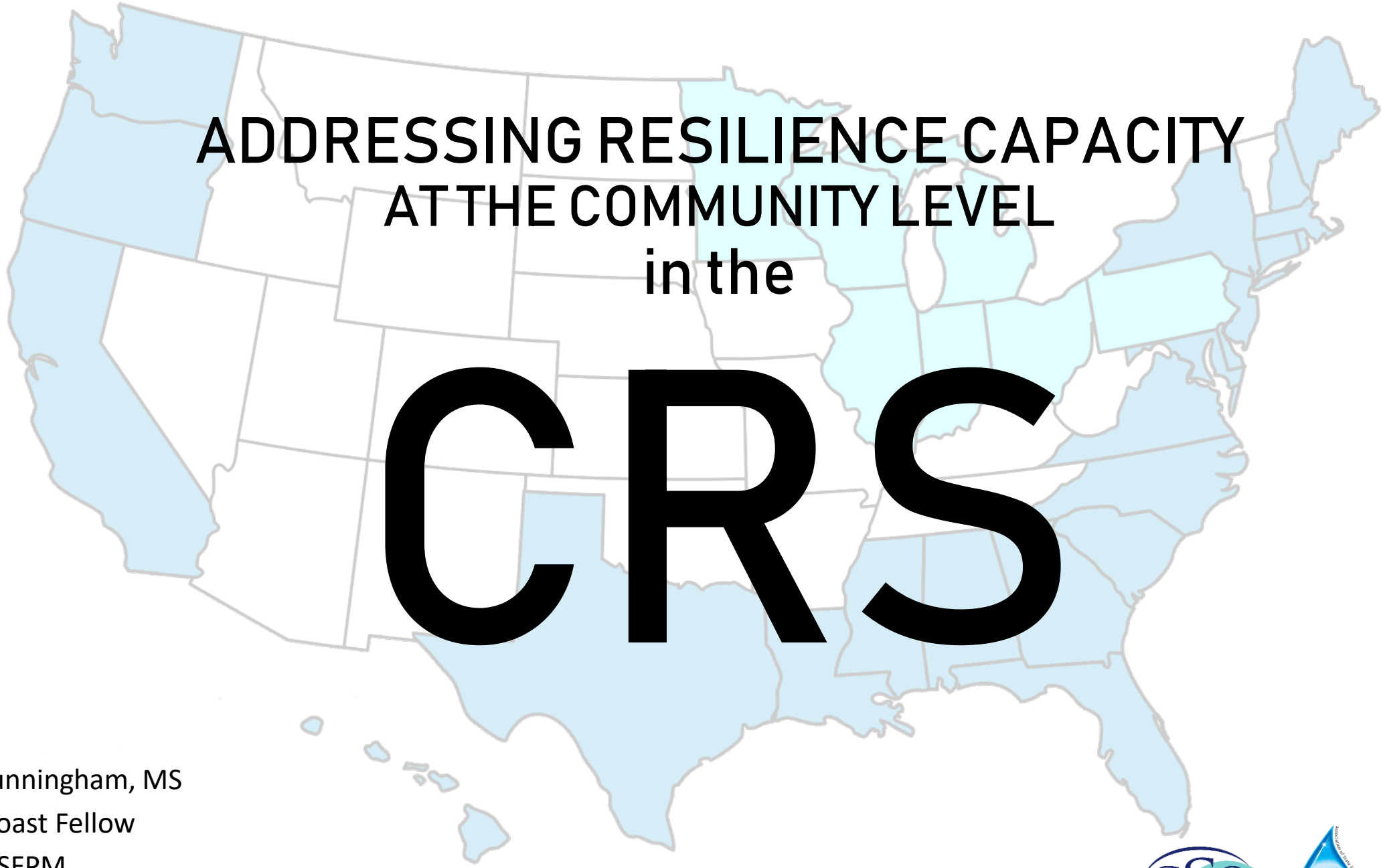


ADDRESSING RESILIENCE CAPACITY AT THE COMMUNITY LEVEL in the CRS

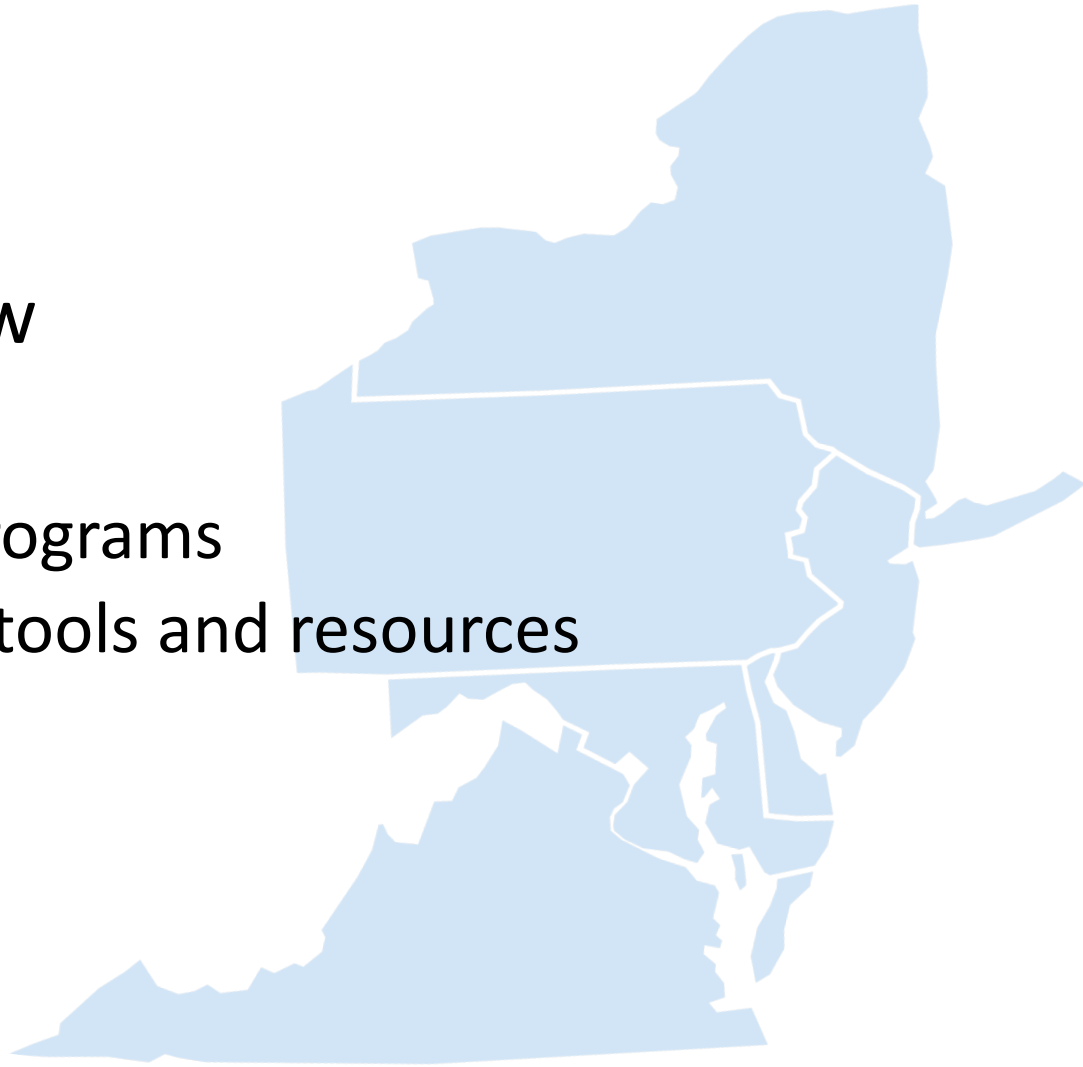
Alexis Cunningham, MS
Digital Coast Fellow
CSO & ASFPM

OVERVIEW

- BACKGROUND
  - CSO/ASFPM efforts
  - CRS
- PURPOSE
- RESEARCH STEPS
  - Overview
- ANALYSIS
  - Quantitative
  - Qualitative
    - Interviews
  - Qualitative
    - Surveys
- NEXT STEPS
  - Plans

