

Offshore Wind Energy in Maine: Information Exchange Webinar

Thursday, July 7, 2011
2:00 – 3:30 p.m.

Island Institute
Rockland, ME

AGENDA

- Introductions
- Offshore Wind Energy in Maine: status update
 - Island Institute, University of Maine, Maine Coastal Program
- Questions taken
- Overview of Island Institute information exchange plan (June 2011 – March 2012)
- Additional outreach events and plans
- Discussion and feedback on Island Institute plans
- Next Steps

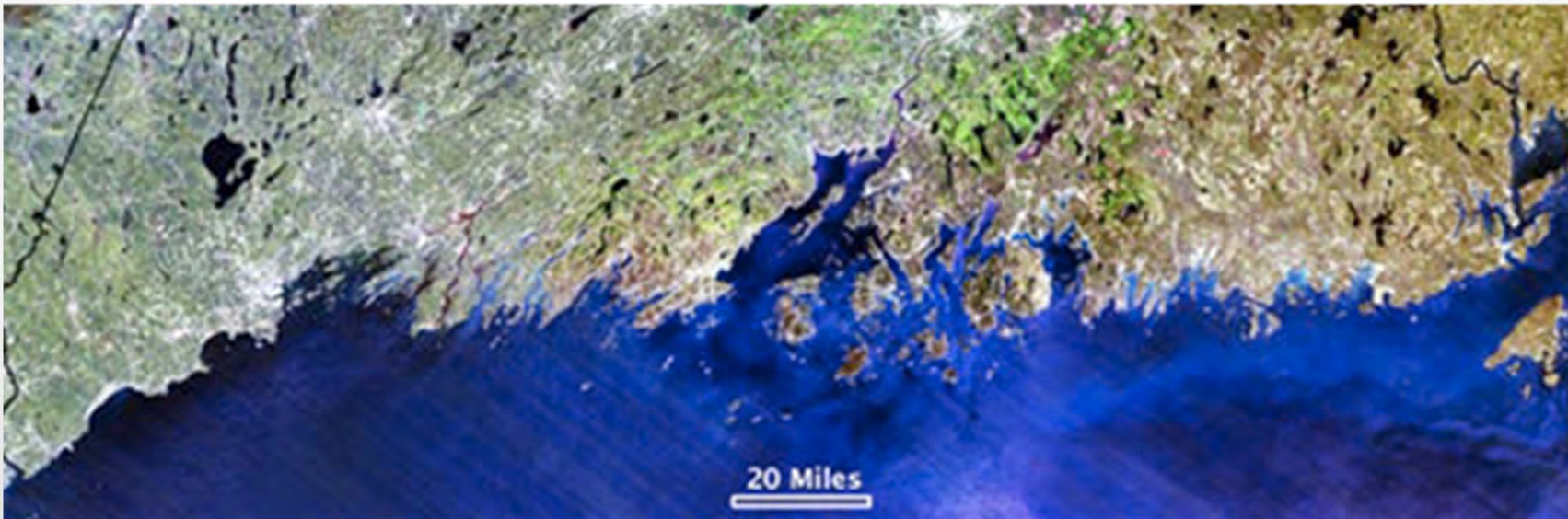
Offshore Wind Energy in Maine: Status update

Heather Deese

Sr. Programs Director,
Marine Initiatives
Island Institute

Island Institute

- Supporting Maine's island and working-waterfront communities
 - Energy costs are a serious threat
 - Commercial fisheries and tourism are the economy
- Research, technical support, outreach, communication, and education projects



Island Institute

Our stance:

