



# Challenges and Opportunities for Marine and Great Lakes Laboratories

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**March 24, 2022**



## Infrastructure Investment and Jobs Act (IIJA): \$2.96B

\$492M coastal & inland flood mapping, forecasting, modeling

\$50M wildfire prediction, modeling forecasting

\$50M wildfire observation equipment and instruments

\$1M + \$25M soil moisture and snowpack research

\$80M supercomputing for weather, climate forecasting

\$56M regional ocean partnerships

**\$150M observing systems** for coastal, ocean, Great Lakes environment



## **Infrastructure Investment and Jobs Act (IIJA): \$2.96B**

\$492M National Fish & Wildlife Foundation Resilience Fund

\$207M habitat restoration through state Coastal Zone Programs

\$77M habitat restoration through National Estuarine Research Reserves

\$491M habitat restoration

\$400M enhancing fish passage

\$200M marine debris prevention, removal

\$172M Pacific coast salmon recovery

\$20M ESA, MMPA, EFH consultation, permitting

**\$2.06B for  
Restoration &  
Resilience  
Grants**



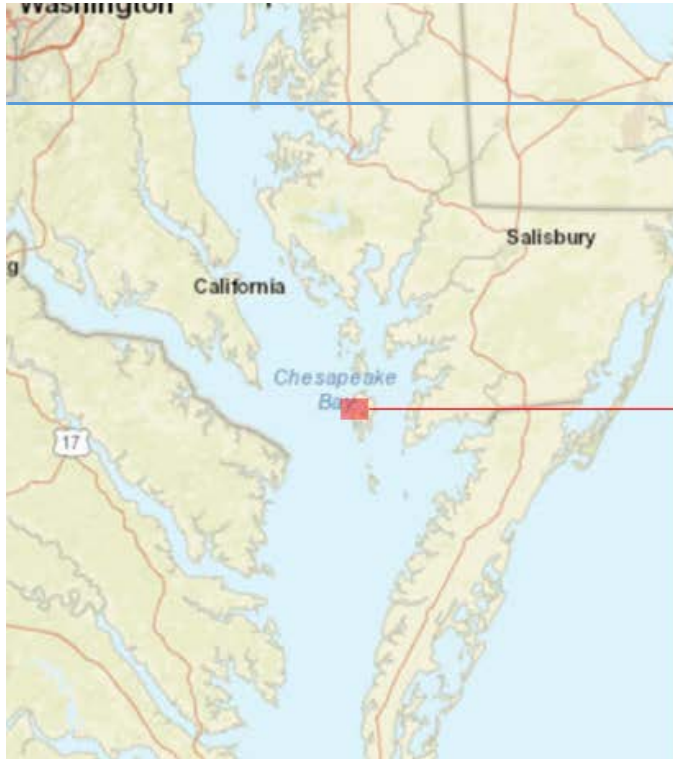


# NOAA's Priorities

- 1. Build a Climate-Ready Nation**
- 2. Make Equity Central to NOAA's Mission**
- 3. Foster the Information-Based Blue Economy**



