

Planning for Coastal Resilience: Challenges facing small rural Maine communities

Sam Belknap
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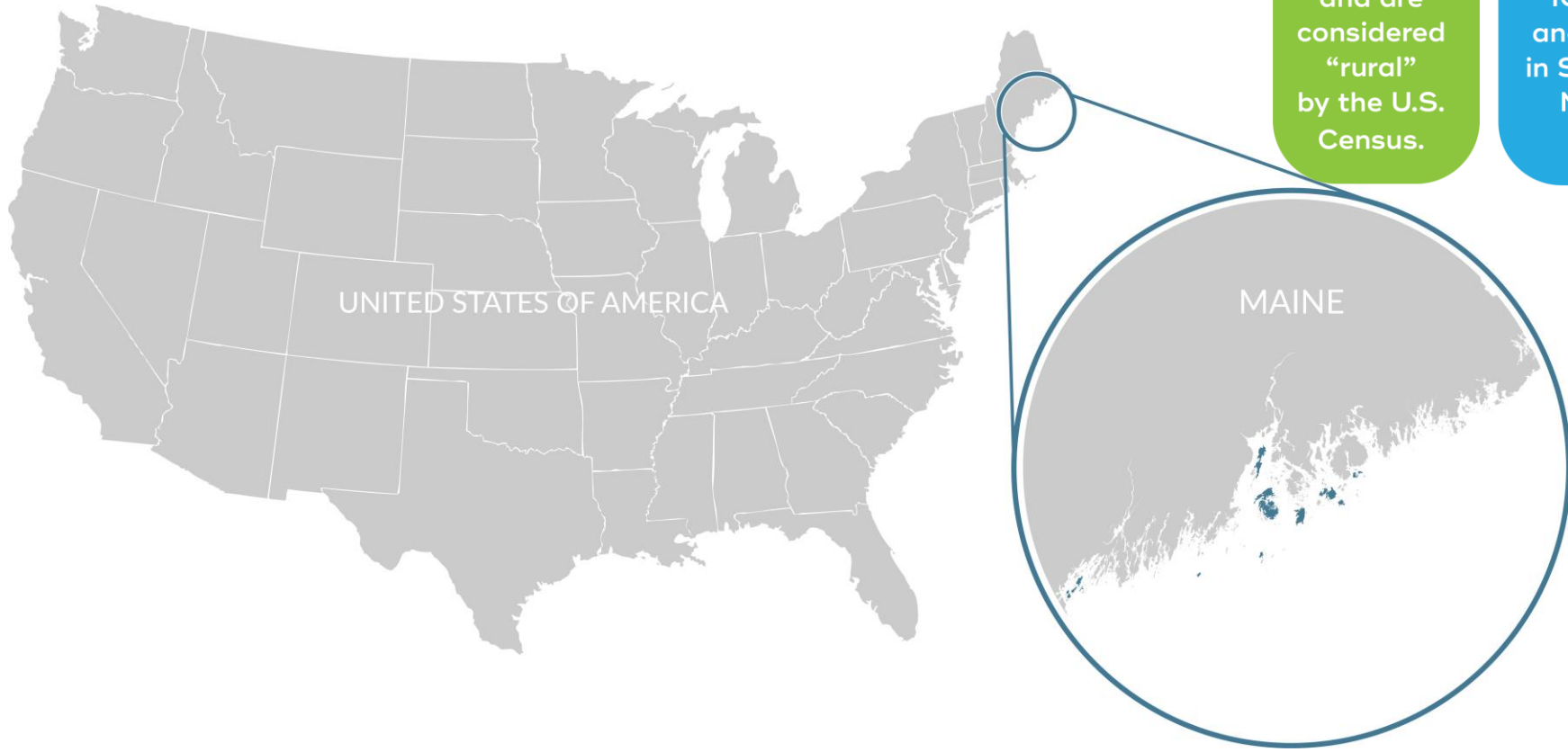
ISLAND
INSTITUTE

Who We Are

The Island Institute works to sustain Maine's island and coastal communities, and exchange ideas and experiences to further the sustainability of communities here and elsewhere.



