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# Do Maine and New Hampshire Residents Prefer Shellfish Harvested Locally? Measuring the Supply and Demand of Shellfish Harvested in Maine and New Hampshire

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## Objective

Our research asks: How important is it for residents to have access to local seafood? Do they know where their seafood comes from? And are they willing to pay to help manage coastal resources?

Maine has 1.8 million acres of shellfish growing waters.  
  
2011 Revenue from shellfish: \$381,012,000

New Hampshire has 61,000 acres of shellfish growing waters.  
  
2011 Revenue from shellfish: \$17,330,000

### Using Literature to Gather Key Questions

Set to launch in late November 2014, researchers from the University of Maine School of Economics have created surveys to measure Maine and New Hampshire residents' knowledge of coastal issues. Using literature to draft survey questions, researchers can better understand how to ask citizens about key coastal management issues.

*"In terms of coastal cod stock levels, bathing water quality, and biodiversity levels, how much economic value do citizens place on improved coastal water quality?"*  
  
-Eggart & Olsson, 2008  
Valuing multi-attribute marine water quality

*"What non-market value do citizens assign to the cleanliness of their coastal waters?"*  
  
-Le Goffe, 1995  
The Benefits of Improvements in Coastal Water Quality: A Contingent Approach

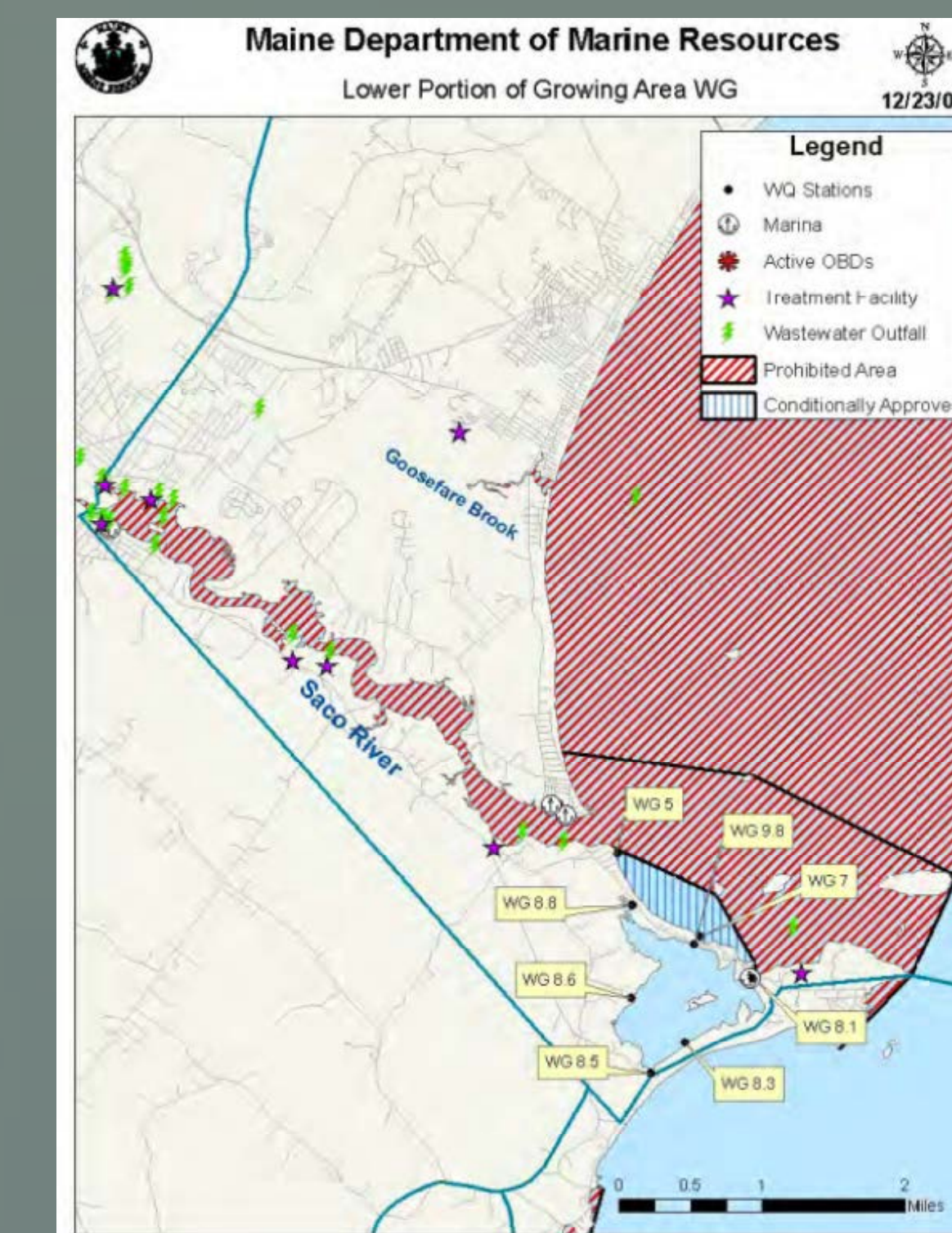
*"How worthwhile are investments in terms of gains in public health and amenity, and what does the public expect from legislation aimed at reducing pollution?"*  
  
