

Citizen Science

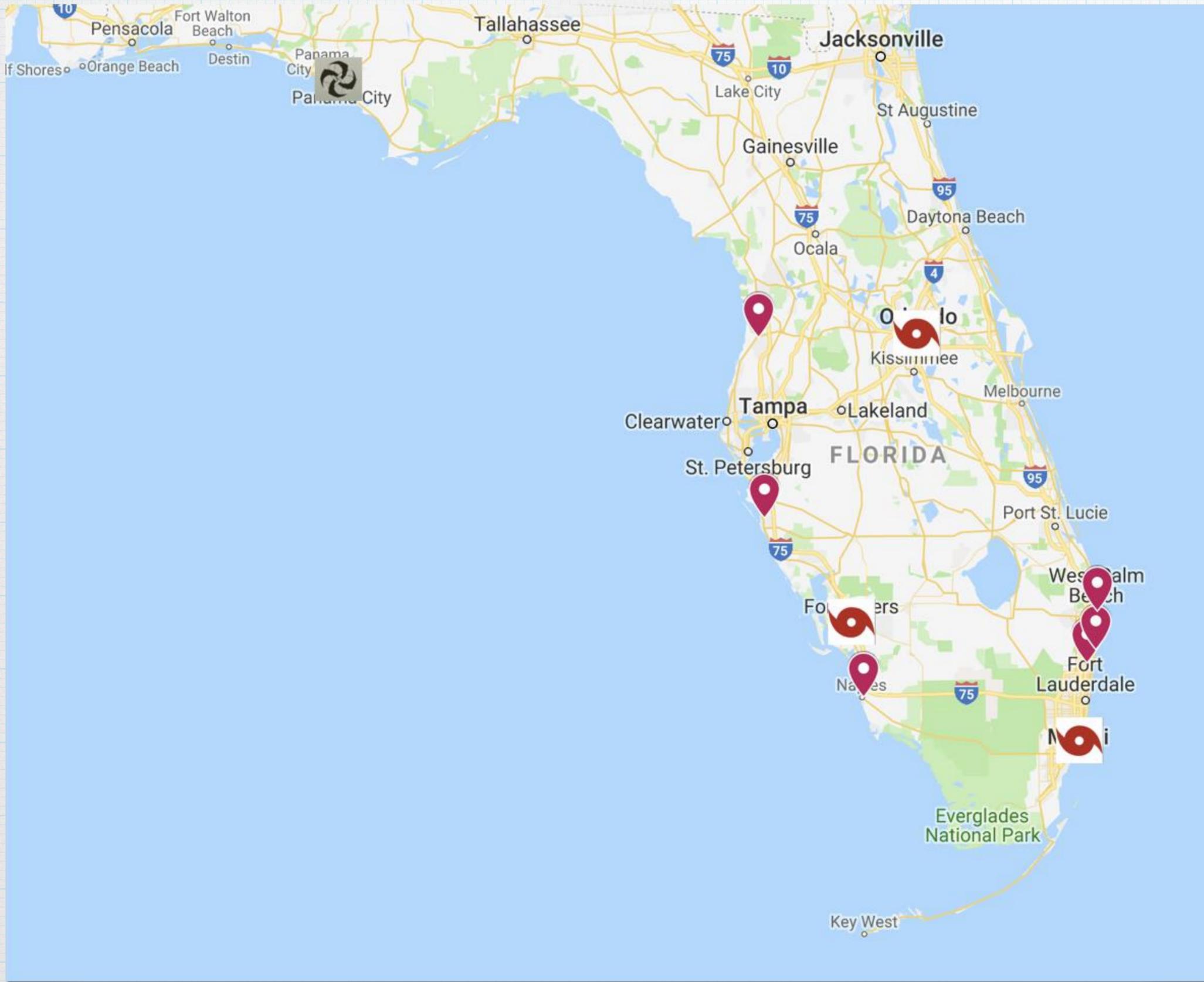
Janice T. Booher, MS

Director UUJF Climate Resilience Ministry

October 31, 2018

JJLBooher@comcast.net





SEYM

Simplicity, Peace, Integrity, Community, Equality, and Sustainability are our central testimonies: a way of life, in the Light, and a call to action to work for a culture of peace, justice, and care for the Earth.

