



Presenter

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A Coastal Resilience Assessment for the United States

As sea levels rise and coastal storm events occur with increased intensity and frequency, many coastal communities—both human and natural—have become more vulnerable to coastal flooding hazards. Increasing resilience can improve a community's ability to respond to and recover from these coastal hazards more quickly and with fewer resources. Often, the ecosystem services provided by natural landscapes can be leveraged to benefit nearby communities and reduce their exposure to impacts from coastal hazards, thereby improving resilience. Identifying hazards and exposed assets are necessary beginning steps.

The National Fish and Wildlife Foundation partnered with UNC Asheville's NEMAC to develop a coastal resilience assessment that integrates geospatial analyses and modeling with the methodology of a resilience framework for the watersheds along our nation's coasts. The assessment supports planners and project managers in:

1. Identifying where community and natural assets are potentially exposed to coastal flood hazards,
2. Locating priority natural landscapes that can be managed to improve community resilience, and
3. Improving habitat for essential fish and wildlife populations.

The data and models resulting from this assessment aim to identify which areas and what assets may be most exposed to coastal flood hazards, leading to further local analyses that can help guide a community's prioritization of management options.

This presentation will provide an overview of the three-year development process for the assessment, including: (1) identification of key datasets and processes used for the analyses and modeling; (2) development and facilitation of stakeholder workshops in seven targeted watersheds along the East Coast (including in Charleston and the Cape Fear area); (3) identification of priority areas—or hubs—to

guide the placement of large restoration or resilience-focused projects; and (4) the development of an interactive, web-based mapping tool to assist in the delivery and application of final results and data.