



# Ecosystem Services

## Definition

Ecosystem services are benefits that people derive from the natural world. The value of marine ecosystems is best known for the living marine resources they supply. Harvesting lobsters, mussels, clams, worms, and other species pumps \$10 million into the Frenchman Bay area economy on an annual basis. Other services may not be as obvious but are also important. For example, carbon storage by shoreline and subtidal grasses helps to offset ocean acidification and other changes due to increasing carbon dioxide in the atmosphere, and purification of polluted runoff by coastal wetlands, which helps to keep the bay clear and beautiful, and healthy for humans and wildlife. Benefits also include aesthetic, educational, and recreational services.

## Background

Frenchman Bay Partners has been engaging community members in conversations about the benefits we all derive from our connections to Frenchman Bay. By identifying and prioritizing the attributes of the bay that are of the most benefit to us, we can plan to preserve and improve them.

### *Stakeholder meetings*

On November 12 and 13, 2014, the Frenchman Bay Partners hosted two stakeholder meetings to introduce the concept of Ecosystem Services and engage people in helping to create a computer-based Ecosystem Services Value (ESValue) decision support tool for Frenchman Bay. Participants of the first meeting included a broad cross-section of Frenchman Bay Partners who helped to pilot the ESValue process. 29 Partners participated, including facilitators. Participants of the second meeting were all owners of businesses in Bar Harbor, most of whom were not already members of the Frenchman Bay Partners group; 23 people participated, including facilitators.

## Factsheet

### Broad Categories of Frenchman Bay Ecosystem Services

- Atmospheric Maintenance
- Tourism
- Food
- Housing
- Quality of Life
- Jobs
- Recreation
- Municipal Revenue
- Habitat
- Education
- Research

### Those Who Benefit

- Fishermen
- Shellfish Harvesters
- Seafood Dealers
- Aquaculture Owners & Operators
- Municipalities
- Tourism-Related Businesses
- Realtors
- Developers
- Shorefront Property Owners
- Educators and Students
- Researchers
- Residents
- Visitors

