

Workshop on Market-Based Solutions with Tundi Agardy
Frenchman Bay Partners
October 2, 2013, 11 a.m. – 2 p.m.
COA, Turrets Building, Strauss Room

Sponsored by the Frenchman Bay Partners, MDI Biological Laboratory, and College of the Atlantic
Funded by Alex C. Walker Foundation

The attendees introduced themselves.

Jane Disney, staff scientist at Mount Desert Island Bio Lab and president of Frenchman Bay Partners (FBP), welcomed everyone to the meeting.

Tundi Agardy introduced herself and mentioned her work at Forest Trends.

Antonio Blasi introduced himself as a planning commissioner. In his role as County Commissioner, he helped pass the wastewater treatment component of the airport's expansion plan.

Richard Barton is on the board of the Frenchman Bay Conservancy. He is working on a project with Penn State students, mapping portions of the Gouldsboro peninsula, including water quality data and identifying flora/ fauna. He is very interested to hear what's going on with FBP.

Roger Bowen is an elected official from Gouldsboro and the municipal liaison to FBP.

Jordan Bailey is the education and outreach coordinator at the Community Environmental Health Lab at Mount Desert Island Bio Lab, and the webmaster of FBP.

Stephanie Clement works at Friends of Acadia and is on the board of directors of the Bar Harbor Chamber of Commerce.

Abby Barrows works at Marine Environmental Research Institute, which is a new partner.

Bob DeForrest is on the executive committee of the Frenchman Bay Partners and is part of the land protection staff of Maine Coast Heritage Trust.

Mike Kersula is a grad student studying marine biology and policy. He does some work with Penobscot East Resource Center as well.

Myrna Coffin is a member of the select board in Hancock and the municipal liaison to FBP

Larry Libby is a chair of the Lamoine Conservation Commission. They are doing a study to find the value of the ocean, its products and services to the town, and will compare their results with those of nearby towns.

Anne Labossiere is a member of the Lamoine Conservation Commission and the Communication Committee of the Frenchman Bay Partners.

Bob Pulver is a member of the Lamoine Conservation Commission and is working on the Lamoine economic study

Shannon White is a marine specialist at the Mount Desert Island Bio Lab.

Chris Petersen is vice president of the FBP, chair of the Bar Harbor Marine Resources Committee, and board member of Somes-Meynell Sanctuary. Most of his work in the bay has been related to mudflats and diadromous fish.

Fiona de Koning is on the executive committee of the FBP and has a mussel aquaculture business in the bay.

Brian Reilly is an environmental consultant, involved in large scale restoration in the Gulf of Mexico.

Natalie Springuel is part of the University of Maine Sea Grant extension team. She does work on outreach programs relating to working waterfronts, fisheries and ecotourism, and is trying to figure out the economic impact of these programs.

Jennifer Fortier is from the University of Maine's Aquaculture Research Institute. She is the interim municipal liaison to the town of Ellsworth.

I. Presentation by Jane Disney

Disney said that one of the things that can come out of this discussion is a list of next steps. One next step would be to include more people from business communities. FBP spent last year bringing municipalities on board and is focusing this year on reaching out to new stakeholder groups.

Background of the Frenchman Bay Partners

Disney gave a presentation on the background and work of the Frenchman Bay Partners. Jane opened her presentation with a quote, "Perhaps we can accomplish things a local level that are difficult or impossible at the state and federal level."

The first stakeholder meeting was in March 2010. They started discussing eelgrass habitat, but the discussion broadened and they decided they wanted to look at more aspects of the bay. They recognized a shared need for taking action. People who were involved included property owners, fishermen, land trusts, research institutes and the Zone B Lobster Council.

At a two-day retreat at Schoodic Education and Research Center (SERC) they defined a common mission and shared vision. All it takes to be a partner is to sign up if you share that vision too.

Their success is built on **inclusion of diverse stakeholders**. "We believe people who live and work in coastal communities are in the best position to recognize and respond to changes in local marine ecosystem."

FBP **developed a logo**. People who become partners can use the logo for FBP related projects. "It is a good way to brand ourselves," Jane said.

FBP **identified individuals to take a lead role**. They adopted bylaws, decided they wanted an executive committee, had an annual meeting in 2013 and elected the first officers to the executive committee.

