Regional Coastal Resilience Assessments

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ABOUT NFWF

Chartered by Congress in 1984, the National Fish and Wildlife Foundation (NFWF) protects and restores the nation's fish, wildlife, plants and habitats. Working with federal, corporate and individual partners, NFWF has funded more than 5,000 organizations and generated a total conservation impact of $6.1 billion.

Learn more at **www.nfwf.org**

Tundra swans paddle through a marsh near Sacramento, California.

BACKGROUND

The National Fish and Wildlife Foundation (NFWF) is committed to supporting programs and projects that build resilience by reducing communities' vulnerability to coastal storms, sea level rise, and flooding events by strengthening natural ecosystems and the fish and wildlife habitat they provide.

REGIONAL COASTAL RESILIENCE ASSESSMENTS

In partnership with the National Oceanic and Atmospheric Administration (NOAA) and the University of North Carolina Asheville's National Environmental Modeling and Analysis Center (NEMAC), the assessments seek to evaluate regional resilience for all U.S. coastlines. Regional Assessments are already complete for the U.S. Atlantic, Gulf of Mexico, and Pacific coastlines, Puerto Rico, the U.S. Virgin Islands, and the Commonwealth of the Northern Mariana Islands. Assessments are underway for Hawaii, Alaska, Guam, American Samoa, and the U.S. Great Lakes.

OBJECTIVES

- Identify areas for restoration, installation of natural and nature-based features, and other projects that have the greatest potential to achieve dual benefits for human community resilience and fish and wildlife habitat
- Analyze the impacts of potential coastal and inland storm events
- Create contiguous and standardized data sets for U.S. coastlines to support coastal resilience assessment and planning

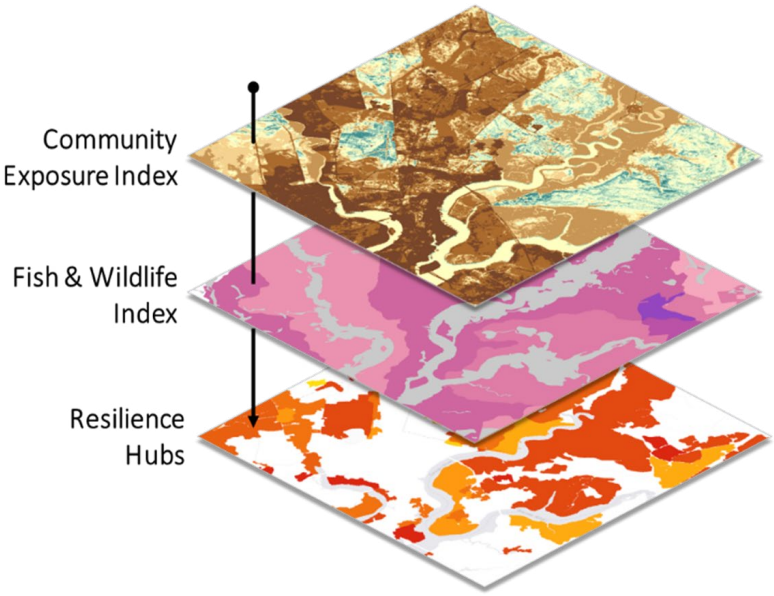
(continued)

ASSESSMENT PRODUCTS

The Regional Assessments seek to identify areas of open space where the implementation of nature-based solutions has potential to maximize benefits for human communities, fish, and wildlife. Combining information about flooding threats, human community assets, and fish and wildlife species, the assessments identify Resilience Hubs. While specific data sources and methods vary by region, each assessment includes the following mapping products:

- **Community Exposure Index,** which provides fine-scale data on where communities, people, and infrastructure are at the highest risk of coastal flooding and other flood-related hazards
- **Fish and Wildlife Index,** which identifies important habitat types and the species they support
- **Resilience Hubs,** which identify large swaths of connected habitat that have potential to protect coastal communities from the effects of storms while also supporting fish and wildlife habitat

Results can be used by community planners, conservation organizations, and others to make informed decisions about the potential of restoration, conservation, or other resilience-related projects to achieve dual benefits for people and wildlife.



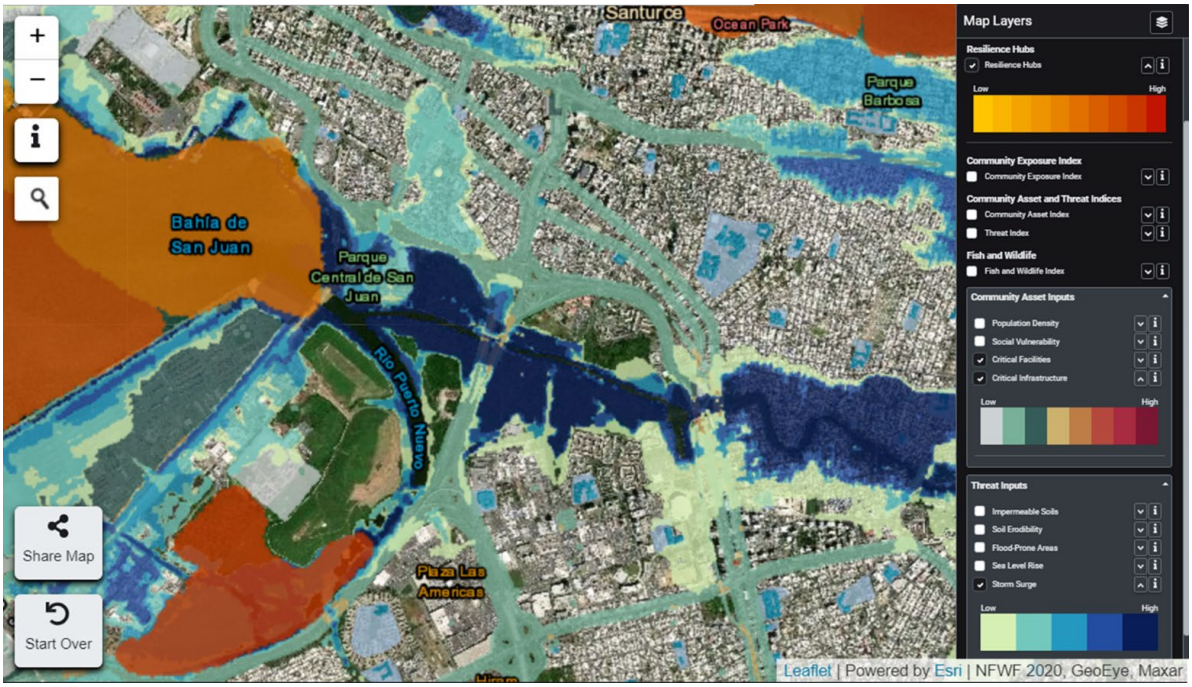
Visit CREST at

resilientcoasts.org

CREST

Coastal Resilience Evaluation and Siting Tool (CREST) is an online platform where users can view, share, and download data and modeling results from the Regional Assessments. CREST provides users with an easy to use, interactive environment to:

- View and explore key assessment inputs and results within their own areas of interest
- Analyze potential project sites and quantify results from the assessment models
- Compare proposed resilience projects by drawing areas or adding shapefile boundaries
- Search Resilience Hubs to help identify and site potential projects
- Focus mitigation measures by identifying critical community assets exposed to flooding threats
- Provide advanced GIS users with the ability to download final data sets for use in their own GIS platform



This CREST example shows where critical infrastructure and facilities are at risk from storm surge in San Juan, Puerto Rico. Resilience Hubs (shades of red) identify contiguous open space that may be suitable for the implementation of natural and nature-based features.