

# Regionality:

## A Tool to Promote Coastal Resilience

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# Overview

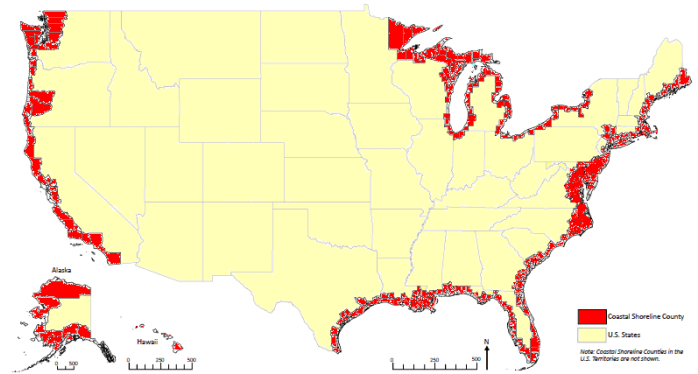
- Introduction – the Big Picture
- Objective: Coastal Resiliency
- Current Process
  - Piecemeal Implementation
  - Federal Financing Trends
- Regionality as an Alternative Model
- Implementation of Policy Change
  - Regional state alliances

# The Big Picture

- Coastal population & economy is increasing
- Sea level rising
- Storm strength & damages increasing
- Uncle Sam's shoulders not strong enough – pockets not deep enough
- Current water resources planning and implementation process needs to be overhauled
- Coastal resiliency is a regional, national and international concern

# Value of the Coast

- \$3 trillion in shoreline infrastructure protected
- In 2011, 45%, or \$6.6 trillion of America's GDP was generated in coastal counties
- \$766,415,356 in dredging contracts awarded in 2012
- In 2011, \$344.4 billion in tax revenue



NOAA: Coastal Shoreline Counties

- Coastal tourism amounts to \$225 billion annually
- Over one-third of the nation's population

# Current Status of the Nation's Coastal Water Resources

- Coastal Navigation
  - Inlets and Small Harbors
- Shore Protection

# Navigation

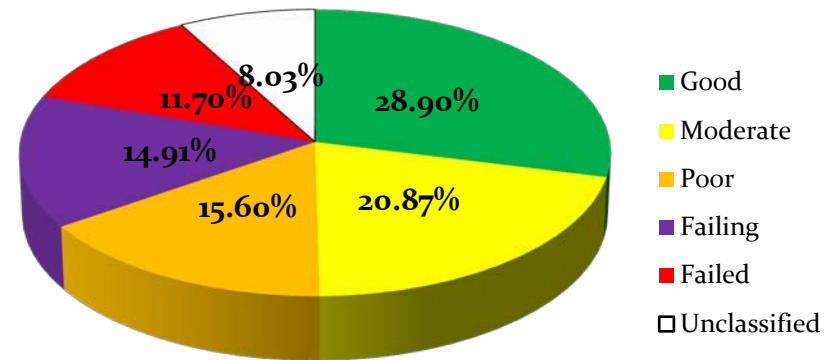
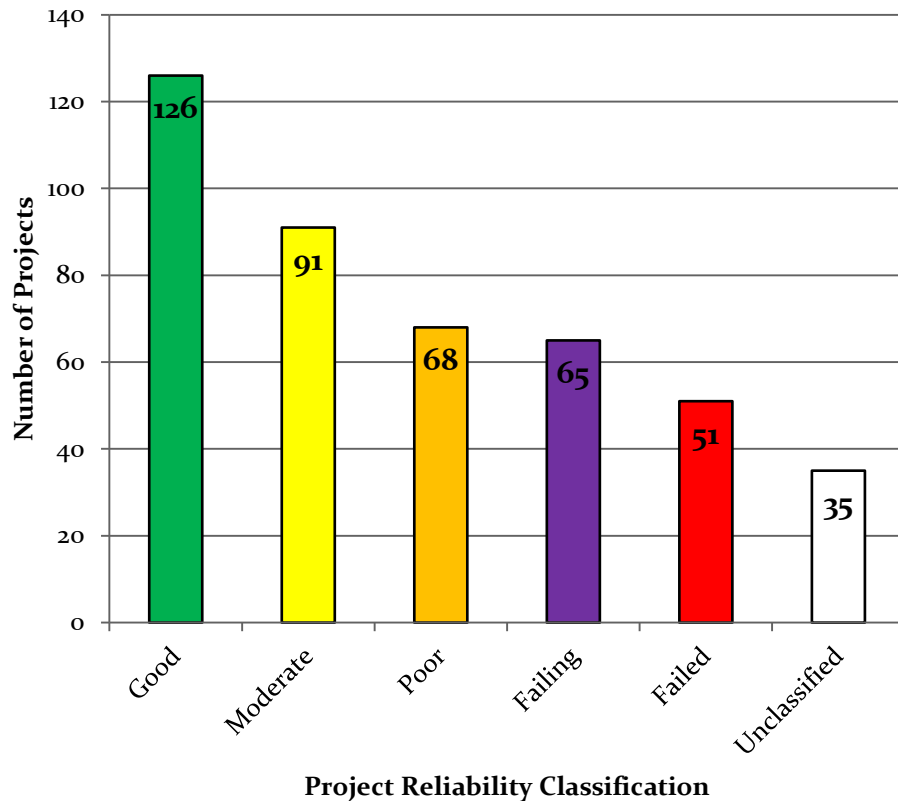
- **Channels, waterways, inlets; jetties, breakwaters, & other structures**
  - Maintenance activities
  - Sand/sediment resources; beneficial uses of sand
  - Confined or Near Shore Sediment Disposal
  - Commercial uses of non-compatible sand

