



Project Location

Wells National Estuarine
Research Reserve, Maine

Project Duration

July 2016 to June 2018

Project Lead

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Project Type

Science Transfer — promoting the
use of science

Products

- The Tourism Resilience Index, a self-assessment [tool](#) to help small businesses in coastal New England assess their resilience to disasters
- Interview [summary](#) outlining the collected findings from assessed businesses

Project Partners

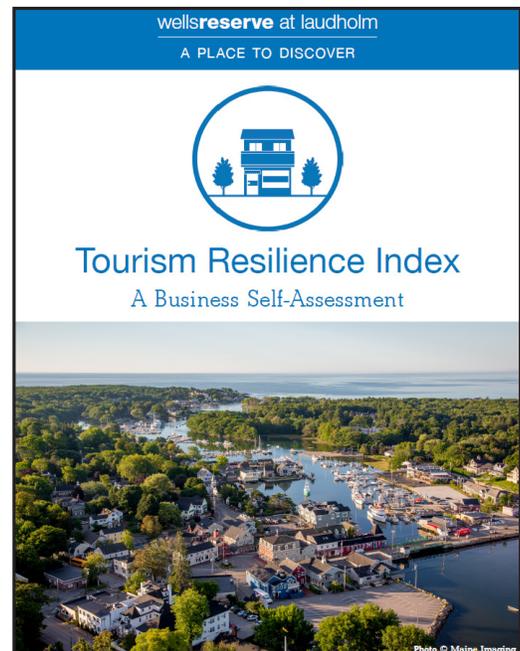
- Kennebunk-Kennebunkport-Arundel Chamber of Commerce
- Laudholm Trust
- Town of Kennebunkport, Maine
- Wells National Estuarine Research Reserve

Decreasing Vulnerability of Maine's Beaches Using the Tourism Resilience Index

Overview

Sea level rise and extreme weather events pose major and ever-growing threats to Maine's beaches region. Located along the state's southern coast, the Beaches region is the primary destination for overnight visitors to Maine and the state's largest economic asset. However, the small businesses that power this beach-based economy are often ill prepared to recover from extreme weather events—a key concern, climate change increasing the frequency and intensity of extreme weather events in coming years. The towns of Kennebunkport and Kennebunk, Maine are especially vulnerable to climate change impacts, as they each have significant economic assets located in low-lying, tidal, or coastal areas.

To enhance the resilience of small businesses in the Beaches region, a project team led by the Wells National Estuarine Research Reserve engaged the business community in self-assessing their resilience to a disaster. Adapting a self-assessment tool previously developed in the Gulf of Mexico for use in New England, the project team created the Tourism Resilience Index tool and worked with 30 beach-based businesses to assess their vulnerability to natural and man-made disasters.



Benefits

In creating the “Tourism Resilience Index: A Business Self-Assessment for New England,” the project team developed a new way to engage business owners in conversations about and preparations for climate change. This project resulted in a number of positive outcomes, including the following:

- 30 beach-based businesses in Kennebunk and Kennebunkport completed the self-assessment and learned about their unique vulnerabilities to extreme weather events and natural disasters.
- Participating businesses learned actionable steps they could take to enhance their resilience to future extreme weather events.
- The local climate adaptation providers’ network and municipal decision makers learned more about the needs of the business community in increasing their resilience to disasters, and better understood the role of the business community in fostering regional resilience.

Approach

Using a collaborative approach that engaged researchers and local business owners, the project team adapted the [Tourism Resilience Index](#), which was initially developed by the Mississippi-Alabama Sea Grant Consortium, for use in New England. After completing pilot testing, the team engaged 30 businesses in Kennebunk and Kennebunkport to complete facilitated self-assessments. Participating businesses received their custom tourism resilience indices, or scores, along with suggested steps they can take to increase their resilience to natural disasters.

The team aggregated the scores of participating businesses and created a summary of lessons learned to share with chambers of commerce, municipalities, and climate adaptation professionals in southern Maine. Project partners also shared strategies for adapting and using the index in different regions and highlighted common gaps and barriers businesses encounter when planning to safeguard their risk to natural disasters.

What’s Next

Lessons learned from this project continue to inform the Wells Reserve Coastal Training Program’s efforts related to resilience, including sharing best practices for disaster preparedness with southern Maine businesses and chambers.

About the Science Collaborative

The National Estuarine Research Reserve System’s Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. The Science Collaborative is managed by the University of Michigan’s Water Center through a cooperative agreement with the National Oceanic and Atmospheric Administration (NOAA). Funding for the research reserves and this program comes from NOAA. Learn more at coast.noaa.gov/herrs or nerrsciencecollaborative.org.