Communicating About Climate Change and its Impacts in New Jersey's Coastal Communities

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URBAN COAST INSTITUTE



#### What is Climate Change?



# What is Climate Change? First, what is weather?

- Atmospheric conditions within small geographic



Carbon dioxide dissolves in the ocean to make carbonic acid. The amount of acid has increased over the past 150 years.

CO<sub>2</sub>

H<sub>2</sub>O

These changes in ocean chemistry can disrupt the entire marine food web.

pre-1850 average pH 8.2

See ?

current average pH 8.1

extra acid blocks growth of corals and shellfish

some species in the food web benefit while others decline

future

H<sub>2</sub>CO<sub>3</sub>

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of time...

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## Is New Jersey Different?

#### http://slrviewer.rutgers.edu/

### Type of Resiliency...





#### Hurricane Categories

Category 1 and 2

Category 3 and 4



The U.S. Army Corps of Engineers storm surge data/maps are to be used in combination with other GIS data or satellite imagery to



#### Type of Posilioney

MIAMI FLOPIDA LISA



# Time for a Game / Challenge!

- How can we be resilient and plan for Monmouth Beach for current and future forecasted climate change?
- Let's see who can do the best!?!