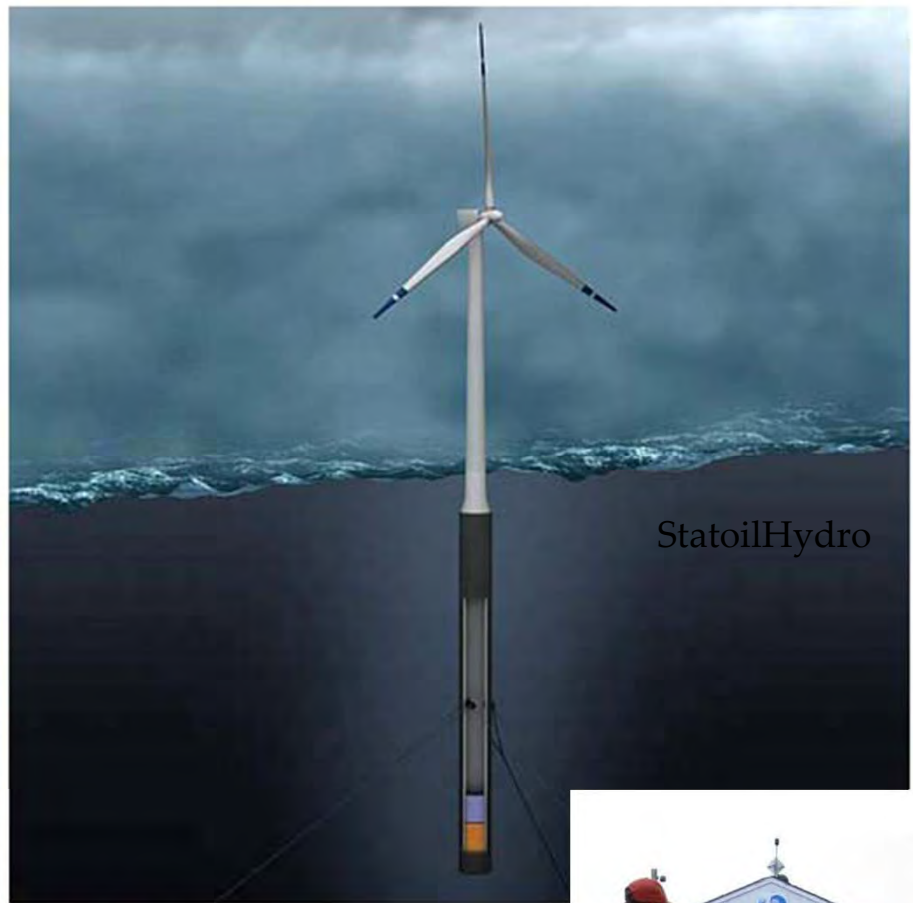
- Supportive of ocean wind energy that is appropriately sited and where there are local benefits in line with any local costs

What we are doing:

- Ongoing conversations with fishermen and other key ocean stakeholders
- Information Exchange: June 2011– March 2012
- Sub-contract to UMaine
 - Co-managing environmental research at Monhegan site - ongoing
 - Researched environmental impacts and stakeholder priorities and concerns for Maine Offshore Wind Report - 2010