# Coastal Storm Damage Reduction

- Not just erosion, but damages caused by wave inundation
- Not just sand nourishment but everything from seawalls & tide gates to wetlands & Natural & nature-based solution
- Regional/comprehensive plans
  - Contingency planning
  - Technical assistance to states for resiliency planning
- State/local building codes & ordinances

# Coastal Navigation

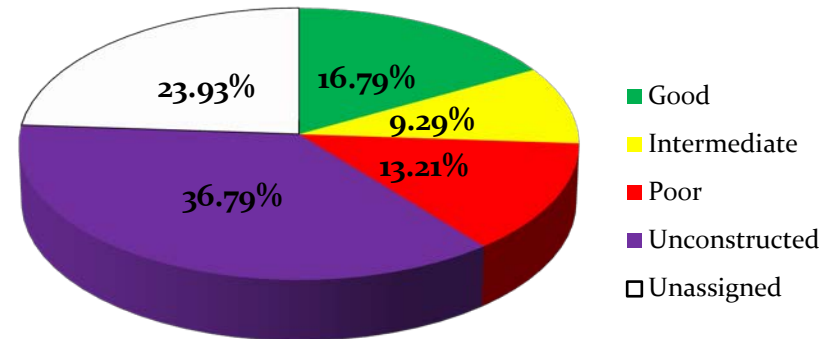
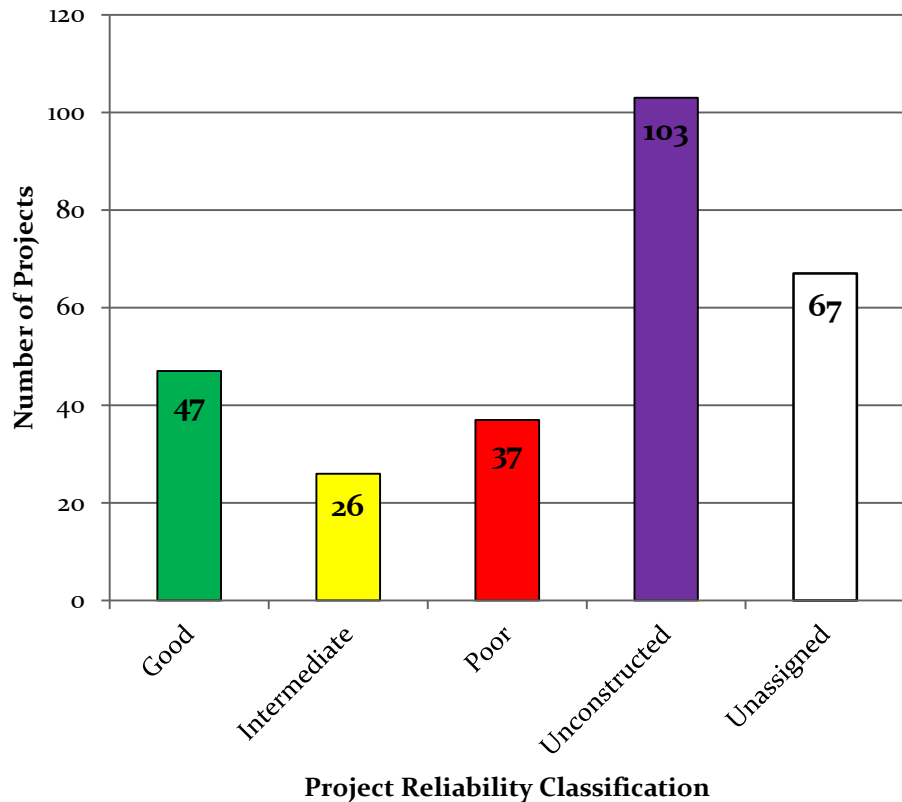
## CSPI Classification of Navigation Projects