FBP **chose a method for achieving its mission and realizing its vision**. FBP held a workshop on methods, and chose the Conservation Measures Partnership's Open Standards for the Practice of Conservation. .

The first step of that method was to determine mission, vision and scope. The first two were done, and it was decided that the scope of project would be the entire Frenchman Bay Watershed.

The next step for FBP was to prioritize habitats and species of concern. There were many listed, but the ones which received the highest votes were mudflats, eelgrass, bottom habitats and diadromous fish.

FBP uses **diverse communication tools**. The Frenchman Bay Partners website at frenchmanbaypartners.org has information on all projects, partners, and meetings. The organization is completely transparent: minutes of every meeting is online. They create new tools as needed as well. For example, the website, www.eelgrassinmaine.org was created to gather information on eelgrass loss from the rest of the state.

College of the Atlantic, a partner, has taken the lead in creating an online atlas tool. It is interactive and allows you to create the particular map you need, with layers of your choosing, and then print it out and take it to a meeting. There's also a hard copy atlas.

The next step is to insert more information. It was suggested that there might be an opportunity to link to the Penn State students' Gouldsboro mapping project.

FBP embraces the **AmeriCorps** motto, "getting things done." FBP's AmeriCorps volunteers have been huge inspirations.

Jane went on to discuss the various **projects of FBP**. One project is **eelgrass restoration** including gathering data on success, changing methods, and showing that eelgrass can recover in areas using our methods. **Mapping** is another project. **Facilitating discussion** is another. FBP didn't expect this to be a role it would play, but because its members are so diverse, it can bring stakeholders together where there had been connection between them before. Another project is **surveying clamflats**; members of FBP with experience surveying clamflats on the Bar Harbor side of the bay helped the Frenchman Bay Regional Shellfish Committee advance clam conservation on the other side of the bay. FBP has data showing that clam conservation works. AmeriCorps volunteer Emma Fox did an economic study on the value of mudflats with what data she had available.

Another project involves working to develop **local agreements on areas in need of protection, like eelgrass restoration areas**. With mussel draggers, FBP made local voluntary agreements on no-drag zones, which are not federally or state mandated.

One of the next steps for FBP is to widen the circle of who is involved.

FBP has **lessons learned** to share. Diverse stakeholders are best served by a bay plan they developed themselves. Identifying and empowering a local leadership team is crucial. It is important to consider both economic and ecological concerns. Set realistic goals based on scientific data that facilitates action. Reducing the lag time between planning and implementation of projects creates buy-in – FBP didn't wait for a final draft of a plan before starting projects. Communication is imperative to the success of a local approach to marine planning.

II. Introduction to Market-based Approaches

Tundi Agardy began the conversation on market-based approaches. She said that FBP is already clearly invested in sticking to priorities. Prioritizing is one step that she goes through with organizations at these workshops but FBP is far ahead in that way and ready to dive right in to thinking about why market-based approaches might be needed, and why to explore various tools. She discussed four **reasons to pursue market-based solutions**.

- 1- Enable generation of new revenue streams for monitoring, conducting research on habitat loss, and developing communication tools as well as things that come up that you don't plan.
- 2- Engage stakeholder sectors that wouldn't be engaged otherwise. Typically, the state is in charge of conservation and engages NGOs but the private sector is left out. This is a good way to engage those who benefit from the natural systems' ecosystem services.
- 3- Accomplish marine conservation at a local scale, which is best supported by local scale investment (of time or money).
- 4- Help people recognize the intrinsic value of the ecosystem services that are benefitting all sectors of society.

Agardy explained that when we say market-based approach, this includes a whole range of tools, some of which are not true market-based approaches. She described some **market based conservation tools and provided** some examples of how these tools have been applied:

- 1- **Setting up a trust fund.** This is the most common tool. It is a public-private partnership that generates set revenue that people can rely on. Usually a grant is obtained for funding conservation and an account established which covers conservation costs. At other times, a philanthropic gift is made that funds conservation projects. This is an old-fashioned method. Most recent analyses have questioned how effective this method is in accomplishing long term conservation goals. This approach can be ineffective. These funds are generated because someone has goodwill. There isn't a lot of buy-in by the people who are executing what is happening or the people affected by the conservation measures. Often, those affected by conservation measures are not thinking about

replenishing or expanding funds. Trust funds are good for generating money, not for empowering parts of society who have not taken part in the planning or generating the good will. Most conservation groups are looking for more innovative approaches.

