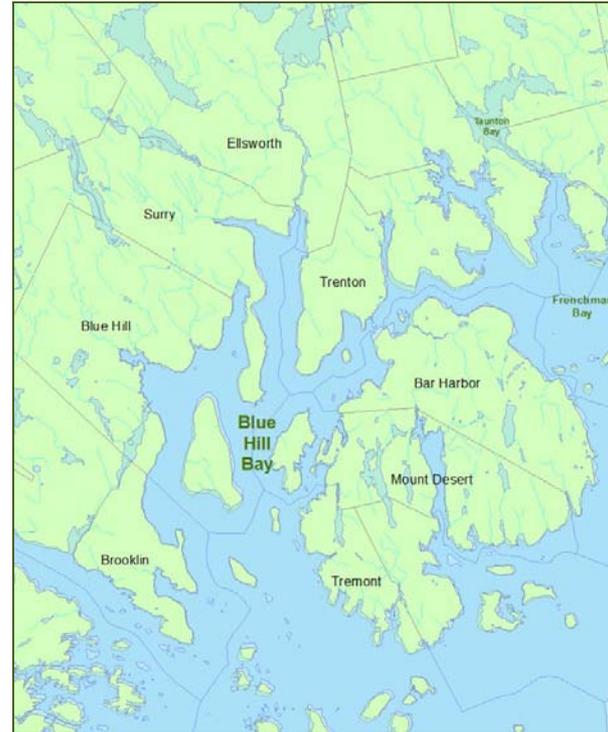


BLUE HILL BAY WATERSHED NEEDS ASSESSMENT



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BLUE HILL BAY WATERSHED NEEDS ASSESSMENT

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In Partnership with

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NOAA NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE



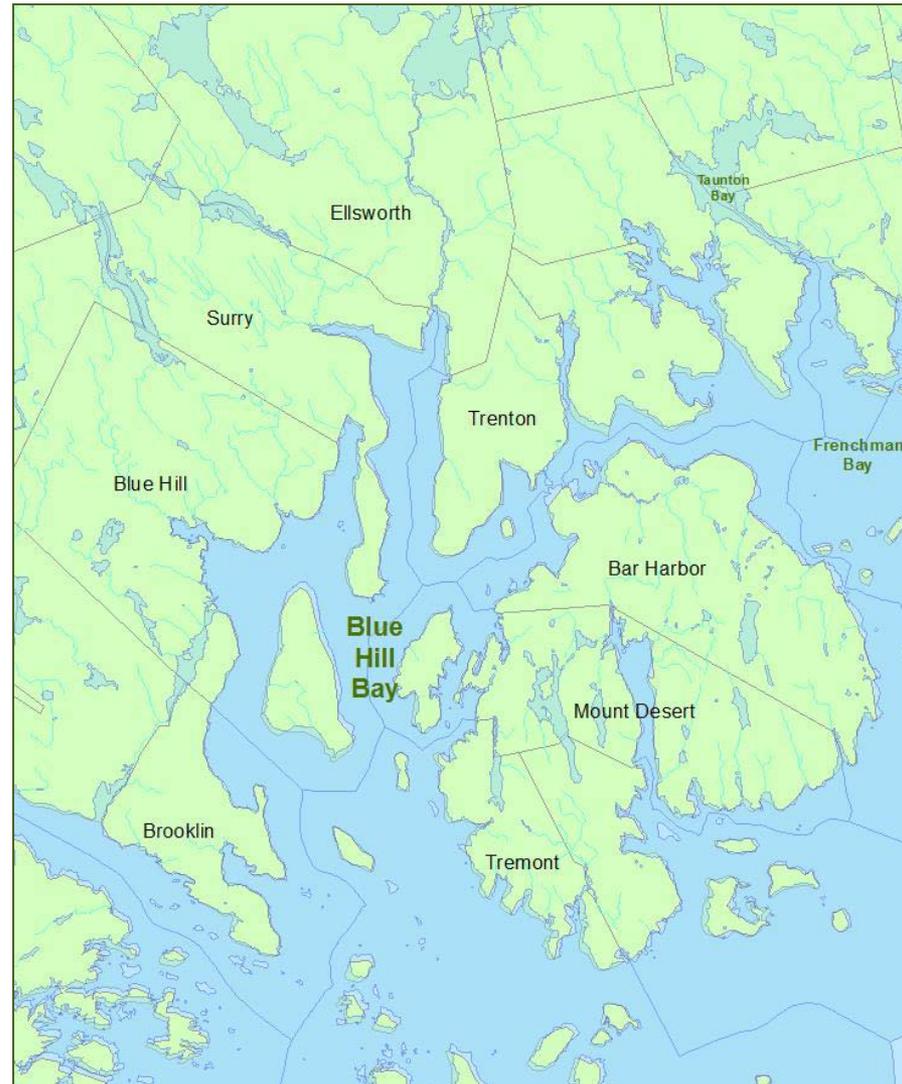
What is a Needs Assessment?