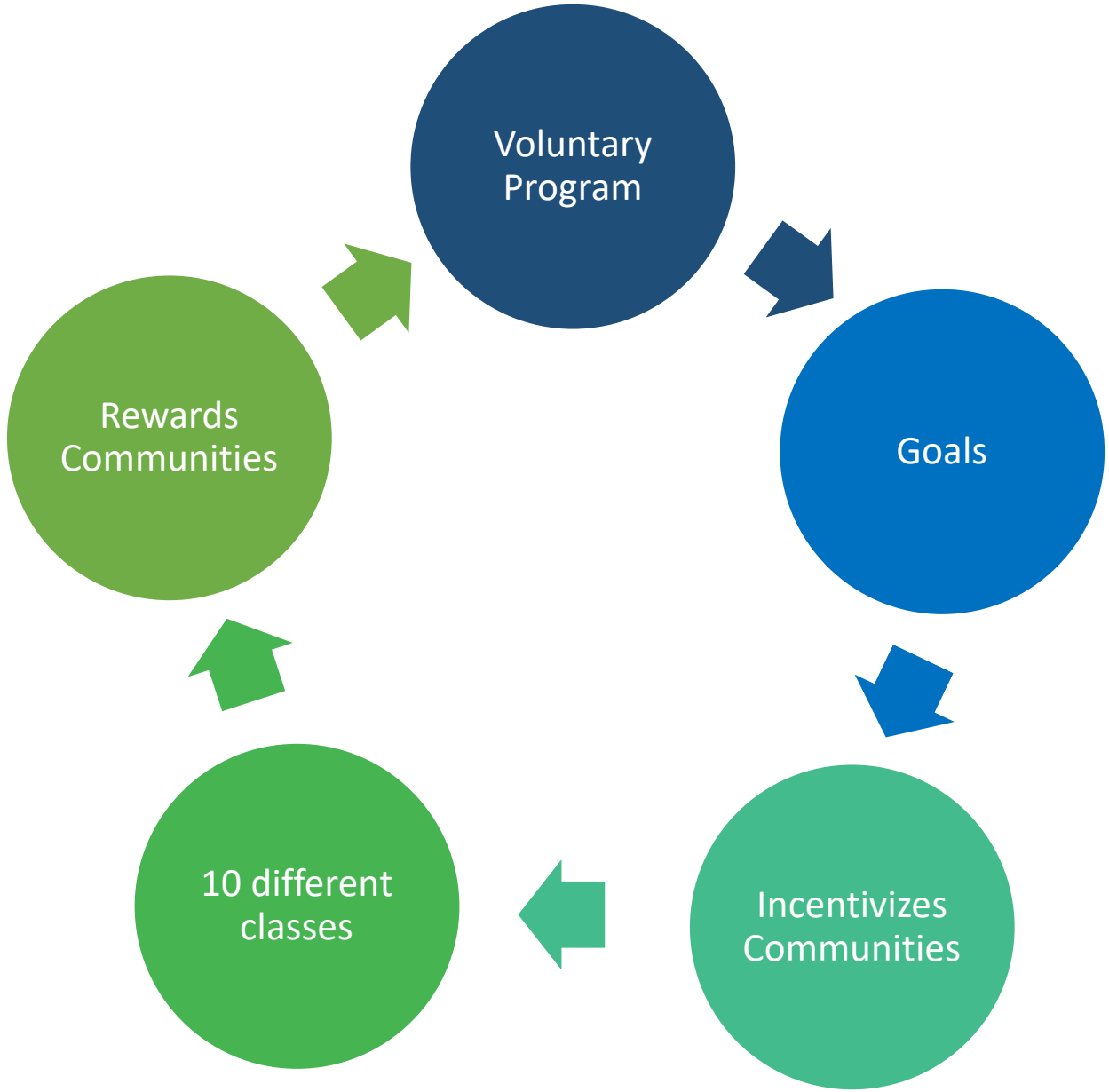
BACKGROUND

- CSO/ASFPM Digital Coast fellow
- CRS Strategy
  - Supports members in Coastal Programs
  - Identifies relevant information, tools and resources
    - Flood risk reduction
    - Ecosystem conservation
    - Climate change resilience



