# Program Report Card 2012: 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 DEEP, CT Department of Public Health, CT Sea Grant, Local Shellfish Commissions, Shoreline Health Departments, Harbor Management Commissions, Marine Police, Public Works, CT Seafood Council.



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 2012, the Bureau processed 7335 samples including fecal coliform water and tissue samples, plankton samples, toxin samples, pathology samples, *Vibrio* samples, and viral samples
- Performed extensive administrative closures of areas lacking significant shellfish resource or activity including Old Saybrook, Old Lyme, and Westbrook
- CT Shellfish Sanitation Program is always responding to emerging pathogens, and must evaluate all potential public health threats.
- The Bureau responded to a new public health threat in 2012 from *Vibrio* bacteria which resulted in several individual illness and extensive shellfish closures, which had an enormous economic impact on companies

#### Proposed actions to turn the curve:

 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. Our most recent FDA evaluation has found a number of critical deficiencies that must be corrected, which are directly related to reduced staffing.

The Bureau must begin sampling for Vibrio bacteria inhouse. Samples collected during the 2012 event were sent to FDA laboratory, however that was only in response to illnesses. Going forward we MUST be able to monitor our areas through in-house testing for Vibrio.

**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 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 and small 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. The new provisions would enable the Department to issue a lease up to 25 acres at \$25.00 an acre to new start up companies. A second bill would enable existing small companies with less than 500 acres of shell-fish beds to petition the Department to place parcels up for bid which would have a minimum 25 an acre price.





**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 Bureau has updated the Aquaculture website to include more information regarding the environmental factors that go into the decision-making process.
- The Bureau has created an email list in order to more effectively communicate regarding environmental conditions, test results, management recommendations and shellfish closures and events.

**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 website will also 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.

**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 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.

 In March of 2012, the Bureau of Aquaculture held the first annual Shellstock Shipper and Captain's HACCP Refresher Seminars in order to explain the new public health threat of *Vibrio* bacteria and the changes to the National Ordinance that have significant impact on the shellfish company operations

• The Bureau has 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.

**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.

- The Bureau of Aquaculture website has been expanded 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.
- The Bureau has created an email list in order to more effectively communicate regarding shellfish closures and events. Many harvesters communicate primarily through email which saves them time.