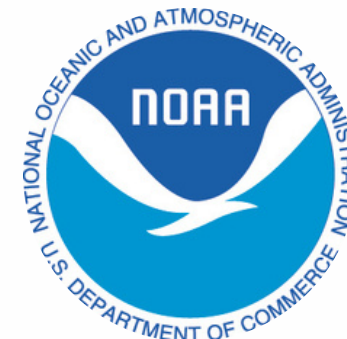


# Using Spatial Data to Prioritize Investment in the Resilience of NJ Communities

Heather Korzun, NOAA Coastal Resilience Fellow



# Contents

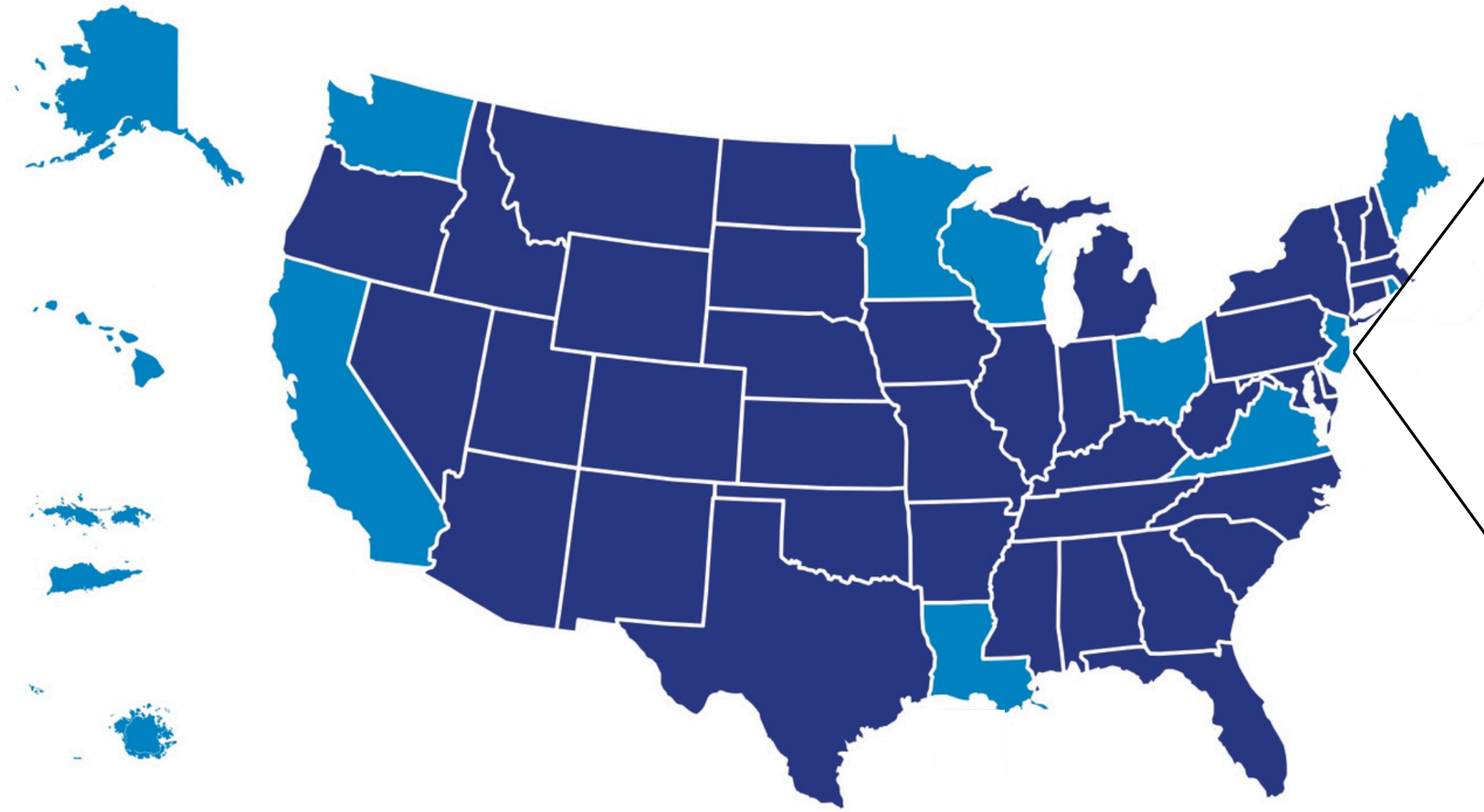
## 1. Background

## 2. Community Screening Criteria

- Social Vulnerability
- Priority Areas for NNB Projects

## 3. Next Steps

 **CLIMATE RESILIENCE REGIONAL CHALLENGE**  
PROJECT LOCATIONS



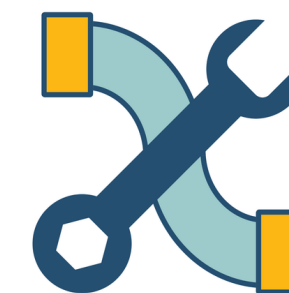
**Building a  
Climate Ready NJ**



**EduCATE**



**Resilience  
Planning**



**Design  
Pipeline**

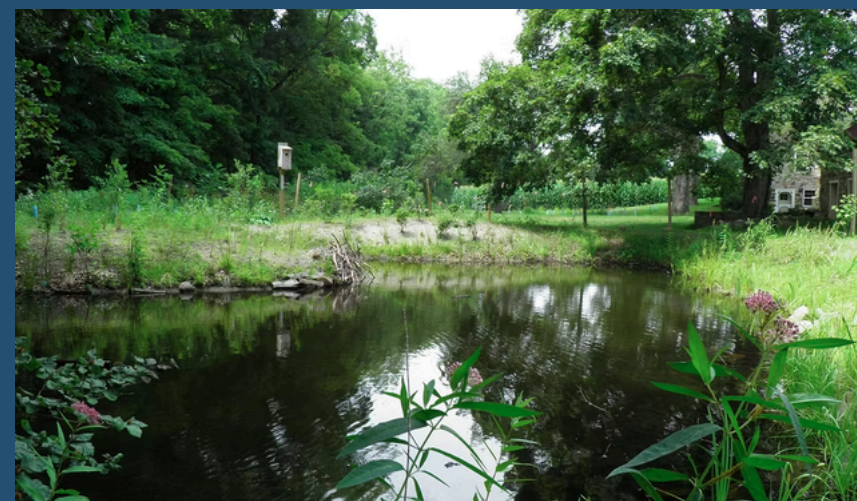
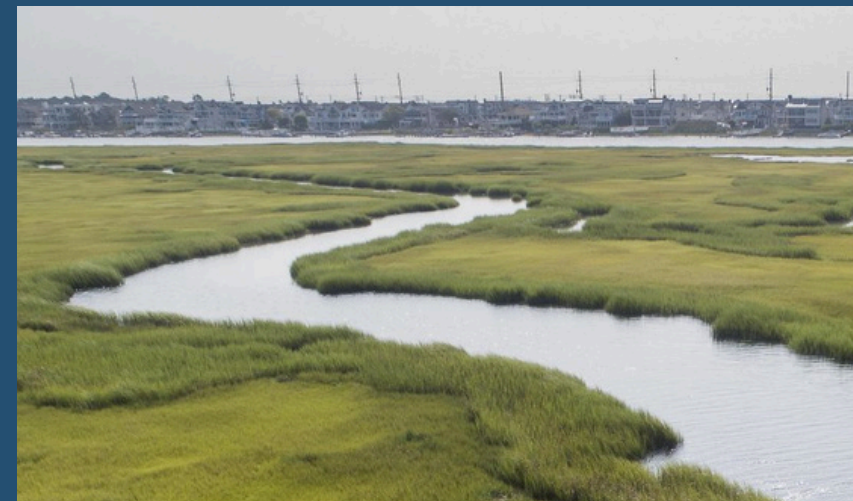


