

Increasing Resilience and Reducing Risk Using Nature Based Coastal Infrastructure in New England

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THE NATURE CONSERVANCY

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CATEGORY: RESEARCH/MANAGEMENT



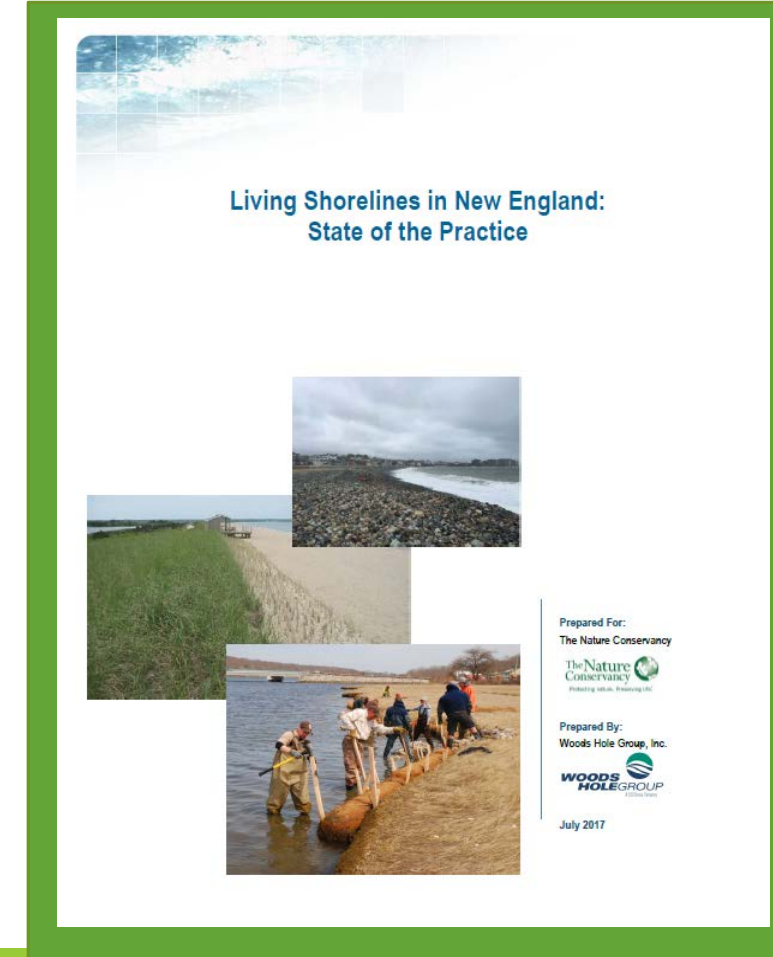
Why: project purpose / identified need

Massachusetts EO 569



Some questions we are asking:

- How well does coastal nature based infrastructure (e.g. living shorelines) perform in New England?
- What positive benefits and negative impacts do the projects have on the project site and adjacent areas in the short and long-term?
- Which monitoring metrics will best inform future design and advance the practice regionally?
- How could state and federal regulations better incentivize consideration and, ultimately, the application of coastal nature-based projects?



What: Project Goals and Desired Outcome

Regional Goals (additionally, each demonstration site has site specific goals)

Generate data, information, and guidance to help regulators, planners, practitioners, coastal property owners, and the general public to understand coastal inundation and erosion issues, more readily consider the use of coastal NBS where appropriate, and have greater confidence when designing, permitting, constructing, and monitoring and maintaining coastal NBS.

Examples of potential measurements for marsh type projects:

- Vegetation (survival, density/abundance, spatial extent, invasive presence/absence), position change (horizontal and vertical), erosion/accretion, invertebrates and nekton, storm survival/damage, structural integrity, ice impacts

Desired ultimate outcome?

- Coastal nature-based solutions are considered as a viable management option and are used more frequently in the appropriate locations.
- State and federal regulations and policies incentivize practices with multiple benefits for people and nature
- Foster the development of a coastal nature based solutions/living shorelines community of practice in New England

Where:

*Denotes salt marsh restoration or creation

Massachusetts:

- Salem*
- Kingston*
- Winthrop
- Plymouth
- Brewster
- Duxbury

Maine:

