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### It Takes a Village to Build a Sea Level Rise App: Civic Hacking as an Approach to Informing Citizens About Sea Level Rise in Miami

### Susan Jacobson

Journalism and Mass Communications Department, Florida International University, sujacobs@fiu.edu

### Juliet Pinto

School of Journalism and Mass Communication, Florida International University, jpinto@fiu.edu

### Robert E. Gutsche Jr.

School of Journalism and Mass Communication, Florida International University, rgutsche@fiu.edu

#### Kate MacMillin

Florida International University

#### Jennifer Fu

Florida International University, Fujen@fiu.edu

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# It Takes a Village to Build a Sea Level Rise App:

Civic Hacking as an Approach to Informing Citizens About Sea Level Rise in Miami

Susan Jacobson, PhD
Juliet Pinto, PhD
Robert Gutsche, PhD
Kate MacMillin
Jennifer Fu

School of Journalism & Mass Communication Florida International University

## I am not a scientist...



Working Group on Environment, Science & Risk Communication ● IAMCR 2015

## ONA Journalism Curriculum Challenge Grant

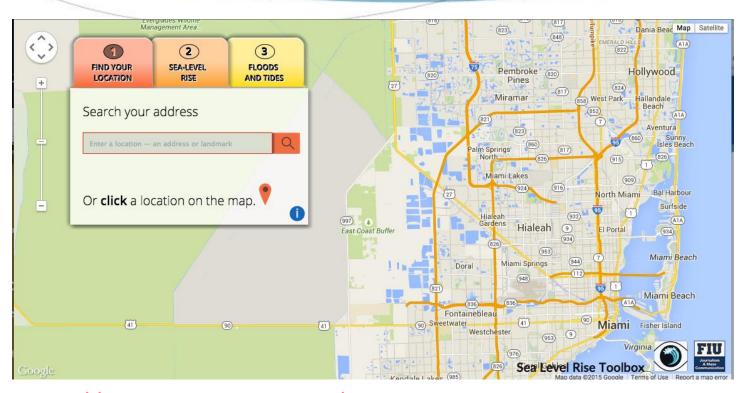
**King Tide Day** 



### **Student-Produced Documentary**



### Sea Level Rise Toolbox



http://eyesontherise.org/app

## SLR Toolbox: Goals

- Focus on South Florida. Inform citizens of the potential risk of sea level rise to their homes and businesses.
- Make it easy to use for a general news audience (ie: not scientists)
- Create a database of flood reports so that citizens may better understand when and where flooding occurs.
- Allow citizens to contribute crowdsourced geographic information to the flood report database.

## Hacking the App





















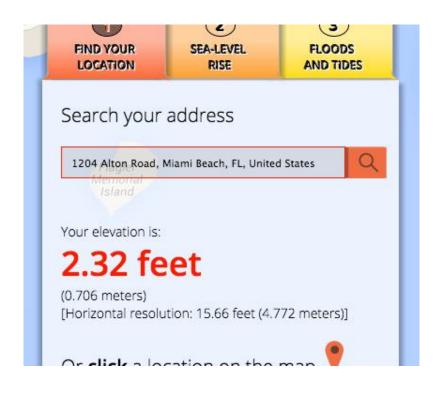
## Hacking the App

**GIS Center** 

- Brainstormed ideas for features and designs
  - Students, scientists, faculty, hacktivists, citizens
- Identified data sources
  - Code for Miami, Miami-Dade County, Open 311
- Created prototype
  - Conducted user testing on students, citizens, hacktivists
- Tested and redesigned prototype
  - Worked with Fusion
- Launched application at BarCamp Miami

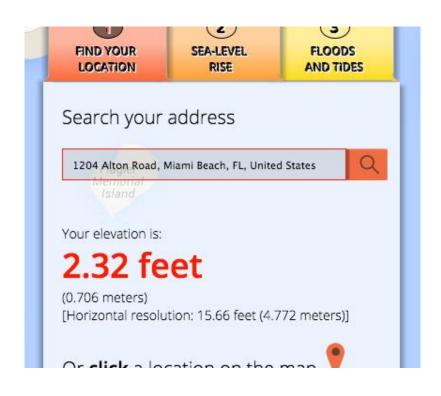
## **SLR Toolbox: Challenges**

- Politics
- Representing years vs. feet
- Creating interface for a lay audience
- Providing context
- Scientific information vs. journalism
  - Google Elevation vs. LiDAR
  - Visualizing .5 feet on 1-foot scale



## **SLR Toolbox: Next Steps**

- Increase transparency of data
- Build and design native IOS and Android applications
- Implement Flood Report Database
  - Add local sources
- Create citizen flood report tool
  - K-12 flood report curriculum
- Integrate narrative into application



### Thank You!

### Susan Jacobson, PhD

Assistant Professor, Florida International University <a href="mailto:sujacobs@fiu.edu">sujacobs@fiu.edu</a>