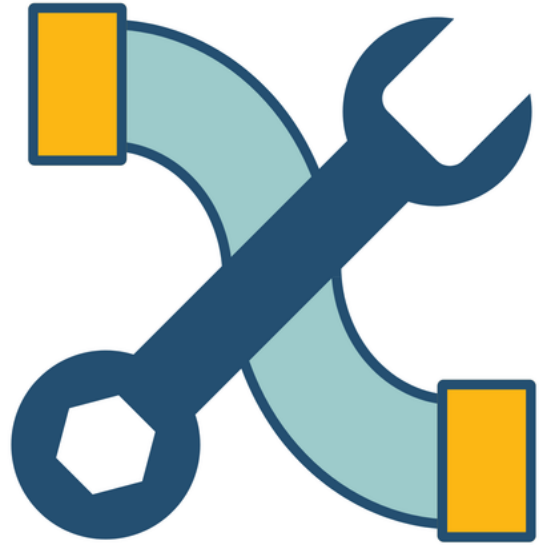
**Construction**

# Natural and Nature-Based Solutions (NNB/NBS)

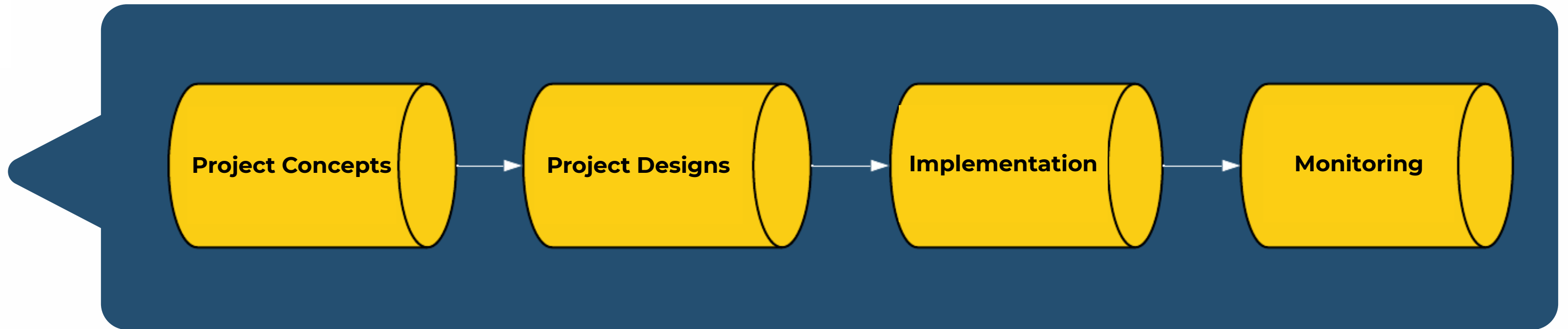


**Design  
Pipeline**



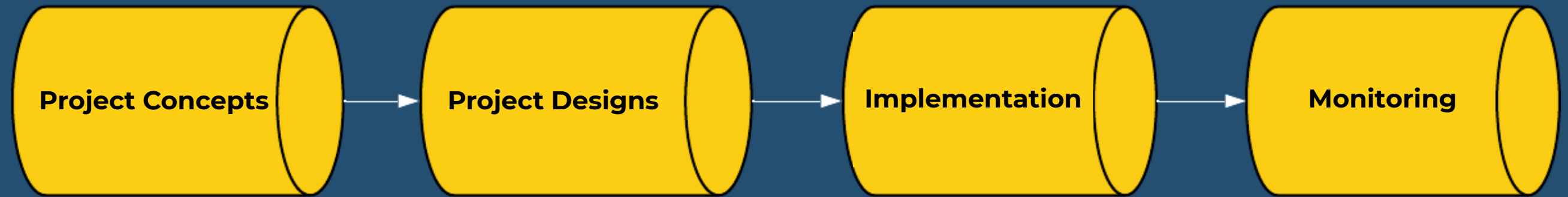


# Design Pipeline





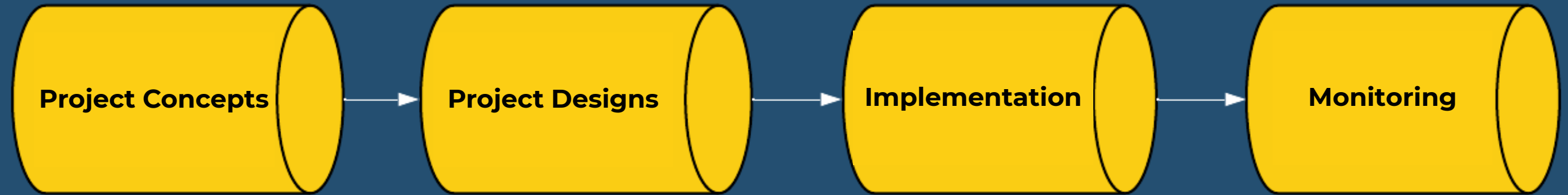
## Design Pipeline



- Enhance and evolve the existing **NJ Coastal Ecological Restoration and Adaptation Planning (CERAP)** to operate as the design pipeline portal
- Engage with **18-20 communities to co-design natural and nature-based resilience projects** and prioritize them for inclusion in the Design Pipeline
- Establish a **Nature Based Solutions Technical Assistance Service (NBSTAS)** to assist in the implementation of resilience projects
- Establish the **Coastal Restoration Extension & Credentialing Program (CRECP)** to train and credential coastal restoration practitioners