# 1. Climate-Ready Nation



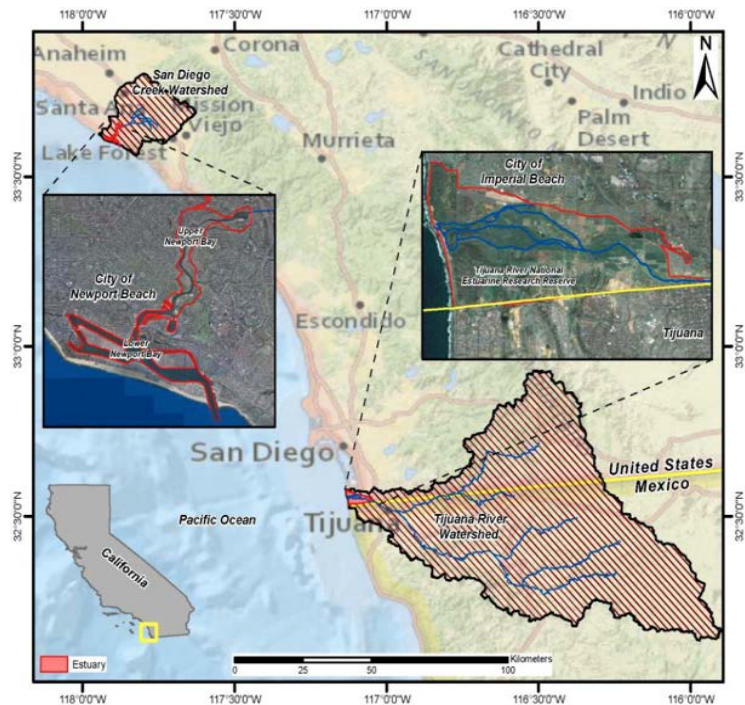
# 1. Climate-Ready Nation



Currently, a lack of available data on the performance of sediment re-use projects like Swan Island is a barrier to widespread implementation



# 1. Climate-Ready Nation



Sediment management effects on NNBF and flood vulnerability in CA.

Thin layer application - enhancing elevation capital. Freeman Creek, NC

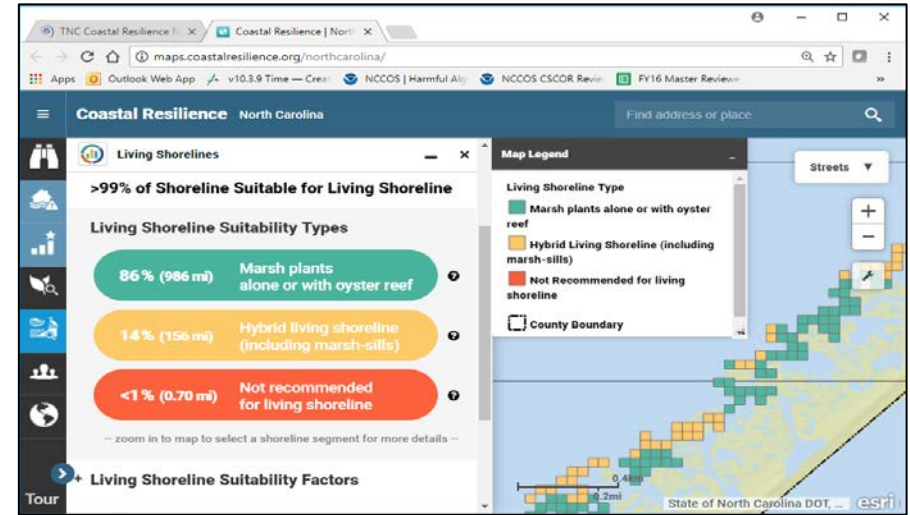
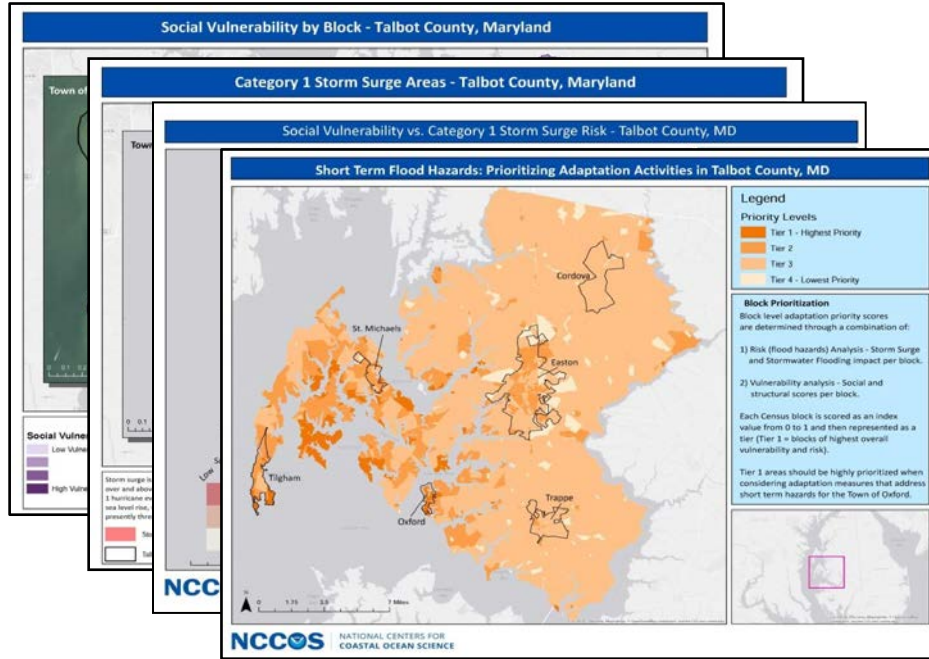




