

COASTAL FOCUS

Summer interns assist instructors from Boston University's Dept. of Earth and Environment with GPS and bathymetric surveys throughout Essex Bay.

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Shore Solutions

Putting new strategies to work for our coast

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Chappaquiddick Island, jutting off of the eastern face of Martha's Vineyard, is a landscape that's as vulnerable as it is beautiful. The shifting, separating, and reconnecting of Chappaquiddick—literally “separated island,” from the Wampanoag word *chepiaquidne*—is well-documented. A major storm cut through the three-mile barrier beach connecting the island to Martha's Vineyard in 2007, and in 2012 when Superstorm Sandy hit, Wasque Reservation—on Chappaquiddick's southeastern corner—lost significant portions of upland area. Exposed to the force of waves, coastal banks rapidly eroded into the sea, with damage affecting parking lots, trails, and trees.

CLEAR AND PRESENT DANGER

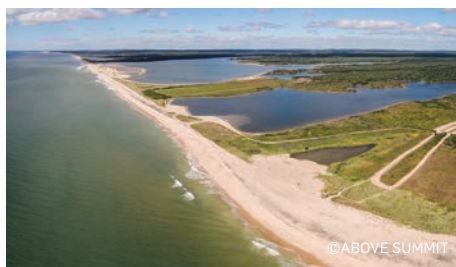
For The Trustees, watching one of its landmark properties literally start to crumble into the sea was a turning point. “That was the first time we sat down and said, ‘We’re witnessing accelerated coastal change. How do we respond?’” explains President & CEO Barbara Erickson. “It required us to think about what was most significant about our coast, and how to be strategic—recognizing our strengths as a coastal landowner, and strengths as an organization to engage the public.” A Climate Vulnerability Assessment, conducted in partnership with Woods Hole Group, clarified what Trustees properties were facing: a “tipping point” of rapidly accelerating changes in the next 20 to 30 years.

A belief in the value of the coast and the desire to protect it from harm have been parts of the mission of The Trustees since its founding. In 1889, Trustees Founder Charles Eliot wrote of coastal development: “The real danger of the present situation is that this annual flood of humanity, with its permanent structures for shelter, may so completely overflow and occupy the limited stretch of coast which it invades, as to rob it of that flavor of wildness and remoteness.”

Eliot set an example for the future. Now, the more than 120 miles of coastline The Trustees owns and protects face the challenge of a changing climate—a challenge to be confronted head-on. “We’re taking a hopeful and optimistic approach as opposed to feeling powerless,” says Trustees Director of Coast and Natural Resources Tom O’Shea, who is leading the coastal strategy. “We have always had the power of invention and innovation to change our world when we needed to. We’re not going to be able to respond *everywhere*, but we’re going to adapt where it makes sense.”

SHAPING THE FUTURE

With leadership in place and planning complete, a five-year plan is underway. For O’Shea, the clear path forward is something he calls a bridge solution to a truly daunting challenge of responding to a changing climate: working with the best available



science and continuing to innovate in order to protect the most vulnerable properties for as long as possible—so that the next generation can pick up the reins and continue to build upon our learnings.

Today, several projects are monitoring changes and testing innovative solutions. At Old Town Hill in Newbury and two other Trustees sites in Essex and Ipswich, a pilot project has begun to “heal” 300 acres of salt marsh damaged by historic ditching processes. Funding will also allow for new land acquisition, protecting pathways for future salt marsh migration. Nearby, the first phase of a project to raise Argilla Road—the key point of access to Castle Hill and Crane Beach—is complete, in a partnership with the Town of Ipswich, and state funding has recently been secured for the next phase. Offshore, the Town of Essex, Boston University, and The Trustees are measuring wave and sediment movement to model and plan for the future integrity of Crane Beach and Essex Bay.

The fragile and ever-changing coastline at two of the Trustees’ 31 coastal reservations—Wasque on Chappaquiddick Island (above) and Long Point Wildlife Refuge in West Tisbury.

Further south, The Trustees’ One Waterfront Initiative is working to build resilient and accessible open green space along Boston’s vulnerable harbor. Expansions of coastal volunteer and educational programs are underway, so that visitors of all ages can actively take part, whether as part of a beach cleanup, or participating in citizen research to conserve habitat and wildlife, or having fun while learning at a hands-on educational program at a coastal visitor center.

It’s a lot of activity, and it’s ramping up. O’Shea is now leading the creation of a “State of the Coast” report, to be published annually for five years. Along with a new *Trustees on the Coast* microsite and podcast, The Trustees aims to engage with and inspire generations of coastal advocates and stewards, in hopes of informing, empowering, and enchanting.

“The coast is experiencing unprecedented change today unlike any other time since our founding,” says O’Shea. “Our next step is to focus on more areas. What kind of places along the coast can we protect that make sense, for coastal habitat, for resilience, for public access? This action is part of the DNA of The Trustees. This is how we can help live our mission.”

To learn more about The Trustees’ coastal work, vision, and how to get involved, visit our new *Trustees on the Coast* microsite at thetrustees.org/coast, and subscribe for email updates.