-Southeastern Yearly Meeting of the Religious Society of Friends



In
Partnership
with

Center for Public Service Communications

NLM/NIH Community Health Mapping Initiative



In Cooperation With

New Florida Majority

FIU School of Communication + Journalism

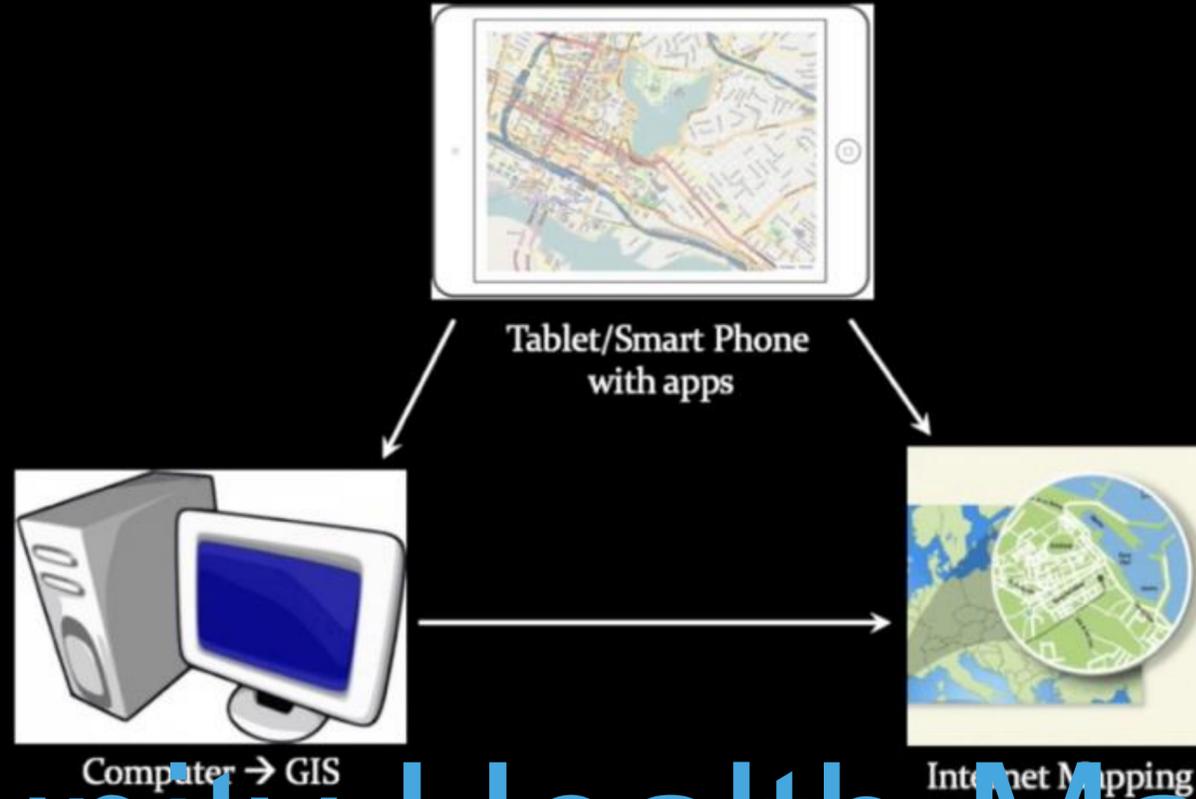
Catalyst Miami

City of Miami

Miami Dade County



The Community Health Mapping Workflow



Community Health Maps Work
Flow

COMMUNITY DEPLOYMENTS

Hurricane Damage

See deployments of Fulcrum Community in hurricane affected areas.

FILTER +

ALL

SPECIAL PROJECTS

TORNADO

FLOOD

FIRE

HURRICANE



Post Irma & Maria Damage Assessment

A team of engineering faculty with NSF support are conducting damage assessments. Collaborators are from Auburn University, Florida Institute of Technology, Florida International University, University of Florida, University of Notre Dame, & James Cook University

[View Community](#)

