

Trustees launches a groundbreaking annual publication examining the challenges and opportunities for coastal zone communities along the vulnerable Massachusetts coast

The Massachusetts coastline is a spectacular and varied landscape. Rocky coasts, sandy dunes, grassy banks, and glacial bluffs all have their place along more than 1,500 miles of shoreline.

The Trustees is proud to protect more than 120 miles of this terrain, as the second largest owner of conserved coastline in the state. These are some of the organization's most visited properties, as well as some of the most dynamic—changing with the seasons, tides, and storms. As previously reported in *Special Places*, Trustees engaged Woods Hole Group (WHG) in 2017 to conduct a Coastal Vulnerability Assessment (CVA) to help determine how best to protect and adapt these places to the effects of climate change, so they may be enjoyed by generations to come.

"The CVA allowed us to take an informed, data-driven approach at deciding where to intervene, and where to let nature take its course," explains Tom

O'Shea, Trustees Director of Coast and Natural Resources. "Today we have several active resilience projects underway as a result, including a sediment study in Essex Bay in partnership with Boston University; a project with The Town of Ipswich to raise a half-mile stretch of [the access road to Crane Beach,] Argilla Road, to bolster its resilience to increased flooding events; and an innovative salt marsh restoration effort, pioneering a nature-based technique at Old Town Hill in Newbury." Responding to a changing coast is a key component of the Trustees' ongoing strategic plan, *Momentum*.

"The Massachusetts coast needs our voice," adds O'Shea. "With 35 coastal properties, we have a real opportunity to feature these places as 'living laboratories' and coastal resilience models that engage thousands of stakeholders and share valuable lessons about how we steward through coastal change. But, to be a more effective coastal conservation leader in the face of sea-level rise, more extreme storms, and threats to the oceans we depend on, we have to broaden our reach, highlight what is happening, and the urgent need for calls to action."

BRINGING DATA TO LIFE

As a result, The Trustees is preparing to publish the first of four annual "State of the Coast" reports, examining the coastal resources, challenges, and adaptation methods for communities up and down the Massachusetts coast. In developing these reports, The Trustees is working

with coastal managers, scientists, journalists, and designers to examine real stories and raw numbers, and produce a compelling, unique look at the health of the Commonwealth's coastal regions.

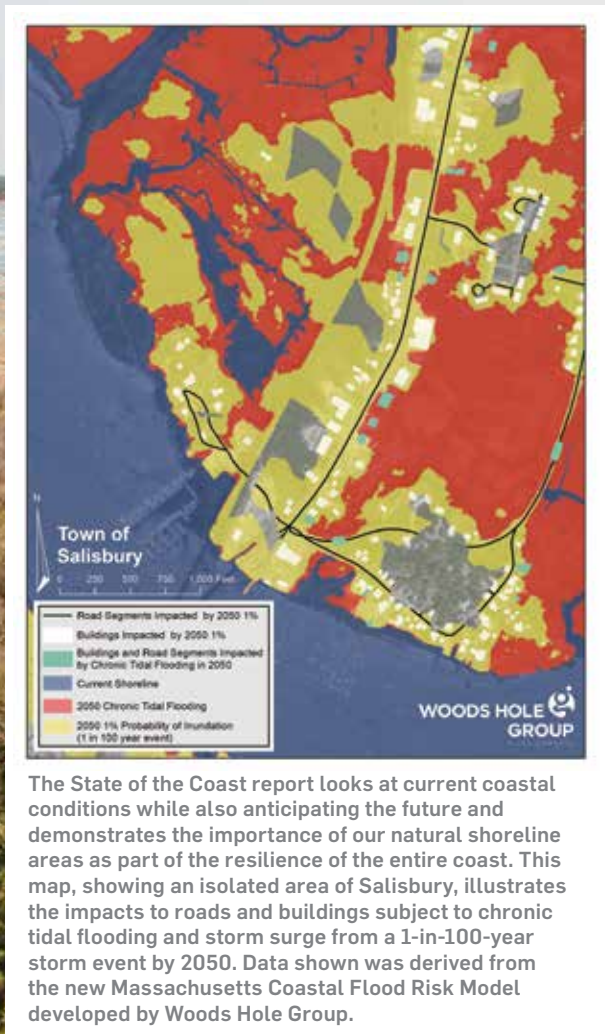
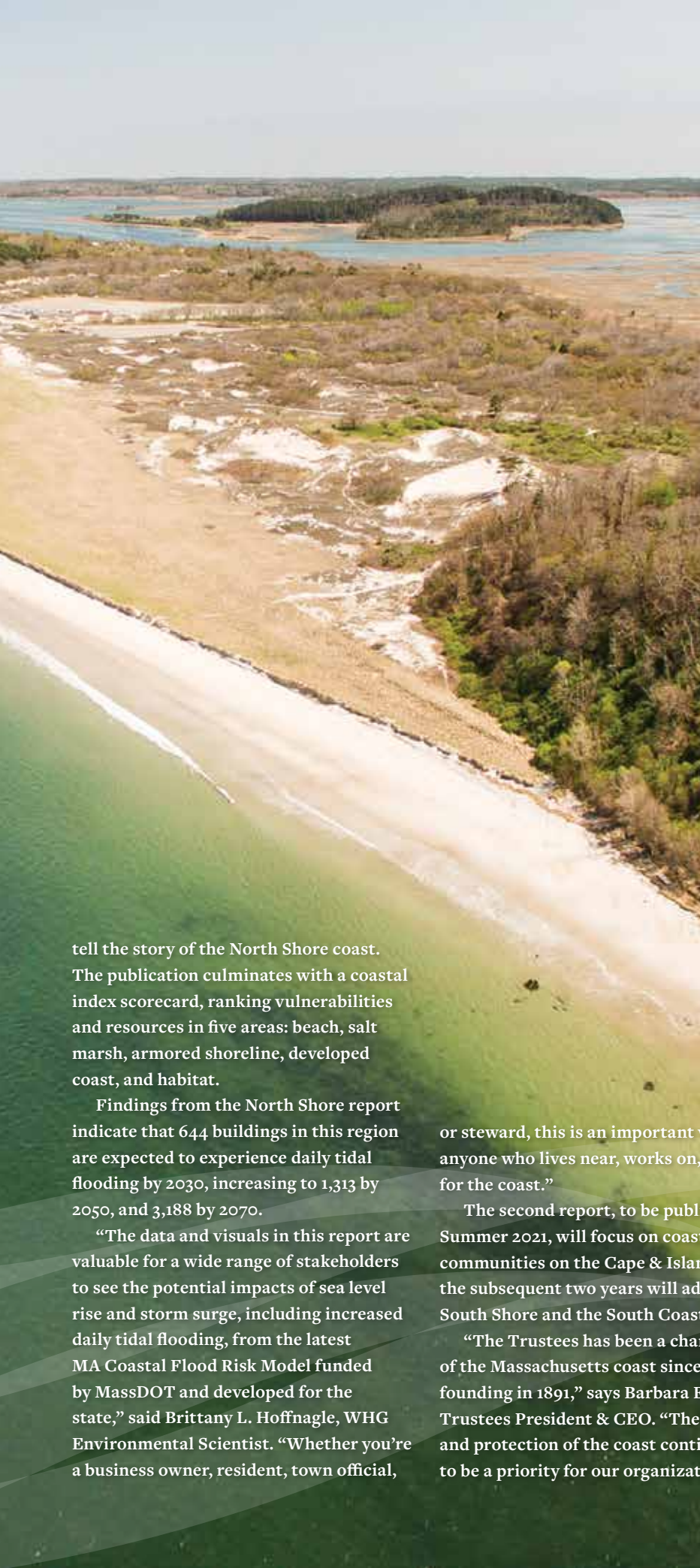
"Much of the data used in this report was compiled from critical state partners, including the Massachusetts Office of Coastal Zone Management (CZM), and groups like the Great Marsh Coalition," said Eric Nelson, Senior Environmental Consultant and Coastal Geologist. "Anyone concerned with the coastal health of one of these communities will be able to pick up the report and see a snapshot of the current state of our local coast, understand the changes expected in the future, and be provided with some options and tools to help make our coasts and communities more resilient."