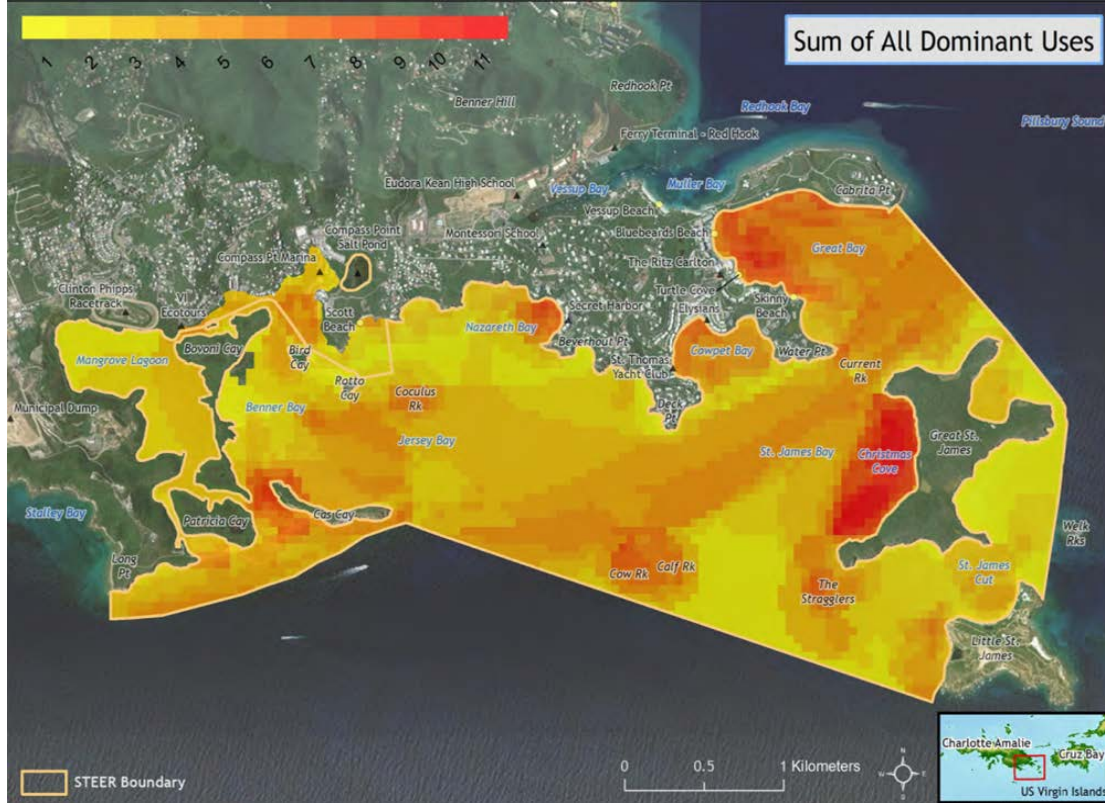
# 2. Equity Central to Mission

## Metrics to Prioritize Adaptation

## Recommendations on Living Shoreline Design



## 2. Equity Central to Mission

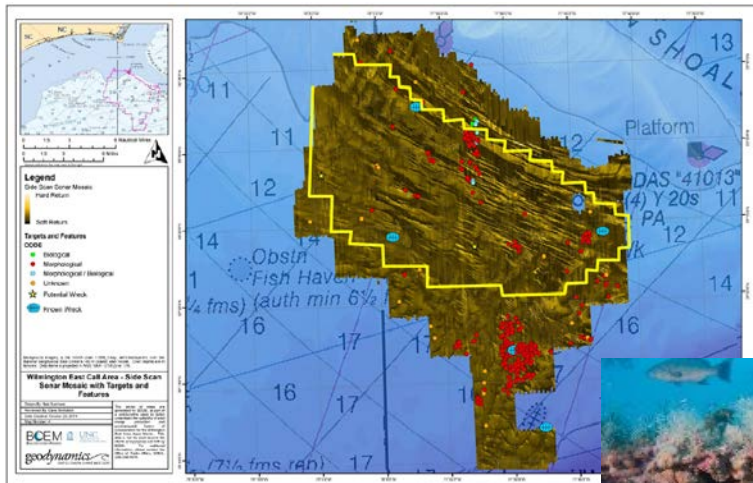


### East End of St. Thomas, USVI

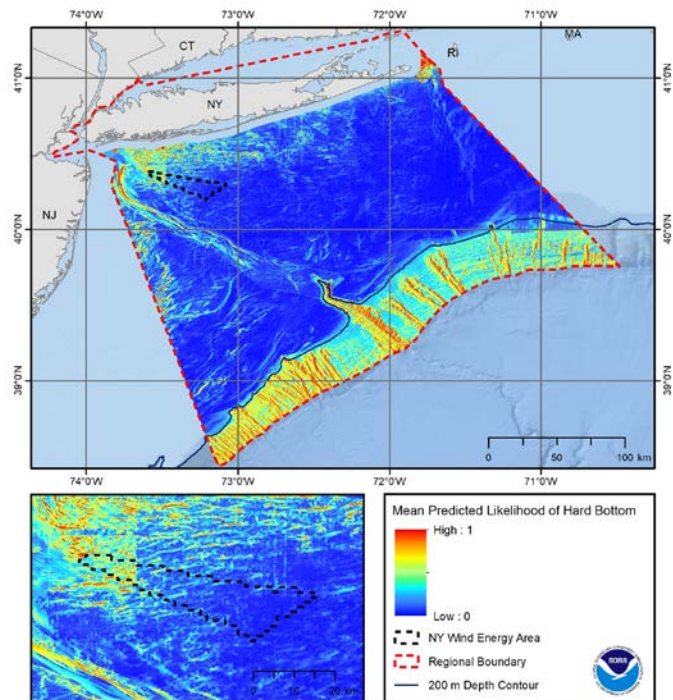
23 types of human use are mapped. Areas of overlap of dominant uses are red.

