GEOSPATIAL INFORMATION
FOR COMMUNITY RESILIENCE

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CLIMATE DATA INITIATIVE

http://climate.data.gov

http://toolkit.climate.gov
DIGITAL COAST

• **Approach:** Bring the geospatial and coastal management communities together

• **Outcome:** A constituent-driven, integrated, enabling platform supporting coastal resource management that is used

http://coast.noaa.gov/digitalcoast
Digital Coast Tools Supporting Community Resilience

Coastal Resilience 2.0
Coastal Flood Exposure Mapper
Lake Level Viewer

Coastal County Snapshots
Great Lakes Coastal Resilience Planning Guide
Sea Level Rise Viewer
SEA LEVEL RISE AND COASTAL FLOODING IMPACTS VIEWER

Sea Level Rise and Coastal Flooding Impacts Viewer

Legend:
- Shallow Coastal Flooding Areas
- Area not Mapped
- Tide Gauges

Overview
- Flooding will become more frequent at sea level rise. In a near future, floods will become more frequent and last for longer durations of time.
- The red areas on the map represent areas currently subject to coastal flooding.

Understanding The Map

Additional Information

http://coast.noaa.gov/digitalcoast
A BROAD SPECTRUM APPROACH: FACILITATING USE AND APPLICATION

**DISCOVER**
Information on sea level rise through the Coastal Inundation Toolkit

**DOWNLOAD**
Sea level rise and high resolution elevation data for your community

**MAP**
Develop mash-ups with ESRI and OGC map services

**ANALYZE**
Potential SLR impacts with the SLR Viewer

**LEARN**
How to map inundation with instructor-led trainings

**SHARE**
Outcomes with others through Stories in the Field

DATA  INFORMATION  ACTION

http://coast.noaa.gov/digitalcoast
SLR Viewer Use Cases

U.S. Department of Energy

- To identify potential threats to energy facilities in 2050 and 2100, the DOE project team combined data and information from the SLR Viewer with NCA projections and local tidal datums.

- The Sea Level Rise Viewer allowed the project team to map areas that are likely to be inundated by sea level increases between one and six feet.

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**SLR VIEWER USE CASES**

**New Jersey Flood Mapper**

- A partnership between the Rutgers University Center for Remote Sensing and Spatial Analysis and the Jacques Cousteau National Estuarine Research Reserve

- Includes data on critical facilities, FEMA PFIRMS, and the projected SFHA in 2050 from the Sea Level Rise Tool for Sandy Recovery

http://www.njfloodmapper.org/
ADDITIONAL USERS OF SLR VIEWER AND DATA

- Climate Central – Surging Seas
- San Francisco Bay – Adapting to Rising Tides and OCOF
- California Coastal Conservancy
- South Florida Climate Compact
- TNC Coastal Resilience
- U. of Florida and Tampa Bay Regional Planning Council Adaptation Project
- National Park Service Coastal Parks Assessment
- U.S. Army Corps Projects Evaluation
- EPA Climate Ready Estuaries
- HI Sea Grant and U. of Hawaii School of Ocean and Earth Sci. (NOAA Coastal Storms Program)
- Vizonomy
- DOD BRAC
- MIT Rebuild by Design
FOR MORE INFORMATION

Climate Data Initiative:
http://climate.data.gov
http://toolkit.climate.gov

Digital Coast:
http://coast.noaa.gov/digitalcoast

Sea Level Rise and Coastal Flooding Impacts Viewer:
http://coast.noaa.gov/slr