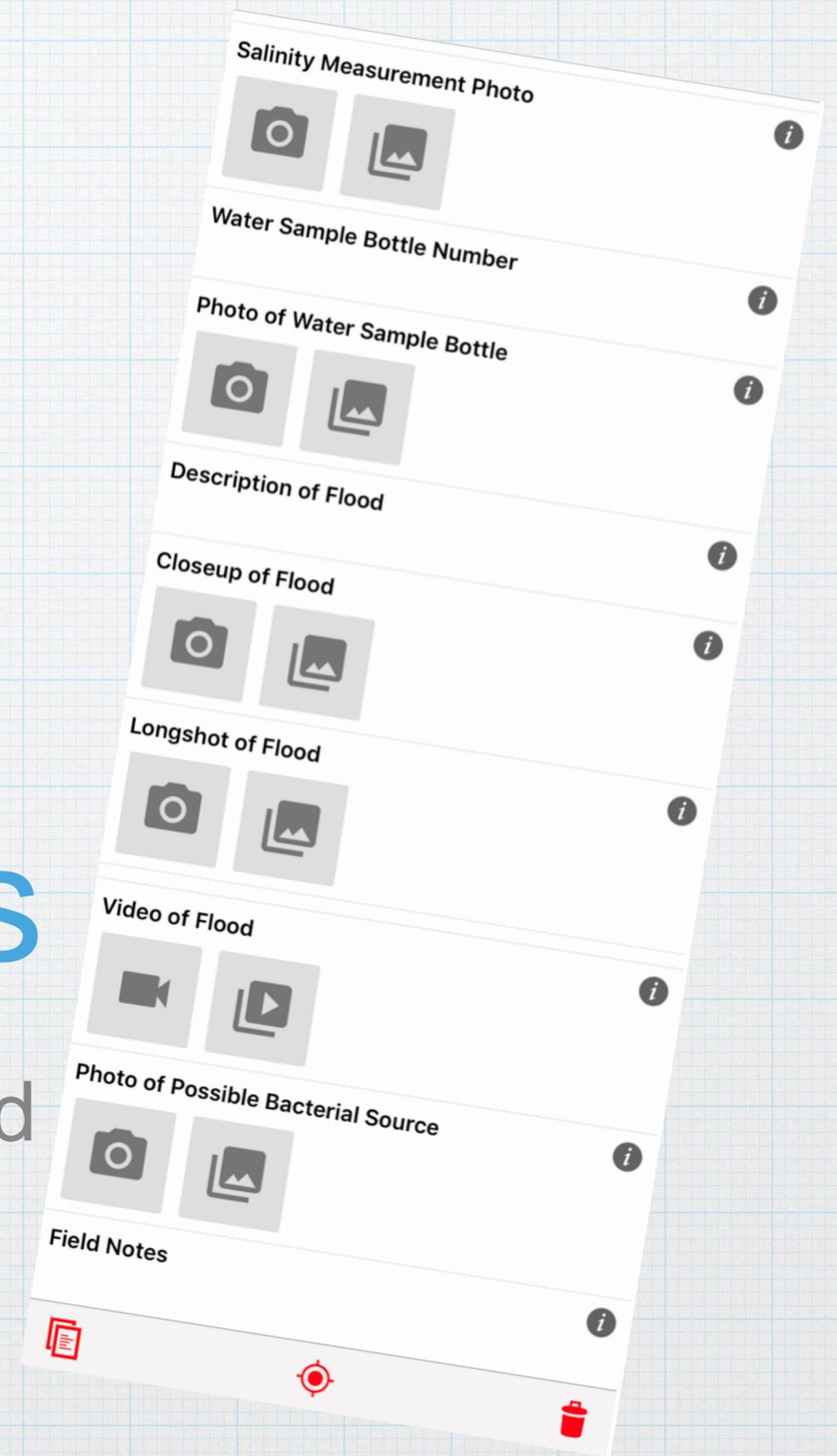
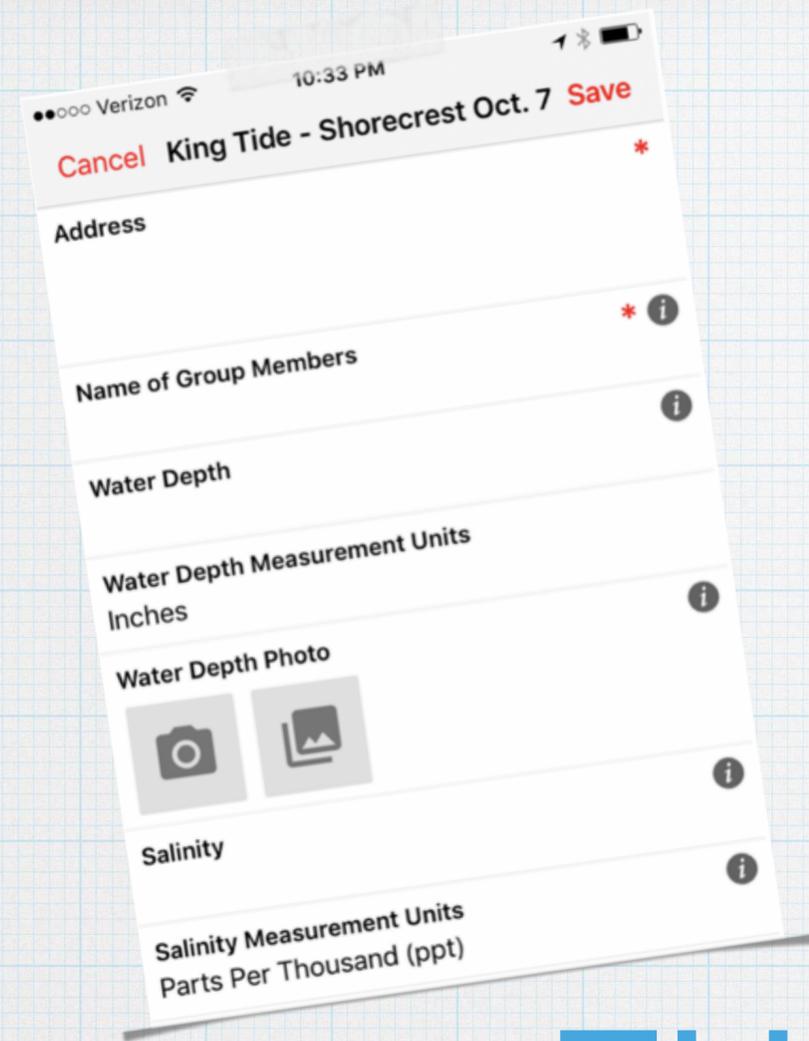


Harvey Relief

Houston, TX was inundated with more than 50 inches of rain after Hurricane Harvey made landfall Aug. 26 and stalled over the area.

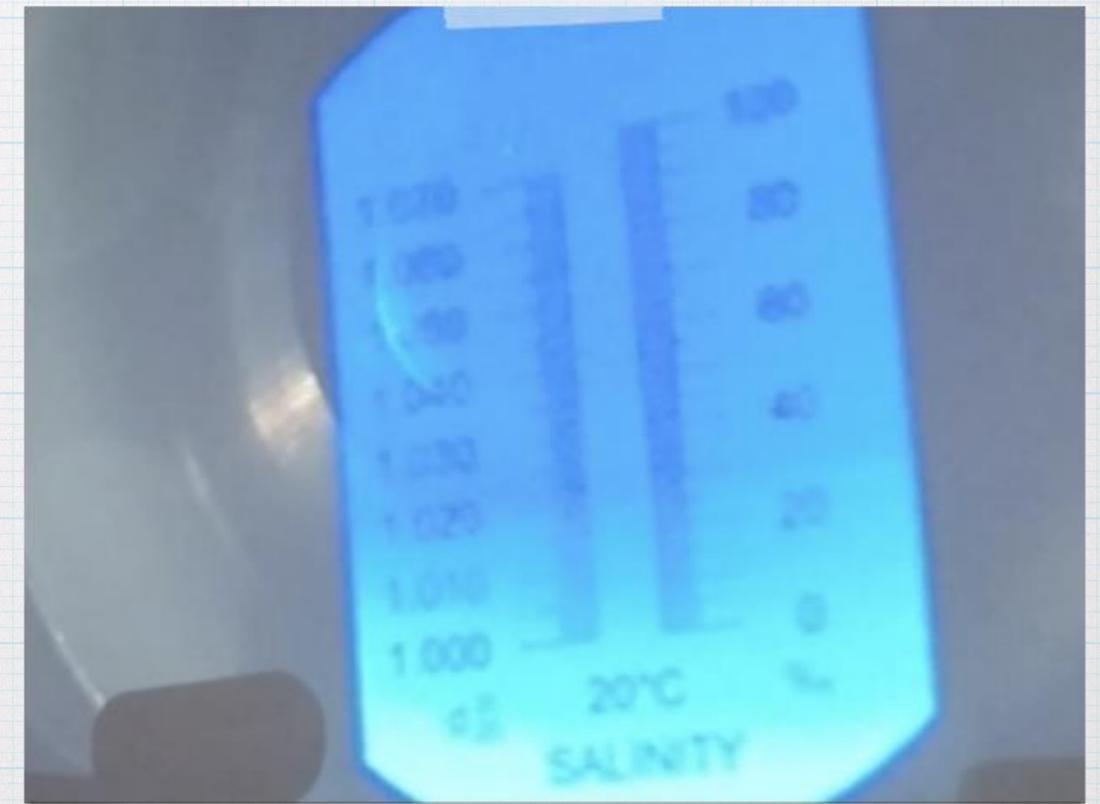
[View Community](#)