- Brunswick*
- Yarmouth

New Hampshire

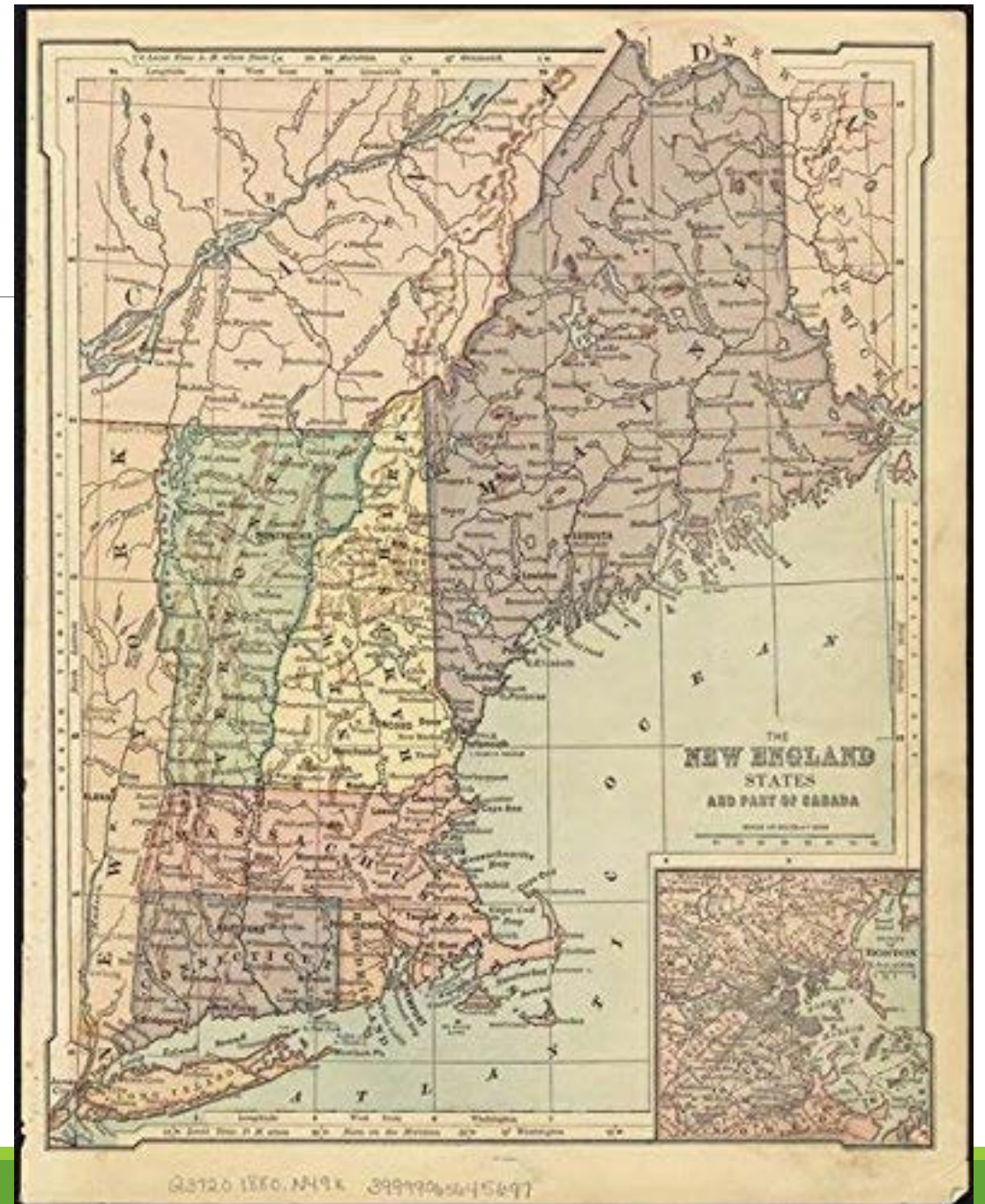
- Portsmouth*
- Durham*

Rhode Island

- East Providence*

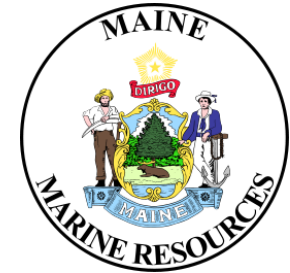
Connecticut

- Stratford*

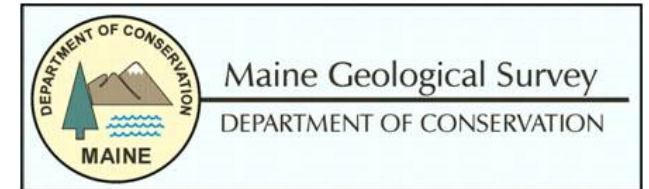


Who is doing the work and **When** are you doing it?

And additional partners in each state.



New Hampshire Coastal Program



Massachusetts Office of Coastal Zone Management



Timeline: October 2017 to September 2020, though likely to extend.

How

How is your work being funded?

- NOAA Regional Coastal Resilience Grant Program (now the National Coastal Resilience Fund done in partnership with the National Fish and Wildlife Foundation)
- State and NGO contributions

How will your work be communicated to your target audience(s)?

- Case studies
- Regional data sharing platform
- Capacity building workshops and network development
- Listserv for interested parties (Email eric.roberts@tnc.org to join)