Florida Coastal Resilience Forum
Quarterly Meeting

August 8, 2018 Notes

I. Welcome and Introductions – Presented by Whitney Gray

II. East Central Florida Regional Resilience Project (ECFRRP)– Presented by Tara McCue
- Provided a slide show, on the actions and plans that the ECFRPC have been involved in. Their engagements with their stakeholders, funding, and workshops that have taken place.
- Contact information for Tara McCue with ECFRPC
  - Director of Planning and Community Development
  - Main Phone Number: 407/245-0300
  - Mailing Address: 455 N. Garland Avenue, Suite 414, Orlando, FL 32801
  - Email: tara@ecfrpc.org
  - Website: http://www.ecfrpc.org/

III. Tampa Bay Coalition Update – Presented by Heather Young
- Memorandum of Understanding was developed in June. So far will be working with Citrus County, Pinellas County, City of Palmetto, City of St. Petersburg, and the City of Treasure Island to date. Hoping more will join after elections are held.
- Contact information for Heather Young with TBPRC
  - Senior Environmental Planner
  - Main Phone Number: 727-570-5151
  - Mailing Address: 4000 Gateway Centre Blvd, Suite 100, Pinellas Park, FL 33782
  - Email: heather@tbrpc.org
  - Website: http://www.tbrpc.org/

IV. Hillsborough County Sea Level Rise Study – Presented by Gene Henry
- Provided a slide show, on the sea level rise study that was conducted. Work was conducted in conjunction with the University of South Florida.
- Looking at the effects of natural resources as well as social changes through vulnerability assessments, as the starting point for a multi-year project to ultimately provide recommendations for possible laws and codes for the future.
- Contact information for Gene Henry
  - Email: HenryE@HillsboroughCounty.org

V. Case Law Update – Presented by Thomas Ruppert
- Discussed the Jordan vs. St. John's County case and its outcomes. Asserted that failing to maintain a road is a property taking claim.
- Discussed St. Bernard Parish Government and the Mississippi River Gulf Outlet canal, which found that maintenance arguments are a tort claim and not a property taking claim.

- There is an article coming out in October that analyzes the weaknesses in the Jordan Case and how the Corps' levee case contradicted the Jordan case.
- Question presented by Allan with Pasco County. Asked to confirm that if a government has the responsibility to act, but it's a matter of inability to solve the problem, it is a civil case.
- Maintenance is required via the legal perspective, but that is different than replacing the entire road.
- Contact information for Thomas Ruppert with University of Florida
  - Coastal Planning Specialist
  - Main Phone Number: 352-392-5113
  - Mailing Address: PO Box 110400, Gainesville, FL 32611
  - Email: truppert@ufl.edu
  - Website: https://www.flseagrant.org/about/staff/ruppert/

VI. Statewide GIS – Presented by Richard Butgereit

- Presented a slideshow regarding the new LiDAR Project that is being implemented.
- The best data density to acquire is level 1.
- Utilizing existing data (that meets the standards) and aerials some counties and other agencies have already produced. This is for a basic understanding of water level rise due to storms and time, and to measure the flood risk.
- Question presented by Kelli Hammer Levy with Pinellas County. Kelly indicated that Pinellas County flew their own LiDAR December 2017, and that the data that was presented didn't indicate it. It was discussed that there are some questions about that original fly over and it would be discussed off-line.
- Question was presented by Peter Sheng, with the University of Florida. Peter asked if Collier County and Miami-Dade County would be re-flown, since the data indicated that they already met the level 1 data collection. It was discussed that the information shown today included those two areas as completed, yet in actuality the work will start up again this fall, because they couldn't complete it before seasonal weather changes shut it down.
- Question was presented by Whitney Gray. How will local governments be able to access this data once it is all completed and compiled. USGS and other federal partners are utilizing Amazon Cloud, and NOAA has the Digital Coast website for data as well. The state is working on a portal for the data along with Water Management District partners for their use. Local governments should partner with and keep in touch with their Water Management Districts for the best updates.
- Contact information for Richard Bugereit with FDEM, SERT
  - Chief Information Officer
  - Main Phone Number: 850-851-4701
  - Email: Richard.butgereit@em.myflorida.com
  - Website: https://www.slideshare.net/governmenttechnology/fl-dgs-18-presentation-emergency-management-in-florida-by-richard-butgereit