FULCRUM Apps

Unlimited Photos + Video Upload



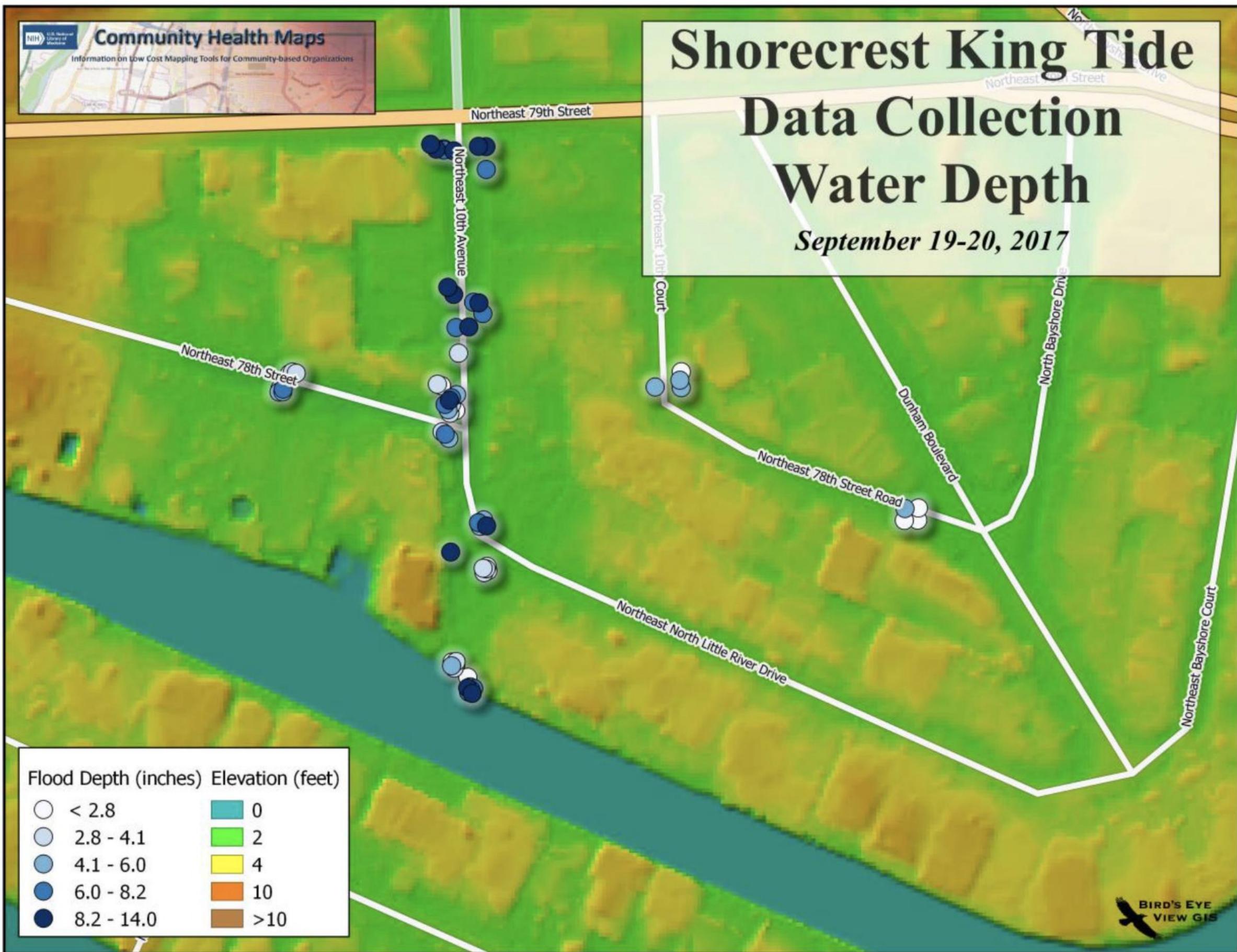


Shorecrest King Tide

Data Collection

Water Depth

September 19-20, 2017



Flood Depth (inches)	Elevation (feet)
 < 2.8	 0
 2.8 - 4.1	 2
 4.1 - 6.0	 4
 6.0 - 8.2	 10
 8.2 - 14.0	 >10