# 3. Info-Based Blue Economy

## North Carolina Wind Energy Area



## NY Bight Wind Energy Planning



### 3. Info-Based Blue Economy

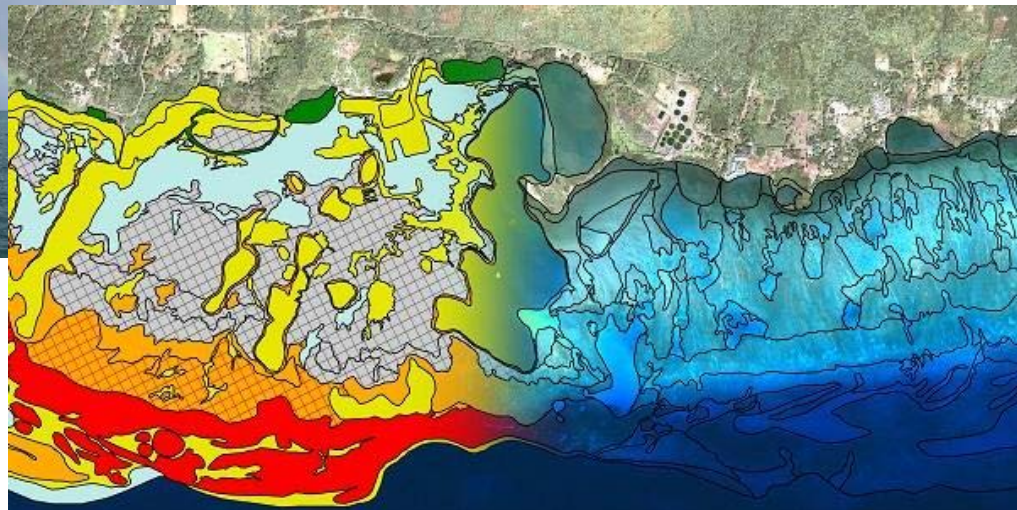
#### Existing Ocean Use



#### Aquaculture Potential



### 3. Info-Based Blue Economy





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