# Shore Protection

## CSPI classification of Shore Protection Projects

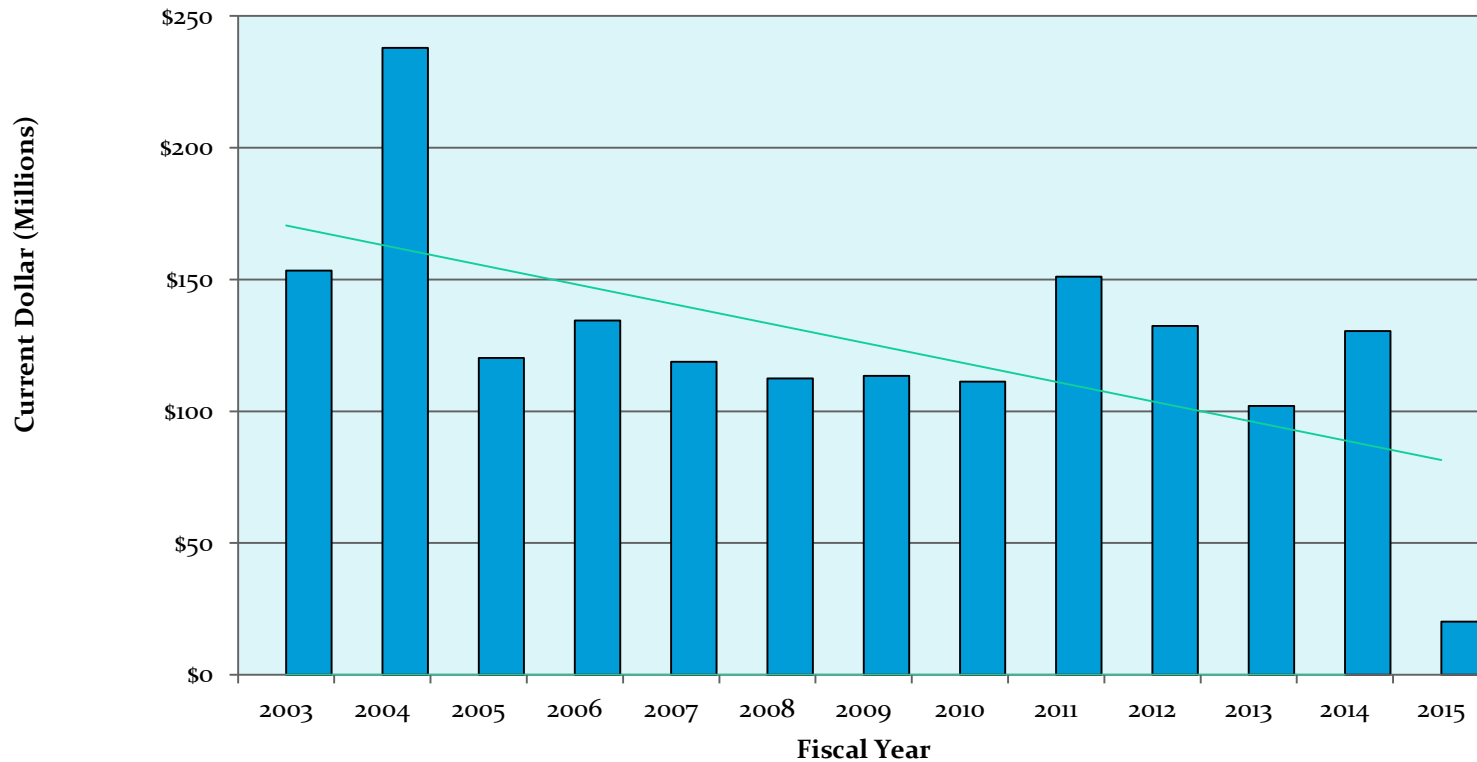


# What Contributes to the Current Status of the Nation's Coastal Water Resources?

- Not viewed as a national priority
- Inadequate Federal Funding
- The Federal Government's Piecemeal Implementation Strategy
- Lack of Collaboration
  - Interagency, States, and NGOs