Coliform Testing

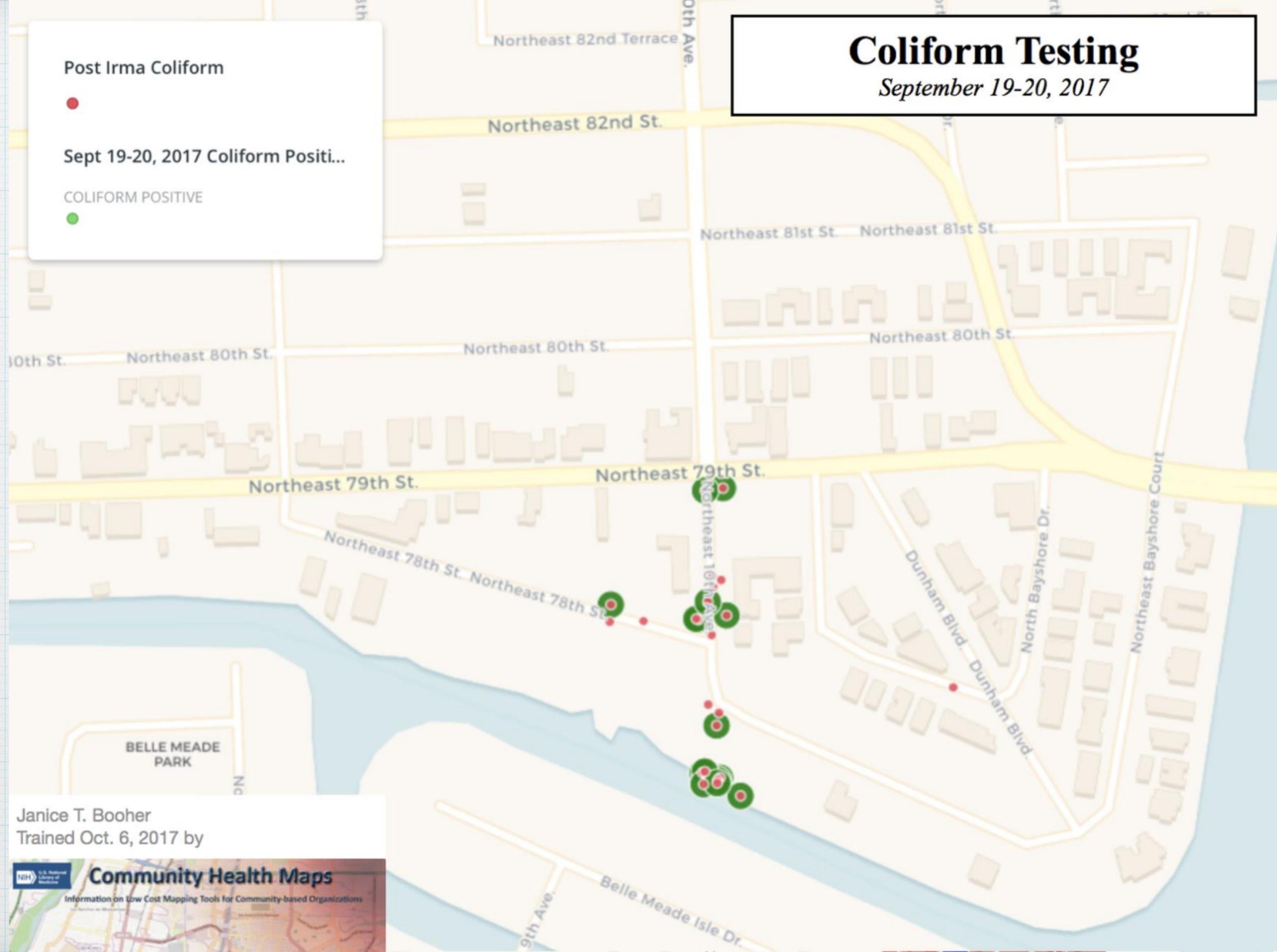
September 19-20, 2017

Post Irma Coliform



Sept 19-20, 2017 Coliform Positi...

COLIFORM POSITIVE



Janice T. Booher
Trained Oct. 6, 2017 by





King Tide Citizen Science Challenges

- * Understanding Units
- * Interpolation
- * Labeling Discipline in the Field
- * Chain of Custody in the Field
- * Protective Gear in the Field



NFL Disaster Resilience Initiative Collaborative Platform

- * Earth Charter Institute
- * Faith Partners (East Bay Baptist Church, Palo Alto Church of Christ, UU Church of Pensacola, UU Church of Tallahassee, UU Fellowship of Bay County, and more...)
- * Future Flash
- * Johnson Brothers Wholesale Meats
- * Lead Coalition of Bay County
- * League of Women Voters
- * Miami Climate Alliance
- * Movement 4 Change
- * Mutual Aid Disaster Relief
- * NAACP
- * Third Wave Volunteers
- * UF-IFAS Extension Agents
- * Unitarian Universalist Justice Florida
- * And many more...

The screenshot shows the North Florida Resilience System website. At the top, there is a navigation menu with links for Home, Forum, Groups, Maps, and Resources. Below this, there are sections for user login, navigation, and related inks. The main content area features two news items: 'Tropical Weather - Michael - News and Information Resources' and 'Hurricane Preparedness - Information Resources'. Each news item includes a date, author, and a list of links to related resources. The website also has social media icons for Facebook and Twitter.

North Florida Resilience System

Home Forum Groups Maps Resources

User login

Username *

Password *

[Log in using OpenID](#)

[Create new account](#)

[Request new password](#)

Navigation

- ▶ Blogs
- ▶ Search
- Recent posts
- Calendar

Language

Related inks

We Have / We Need

Anonymous's groups in this site

Tropical Weather - Michael - News and Information Resources

Tue, 2018-10-09 00:09 — Kathy Gilbeaux

AN EXPANDING LIST OF NEWS AND INFORMATION RESOURCES RELATED TO TROPICAL WEATHER - MICHAEL . . .