Blue H



StatoilHydro



Principle Power



Ocean Renewable Power Company

Offshore Wind Energy -- for the Nation

Los Angeles Times

**"Federal offshore wind plan: \$50.5 million
in research funding"**

February 7, 2011

The New York Times

**Offshore Wind Power Line
Wins Backing**

October 12, 2010

The New York Times

**Who Will Build the First Offshore
Wind Farm in North America?**

April 26, 2010

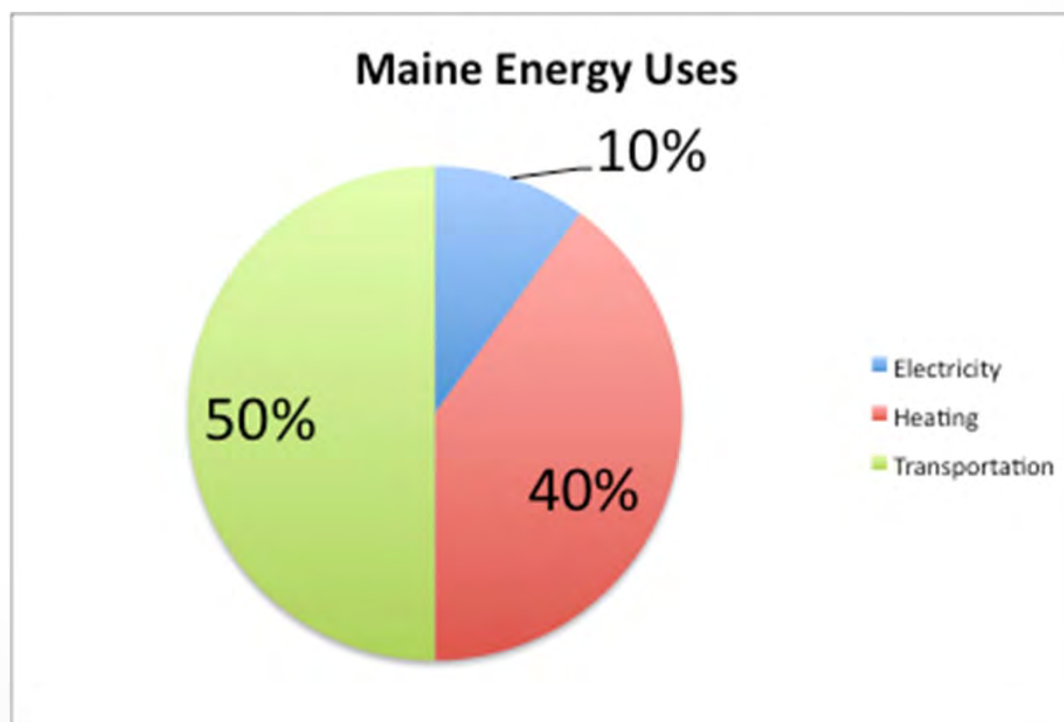
Ocean Energy: The motivation

- Maine is the most fossil fuel-dependent state in the nation
 - No natural gas north of Portland, only heating oil
 - High vehicle mileage
- Offshore wind resources are stronger, steadier
- Aesthetic, noise, use conflicts decrease with distance from shore



Maine's Goals

- State's goals for wind power
 - 3 GW of terrestrial wind development by 2020
 - 5 GW of offshore wind development by 2030
- But Maine's maximum load on the grid is only 2.8 GW



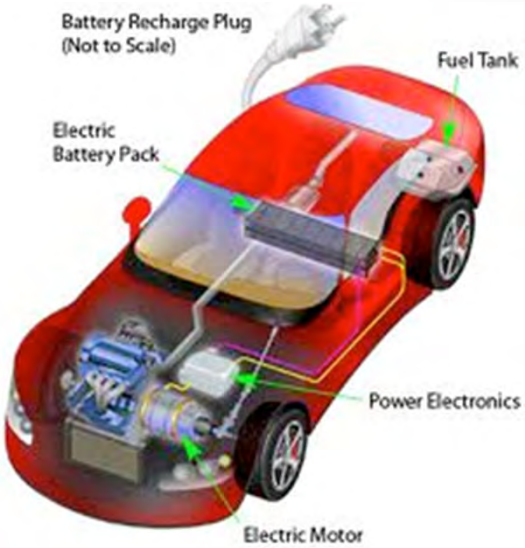
Potential to export ...



... or generate all of the state's energy needs



Photo: Tristan Jackson



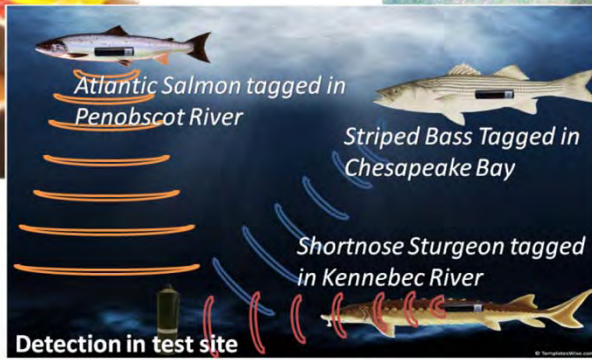
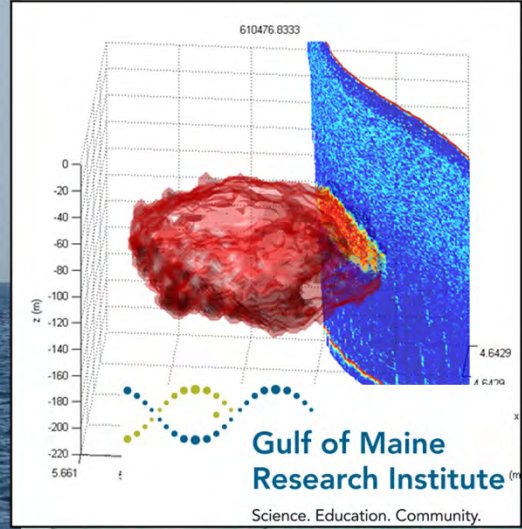
Ocean Energy: the challenge

