NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE

Community Vulnerability Assessment Portfolio: Overview, Site Selection, and Research Capacity

What Are We Doing?

Coastal communities experience flooding, storms, and erosion, and climate change is exacerbating these and other natural hazards. The impacts are felt differently across the nation and some communities are more vulnerable than others.

Through our Community Vulnerability Assessment Portfolio, we identify one community or region each year and work with local partners and their stakeholders to assess community climate vulnerability (ex. social vulnerability, flood hazard). Working with partners directly ensures that results are locally tailored and relevant for effective, equitable planning.

How Do We Choose Locations?

Many of our nation's most disadvantaged and underserved populations are at risk and are less able to prepare for or recover from climate change impacts. These at-risk populations are also often marine resource-dependent coastal and island communities.

This portfolio prioritizes communities that have high likelihood of hazards, disadvantaged or underserved communities, high vulnerability within the <u>EJScreen Tool</u> and <u>CDC SVI Tool</u>, engaged project partners and stakeholders, research needs that align with program capabilities and that inform climate adaptation action, and the capacity to receive and act on research. Additional priority is given to communities that are often omitted from national screening tools (such as U.S. Territories and Alaska) and communities adjacent to coastal restoration projects.









What Do We Provide to Partners and Communities?

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Engagement	Indicator development	Assess vulnerability and hazard	Assess risk	Conduct place-based research	Develop and release products
Assign project advisory committee. Determine project goals and prioritize local needs.	Gather data to develop indicators.	Assess vulnerability (or exposure) and hazards.	Assess risk by intersecting vulnerability (or exposure) with hazard.	Use hazard, vulnerability, or risk maps to conduct further place-based research.	Develop products. Present findings and products. Revise and finalize.

The project advisory committee and local workshops provide local context throughout all assessment phases.

All assessments use non-survey data to identify and produce:

- Social vulnerability, structural vulnerability, and/or structural exposure.
- Flood hazard(s) of local importance (ex. coastal flooding, stormwater flooding).
- Relative risk through intersection of vulnerability/exposure and hazard profiles.
- At-risk communities or community assets in relation to chosen flood hazard(s).
- An assessment report, mapbook, and spatial data (geodatabase).
- One communications item (ex. infographic, key findings sheet, storymap).
- Plain language webpage, summarizing the project.

In addition to our standard information and products, local needs and research questions often require additional analysis. Within team capacity and data availability, partners will be able to select up to two additional placebased analysis (ex. expansion to additional hazard categories, exploration of natural resource exposure as it relates to social systems, etc.) and/or propose similar analyses that align with local context and need.



For More Information

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

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