BACKGROUND
CRS

BENEFITS
- Reduction in FIPs
- Robust mitigation measures



BACKGROUND
CRS

Table 7. Average Amounts Saved per Point and per Jurisdiction

	Total (dollars)		A-V zones (dollars)		B-C-X zones (dollars)	
Activity	Per point	Per jurisdiction	Per point	Per jurisdiction	Per point	Per jurisdiction
420	3,532	591,436	3,003	502,818	474	79,433
Freeboard	8,289	800,010	7,055	680,902	—	—
530	—	—	4,175	319,564	—	—

Highfield & Brody (2013) Evaluating the Effectiveness of Local Mitigation Activities in Reducing Flood Losses. Nat. Hazards Rev., 2013, 14(4): 229-236

BACKGROUND

CRS

1,502 con

*Correlations showing a community's **capacity** to respond to flood hazards… linked to **social inequities**…*

Fan, Qin, Davlasheridze, M. Flood Risk, Flood Mitigation, and Location Choice: Evaluating the National Flood Insurance Program's Community Rating System. *Risk Analysis: An Official Publication of the Society for Risk Analysis* 36, no. 6 (2016): 1125–47. https://doi.org/10.1111/risa.12505.

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Shively, David. Flood risk management in the USA: implications of the National Flood Insurance Program changes for social justice. *Reg Environ Change* (2017) 17:1663–1672DOI 10.1007/s10113-017-1127-3

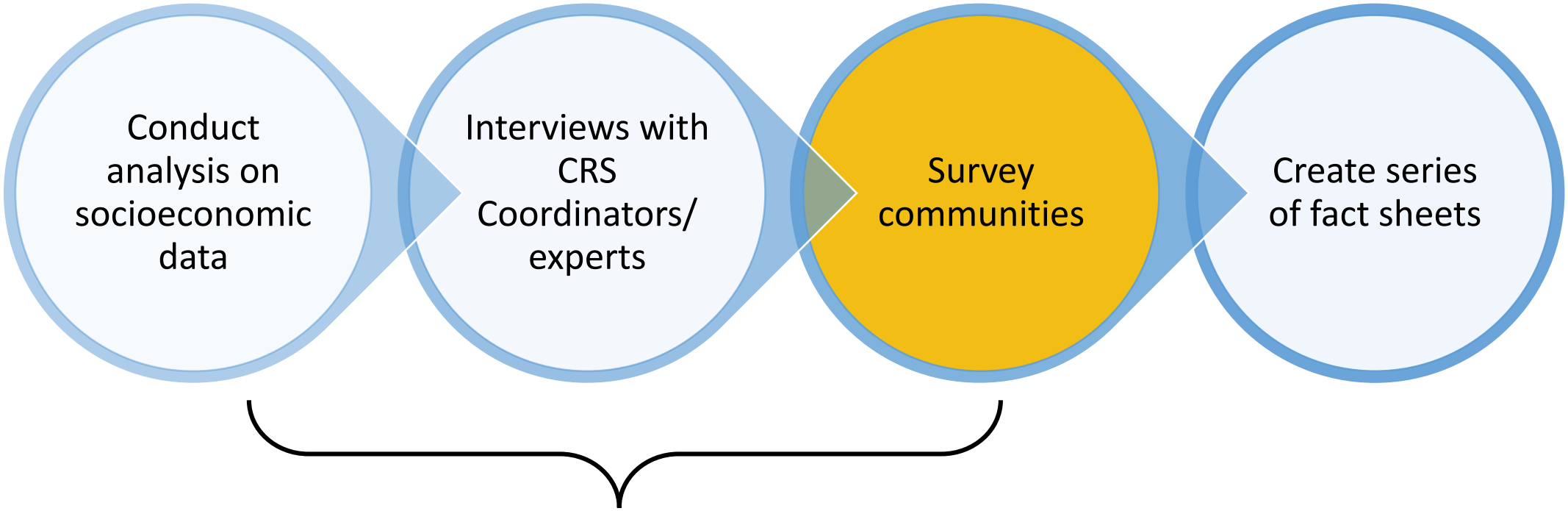
PURPOSE

1. *Is high vulnerability to flood risk in communities a result of lack in local government capacity and resources?*