- Technology in early stages – one full-scale prototype exists
- Ocean is public resource – fishing is territorial, but no legal ownership
- If fishermen and the state of Maine give up ocean territory for ocean wind-power development, can ocean wind benefits flow in return?

Current Status

- Governor's Ocean Energy Task Force: 2008-2009
- Selection of Research and Design demonstration areas in state waters: December 2009
- Maine Public Utilities Commission Request for Proposals (RFP): now
- Bureau of Ocean Energy Management (BOEM) – federal and state regulatory task force process: ongoing
- Federal effort on Marine Spatial Planning (MSP): ongoing
- University of Maine-led DeepCwind Research and Design: ongoing
- Interested developers – ongoing

Environmental Research at Offshore Wind Energy Test Site



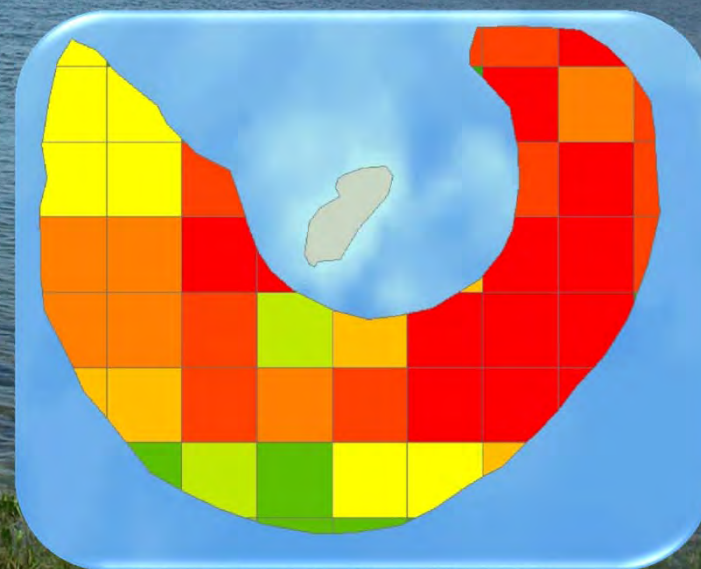
Update on Potential for Commercial Development:

Matt Nixon

Maine Coastal Program
Maine State Planning Office

OVERVIEW

- **BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT (BOEMRE) TASK FORCE**
 - Reengagement
 - Continued Data Collection Efforts/Coordination
 - Next Steps
- **MESSAGING AND OUTREACH**
 - Ocean Energy
 - Maine's Energy Costs
 - Outreach Position
 - Coordination



Overview of Offshore Wind Energy Information Exchange

Suzanne Pude

Community Energy Director

Amanda LaBelle

Marine Programs Associate

Island Institute

Offshore Wind Energy Information Exchange

- Ocean energy outreach efforts and stakeholder responses to date
- Goals of Information Exchange
- Components of Information Exchange
- Timeline of events

Ocean Energy Outreach & Outcomes

- **Summer-Fall 2009:** OETF Demonstration Areas
 - Documented concerns about potential near-shore impacts
- **Winter 2010 to present:** Mapping Working Waters
 - Highlighted interest in mapping uses 10-40 miles offshore
- **October 2010:** DeepCwind conference
 - Increased awareness of statewide capacity and interest in developing an industry
- **December 2010:** Offshore Wind Energy: Tools and Information for Coastal Stakeholders
 - Increased topic-specific knowledge
 - Documented topics of concern and interest
 - Established network of collaborating organizations

