

North Carolina Coastal Resilience Tool: Applications for Identifying Nature-based Solutions

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Coastal Resilience is a program developed through a public-private partnership led by The Nature Conservancy (TNC) to promote and enable use of nature-based solutions to reduce risks associated with coastal hazards. The Coastal Resilience approach includes four critical steps: assessing risk, identifying solutions, taking action, and measuring effectiveness. A growing network of practitioners are applying this approach around the world encompassing 17 coastal U.S. states, the Caribbean, Mexico, and across Central America. The main mechanism for delivering this approach to communities is through the Coastal Resilience online decision support system that consists of a data viewing platform and customized web-based applications (“Apps”). TNC works with local stakeholders to customize these apps to inform specific stakeholder needs and facilitate the use of nature-based solutions in local planning processes. In North Carolina, TNC is working with local communities and experts to develop a suite of Apps that help examine nature’s role in risk reduction, such as promoting open space conservation in coastal flood-prone areas, and using oyster reefs for reducing shoreline erosion. These Apps are further informed by pertinent community-scale data provided by local partners. Participants will hear from Conservancy staff about how the stakeholder driven process was used to develop these Apps and how they are being used to support local planning processes. During the break-out session, participants will get a hands-on introduction to the Coastal Resilience Tool and deep dives into the two Apps. The first App, the Community Rating System (CRS) Explorer, is meant to help planners identify parcels that qualify for points within the Open Space Preservation activity in the Federal Emergency Management Agency’s CRS program. The second App, the Restoration Explorer, allows users to examine ecological factors, like salinity gradients, along with socio-economic factors, like public accessibility, to identify suitable locations for subtidal oyster reefs to support erosion reduction in the Pamlico Sound.