# Federal Financing Trends

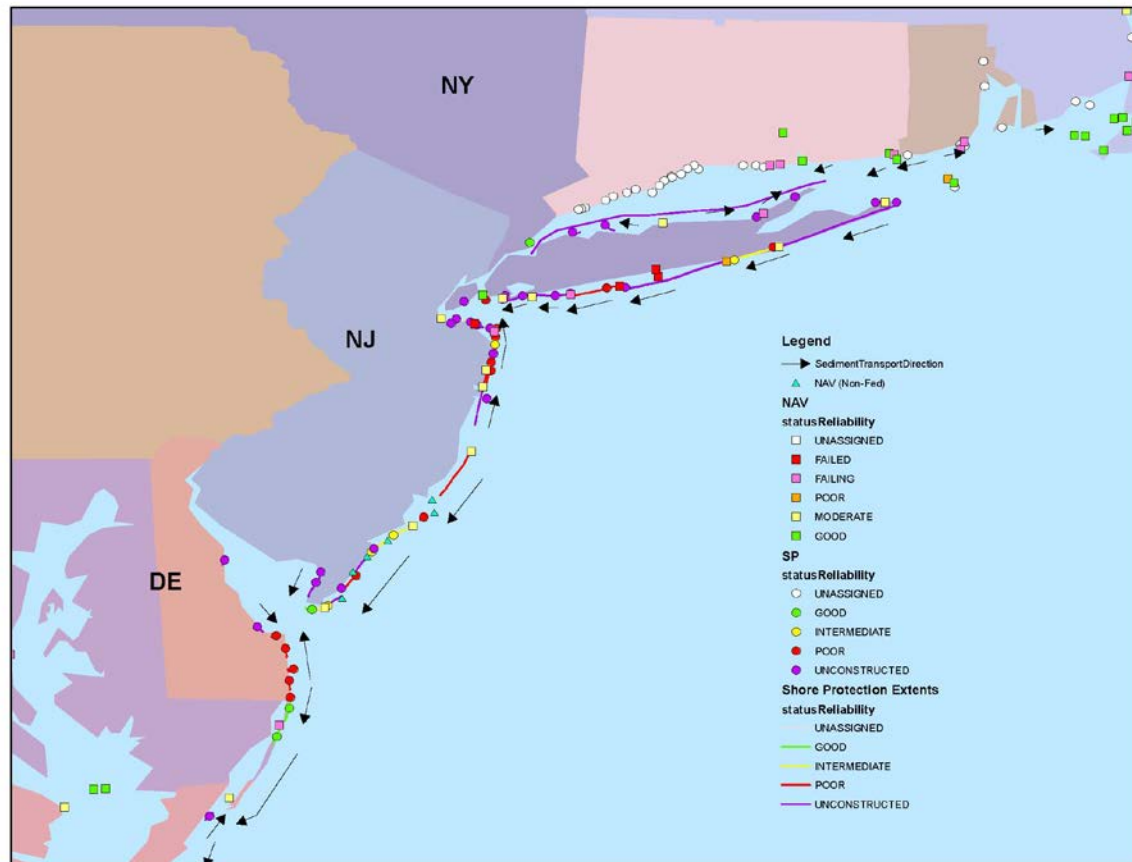
## Civil Works Budget – Coastal Projects



# Inefficient Federal Project Delivery Mechanism

- Piecemeal Planning & Implementation
  - Staggered Dredge Mobilization and Demobilization Schedules.
  - Discourages Beneficial Use.
  - Projects Planned and Designed Individually with Little Consideration to Regional Implications.
- Lack of Needs-Based Project Prioritization

