Coastal Resiliency in New Jersey

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How Did We Get Here?
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New Jersey’s original settlements were along navigable waterways.

As a result, many of the State’s population centers are within flood hazard areas today.
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What is Resiliency?
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Resiliency
The ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events*

❖ Enhanced resiliency = effectively anticipating disasters and planning in advance to reduce disaster losses instead of merely coping with the aftermath of an event

$ Complicated and expensive – requiring the investment of time and resources prior to an event

*from Disaster Resilience: A National Imperative, National Academy of Science, 2012
Impacts of Superstorm Sandy

Two million households in the state lost power

346,000 homes were damaged or destroyed

Economic losses to businesses of up to $30 billion

37 people in NJ were killed
What is Resiliency?

- Building Beaches and Dunes
• Building Sea Walls

• Elevating Houses
• Retreating from Vulnerable Areas

Blue Acres Program:
• 935 offers made on homes in 14 municipalities
• 714 offers accepted
• 632 closings on homes in 14 municipalities
• 531 demolitions completed
What are the Costs?

• $375 million is currently committed for Blue Acres projects.
  • $185 million from FEMA Hazard Mitigation Grant Program
  • $175 million from HUD Community Disaster Block Grant – Disaster Recovery
  • $15 million from State bond funds

Blue Acres has spent more than $172 million on acquisitions to date.

• $647 million spent on completed projects
  • Federal contribution = $605 million
  • New Jersey’s contribution = $42 million
• $569 million spent on projects currently under construction
  • Federal contribution = $490 million
  • New Jersey’s contribution = $79 million

Since Superstorm Sandy, $1.216 billion have been spent on shore protection projects in New Jersey.
Why is Coastal Resiliency So Important in New Jersey?
New Jersey’s Coast

- 1,800 Miles of Tidal Coastline
- 239 Municipalities
- Inland, Seaward, Interstate
- $16 Billion Annual Tourism
- 1.5 Million Migratory Shorebirds
- 50-Species Commercial Fishing
42% of New Jersey’s municipalities are coastal municipalities.

Coastal Development
Coastal Hazards

Coastal hazards include:
- Chronic flooding
- Storm events of increasing intensity and frequency
- Sea level rise
- Erosion

These hazards threaten our coast, including the population, infrastructure, and habitat within our coastal areas.
New Jersey endures severe and chronic flooding due to its:

1. Geography
2. Location along the eastern seaboard
3. High level of development
   - New Jersey is the most densely populated state in the nation.
   - Proximity to New York and Philadelphia increases the demand for development.
   - Development increases flooding.
Flooding and storm events have been getting worse due to climate change.

- The atmosphere is getting warmer.
  - Warmer air holds more moisture, which results in increased flooding and larger storm events, such as Superstorm Sandy.
- Sea levels are rising.
- Land is subsiding.
• A sea level rise of 2 feet would affect or submerge about 1% of New Jersey’s land along the coastline.

• This is projected to occur by 2100.