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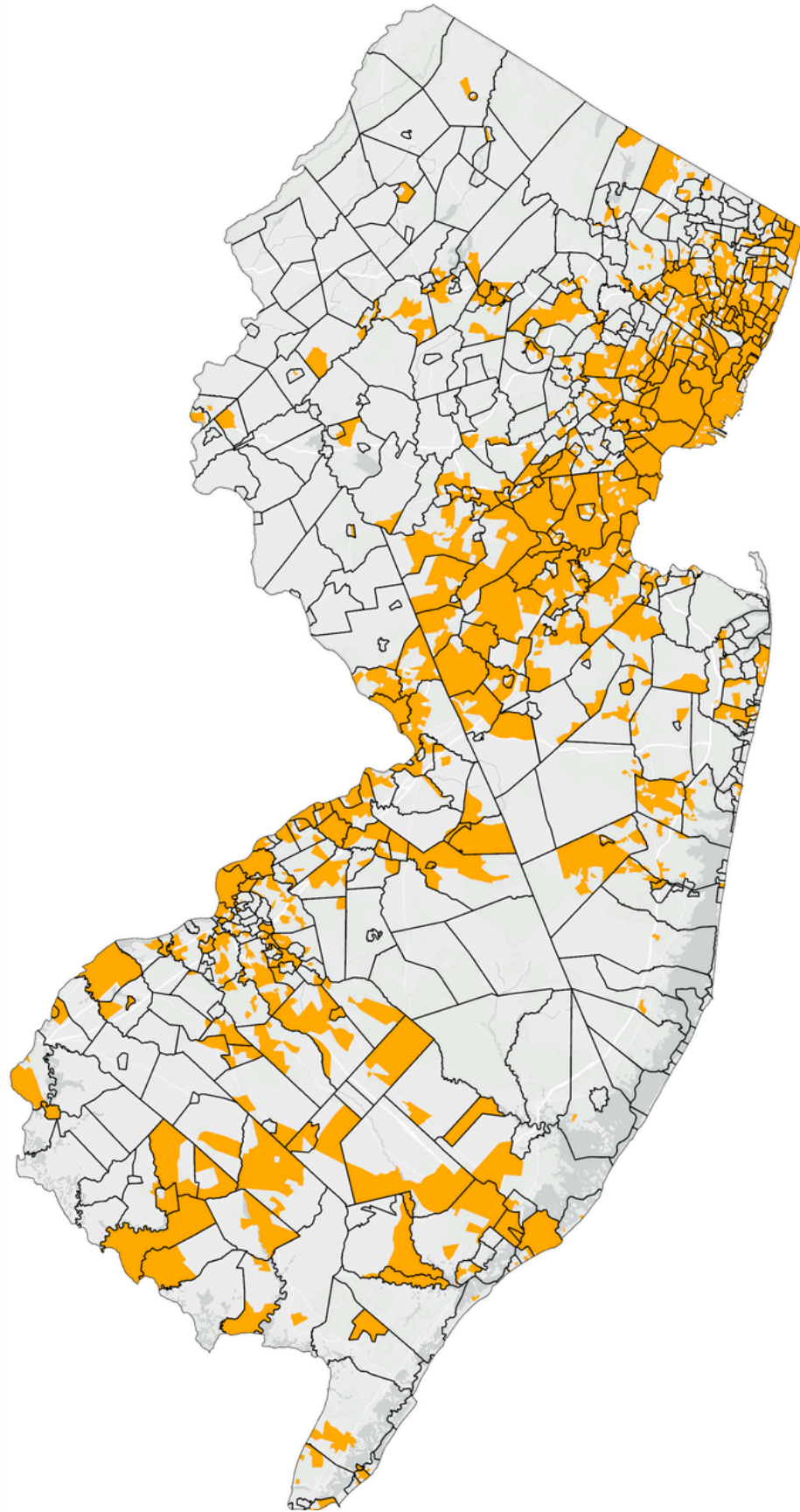
## Which 18-20 communities do we want to engage?



## Which 18-20 communities do we want to engage?



- Communities that are **socially vulnerable** to climate change



## Screening Criteria for Social Vulnerability:

 NJ Environmental Justice Law  
Overburdened Communities (OBCs)

Census block groups with:

1. At least 35 percent **low-income** households; or
2. At least 40 percent of the residents identify as **minority** or as members of a State recognized **tribal community**; or
3. At least 40 percent of the households have **limited English proficiency**.