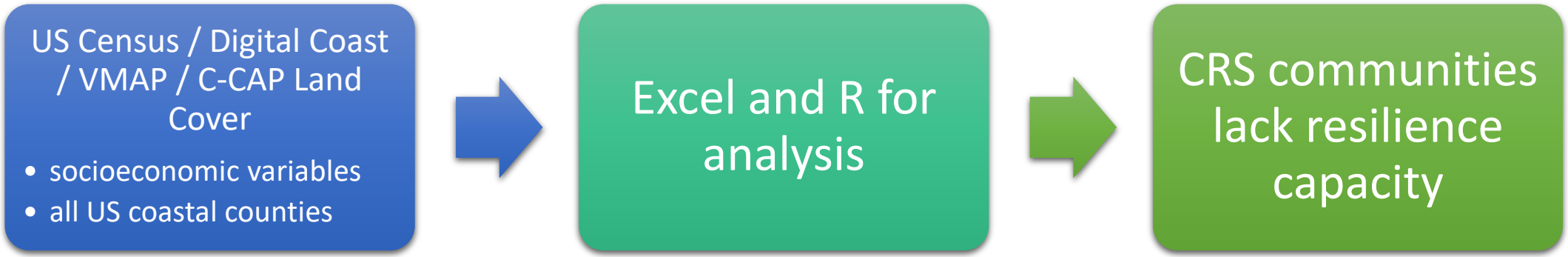
2. *Why are communities not participating in the CRS? Why aren't participating communities advancing in the CRS?*

3. *How can national groups that are working to support communities confront socioeconomic barriers? What is specifically missing?*

