



EA Engineering,
Science, and
Technology, Inc., PBC



Coastal Resilience **Solutions**

**Nature-Based and Engineered Strategies
for Success in a Changing World**



Planning



Modeling



Engineering &
Design



Research



Permit &
Compliance
Support



Construction
Oversight



Grant
Application
Support

Improving Coastal Environments and Infrastructure

IMPROVING THE QUALITY OF THE ENVIRONMENT IN WHICH WE LIVE, ONE PROJECT AT A TIME®

That is EA's core purpose. In supporting our partners, who are challenged by sea level rise and degraded coastal habitats, we address each project with the goal of improving ecosystems and communities—for the present as well as the future.



Coastal Resilience Services



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Project Types



Ecosystem Restoration/
Creation/Protection

- Coastal marshes
- Coral reefs and colonies
- Natural and nature-based features
- Anadromous fish passages
- Living shorelines
- Vulnerable shorelines



Water Resource &
Infrastructure Support

- Coastal resilience planning
- Contaminated site assessment and protection
- Engineering support for water resource infrastructure protection
- Algal bloom and red tide evaluations and solutions
- Permitting and NEPA compliance support



Metrics
& Monitoring

- Biological assessments
- Aquatic species population and foraging assessments
- Physical assessments (waves, currents, and sediment transport)
- Bathymetric surveys
- Sediment sampling

Thousands of Solutions. Seven Examples.

Point Hope Mentorship

In this remote village, we are mentoring contractors and the indigenous community, protecting habitats, infrastructure, and traditional values in the face of rapid climate change.



Fire Island Breach Management Plan

EA conducted multiple workshops and meetings in preparation of a Fire Island National Seashore Wilderness Breach Management Plan/ Environmental Impact Statement that drew praise for clearly presenting critical decision-making information.



Pictured Rocks National Lakeshore

For the NPS, EA assessed erosion-control plans, evaluated environmental impacts, and suggested beach replenishment and shoreline restoration measures.



Upper Chesapeake Bay Resilience Plan

EA evaluated the impacts of rising water levels on infrastructure and natural resources, EA identified vulnerabilities and provided a land-use planning framework.



Keeping it in the System

To improve coastal resiliency, EA is part of a team that received funding from the NOAA Ecological Effects of Sea Level Rise Program identify nature-based uses for sediment.



Beale Air Force Base

EA is facilitating reproductive success in an anadromous fish population by helping the USAF remove Beale Lake Dam, restore fish passage, and improve spawning habitat.



Deepwater Horizon

EA prepared a preliminary Draft Programmatic Environmental Impact Statement to help guide restoration actions associated with the Deepwater Horizon Oil Spill Natural Resource Damage Assessment.



National Presence. Local Connections.

● OFFICE LOCATIONS ● FEATURED PROJECTS LOCATION

Taming the Complexities of Coastal Resilience

Solutions for Tough Challenges

Coastal settings, where natural and built environments meet, have long posed dynamic challenges for managers who must protect and restore them. Today, given rising sea levels, fluctuations in the Great Lakes, and more intense and frequent storm events, the stakes are higher than ever before. Since our founding in 1973, EA has worked to improve coastal environments. This experience enables us to provide innovative, experience-based solutions to complex coastal challenges.

Rational Decisions, Decisive Actions

EA provides our partners with coastal experience, which is rooted in the philosophy that our solutions are meant to be part of a natural environment rather than work against it. As we guide you toward natural and nature-based responses for a more resilient coastline, we draw on 30 years of experience in coastal assessments and design solutions. Our partners benefit from proven tactics for reducing life-cycle protection costs by focusing on the most sustainable long-term solutions.

Tailored to your one-of-a-kind situation, your collaboration with EA will proceed in a logical stepwise manner with the intent to equip you with a lasting capacity for resilience and adaptation.

A Proven Commitment to Practical Sustainability

At EA, we empower our partners to derive the greatest value from even modest assets. We do so by constantly advancing strategies that put sustainability into practice, measure the results, and continuously sharpen performance.

Contact Us

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Prime Hook National Wildlife Refuge Tidal Marsh Restoration

This EA-designed project earned the USFWS a 2019 Climate Adaptation Leadership Award for Natural Resources. Cited for "exemplary leadership in reducing climate-related threats and promoting adaptation," it received the Environmental Excellence Award for Environmental Dredging from the World Organization of Dredging Associations.



Department of Defense Climate Adaptation Guidebook

EA was selected to develop a guide for managing cultural resources and protecting them from climatic change impacts. The guide introduces DoD cultural resource managers to appropriate, adaptive responses to climate risks.



Naval Construction Battalion Center Site Reuse Support

This project brought resilient design and living shoreline components to the closure process for a coastal New England landfill. EPA Climate Change Adaptation Technical Fact Sheet EPA 542-F-14-001 presents EA's design as an example of best management practices.*

*The use by EPA of EA's design in their fact sheet is not an endorsement by EPA of EA's work.



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