## Which 18-20 communities do we want to engage?

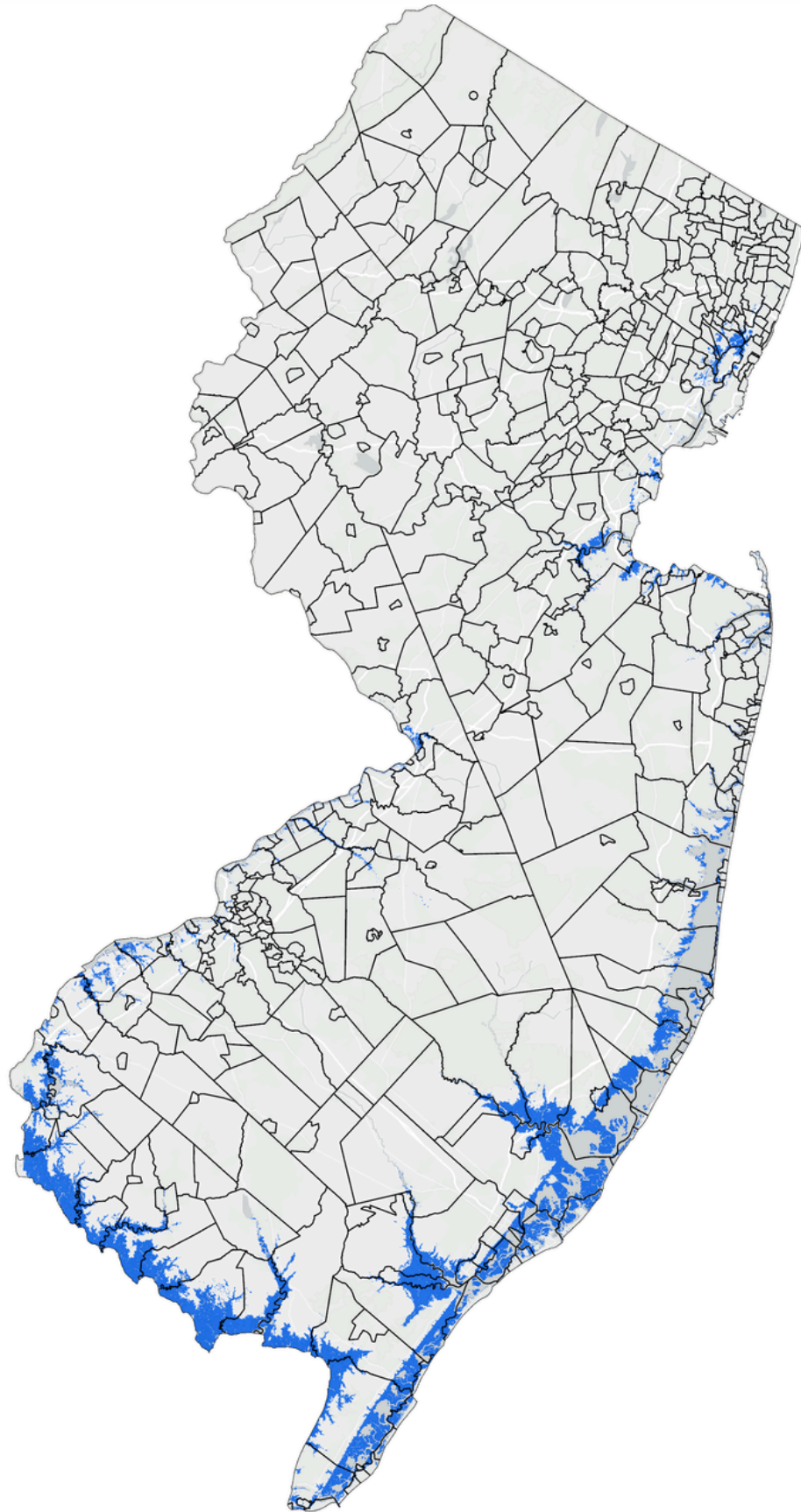


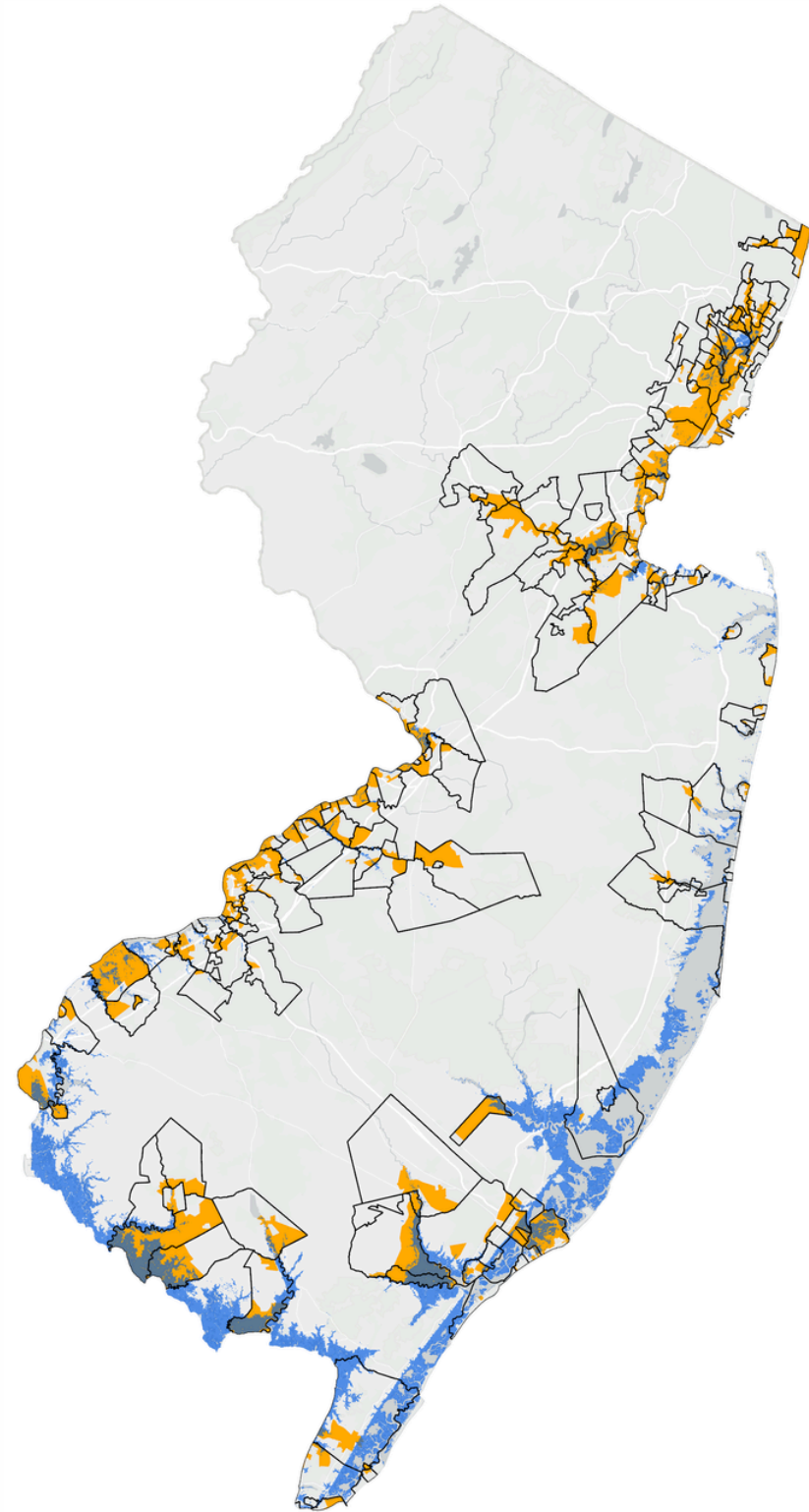
- Communities that are **socially vulnerable** to climate change
- Communities that contain **priority areas for NNB resilience projects**