Ocean Energy Outreach & Outcomes

- **February 2011:** University of Maine Offshore Wind Report
 - Documented wide range of stakeholder questions, concerns and interests regarding potential commercial development
- **March – April 2011:** Sea Grant/DeepCwind outreach meetings
 - Established relationships between University and coastal communities
 - Documented questions, concerns and interests related to Monhegan test site
- **Ongoing:** Survey work (Jim Acheson and Mario Teisl)
 - Collected and analyzed marine user, coastal and statewide opinions on offshore development
- **Ongoing:** N.E. Wind Energy Education Project (NEWEEP)
 - Creating a “comprehensive source of objective information on wind energy issues in the New England region”
 - <http://www.windpoweringamerica.gov/newengland/neweep/index.asp>

What have we learned?

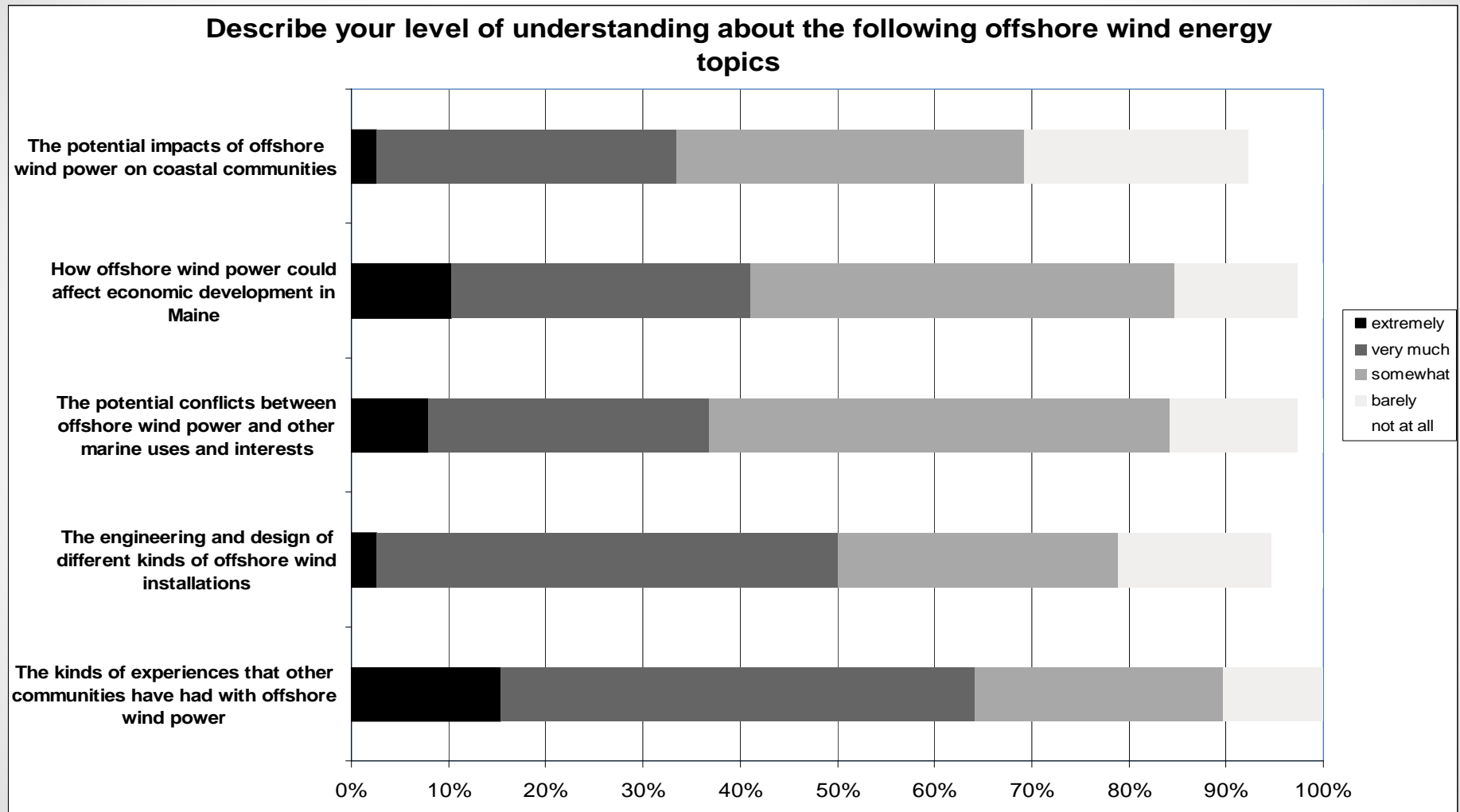
Table 5-2: Stakeholder concerns, questions, and priorities as relating to deepwater offshore wind energy in Maine

