

### Group Activity

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# Objectives and agenda

- Objectives

- ▶ Participants should be comfortable retrieving, organizing, and analyzing a SWMP dataset
- ▶ Understand the questions and use appropriate methods

- Agenda

- ▶ Dataset description and questions
- ▶ Group activity

# Dataset description

## Hurricane Sandy

- Largest Atlantic hurricane on record (by diameter)
- Second costliest US hurricane
- US landfall October 29<sup>th</sup>, 2012
- Cat 2 on landfall
- Rainfall exceeding 12 inches, 13 foot storm surge in some areas



# Dataset description

Several NERRS reserves were impacted, landfall directly over Jacques Cousteau



# Dataset description

We will look at the water quality, nutrients, and weather data for 2012 and 2013 for Jacques Cousteau – ‘dataset4’ folder

## Overall question

How did the hurricane impact the reserve?

## Specific questions

- Are there noticeable changes in the time series? Which parameters?
- Are the long-term means different before and after landfall?
- Can the effects be detected prior to landfall?
- How long did the effects persist after the storm?

# Dataset description

## Specific questions

- Are there noticeable changes in the time series? Which parameters?
- Are the long-term means different before and after landfall?
- Can the effects be detected prior to landfall?
- How long did the effects persist after the storm?

## How will you address these questions?

- What parameters or stations will you consider?
- How will you subset, combine, aggregate?
- What plots will you create?
- How will you interpret your results?

Resources - cookbook, SWMPPr tutorial, instructors, your table buddies!



NERRS / SWMP

Data Analysis Workshop: *Time Series*

November 17, 2014

***Questions??***