- A process for determining and addressing gaps between current conditions and desired conditions
- Often the preliminary part of a larger planning process
- By identifying needs, decision making and resources can be directed toward feasible and applicable solutions



Project Focus Area

- Eight communities in the bay watershed: Trenton, Ellsworth, Mount Desert, Bar Harbor, Tremont, Surry, Blue Hill, and Brooklin.
- The bay is a common asset for towns that are distinct from one another in many other ways.
- Assessment focuses on four major topics: fisheries, recreation and tourism, water quality, and land use and development.



Methodology

- Existing Research on Blue Hill Bay
- Bay Management Initiatives
- Data Sources
- Public Participation
 - ✓ Personal Interviews with community specialists
 - ✓ Town Committee Meetings
 - ✓ Four public meetings were held in Ellsworth in 2012:
 - Kick Off Meeting March 5
 - Fisheries Meeting April 23
 - Waterfront Planning Meeting July 9
 - Economic Importance Meeting November 29

Background: Demographic Trends

- Total year-round population of 8 towns increased 32% between 1980 and 2010.
- Brooklin and Mount Desert lost population between 2000 and 2010. Possibly due to high cost of housing and limited job opportunities.
- Ellsworth had the largest increase (from 6,656 to 7,441); was fastest growing city in Maine between 2000 -2010.
- The median age increased in all bay towns.

Demographic & Economic Trends

Table 2.2 Change in Median Age, Blue Hill Bay Communities, 2000-2010 (US Census 2011)

Town	2000	2010
Bar Harbor	40.6	45.3
Blue Hill	44.7	49.5
Brooklin	45.9	52.9
Ellsworth	40.5	41.9
Mount Desert	43.6	50.7
Surry	41.1	49.0
Tremont	41.6	48.5
Trenton	40.7	45.9
Hancock County	40.7	46.3

Table 2.3: Socio-Economic Data (¹ 2010 U.S. Census; ² Bureau of Labor Statistics, February 2012.; ³U.S. Census Bureau, 2006-2010 American Community Survey)

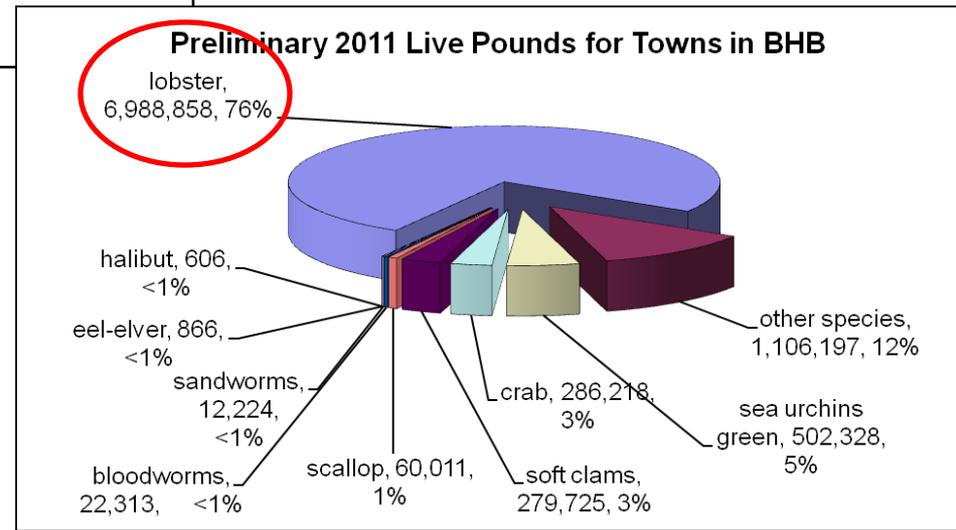
Data	HCPC Service Area	Maine	National
Population	53,372 ¹	1,328,361 ¹	308,745,538 ¹
Unemployment	11.7% ²	8.2% ²	8.3% ²
Poverty Rate	12.3% ³	14.4% ³	15.9% ³
Per Capita Income	\$26,876 ³	\$25,802 ³	\$26,708 ³

Fisheries

Table 3.1. Maine state and BHB fisheries landings and values, 2011. (NOAA 2012 and DMR 2012)

	Maine	Blue Hill Bay	% BHB /Maine
Total Landings (lbs)	270,000,000	9,259,347	3%
Total Value (\$)	426,000,000	\$26,418,508	6%
Lobster Landings (lbs)	104,700,000	6,988,858	7%
Elver Landings (lbs)	9,300	866	9%
Clam Landings (lbs)	15,700,000	279,725	2%