Stakeholders contacted for this section raised a number of common concerns, questions, and priorities related to deepwater offshore wind energy, including:

- Will it benefit Maine people and how?
- As a ratepayer, what will the costs be? Will the power be shipped to another state while we get stuck paying for it?
- How will ocean energy development impact current users of the ocean, both from a pilot perspective and eventual build-out?
- Which fisheries will be allowed amongst turbines in an array? Which will be completely excluded?
- How will those individuals and/or communities negatively affected by ocean energy development be compensated?

Excerpt from the Maine Deepwater Offshore Wind Report
authored by the Island Institute - 2011

What have we learned?



Attendee responses to post-conference survey - December 2010

Goals of Information Exchange

- Build upon previous efforts to further address key questions, concerns and interests by:
 - Increasing the quality of information available to a broad range of stakeholders
 - Recognize wealth of local knowledge
 - Facilitating relationship-building between stakeholder groups
 - Documenting and disseminating relevant materials and key findings of the Information Exchange

Components of Information Exchange

- **Briefings**
 - Informal meetings with individuals and groups who can relay information to peers and constituents
- **Fact Sheets and Resources**
 - Address topics of interest raised to date with fact-based research, drafted in consultation with topic experts and peer-reviewed, and distributed widely along the coast
- **Forums**
 - Facilitated conversations among topic experts and stakeholders for exchange of information, perspectives, concerns, and priorities
 - Opportunity to engage in detailed discussions about specific questions or issues of concern
- **Tours**
 - In-person, cross-sector introductions to work environments
 - Exchange of relevant knowledge and experiences
 - Expand contact networks and communications across sectors

Offshore Wind Energy Information Exchange

Overview of Upcoming Events

- **June 29, 2011: “Wind Turbines on Land, Wind Turbines at Sea”**
 - EVENT: Tour
 - LOCATION: UMaine research labs, Beaver Ridge Wind Project, Front Street Shipyard
 - TOPIC: Nuts and bolts of electricity grid, wind turbine design and power generation
 - AUDIENCE: Commercial fishermen, coastal leaders
- **July 7, 2011: “An Introduction to the Offshore Wind Energy Information Exchange”**
 - EVENT: Webinar
 - TOPIC: Offshore wind energy briefing and overview of Info Exchange
 - AUDIENCE: Staff of interested nonprofit organizations, coastal businesses, regulatory agencies, state legislature, the philanthropic community and other interested individuals



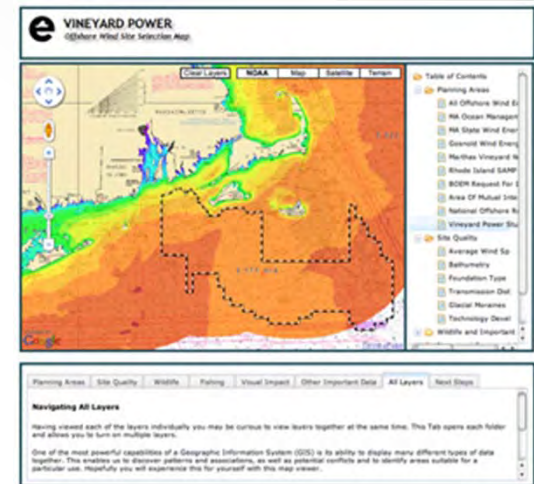
- **July 27, 2011: “View from the Dock and the Deck”**
 - EVENT: Tour
 - LOCATION: Port Clyde
 - TOPIC: Multi-faceted look at working-waterfront communities and their potential interactions with offshore wind development
 - AUDIENCE: Regulatory agency staff, developers, manufacturers, and other industry representatives



