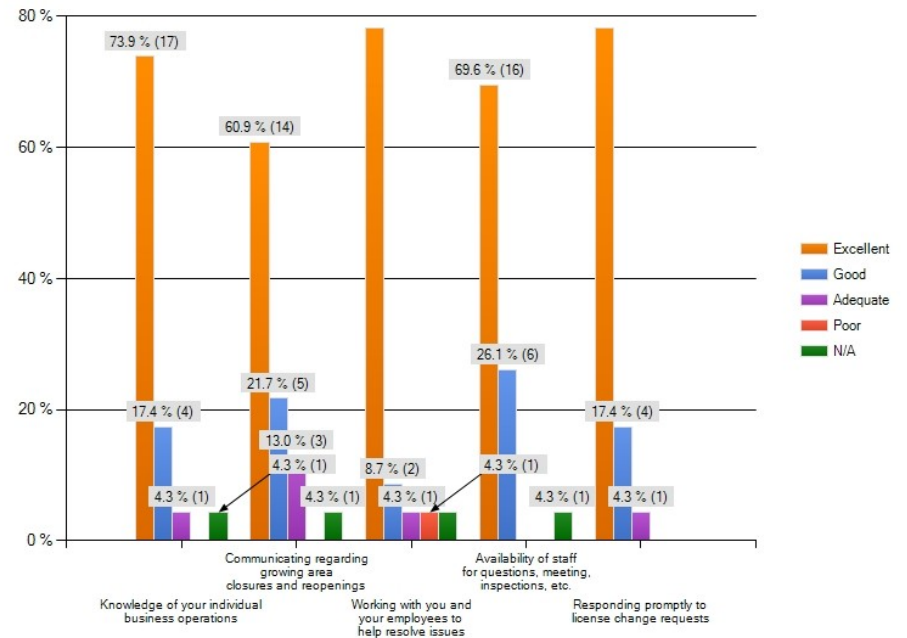
website to include more information regarding the environmental factors that go into the decision-making process.

- The website will include updated maps of shellfishing area classifications and maps showing sampling station locations and pollution source locations, so that harvesters are fully aware of how we identify areas that are not meeting the water quality requirements. These are actions that the bureau has taken at no additional cost to improve communications with the harvesters.
- The best way to maintain this high level of confidence is by transparent communications and education regarding pollution sources, water quality requirements, and water quality results, so that the harvesters have a better understanding of what the criteria are and if the environmental conditions are meeting the criteria.

Performance Measure 4-Industry Satisfaction: Improve the perception of quality of service provided in support of CT’s industry. Achieve a rating of “Good” or “Excellent” service in a variety of responsibilities performed in support of the CT Shellfish Industry.

Story behind the baseline: The Bureau of Aquaculture staff administers the CT Shellfish Program by overseeing shellfish harvest in CT, monitoring water quality in the shellfish growing areas, opening and closing shellfish beds based on water

Please rate the following aspects of the Bureau of Aquaculture’s service:



quality, and licensing and inspecting 45 harvest operations and facilities and 32 wholesale facilities. The Bureau’s service was rated “Good” or “Excellent” on 5 aspects of service by between 82.6% and 95.7% of shellfish harvesters.

Proposed actions to turn the curve: The CT Shellfish Sanitation Program is a multi-faceted program, which must perform a wide-variety of services in order to meet the requirements of the National Shellfish Sanitation Program, which is regulated by FDA. The CT Shellfish Sanitation Program must find ways to serve the industry in a more efficient manner as state program budgets and personnel are shrinking.

- A project is currently underway to improve the Bureau of Aquaculture website to make it more user-friendly, improve access to application and license change forms, sanitation forms, HACCP forms, etc. in order to make it easier for harvesters to make license changes and find information related to their operations.
- We have implemented a phone hotline recording service so that harvesters can call in and get information regarding closures and openings. This hotline service only serves harvesters in the Western region of the state at this time. Please note: In the Eastern region, a number of municipalities share the responsibility for opening and closing areas; this may contribute to the lower ratings in the category.