## Screening Criteria for NNB Resilience Projects: ■ CERAP's Issues of Concern Mapping Layer

Identifies areas of NJ coast that might be at highest vulnerability as it relates to the following stressors:

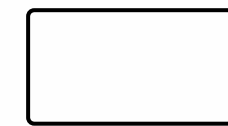
- Coastal Ecosystem Degradation and Habitat Loss
- Shoreline Erosion
- Coastal Flood Damage
- Nuisance Flooding
- Coastal Storm Damage
- Water Quality Degradation
- Loss of CO2 Sequestration
- Social Vulnerability





## Priority Communities

Overburdened communities containing priority areas for NNB projects

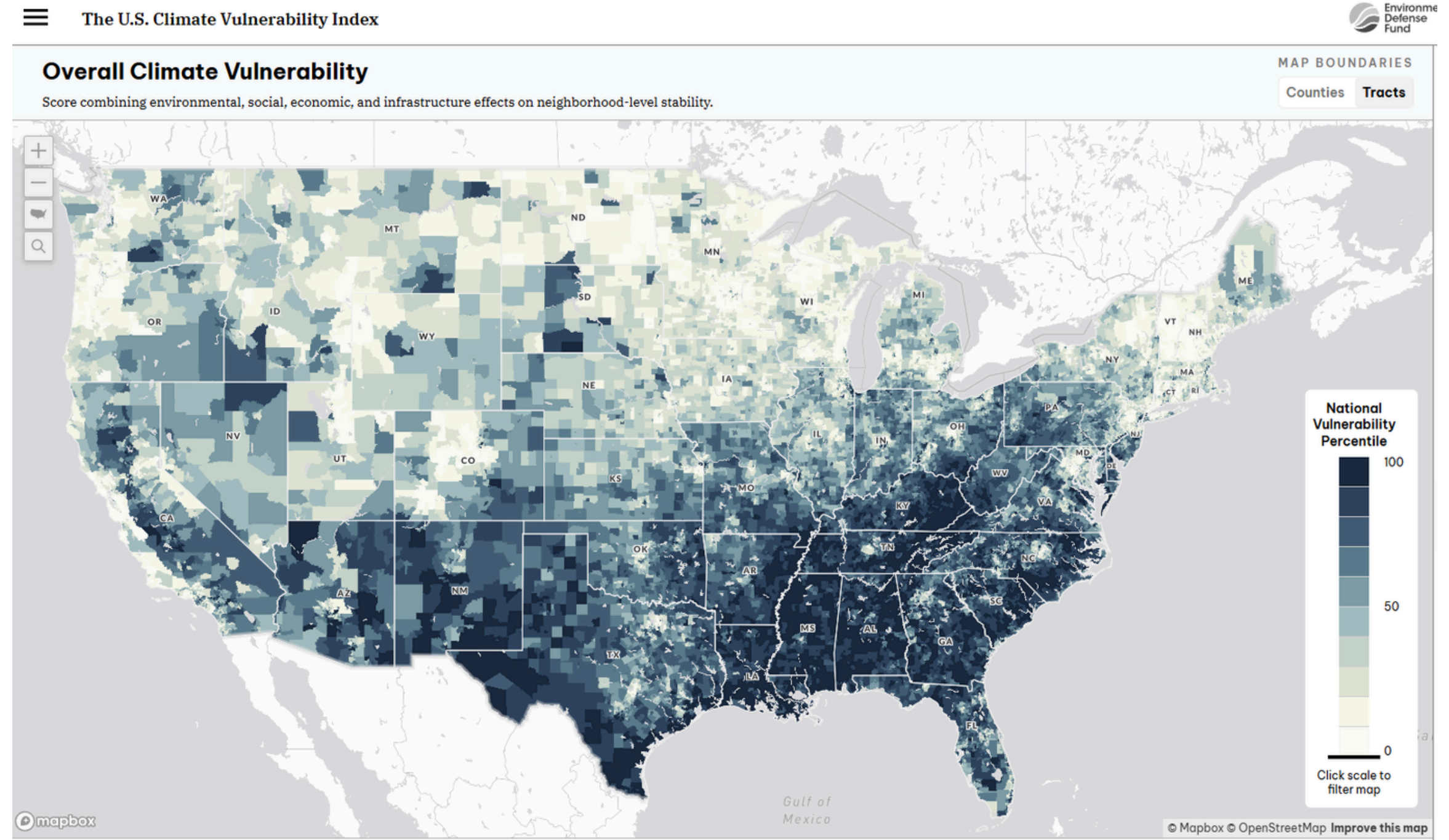


## Priority Municipalities

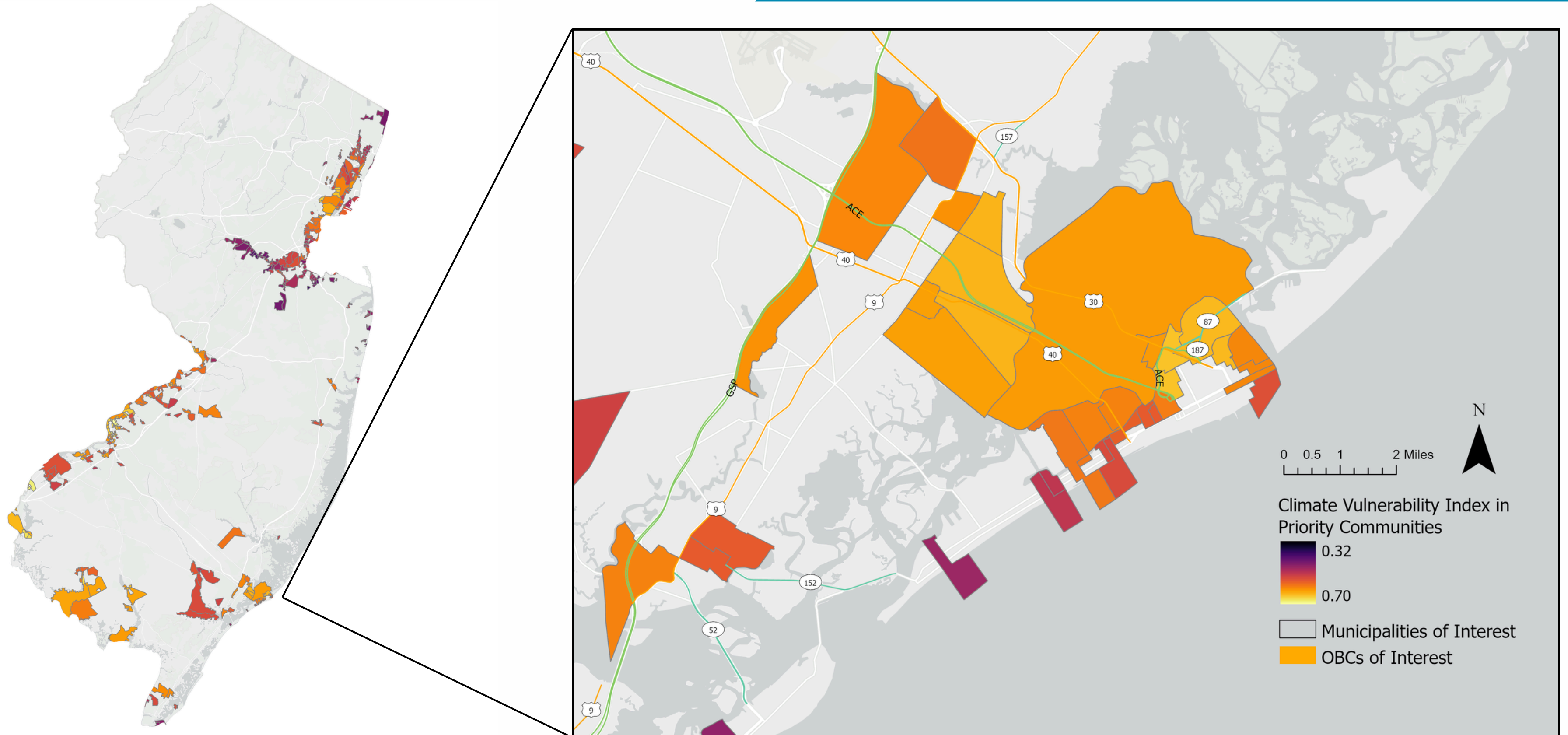
Municipalities containing Priority Communities

## Climate Vulnerability Index (CVI)

- Visualizes communities' vulnerability to climate change (184 indicators)
- Layers:  
Community baseline vulnerability  
+ Climate change risks  
= **Climate Vulnerability Score**



# Community Screening Criteria



# Ready NJ Partner Surveys and Interviews

Which communities do partners believe are most vulnerable?