- **August 11, 2011: “On the Horizon”**
 - EVENT: Film screening and panel discussion
 - LOCATION: The Strand, Rockland
 - TOPIC: Defining local benefit, environmental monitoring, opportunities for community participation
 - AUDIENCE: Seasonal and year-round coastal residents



- September 15, 2011: “The Sights and Sounds of Offshore Wind Energy”
 - EVENT: Forum
 - LOCATION: Island Institute
 - TOPIC: Visualizations and noise propagation above and under the water
 - AUDIENCE: Year-round and seasonal coastal residents



- October/November 2011 (Date TBD): Possible repeat of “Wind Turbines on Land, Wind Turbines at Sea” Tour



- **Late October 2011 (Date TBD): “Environmental Impacts of Offshore Wind Energy”**

- EVENT: Forum
- LOCATION: TBD
- TOPIC: Technology, methodology, and findings from environmental monitoring studies in Europe and at the Monhegan site
- AUDIENCE: Fishermen and other coastal community members



- **Late 2011/Early 2012 (Date TBD): “On the Home Front”**

- EVENT: Forum
- LOCATION: TBD
- TOPIC: Coastal and marine community interactions – setbacks, cabling, community-developer relations, employment opportunities
- AUDIENCE: Coastal selectmen, harbor masters, planning board representatives, fishermen

- **February 2012 (Date TBD) “Made in Maine?”**

- EVENT: Tour
- LOCATION: Cianbro or Bath Iron Works
- TOPIC: Wind energy R&D, manufacturing and deployment facilities, job creation
- AUDIENCE: Coastal residents, fishermen

Additional Outreach Events and Plans Around the State:



Additional Outreach Events and Plans Around the State:

Alan Rounds

Intern

Gulf of Maine Research Institute

Purpose of GMRI's Developmental Sessions in November

-Coastal and Marine Spatial Planning (CMSP) and Ocean Wind Energy

- ❑ GMRI intends to bring knowledgeable individuals and organizations who have experience with these issues and stakeholders (primarily from the fishing industry) together to develop understanding, ask questions, raise concerns, and provide the skills and knowledge to engage in CMSP and ocean energy dialogue.
- ❑ Give stakeholders an introduction of the past, present, and potential future of both CMSP and ocean wind energy.
- ❑ Currently, one of the main drivers for the CMSP process is the coordinated and compatible implementation of wind energy turbines both near and off-shore.
- ❑ Though these issues are related, they are distinct from each other, and will be covered separately.

Guiding Questions For the Upcoming Sessions

CMSP

What is CMSP and who has been implementing it?

What are the future plans/visions for CMSP?

Ocean Wind Energy

What is ocean wind energy and what is it not?

What has been happening with ocean wind energy development and where is it going?

Will ocean wind energy be a competing use? A possible opportunity?

Both

How do I become engaged on these issues?

• How can I have input into these decisions?



Discussion and Feedback



Save the Dates!

- July 27, 2011: “View from the Dock and the Deck” Tour, Port Clyde
- August 11, 2011: “On the Horizon” Film Screening, The Strand, Rockland
- September 15, 2011: “The Sights and Sounds of Offshore Wind Energy” Forum, Location TBD

For More Information:

Please visit <http://www.islandinstitute.org/oceanrenewableenergy.php>

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Funding for the Island Institute’s offshore wind energy information exchange project is generously provided by: the Oak Foundation, Maine Outdoor Heritage Fund, and Maine Coastal Program