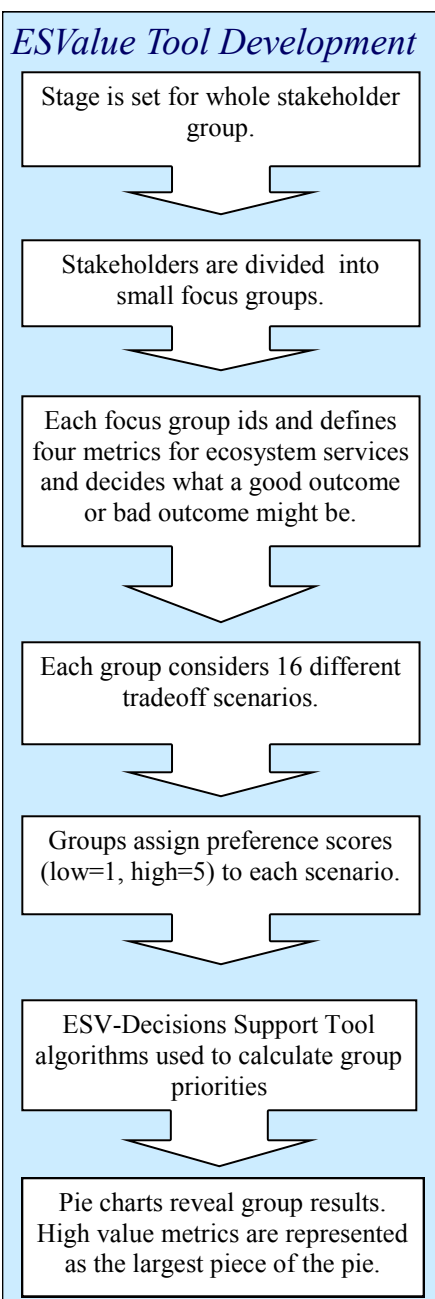


From: Frenchman Bay Partners  
Market-Based Approach Report Nov. 2013

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## Frenchman Bay Survey

In preparation for the stakeholder meetings, a survey was distributed to all meeting registrants. A total of 26 completed surveys were submitted; 21 from the November 12 stakeholder group and five from the November 13 stakeholder group. The survey was used as an educational tool, providing survey respondents with definitions and examples of ecosystem services as well as providing practice for decision-making. When asked whether particular bay ecosystem services were of low, medium, or high importance, the majority of respondents from both groups thought that most of the listed services were highly important to them personally and most of the other beneficiaries listed in the survey. Most thought it was likely or very likely that most ecosystem services would suffer noticeable declines in the next 20 years. Survey respondents were given sample trade-off questions to help prepare them for making choices and setting priorities at the November 12th and November 13th stakeholder meetings. In general, respondents were not willing to trade environmental health for increases in visitation or revenues.