Where We Work



84
coastal and island communities have fewer than 2,500 residents and are considered "rural" by the U.S. Census.

9
coastal and island communities have populations larger than 10,000 and all are in Southern Maine.

75%
of coastal and island communities have fewer than 3,500 residents.

25%
of coastal and island communities have fewer than 800 residents.

Why Rural Matters:

It's part of what defines
our region.



Bridging the Rural Efficiency Gap

Expanding access to energy efficiency upgrades in remote and high energy cost communities

Brooks Winner, Suzanne MacDonald, Lisa Smith, Juliette Juillerat



<http://www.islandinstitute.org/bridging-rural-efficiency-gap>



How We Work

- Facilitating community conversations to spur adaptive actions
- Providing planning and technical support to move communities forward
- Making targeted investments to leverage larger returns from State and Federal Programs



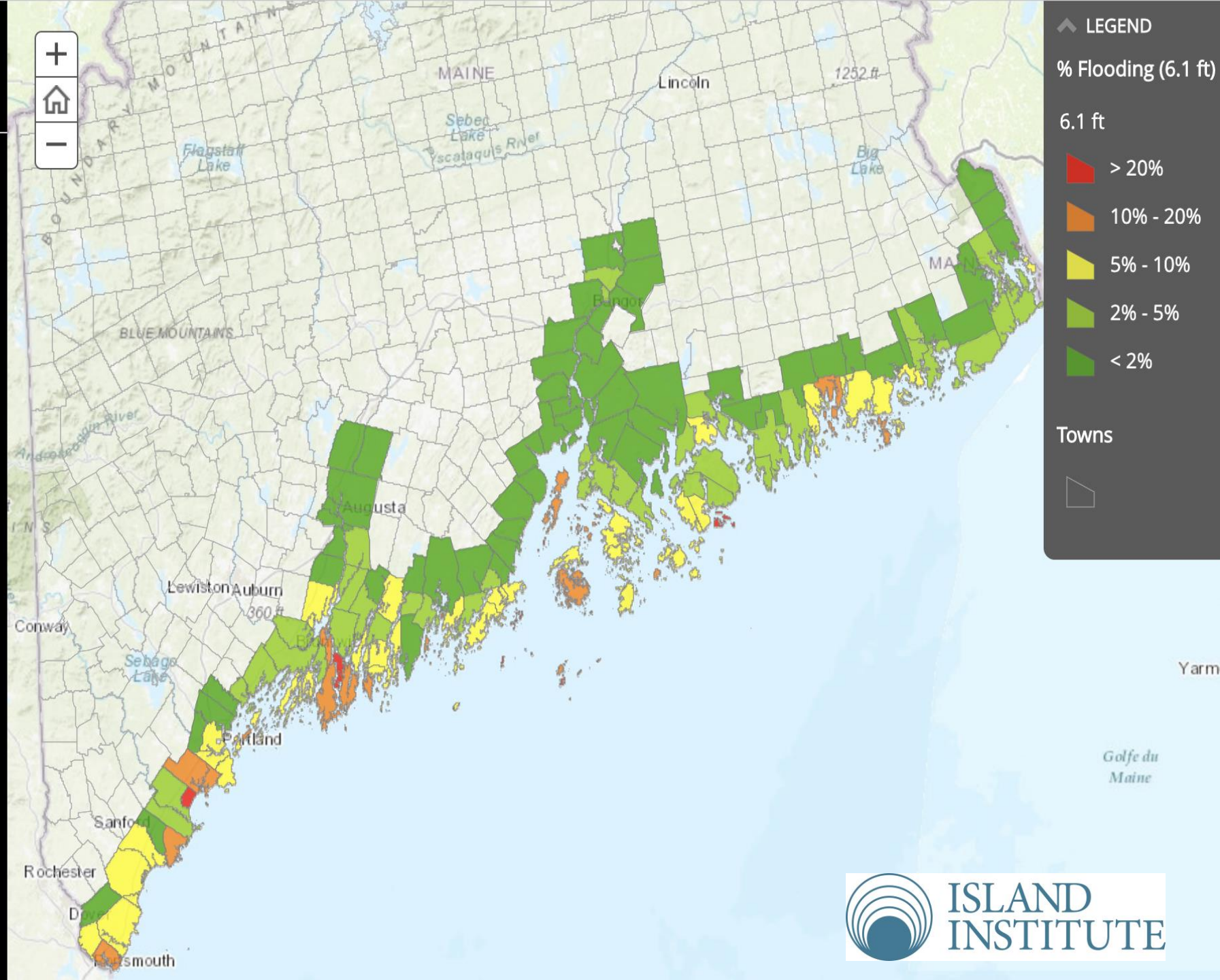
Cost of Sea Level Rise

Sea Level Rise Inundation

All of Maine's coastal communities will experience changes because of sea level rise. The amount and type of change each community experiences will be dependent on multiple factors. Here the map shows the percent of total acreage of each community that will be flooded by a sea level rise of 6.1 feet. Vinalhaven could lose more than 10% of its land by 2100 given current projections.

Projected Scenarios

The Maine Geological Survey viewers use sea level rise scenarios ranging from 1.2-10.9 feet on top of the highest astronomical tide. For our analysis, we used the 1.6 feet (intermediate low), 3.9 feet (intermediate),





