



An Overview of NCCOS's Community Vulnerability Assessment Portfolio

What are we doing?

Coastal communities face increased flooding, storms, erosion, and other natural hazards worsened by climate change. The impacts are felt differently across the nation and some communities are more at risk than others.

Through our Community Vulnerability Assessment Portfolio, we serve one community or region each year by assessing their vulnerability to natural hazards in a series of maps. We work with local partners and stakeholders to ensure that results are locally tailored and relevant for effective, equitable planning.



How do we identify where to provide services?

Many of our nation's coastal communities have limited economic resources and are frequently exposed to natural hazards. Historic inequalities have reduced the odds of coastal restoration and infrastructure upgrades in underserved communities. As a result, underserved communities have had fewer opportunities to prepare for hazardous events.

The team begins one new assessment each year. We have developed an intentional, equitable approach for identifying communities in greatest need of our services. We organize U.S. coastal counties by region, and then screen potential communities by prioritizing those with low resilience, high social vulnerability, high environmental justice exposure, research need for timely climate action, partner availability, and stakeholder support. This ensures that our services are reaching those who have been historically underserved and may not have the resources to secure assistance otherwise.



What do we provide to partners and communities?

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Engagement Assign project advisory committee. Determine project goals and prioritize local needs.	Indicator development Gather data to develop indicators.	Assess vulnerability and hazard Develop maps of each vulnerability (or exposure) and hazard index.	Assess risk Assess risk by intersecting vulnerability (or exposure) maps with hazard maps.	Conduct place-based research Develop indicators and indices to support additional needs. Intersect with other assessment maps.	Develop and release products Develop products. Present findings and products. Revise and finalize.

We provide information to municipal, regional, and federal government agencies and their stakeholders that helps communities better protect themselves. Our tailored geospatial data and products can be used in climate adaptation, resilience, emergency response, and other types of planning at multiple scales. All assessments work with a project advisory committee and often learn from stakeholder workshops to identify and produce maps of:

- Vulnerability of social, demographic, and economic factors (social vulnerability)
- Vulnerability of critical infrastructure (ex. hospitals, schools, roads)
- Flood hazard(s) of local importance (ex. coastal flooding, stormwater flooding)
- At-risk communities or community assets in relation to chosen flood hazard(s)
- Up to two place-based analyses that support local climate vulnerability planning (ex. other hazard categories, flood insurance access, toxins and contaminants)

All findings are made publicly available by releasing an assessment report, mapbook, spatial dataset, and one communications item such as an infographic, key findings fact sheet, or online storymap. Each assessment also has a plain language webpage to summarize the project.



For More Information

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Visit us at: <https://coastalscience.noaa.gov/project/programmatic-execution-of-nccos-vulnerability-assessments/>

