Governors South Atlantic Alliance September 4, 2013 State of the Coast

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What We Will Talk About Today

- Lessons Learned Superstorm Sandy
- Challenges for Managing a Developed American Coast
- Where does GSAA fit in? How do we engage states?

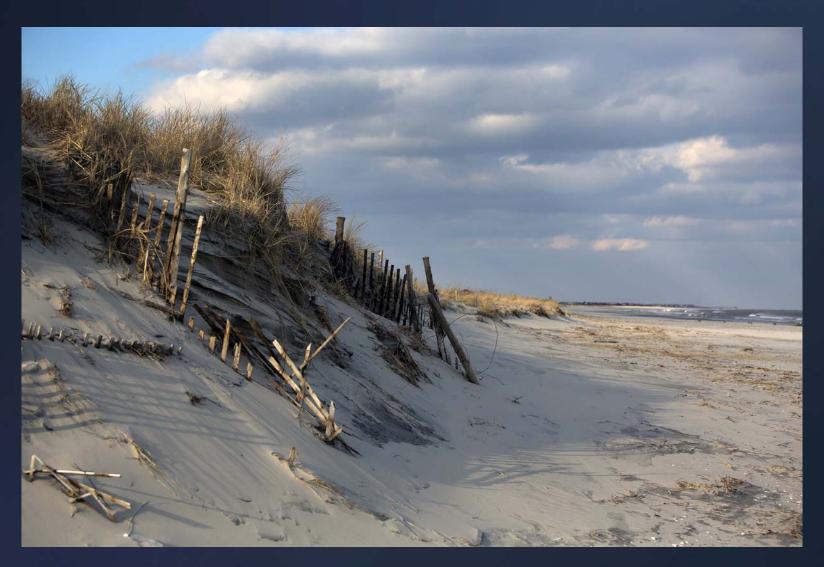
Superstorm Sandy

- Test your knowledge about some of the impacts of Superstorm Sandy.
- 1. Why did Fire Island, New York, fare better in Sandy than some of its neighbors?
 - A. Its rocky shoreline rebuffed the storm's winds and waves.
 - B. It had large seawalls along the coastline.
 - C. It had large dunes ranging from 10-20 feet in height that absorbed the storm waves.

The answer is C. The robust coastal dune system saved the bulk of the island's 4,500 homes. If you visited Avalon or Ocean City in New Jersey, post-Sandy you would have seen the same positive result for the same reason: Dunes make a difference.

Dunes that absorbed the waves

Avalon NJ



- 2. According to a U.S. Army Corps of Engineers spokesman, in the areas affected by Sandy every place where there was an engineered beach project in place, the community fared:
- A. Relatively poorly.
- B. Relatively well.
- C. It had no impact.

The answer is B. Although there was still flooding from the storm, the engineered beaches reduced the direct impacts of the storm. An engineered beach is designed for storm protection, since its engineering is based on extensive research and world-class computer modeling.

- 3. In coastal areas, with no tall dunes, that were hit by Sandy:
- A. Destruction was complete.
- B. Homes and businesses absorbed the waves.
- C. There was extensive flooding.
- D. All of the above.

The answer is D. In areas without healthy, high dunes, the destruction was complete. Without dunes to absorb the storm waves, the homes, businesses and other exposed infrastructure did the absorbing – and flooding was more extensive as well.

- 4. Sandy's damage increased where:
- A. Dunes were lowered because they obstructed the view.
- B. Segments of beach restoration projects were not built because people wouldn't sign the necessary construction easements.
- C. Both.
- D. Neither.

The answer is C. Unfortunately, storm damage increased where dunes were lower in height AND where beach project segments were not built (meaning the beach in front of those dunes was not as wide). Although some dunes are better than no dunes, they should be designed at the appropriate storm protection height for the beach and upland properties at hand. Dunes are meant for shore protection — which means protecting coastal communities — one of the benefits of wider beaches as well.

Dunes according to Christie:



"Look at the communities that had them (tall and wide dunes) and look at the communities that didn't. Look at the level of destruction in both. There should no longer be any debate about whether or not these dune systems work to protect both the coastline homes and the inland areas and property there. They work."

- 5. The lessons of Sandy show us which of the following can limit storm damages:
- A. Wide beach.
- B. High dunes.
- C. Elevated homes.
- D. All of the above.

The answer is D. Superstorm Sandy proved again and again that, along the coast, wide beaches, high dunes and elevated homes were the combination that resulted in the least storm damage and least overall community misery. Wide beaches and high dunes provided storm protection, while elevated homes limited (or even eliminated) the impacts of flooding.

My Beach – Why I became Mayor in 1999



Caswell Beach, North Carolina

American Coastal Challenges



Where are we going??

Applying what we learned from Sandy

Sustainable Funding

Determine the Amount Needed

\$82 billion Federal to fix NY/NJ after Sandy How much could have prevented some of that?

Determine the Source of Funding

User fees, much like state occupancy tax

Some percentage of taxes paid by coastal owners

Hot dog tax

State Involvement

- With the recent reduction in federal funding for coastal projects, states will have to pick up the slack OR cause the federals to get back into the beach building business with vigor.
- Regional approach? With beach building going on in each of the GSAA states, should GSAA be a bigger part of how funding occurs?
- Managing developed shorelines will reduce storm damages, it's a win-win.

Government Creates Quandary

Proposed Critical Habitat Loggerhead Sea Turtles

- Loggerheads have been protected by ESA since 1978
- Critical habitat could have been instituted then
- Even recently, USFWS stated designation was not needed
- Dramatic differences in density of <u>nests / mile</u>

FL 120.00

GA 24.00

SC 24.80

NC 3.25

Per USFWS, the Primary Threats

...that will impact critical habitat and require special management or protection. These threats include (among others):

- Recreational beach use
- Beach sand placement activities
- In-water shoreline alterations
- Artificial lighting
- Beach erosion
- Climate change
- Habitat obstructions

But...

ESA says:

- "designation of critical habitat is not prudent when one or both of the following situations exist:
- (1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or
- (2) such designation of critical habitat would not be beneficial to the species."
- In its recent economic analysis, the USFWS states that the designation is not needed, so the assumption is it would not be beneficial!!

Regulation by lawsuit?

- The <u>only</u> reason the critical habitat designation is <u>even being proposed</u> now is to settle a lawsuit that was brought by nongovernmental organizations (NGOs)
- Now some of the local governments included in the proposed habitat area are threatening to sue if the habitat is imposed.
- Is that how we want to govern and regulate?
 Lawsuit for lawsuit?

Other issues?

- I haven't even mentioned:
 - Sea Level Rise
 - Research needed to maximize and improve management efforts
 - Funding for coastal education
 - Loss of experts in the field
 - More and More!



American Shore & Beach Preservation Association

Advocating for healthy coastlines

Suggestions from GSAA?
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