# Digital Coast Resources for the Climate Resilience Regional Challenge

The Digital Coast is an information resource frequently used by coastal communities. This document contains links to the commonly used information resources that can be helpful to those applying for and receiving grants from the Climate Resilience Regional Challenge.

## NOAA Sea Level Rise Viewer

- **Purpose:** This tool (the Sea Level Rise Viewer) helps users understand and visualize the potential impacts of sea level rise. Community planners use this information as a discussion starter, as the maps show which areas will be vulnerable in relation to various sea level rise scenarios. Home and business owners also find these visualizations helpful and eye-opening.

- **Features:** Interactive maps, customizable scenarios, and location-specific information.

- **Application:** Vulnerability assessments, adaptation planning, and making informed decisions regarding infrastructure and community development.

- **Data Source:** Authoritative data sources and scientific projections provide accurate and reliable information on sea level rise impacts.

- **Educational Tool:** Raises awareness about potential consequences and fosters a better understanding of the challenges posed by climate change in coastal regions.

- **Use Case:** Understanding and Planning for Sea Level Rise in California

## C-CAP Land Cover Atlas

- **Purpose:** The C-CAP Land Cover Atlas provides a comprehensive and detailed look at land cover and land use changes along the U.S. coastlines. The data is used for a variety of purposes including flood modeling, stormwater management, conservation and restoration planning, and climate change impact assessments.

- **Features:** Land cover data, temporal analysis, and geospatial visualization.

- **Application:** Coastal management and decision support.

- **Data Source:** Satellite imagery and remote sensing data are used to generate accurate and up-to-date land cover information.

- **Improved Resolution:** These data products, typically collected at a 30-meter resolution, are now available in a 1-meter resolution.

- **Use Case:** Improved Storm Surge Modeling Enhances Disaster Preparedness in the Caribbean

## Coastal Flood Exposure Mapper

- **Purpose:** The Coastal Flood Exposure Mapper helps users assess and understand the potential exposure to coastal flooding in specific coastline areas. The tool shows community areas at risk, provides an accurate and reliable flood hazard exposure analysis, prioritizes areas for resilience efforts, and more.

- **Features:** Flood hazard information, community exposure analysis, and customizable maps.

- **Application:** Risk assessment and emergency preparedness.

- **Data Source:** Authoritative data sources include topographic and bathymetric data, storm surge models, and demographic information.

- **User-friendly Interface:** The user-friendly interface makes the tool accessible to a wide range of people, including community planners, researchers, and the general public.

- **Use Case:** Building Awareness of Coastal Flood Risks in South Florida


## Coastal Change Hazards Portal

- **Purpose:** The U.S. Geological Survey's Coastal Change Hazards Portal helps people assess and understand coastal hazards, including erosion, storm surge, and other factors that contribute to changes in coastal landscapes. Use the portal to collect, share, and download hazards data.

- **Features:** Hazard mapping and temporal analysis.

- **Application:** Risk assessment and data integration.

- **Data Source:** The portal relies on data from the U.S. Geological Survey, and includes topographic, bathymetric, and other relevant data sets.

- **Accessibility:** Is accessible to a broad audience, including researchers, policymakers, and the general public through a user-friendly interface and many customizable features.

- **Use Case:** Predicting Probabilities of Dune Erosion


## Coastal Resilience Mapping Portal

- **Purpose:** The Coastal Resilience Mapping Portal, from the Nature Conservancy, provides the mapping and decision-support tools that coastal communities use as they work to become more resilient in the face of sea level rise and other hazards.

- **Features:** Resilience mapping and multiple diverse data layers.

- **Application:** Planning and decision-making and community engagement.

- **Data Source:** Authoritative scientific research, remote sensing, and other data sets are combined to provide comprehensive and reliable information.

- **Collaboration:** The portal supports collaboration and information sharing among different stakeholders involved in coastal resilience, and fosters a more holistic and cooperative approach to resilience planning.

- **Use Case:** Restoring Natural Areas to Protect Vulnerable Island Communities

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