- 2- **Certification schemes.** About five years after the sustainable forestry movement, the Marine Stewardship Council (MSC) developed a fisheries label. Usually certification schemes have to do with marketed resources or commodities. Many certification schemes exist today and that is diminishing the power of the certification system and confusing consumers. What does it mean to have a seal of approval, or that something was “sustainably harvested”?

Example: There is a small-scale, artisanal spiny-lobster fishery in the Gulf of California. Money was needed to figure out priority areas and quota levels in order to keep the fishery sustainable. Money was needed to answer scientific questions about the fishery. Harvesters paid for the certification. With certification, harvesters were able to get a significant premium on their product which incentivized people to participate and follow the standards for conservation.

Certification schemes can have a negative effect on the producer if grocery stores advertise the standards but don't sell for premium. So oversight is necessary.

Sometimes, there are deals or contracts between retailers and individual operators with good practices. “Sustainable Fish Partnership” is one NGO that connects suppliers and retailers. They have their own set of criteria and they do constant monitoring and spot checks. Wal-Mart and Costco are huge retailers which are using this particular NGO to identify good providers and they do get a premium price for their products.

- 3- **ECO-Labeling or Seals of approval** (for hotels restaurants, resorts, cruise operations, etc that have sustainable practices). This idea is gaining traction where there is a community desire to get everyone up to speed on using resources sustainably and keep mega-corporations out.

Example: On the other side of Mexico where Cancun development is threatening to expand down the coast, the small town of Tulum is anxious to keep things smaller in scale with local ownership of businesses. The people there are trying to do things in a small-scale way, there are local seals of approval for business that are preserving shoreline, doing beach clean-ups, composting, etc. The certification allows for use of resources but encourages sustainable use. FBP could similarly provide seals of approval to businesses that are working sustainably.

- 4- **Biodiversity offsets.** Wherever there is development, there is an environmental impact statement, and regulators must assure that development does not cause too much damage. Inevitably there will be an impact on biodiversity. This inevitable impact can be countered by a biodiversity offset.

Example: If some eelgrass is lost due to development, that developer can offset it by restoring eelgrass (and more of it) somewhere else. There is a set of rules of determining equivalencies, so it does not necessarily have to be the same species. There are no marine biodiversity offsets established yet but may be coming in the future.

- 5- **Species banking.** This is a way for investors to get ahead of the game by buying up lands or marine areas, in order to be able to sell them in the future for the offset credit. A conservation banker can be sitting on land tracks, which investors can buy to offset for impacts of their development. These investors are conservation speculators, adding value to pristine land. The developer invests in the credits from the property, and cannot develop it. There has to be a regulatory framework for this to work. Sometimes the process *creates* a regulatory framework. Upon recognizing the value of these systems, people might impose local regulations that enable the offsets to take place.

Example: A development which included the destruction of mudflats and eelgrass was offset by the creation of a marine protected area (MPA) with coral, which has much more biodiversity. The company provided the money to the government to set up, monitor and patrol the MPA. So, in this case there was no speculator, but the offset funds went to setting up the MPA.

- 6- **Payments for ecosystem services.** Ecosystem services are the things nature does for us for free. There are provisioning services, nature giving us materials and food, and there are regulatory services such as nutrient cycling, hydrological balance and pollination. What are these services worth? It is a burgeoning field. You can start to engage the beneficiaries in the protection of the habitats that are providing those services.

Example: The first example of this ever was in Costa Rica. There was a problem with the water supply. Sediment was getting into it. A community was going to have to build a plant to get sediment out. Conservationist suggested that farmers plant vegetative buffers, and paid out to the farmers annually for those services. It saved a lot of money, because the community didn't have to build a plant. This is value people understand.