STEPS IN RESEARCH

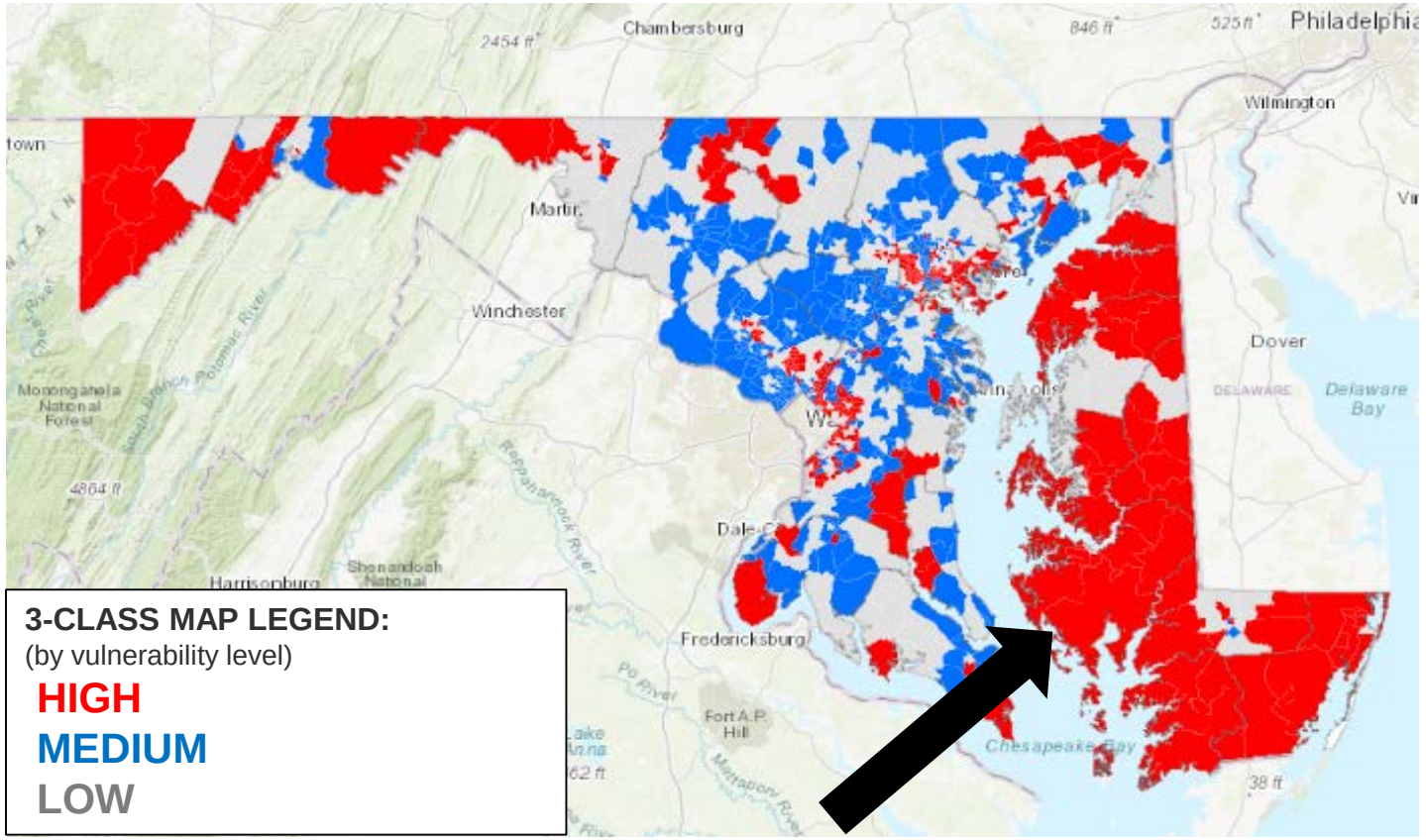


STEPS IN RESEARCH
Quantitative Data



STEPS IN RESEARCH
Quantitative Analysis

Population	**35,534**
Median Age	43.8
Percent Black	28
Percent Native American	0.043
Percent Asian	1
Percent Hispanic	4.3
Percent with less than 12th grade education	15.6
Percent Poverty	11.6
Median Household Income	$47,093
Number of Agricultural Acres	133