[CLICK HERE - WJHG - Hurricane Michael Recovery Information - by County](#)

[CLICK HERE - Air Force Personnel Center - HURRICANE MICHAEL RECOVERY EFFORTS](#)

[CLICK HERE - Need help after Hurricane Michael? Want to help? Here's a list](#)

[CLICK HERE - Free legal assistance available for Florida Hurricane Michael survivors](#)

[CLICK HERE - FEMA - Debris Removal Guidelines](#)

[CLICK HERE - Florida Division of Emergency Management \(FDEM\) - News Archive - 2018](#)

[CLICK HERE - Without power and living in tents: Florida Panhandle struggles after Michael - October 26, 2018](#)

Country / Region Tags: [US](#) - [SouthEast](#)

General Topic Tags: [Climate](#) [Emergency Management](#) [Extreme Weather](#)

Problem, Solution, SitRep, or?: [Situation Report](#)

[Read more](#) [Log in or register to post comments](#)

Hurricane Preparedness - Information Resources

Thu, 2016-10-06 00:42 — Kathy Gilbeaux

General Topic Tags: [Climate](#) [Extreme Weather](#) [Oceans](#) [Visualization](#)

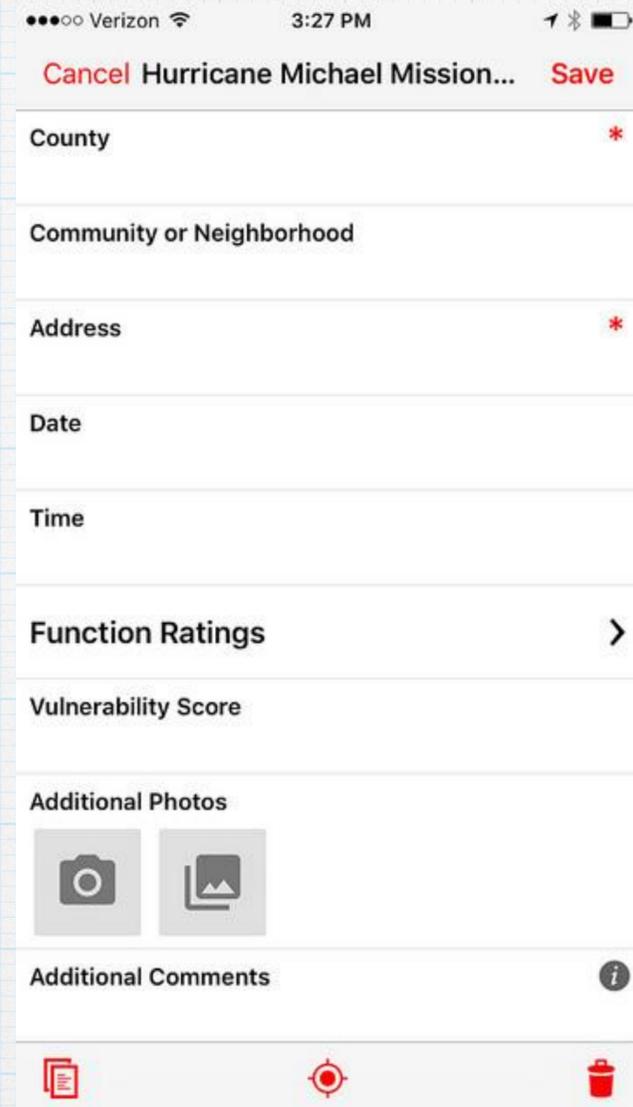
Problem, Solution, SitRep, or?: [Situation Report](#)

AN EXPANDING LIST OF INFORMATION RESOURCES FOR HURRICANE PREPAREDNESS . . .

[National Hurricane Center - Active Tropical Cyclones](#)
<http://www.nhc.noaa.gov/cyclones/>