-Georgiou, Langford et. al, 2001  
Public Preferences for Reducing Health Risks from Polluted Coastal Bathing Water

### Data Gaps in Determining Local Supply

If demand for local shellfish is significant, it is economically viable to support adequate management of shellfish resources.

Maine faces a unique challenge because of its expansive coastline.

Adequate management of shellfish resources often requires initiative from municipalities.



Taken from the Maine Department of Marine resources, this map shows open and closed harvesting areas within the Saco Bay area. Without previous knowledge of shellfish management programs, this kind of information may not be accessible to citizens. With better documentation of current harvesting area conditions, residents may feel more inclined to actively participate in local shellfish economies.

## Measuring the Demand for Shellfish in Maine and New Hampshire



According to a compilation of data from 2001, 2006, and 2010 National Food Safety Data, 70.2% of Maine and New Hampshire residents prepare fish and/or shellfish in their homes.

Shellfish plays an important role in the success Maine and New Hampshire's coastal economies. A healthy shellfish population is a key indicator of clean ocean water.



Ensuring a future for one of our most important natural resources requires a unique cooperation between municipalities, harvesters, and state shellfish and water quality management programs.

Because of the extent of public access to our coastal resources, it benefits harvesters to know how invested citizens are in ensuring that local shellfish is clean and safe to eat. Identifying the stakeholders in this problem is key in determining how best to manage and protect Maine and New Hampshire coastal resources.

## Using Surveys to Gather Citizen Perceptions

This scoping question was designed with the intent of gathering citizen perceptions of local Maine (and New Hampshire) shellfish.

Information gathered from this question will tell researchers if citizens perceive there to be a problem with the cleanliness of local shellfish, and what their preferences are towards buying local vs. non-local shellfish.

This question comes from previous literature regarding management of coastal water quality, and individual preference for ensuring safe bathing and fishing conditions. Because of the nature of shellfish to reflect the quality of their environment, ensuring safe shellfish benefits more than those concerned about the safety of the food they consume.

Please express your opinion by selecting the answer that matches how you feel about each statement.

	Strongly Disagree		Unsure			Strongly Agree	
	1	2	3	4	5	6	7
Maine shellfish are cleaner than other U.S. and Canadian shellfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shellfish harvested in my local community are cleaner than other Maine shellfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aquacultured shellfish are cleaner than wild Maine shellfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shellfish that are wild harvested are cleaner than aquaculture produced shellfish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local seafood from New England is safer to eat than seafood from other places	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I shop for seafood, price matters more than whether it is local	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I buy less local seafood when I hear about problems with bacterial contamination or red tides in New England	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worry about seafood being contaminated by bacteria that makes it unsafe to eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22. How important are the following Coastal Water Quality Improvement Program outcomes to you?

	Not Important		Somewhat Important			Extremely Important	
	1	2	3	4	5	6	7
Healthy environment for marine animals, fish, birds and other species	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increases in flats and waters open for shellfish harvesting (fewer closures)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased opportunities for aquaculture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved beach safety (fewer advisories posted at ocean beaches)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved coastal experience (views, boating, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Opportunities for Growth

Preliminary research shows significant demand for Maine and New Hampshire shellfish. This presents an opportunity for harvesters and marine resource management to make information about the supply of local shellfish more available to consumers. Our research poses the question: How important is buying local seafood to Maine and New Hampshire residents, and accordingly how much of a stake do they have in ensuring the prosperity of local shellfish industries?

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