NORTH SHORE NUMBERS

The inaugural issue examines 13 coastal communities on the North Shore—Salisbury, Newburyport, Newbury, Rowley, Ipswich, Essex, Rockport, Gloucester, Manchester-by-the-Sea, Beverly, Salem, Marblehead, and Swampscott—and will include never-before-seen, newly updated flood and shoreline inundation modeling from WHG's Coastal Flood Risk Model. Town profiles, feature articles, maps, and graphics are incorporated throughout to

THE STATE OF OUR COAST

BY CHRISTINE BOYNTON
TRUSTEES STAFF



The State of the Coast report looks at current coastal conditions while also anticipating the future and demonstrates the importance of our natural shoreline areas as part of the resilience of the entire coast. This map, showing an isolated area of Salisbury, illustrates the impacts to roads and buildings subject to chronic tidal flooding and storm surge from a 1-in-100-year storm event by 2050. Data shown was derived from the new Massachusetts Coastal Flood Risk Model developed by Woods Hole Group.

tell the story of the North Shore coast. The publication culminates with a coastal index scorecard, ranking vulnerabilities and resources in five areas: beach, salt marsh, armored shoreline, developed coast, and habitat.

Findings from the North Shore report indicate that 644 buildings in this region are expected to experience daily tidal flooding by 2030, increasing to 1,313 by 2050, and 3,188 by 2070.

“The data and visuals in this report are valuable for a wide range of stakeholders to see the potential impacts of sea level rise and storm surge, including increased daily tidal flooding, from the latest MA Coastal Flood Risk Model funded by MassDOT and developed for the state,” said Brittany L. Hoffnagle, WHG Environmental Scientist. “Whether you’re a business owner, resident, town official,

or steward, this is an important visual for anyone who lives near, works on, or cares for the coast.”

The second report, to be published in Summer 2021, will focus on coastal zone communities on the Cape & Islands, and the subsequent two years will address the South Shore and the South Coast.

“The Trustees has been a champion of the Massachusetts coast since our founding in 1891,” says Barbara Erickson, Trustees President & CEO. “The health and protection of the coast continues to be a priority for our organization,

and this landmark publication should be a call to action for anyone involved with, or concerned for, the future of the Commonwealth’s shores.”

To view the report when it becomes available and for more on Trustees work up and down our coast, visit thetrustees.org/coast.

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