



## Presenter

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## Coastal Habitat Restoration and Conservation Projects to Build Resilience

This presentation highlights the benefits of green infrastructure and taking a habitat conservation and restoration approach to building climate resilience. It discusses 1) the relative value and effectiveness of habitat restoration and conservation for this purpose, 2) the types of projects that suit this region, and 3) GIS tools to explore and choose sites for such projects.

The results are the work of numerous partners that assessed climate resilience in seven coastal watersheds. In North and South Carolina, assessments encompassed the Cape Fear and Charleston harbor watersheds. The assessment process identified threats to communities from flooding, tidal inundation, and other climate dynamics, and analyzed the threats at the watershed scale using GIS. Through a stakeholder engagement process, participants were asked for projects that would benefit both climate resilience and habitat, and in response, they submitted over 90 project concepts in this region. Proposed projects included conserving and restoring wetlands, floodplains, salt marshes, aquatic vegetation, oyster reefs, riparian corridors, and dunes; as well as constructing living shorelines, removing barriers to restore hydrology, creating barrier and bird nesting islands, and nourishing beaches. Many projects focused on reducing and preventing impacts from shoreline erosion, tidal inundation, and flooding.

The assessment and project proponents identified many benefits of the proposed projects to habitats, key species, and communities. These projects hold tremendous potential to increase climate resilience by boosting the capacity of the environment to withstand and recover from impacts. Funding and implementing the projects will accomplish multiple goals: reduce vulnerability to climate threats such as storms, flooding, drought, and extreme variability in precipitation and temperature; provide expanded ecosystem services, and increase and improve habitat for fish and wildlife, all of which benefit communities.