* In 2011, 279,725 lbs of softshell clams were harvested in BHB at a value of **\$776,167** by 119 harvesters



Fisheries Recommendations

- **Regional Shellfish Ordinance:** reduce costs, enhance conservation, provide recreational opportunities and water quality improvement incentives, and enhance harvester involvement in decision making.
- **Public Access:** work with land trusts or landowners to acquire land and/or easements for access.
- **Shellfish Conservation:** Continue reseeding efforts and other conservation measures to make clams sustainable
- **Fish passage:** inspect all stream crossings (bridges, culverts, etc) and repair those crossings which do not provide adequate passage.
- **Aquaculture:** bring together stakeholders to identify and map out areas appropriate for safe sustainable aquaculture by species.



Tourism and Recreation Trends

- Economy grew between 2000 – 2008 but by 2009 impacts of banking crisis felt, especially in tourism (restaurants and lodging).
- Restaurant and lodging sectors spike during the summer tourist season and plummet during the off season to produce fewer revenues than any other sectors.
- Recent economic downturn affects auto sales and building supplies, but appears to have less impact on restaurants and lodging.

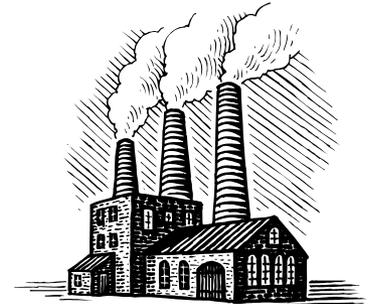
Tourism and Recreation Recommendations

- **Inter-local management of critical natural resources and public infrastructure:** When towns work together issues like public access, recreational opportunities, and waste management move ahead efficiently.
- **Infrastructure Investment:** Additional infrastructure is needed for public access, trails and shoreland for walking, sites for camping, picnics, kayak tours and public events, and sanitary “pump-outs” in harbors
- **Promote Environmental Sustainability:**
 - Diverse fish stocks
 - Local guide services, boat rentals, sales, and service
 - Community events that celebrate the environment should be explored, e.g.,
 - ANP Night Sky festival every autumn.
 - Machias Blueberry Festival
 - Down East Salmon Federation Smelt Fry in Columbia Falls



Water Quality Concerns

- Nonpoint Source Pollution:
 - Urban Runoff (ex. Card Brook in Ellsworth)
 - Sewage from Boats (Union R, Yacht Clubs, etc)
 - Bacterial shellfish closures
- Ocean Acidification
 - Affecting shell development
- Circulation and Current Patterns
 - Poor flushing and long residence time for effluents





Maine Department of Marine Resources

Pollution Area No. 39

Blue Hill Harbor and vicinity (Brooklin, Sedgwick, Blue Hill)



8/2/11

Shellfish Closures in BH (an example)

A Prohibited:

A1 Blue Hill Harbor

A2 McHeard Cove (BH)

A3 Western Blue Hill Bay (BH)

B Restricted (need Permit):

B Bragdon Brook (BH)

C Conditionally Restricted (need permit):

C1 Blue Hill Harbor WWTF

C2 Blue Hill Harbor WWTF

D Conditionally Approved (open unless WWTF malfunctions):

D Outer BH Harbor

E Conditionally Approved (Open Nov 1-Apr 30):

