Our Future Coast

Climate Change and Community
Rob Snyder, PhD
President, Island Institute
Locally Relevant, Globally Networked
1995:
- Lobster: 123 million pounds total
- Urchins: 37 million pounds of lobster

2015:
- Lobster: 138 million pounds total
- Urchins
- Scallops
- Groundfish
“Warming waters have killed the lobster larvae south of here, hence there is no commercial fishery below Cape Cod anymore.... I can see warm water species in my traps like triggerfish, and I caught sea horses back in 2012... There’s black sea bass out here now. There weren’t any of those species here before.”

~Dave Cousens, Island Institute board member
Sea Level Rise

“It’s no longer just roads being flooded, we’ve had to cancel the ferries a few times due to the highest tides.”

~Vinalhaven
“I lost a month of [paving] work last year from all the rain.”

~Rockland resident
“Fertilized [oyster] eggs would periodically show poor survival and many of the survivors were severely deformed.... Acidification is not a future problem. It is a problem now, and it will only get worse.”

~ Mook Sea Farm
“My bout with Lyme disease was relatively mild; a friend and neighbor on the island [had it too and] never really recovered.”

~Islesboro resident
Greater Global Economic Instability

- Shifts in farming
- Drought & increased fires
- Risks in supply chains
- Increased migration from climate impacts elsewhere
What makes a resilient community?

Social cohesion

Diverse economies

Connected infrastructure

Sustainability
Community Energy Action Teams (CEATs) are intergenerational groups of island residents that work to increase local action on energy challenges through educational activities and community-focused projects. While each team creates a host of local benefits, they also influence efforts on neighboring islands and the mainland through networking, information sharing, and exchange activities facilitated by the Island Institute.

This diagram demonstrates part of the flow of information, motivation, inspiration, and resources between CEAT communities.

*Showing activities through 5/30/2016*

- All CEATs contribute to:
  - Island Energy Conference
  - Maine Energy Work Group

---

An LED lighting project at Islesboro Central School was inspired by Monhegan School’s efforts to measure and reduce energy consumption.

Students and adults visited other schools to learn about renewable energy and energy efficiency:
- Islesboro to Camden; Monhegan to Vinalhaven

Weatherization Week public outreach campaigns on Vinalhaven prompted weatherization of almost 40 homes on Islesboro, Cliff and Long.

"Energy Day" at Monhegan School inspired similar activities on Chebeague, Long, Matinicus, Cliff and Vinalhaven.

Peaks shared energy use models of the school and library with Long and Chebeague.

Supported by award no. NE 96184601

Disclaimer: Although the information in this document has been funded in part by the U.S. Environmental Protection Agency under assistance agreement 96184601 to the Island Institute, it may not necessarily reflect the views of the Agency and no official endorsement should be inferred.
Challenge
HIGH COST OF ENERGY

Challenge
ISOLATION IN RURAL SCHOOLS

Challenge
DECLINING FISHING REVENUE

Challenge
ELDERS STRUGGLE TO AGE IN PLACE

Challenge
LACK OF AFFORDABLE HOUSING

Challenge
LIMITED COMMUNITY CAPACITY
### Technical Assistance

- Updating infrastructure for sea level rise
- Weatherization
- Aquaculture business development to supplement lobstering
- Clean energy policy advocacy
- Renewable energy projects
- Ocean acidification research

### Mobilizing Communities

- Fishermen’s Climate Roundtable
- Articles in *Island Journal*
- Collaboration with Maine Climate Table on communications workshops
- Videos: Sea level rise cartoon; “A Climate of Change” short film series
- Climate change curricula in schools
- *Waypoints* Community Data

- Community Data
What’s next for you?

1. Think like an islander
2. Create change locally
   • Support resilient land use planning
   • Invest in energy efficiency in your own life
3. Make climate change and resiliency part of the conversation
   • Including economic consequences of acting, or not
4. Vote