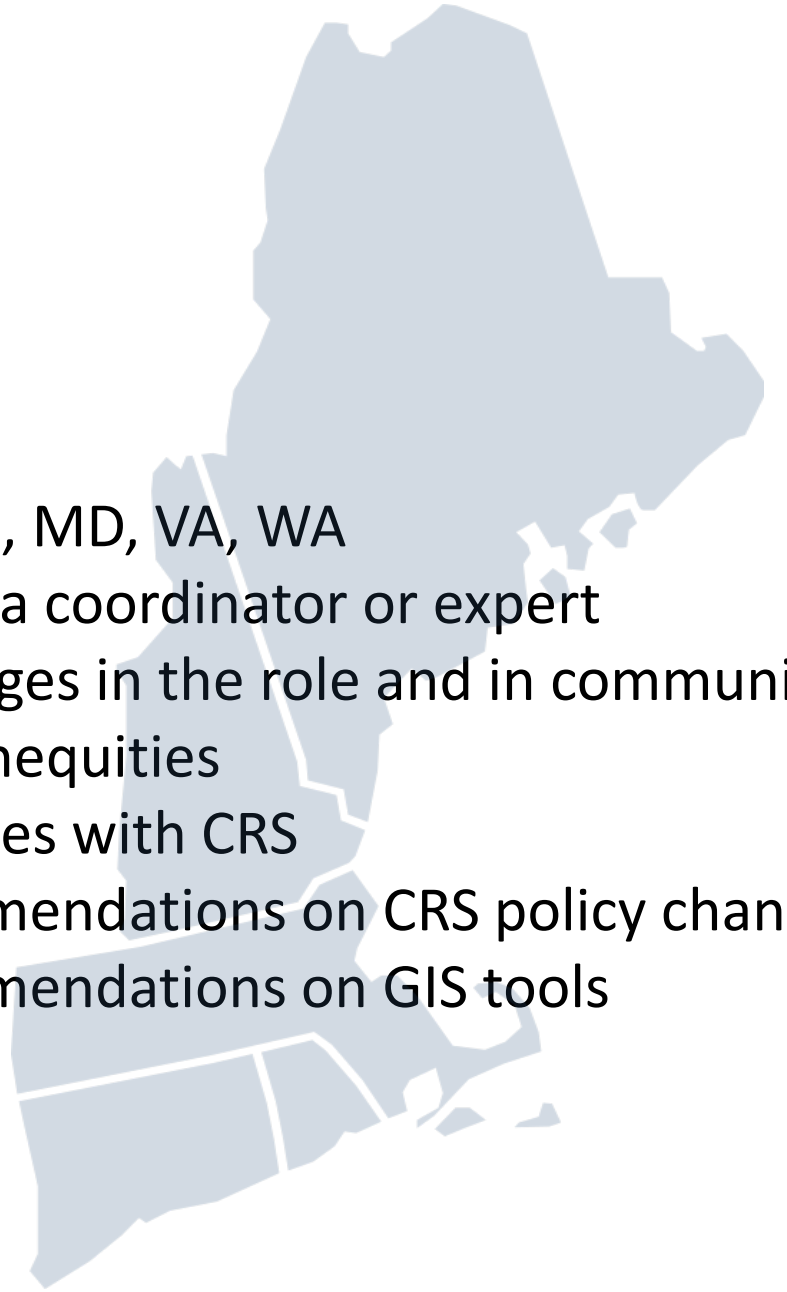


Dorchester County, MD

U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates; 2011-2015 Social Vulnerability Index (SoVI®); NOAA C-CAP Land Cover tool

STEPS IN RESEARCH
Qualitative – Interviews

Interviews with CRS Coordinators & experts



- GA, MA, MD, VA, WA
- Role as a coordinator or expert
- Challenges in the role and in communities
- Social inequities
- Successes with CRS
- Recommendations on CRS policy changes
- Recommendations on GIS tools

STEPS IN RESEARCH
Qualitative Analysis

GA, MA, MD, VA, & WA

Challenges & Concerns

- Scoring inequity
- CRS process is time-consuming
- Political will/initiative
- Lack of resources & funding

Social Inequities

- Rural v. urban
- Education

Successes

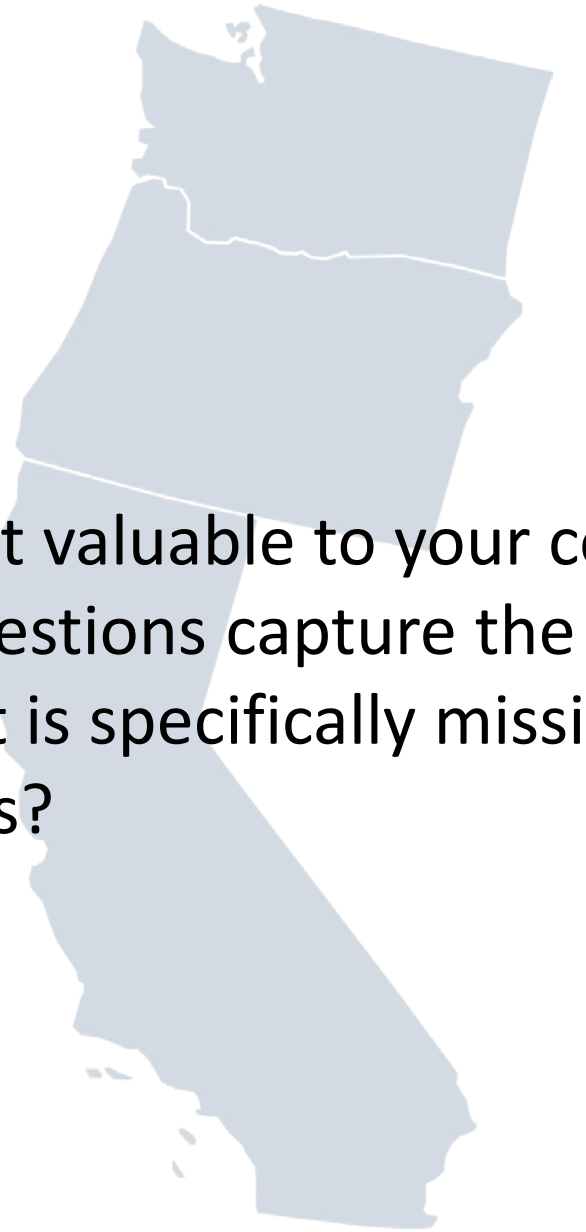
- Community initiative & ownership
- Communication & coordination
- Engagement in meetings

Recommendations

- Equity
- An approachable CRS
- Workshops, trainings, etc.
- Improved staff capacity

STEPS IN RESEARCH
Qualitative - Surveys

Survey communities



1. What is most valuable to your community?
2. Do these questions capture the ideas behind what is specifically missing in communities?

NEXT STEPS

Create series of fact sheets

- National agencies and organizations
- Capacity to address flood risk and hazards

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U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Vulnerability Index (SoVI®)

NOAA C-CAP Land Cover tool

Thank you!

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