Another Example: There was payment for marine ecosystem services in a marine park in the San Andreas archipelago in the middle of the Columbian Biosphere Reserve. They had very limited capacity to manage that area due to the set up of the local government, which was partly private and partly public. The local government hadn't been able to do enough to

regulate land use. The beach in front of a resort area began to erode. Resort owners wanted to build jetties to keep sand there. The resort owners invested in an economic study which showed how important the beach is for their business, and the final report revealed that it is very important. A huge number answered a survey, and the results showed that people come for an average of seven days, spend nine hours a day on the beach and don't do anything else. Agardy's team suggested to the resort owners that they let them look into why the sand is disappearing. The resorts owners funded a quick engineering study. The study found that an opening had been blasted into reef to allow access to the marina, created a change in currents. There were setbacks that were mysteriously breached; structures were built too close to beach. The biggest problem was that there wasn't sand being generated. What generates sand are grazing fish, particularly the parrot fish. It eats calcareous algae, and then it excretes sand. One parrot fish excretes a ton of sand per year. Parrot fish happened to be a newly targeted fishery. The solution they came up with was for resort owners to invest in compensating fishermen for not harvesting these particular fish. They are also looking into aquaculture. Resort owners make an annual payment to support fishermen and the management of the park.

7- **Reciprocal Arrangements**-a type of payment for ecosystem services that is not really a market approach, but it is like bartering. Both parties benefit.

Example: Agardy provided an example of a reciprocal arrangement across a watershed. A downstream community was suffering from water pollution coming down river. Human sewage was contaminating fish and their environment. The people at the top of watershed were upset because people on coast were catching the anadromous fish that they had depended upon. They came up with agreement: the people upstream would treat their water and the people downstream would allow the anadromous fish to go upstream.

FPB had an example of a reciprocal type of agreement with mussel harvesters. FBP communicated to mussel draggers that 98 percent of what's colonizing the eelgrass is mussel seed. Draggers agreed not to drag in designated eelgrass restoration areas. It will be interesting to see how the loss of eelgrass affected mussel seed set this year.

III: Market-based strategies for Frenchman Bay Partner projects

610- Project: Brainstorming session

This FBP project works toward the goal of opening 610 acres of mudflats closed due to bacterial pollution. Watershed surveys have not yet been done.

It was suggested that a “county sanitation district” be formed. The County Commissioners would explore the setup. The objective would be septic remediation. It could be a joint Commissioner and Partner project.

The DMR has a survey program; shorelines are surveyed on a rotating basis. We need to find out what their plans are in the coming year. Paul Davis from the Frenchman Bay Regional Shellfish Committee has been having those conversations with DMR. A \$7,500 Maine Community Foundation grant has been obtained to conduct the 610 Project, some of which is being used support Paul’s efforts to garner information about how bacterial problems are resolved by DMR. This information will be organized into a “Guide for Opening Clamflats in Maine”

It was suggested that an added fee on real estate transactions could help to support efforts to get clamflats open. For example, 1 percent of transactions by The Swan agency go to Friends of Acadia. Real estate transfers in the area could include a contribution to a fund that would be available to help people who can’t afford to fix their septic systems. The shorefront property owners would benefit in that they could go out and pick mussels. It might positively affect the value of their properties.

It was suggested that part of the cost of research to identify pollution sources could be borne by the beneficiaries, the shellfish harvesters. Although there are more beneficiaries to pristine water than the harvesters, these are the most tangible ones. However developers and tourists and businesses depending on tourism also benefit.

FBP Project	Market Based Solution	Who should be involved
<p>Project 610 We need a map of 610 acres for communicating the scope of the project and the communities affected.</p>	<p>Research: cost of septic repair, value of clean water to landowners, economic loss to shellfish harvesters and tourism industry Evaluate: the impact of poor water quality on public health – Investigate: CDC statistics Identify: funds for septic remediation: Find sources or set up a fund Educate: politicians (FBP→ develop a model for the state?)</p>	<p>City sanitation departments County Commissioners Municipalities Shellfish committees Hancock County Planning Comm. Clam wardens Licensed Plumbing Inspectors Id who will benefit from opening flats, they should be involved.</p>

IV Next Steps

- 1- There will be an action committee on market-based solutions, beginning with a brainstorming meeting. Jen Fortier, Natalie Springuel, Brian Reilly, and Abby Barrows agreed to participate on an action committee. The FBP executive committee will participate on the committee as well. Others will be approached.