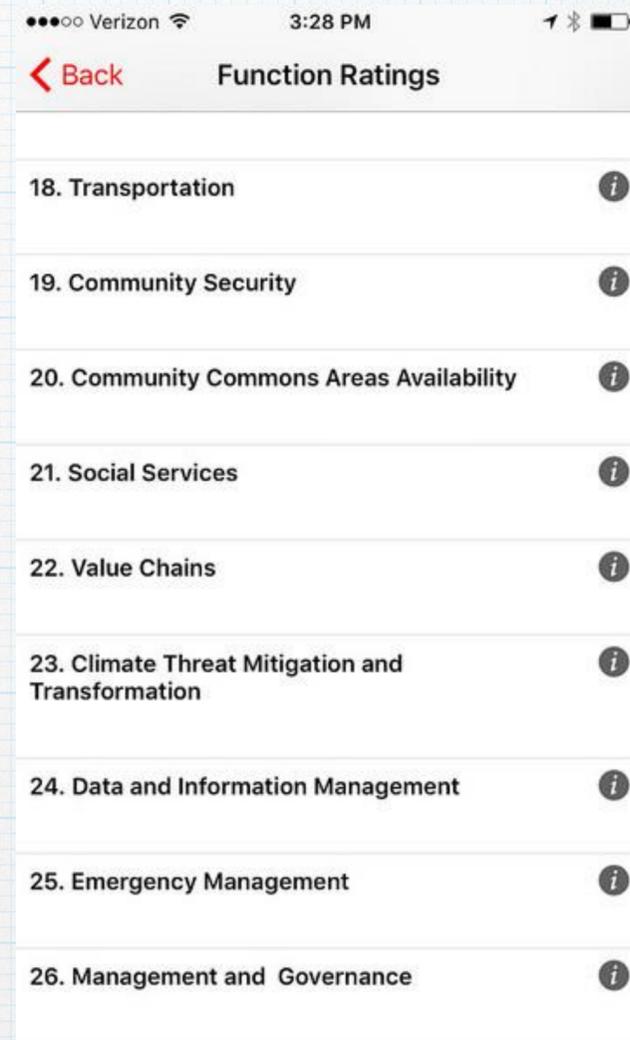
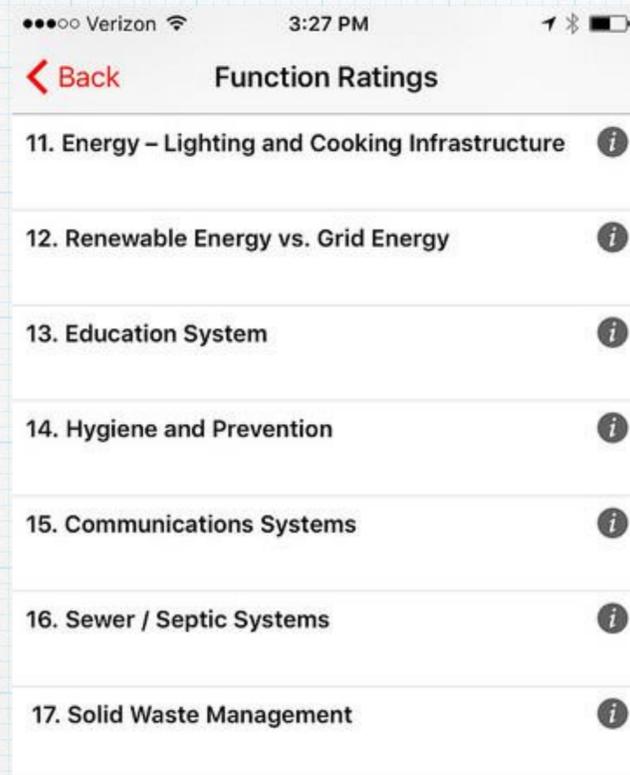
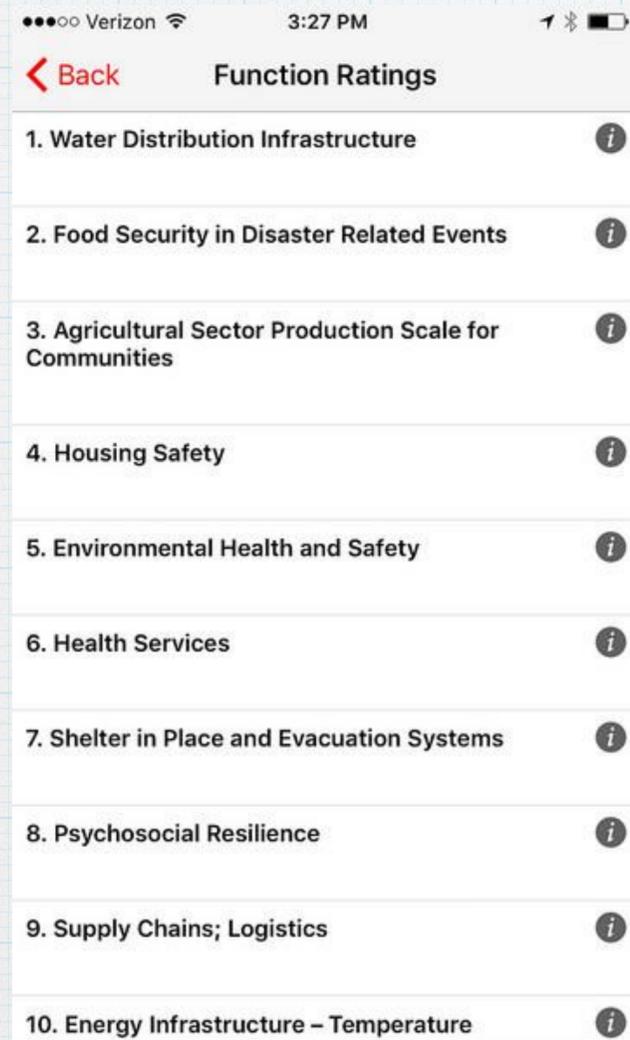
[National Hurricane Center - Atlantic 5-Day Graphical Tropical Weather Outlook](#)
<http://www.nhc.noaa.gov/gtwo.php?basin=atlc&fdays=5>

[Read more](#) [Log in or register to post comments](#)



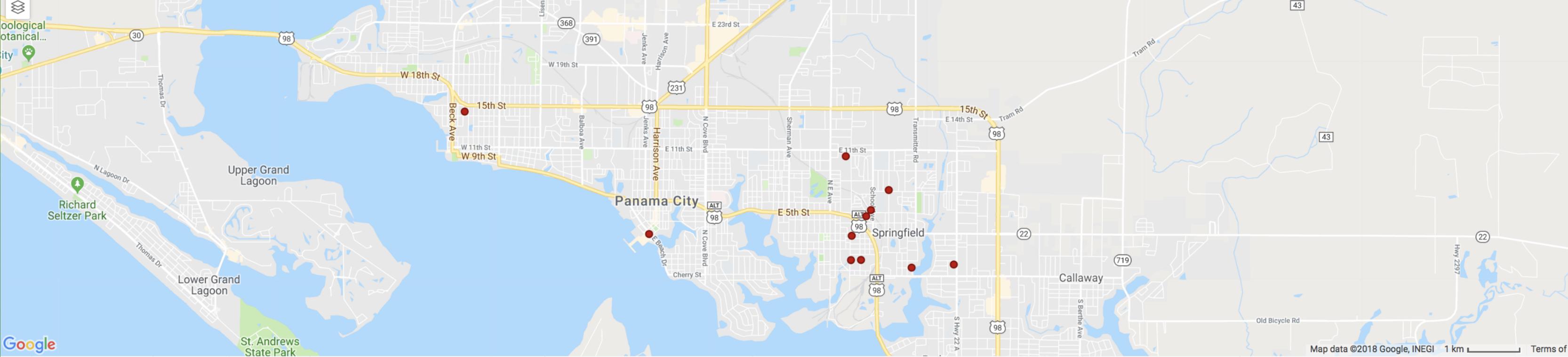
Hurricane Michael Mission Critical Function Assessment