E SW Salt Pond

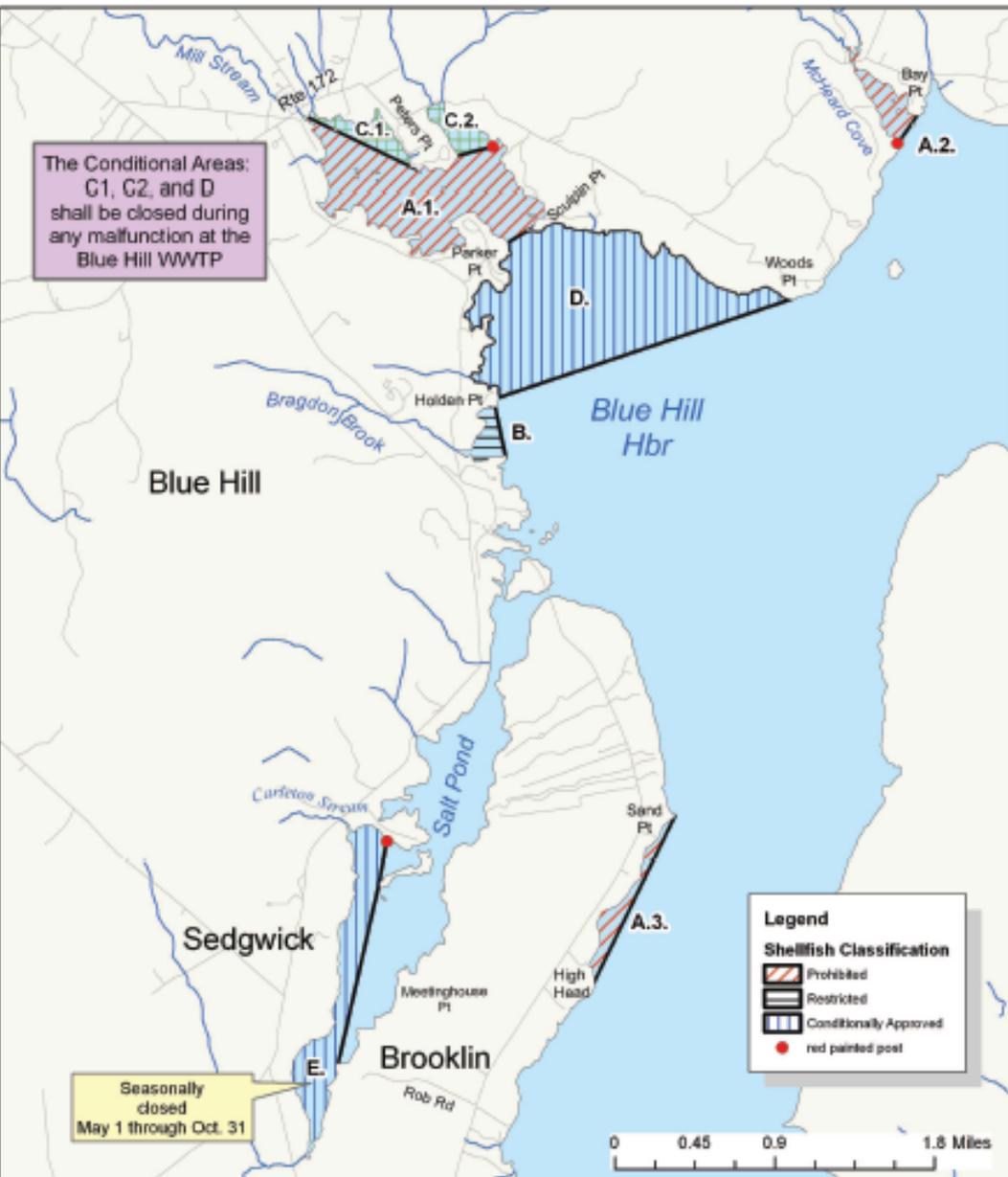
The Conditional Areas:
C1, C2, and D
shall be closed during
any malfunction at the
Blue Hill WWTP

Legend

Shellfish Classification

- Prohibited
- Restricted
- Conditionally Approved
- red painted post

Seasonally
closed
May 1 through Oct. 31



Water Quality Recommendations

- **Shellfish Closures:** Apply for funding to repair sewage problems that cause bacterial clam flat closures.
- **Stormwater:** Adopt Low-Impact Development standards and practices at all new and/or retrofitted development sites. Use educational program and/or the adoption of ordinances.
- **Acidification:** Implement clam flat buffering program (adding shells) to offset the impacts of ocean acidification.
- **Sewage Pollution:** Encourage boaters to use the pump-out stations and pump-out boats.

Landuse and Development Trends

- From 1980-2010:
 - Year-round housing increased 41 %
 - Second homes increased 94 %
 - Total dwellings increased 63%



- Trend means increase in bay use & stormwater
- All towns except Blue Hill & Brooklin have town-wide zoning. Ordinances vary in the standards used to regulate stormwater runoff and other threats to water quality,

Land Use and Development Recommendations

- **Water Quality:**
 - Enact low impact development standards
 - Continue and expand septic tank inspection programs
 - Assess current boat pump-out stations
 - Add new systems and expand the capacity of existing stations
- **Public Access:**
 - Undertake a comprehensive public access/harbor needs assessment
 - Retain/revise water dependent use standards in shoreland zoning ordinances where commercial fishing is occurring
 - Implement parking policies at public access points that reserve adequate space for launching boats, allow for nearby boat trailer and motor vehicle parking.
 - Promote cost-effective measures in those towns with inadequate all-tides access to increase the access as available.



Next Steps

- Form stakeholder group representing each town to continue discussion. Could use Frenchman Bay Partners Model.
- Continue the planning process. Develop a regional comprehensive plan for the bay.
- Work closely with state and federal agencies to implement recommendations.
- The most important next step is for communities to keep their concerns on the "front burner." Work closely with conservation organizations, HCPC, municipal governments, and community health and economic organizations to strengthen voice and effectively develop solutions for resource concerns.