# Inefficient Federal Project Delivery Mechanism



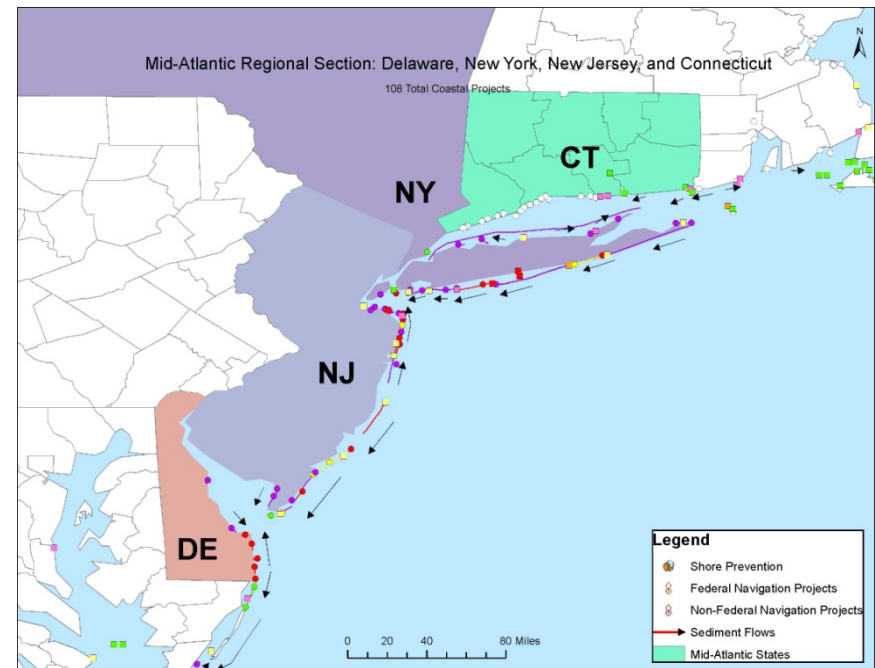
# Policy Alternatives

- Option #1: Stay the Course
- Option #2: Make radical changes
  - Reducing project operating costs
  - Increasing their effectiveness
  - Protect people, infrastructure & the coastal environment
  - Reduce storm & SLR impacts
  - Take actions that reduce risks

= **Regionality**

# Regional Project Mgt.

- Coordination of dredge mobilizations
- Beneficial use of dredged material
- Interagency coordination
- Coastalshed Analysis
  - CSPI prioritization



# Beneficial Use

- Beneficial use of dredged materials
  - Sand is a precious resource whose supply is not infinite
  - We are wasting sand & money due to bad policies & practices regarding the disposal of sand dredged from inlets & channels



# Regional Sediment Management Case Study

- Port of Oakland 50 Foot Deepening Project- 12 million cubic yards
  - Middle Harbor Enhancement Area- 6 million cubic yards
  - Hamilton Wetland Restoration- 2.5 million cubic yards
  - Montezuma Wetland Restoration- 3 million cubic yards



# Coordination

- Coordinate Federal & State Regulatory Requirements
  - Environmental Review
  - Permitting
- Share information & expertise
- Incorporation of stakeholders interests
  - Intergovernmental
  - NGOs

# Coastalshed Analysis:

## *CSPI Prioritization*

- Analyze resource need across coastalsheds
- Prioritize
  - Project reliability
  - Extent of resource risk
  - Relationship between projects
  - Risks
    - Structures (Residential and Commercial)
    - Environment & Habitat
    - Infrastructure
    - Critical Facilities (Hospitals, police, fire, etc.)
    - Evacuation Routes
    - Recreation

# Coastalshed Analysis

## *CSPI Prioritization Case Study*

- Fenwick Island- Hurricane Sandy
  - Beach project performed as expected
  - Flooding mostly occurred from bay side

Before



After



# Implementing Regionality

- #1: Regional Alliance of States & other Stakeholders
- #2: Alternative Sources of Funding\*

\* - *an important subject for a separate presentation*

# Build New Partnerships

- Regional Alliance
  - State governors & their water resource agencies
  - Corps & Federal resource agencies
  - Key stakeholders
    - NGOs
    - Private for-profits

WEST COAST GOVERNORS  
ALLIANCE on OCEAN HEALTH  
CALIFORNIA OREGON WASHINGTON



## Governors South Atlantic Alliance



US Army Corps of Engineers

Coastal Zone Management (CZM)



**NROC**  
Northeast Regional  
Ocean Council



COUNCIL OF  
GREAT LAKES  
GOVERNORS

CZMA





# Incentives to Cooperate

- Common regional interests
- Needs Increasing + Oncoming Watershed Budgeting
- Inadequate Federal & State Funding Resources
- Collaborative action urgently needed



# Thank You

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