Community Leaders, Elected Officials,
Pastors



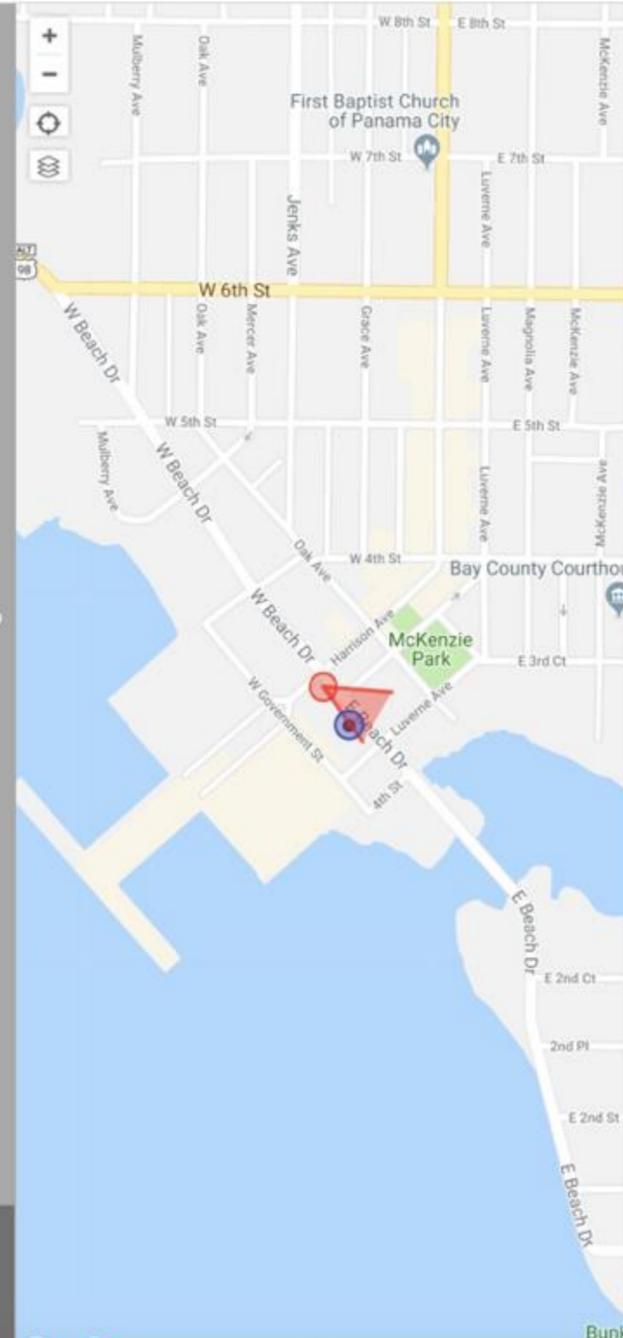
Mission Critical Functions Assessments

Panama City Housing Survey



Title	Project	Assigned	Building Address	Building Address (sub_thoroughfare)	Building Address (thoroughfare)	Building Address (suite)	Building Address (locality)	Building Address (sub_admin_area)	Building Address (admin)
24 Harrison Ave Panama City FL 32401 US		Janice Booher	24 Harrison Ave Panama City FL 32401 US	24	Harrison Ave		Panama City	Bay	FL
206 Everitt Ave Panama City FL 32401 US		Janice Booher	206 Everitt Ave Panama City FL 32401 US	206	Everitt Ave		Panama City	Polk	FL
500 Powell Ave Panama City FL 32401 US		Janice Booher	500 Powell Ave Panama City FL 32401 US	500	Powell Ave		Panama City	Bay	FL
409 School Ave Panama City FL 32401 US		Janice Booher	409 School Ave Panama City FL 32401 US	409	School Ave		Panama City	Bay	FL
146 Everitt Ave. Panama City FL 34201 US		Janice Booher	146 Everitt Ave. Panama City FL 34201 US	146	Everitt Ave.		Panama City	Bay	FL
149 N Highway 22A Panama City FL 32404 US		Janice Booher	149 N Highway 22A Panama City FL 32404 US	149	N Highway 22A		Panama City	Bay	FL
3207 E 1st Court Panama City FL 32401 US		Janice Booher	3207 E 1st Court Panama City FL 32401 US	3207	E 1st Court		Panama City	Bay	FL

Captured by Janice Booher near East Beach Drive, Panama City 2 days ago



Share

<https://web.fulcrumapp.com/shares/e->

Download

- Original
- Large
- Thumbnail

Metadata

Date: 2018-10-27 12:25:22
Make/Model: Apple iPhone 7
Software: Fulcrum iOS 2.17.2 (3478), iOS 10.3.2, Apple, iPhone 7
Dimensions: 1080 x 810 (0.9MP)
Size: 331 KB
Latitude: 30.153497
Longitude: -85.662192
Accuracy: 5.0m
Altitude: 2.3m
Direction: 120°
Distance: 70.5m



Challenges

- * Training required before Response
- * Download Apps before entering disaster zone
- * Save on site/Synchronize when there are comms
- * Without training, very simple apps are needed
- * Redundancies are necessary in a disaster Zone
(FULCRUM Apps + Google Surveys + Paper Surveys)

PLAN AHEAD

Pre-position Assets