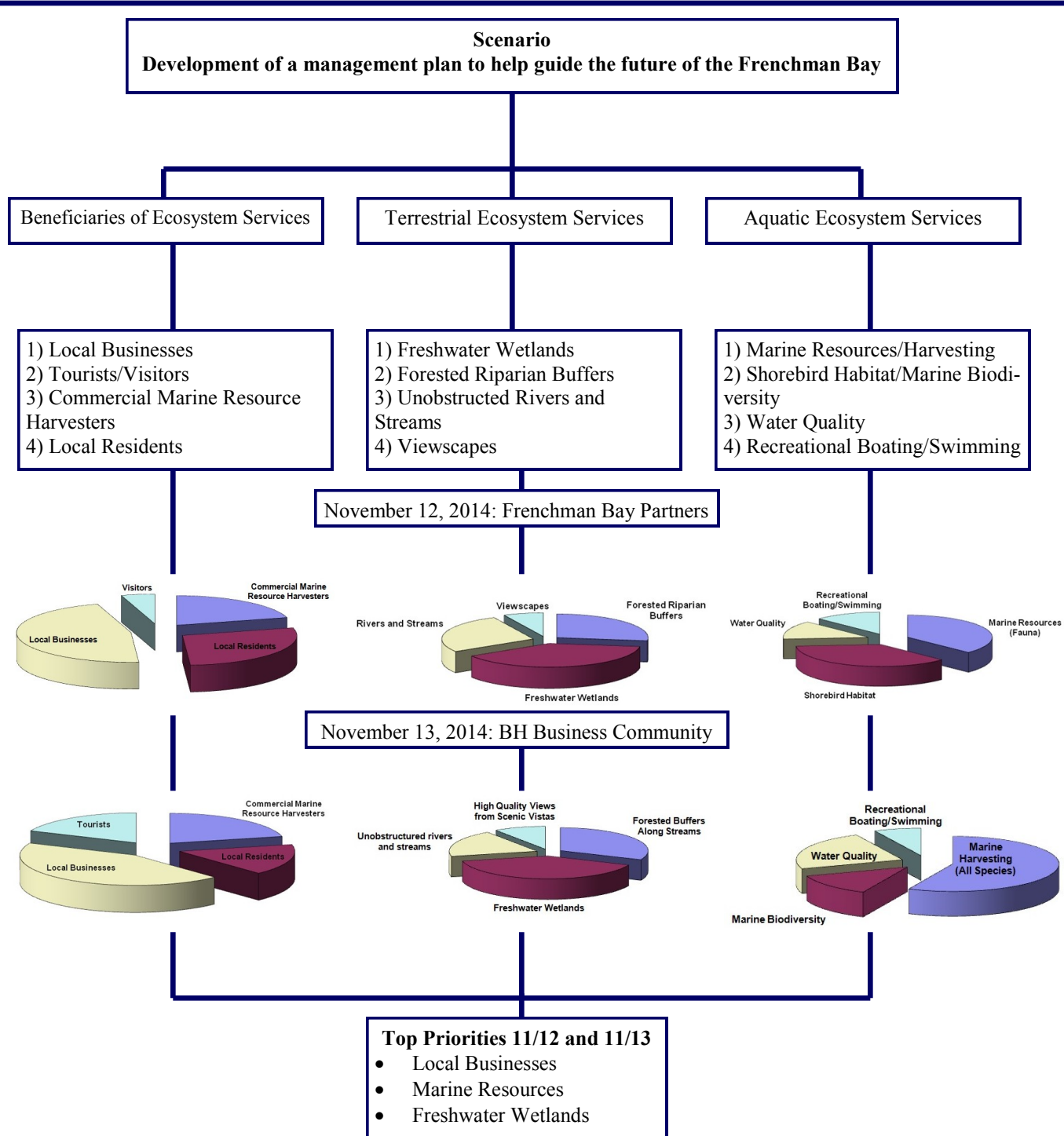


## The ESValue Decision Support Tool

The ESValue decision support tool engages stakeholders in identifying ecosystem services and values. It can help build a shared vision of resource management for diverse groups of stakeholders, narrow the range of issues and management options that need to be considered, and create a common language for discussion. The flowchart at left outlines how to use the tool.

## Using the Tool

The ESValue decision support tool is part of an active decision making process. The first step is working with stakeholders to identify management decisions and develop probable scenarios to project how the provision of services might change in response to those decisions. These choices are run through a computer model, and the outputs provide decision makers with information about the priorities set by stakeholders. Public and private sector decision makers can use this information in conjunction with scientific understanding of the ecosystem and all of its intricacies to formulate sustainable decisions. Working together to create an ESValue decision support tool that helps stakeholders choose among potential alternative scenarios or strategies will strengthen our collective ability to achieve our goals. It will increase the likelihood of successfully planning and carrying out projects that will ultimately keep Frenchman Bay healthy and vibrant for future generations of recreational and commercial users.



## Different Groups, Similar Priorities

Participants at the November 12 meeting represented a cross section of Frenchman Bay Partners. Participants at the November 13 meeting were primarily members of the Bar Harbor business community. At each meeting stakeholders were divided into three focus groups: beneficiaries of ecosystem services, aquatic ecosystem services, and terrestrial ecosystem services. Results from November 12 are depicted in the first row of pie charts, results from November 13 in the second row. **The striking result is that both groups prioritized local businesses as primary beneficiaries of ecosystem services, identified freshwater wetlands as providing the most important of terrestrial ecosystem services, and viewed harvesting of marine resources as the most important ecosystem service provided by Frenchman Bay.** The priorities set by focus groups like these can be used at a later date to discuss possible futures, given a development or planning scenario where the future of Frenchman Bay could be impacted.

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## *Applications of the Decision Support Tool*

- Shoreline development
- Working waterfront access
- Expansion of cruise ship visitation
- Creation of harbor policy
- Conservation of bay resources
- Area management
- Marine spatial planning



## *What else came out of the process?*

In the process of developing the ESValue Decision Support Tool, stakeholders engaged in conversations that they may have never had before. Through the process, participants began to look at the bay a little differently, asking the question “What are those services provided to me by the bay that I value most?” When presented with scenarios where they had to make choices, they realized that you can’t have everything, and that some things might have to be sacrificed in order to get others. They had to grapple with the question “Where is the balance?”.

The November 12th meeting was a trial exercise with 29 Frenchman Bay Partner members and facilitators. The November 13th meeting included 23 participants: business community members who were not already members of Frenchman Bay Partners and facilitators. Two business stakeholders became members after the meeting. Evaluations of participants from each meeting has provided good feedback for moving forward.

## Next Steps

- Follow-up with all participants and encourage membership in Frenchman Bay Partners.
- Initiate another business stakeholder meeting on the other side of Frenchman Bay.
- Work with project partners to develop an on-line version of the ESValue tool development exercise.
- Ask project participants to help in identifying additional stakeholders who may be interested in our process and contribute to on-going development of the tool by participating in an on-line exercise.

## For more information

For more information about our partners, projects, and events, visit our website at [www.frenchmanbaypartners.org](http://www.frenchmanbaypartners.org) or call FBP President Jane Disney at 207.288.9880 x 429.



**Frenchman Bay  
Partners**

The mission of the Frenchman Bay Partners is to ensure that the Frenchman Bay area is ecologically, economically and socially healthy and resilient in the face of future challenges.