HARD RUNNY TIDE

HARD RUNNY TIDE



Vinalhaven

1150 year-round residents



Cost of Sea Level Rise

Sea level rise is an increasing threat to the sustainability of the coastal regions of Maine. If unmitigated, it will fundamentally change the economy and way of life of Maine's island and coastal communities.

Sea Level Rise Inundation

All of Maine's coastal communities will experience changes because of sea level rise. The amount and type of change each



WHAT WORKS SOLUTIONS LIBRARY

Challenge

PREPARING FOR RISING SEAS

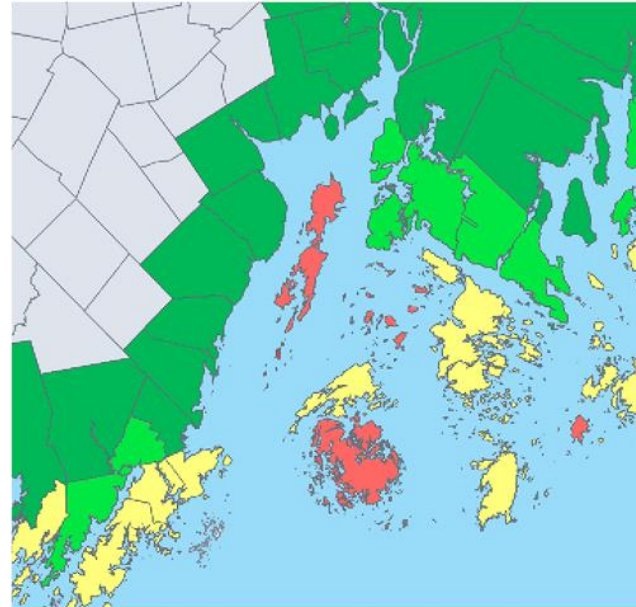
Late in 2017, the U.S. government released a report on climate change that estimates more extreme and damaging weather disaster events and a rise in global sea levels amounting to several inches in the next 15 years and one to four feet – with the possibility of rising even by as much as eight feet – by 2100. Looking to the future, the National Oceanic and Atmospheric Administration (NOAA) identifies the coast of Maine as being particularly vulnerable to storm events and sea level rise. In fact, the coast and islands are already grappling with historic storm damage and coastal flooding.

SHOREUP MAINE 2019

Sea Level Rise: Who Pays and How?

FRIDAY, SEPTEMBER 27, 2019

UNITED FARMERS MARKET OF MAINE • BELFAST, MAINE



<http://www.islandinstitute.org/resource/shoreup-maine-2019-who-pays-and-how>

What We Need

We need direct investments into the state...

It's about the ability to Plan...

...and the ability to know the cost and time horizon





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