Which communities show the most support for NNB resilience projects?

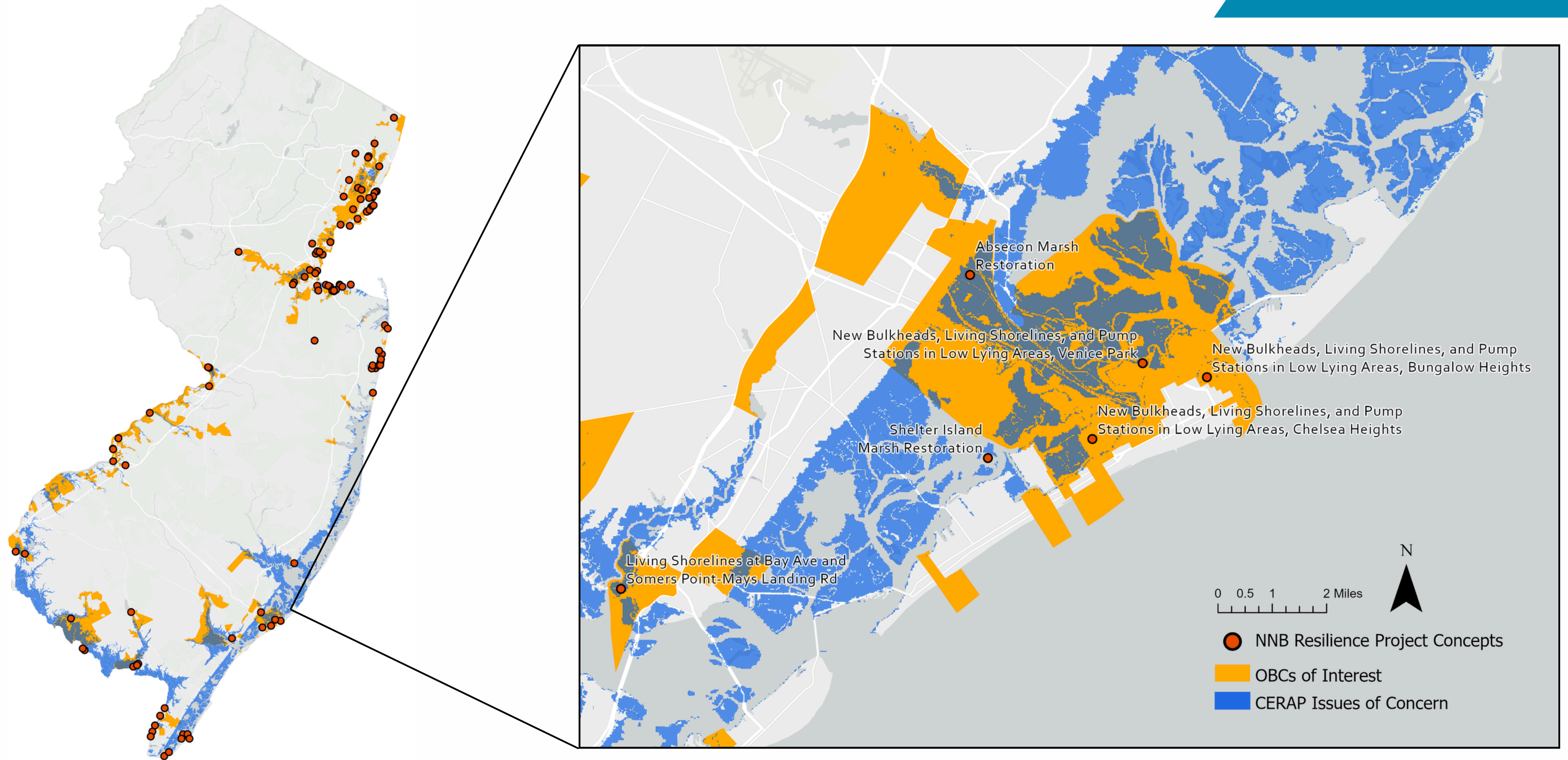
What barriers prevent certain municipalities from implementing NNB resilience projects?



# Project Concepts in Priority Communities

## Compile list of NNB project concepts from:

- CERAP
- Resilient NJ planning documents
- County HMPs
- Other resilience planning documents
- Input from Ready NJ partners



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Gandy's Beach Oyster Castle - Jenny Paterno Shinn/Haskin Shellfish Research Laboratory

Barretts Run Grassland & Afforestation Project in Hopewell Township, NJ - American Littoral Society

Salt Marsh - The Nature Conservancy