VII. Cultural Resources – Impacts and Options – Presented by Gary Ellis

- Discussed the focus on micro level study along the central coast of Florida. The purpose of the analysis that has been completed is to look at the elevation levels, to

see what archaeological assets are staying and what is disappearing, from the cultural resources as well as natural environment losses.

- Question presented by Whitney Gray. Is there a particular spot that is the most vulnerable in the state? Yes, it is St. Augustine. 49% of statewide archeological inventory has been destroyed since 1975. These are non-renewable resources that are being lost.
- Contact information for Gary Ellis with Gulf Archaeology Research Institute
  - Director Emeritus
  - Main Phone Number: (732) 995-3818 or (352) 464-4274
  - Mailing Address: 5990 N. Tallahassee Road, Crystal River, FL 34428
  - Email: gari.arch@gmail.com
  - Website: https://gulfarchaeology.org/

VIII. Florida Climate Institute – Presented by Carolyn Cox

- Working with 10 universities
- Produced a book last December, with 20 chapters, all of which can be located on the website. https://floridaclimateinstitute.org/resources/florida-climate-book.
- They also put out a monthly newsletter that includes funding opportunities.
- Contact information for Carolyn Cox with Florida Climate Institute
  - Coordinator
  - Main Phone Number: 352-392-1864 ext.255mber:
  - Mailing Address: 255 Frazier Rogers Hall, Gainesville, FL 32611
  - Email: crcox@ufl.edu;
  - Website: crcox@ufl.edu

IX. Question from Kelli Levy, from Pinellas County

- Looking for anyone who has information on management plans for operating a department related to maintenance and management to climate impacts. This would be something that could be utilized on a day-to-day basis, as to items to look for and correct, to lesson climate changes.
- Palm Beach County mentioned that they would make contact with Kelli off line.
- Margarita Wells, with Miami Beach, advised that they could provide some information for Kelli as well.
- Contact information for Kelli Levy with Pinellas County
  - Division Director, Pinellas County Environmental Management
  - Email: klevy@pinellascounty.org
  - Website: http://www.pinellascounty.org/default.htm

X. Question from Rebecca DeLarosa from Palm Beach County

- Rachel filled in for Rebecca who wasn't able to make the meeting.
- Rebecca wanted to know what efforts were being utilized with regards to solar energy.
- Margarita Wells, with Miami Beach, advised that she has some information that she could share with Rebecca off line.
- Question was presented by Anita, with Franklin County advised that they are putting in solar panels to power their waste water, for a savings of $60K per year.

- It was discussed that FRCP doesn't include solar energy in its wheelhouse, currently. The unit is working on coastal effects in sea level rise at this time.
- Contact information for Rebecca DeLarosa with Palm Beach County
  - Legislative Affairs Director
  - Main Phone Number: 561-355-3451
  - Email: rdelarosa@pbcgov.org
  - Website: http://discover.pbcgov.org/Pages/default.aspx

XI. Status of 2018 FRCP Grants & Resilience Planning Grants 2018-2019 – Presented by Whitney Gray

- Guidebook
  - There is a New Florida Adaptation Planning Guidebook which is a culmination of the Community Resilience Initiative that was funded by DEP and carried out by DEO, with funds from the Florida Coastal Management Program.
  - Shows best practices in adaptation planning, along with step-by-step process to do adaptation planning.
  - There are examples included along with an update to the PDRP Addendum.
  - You can access the Guidebook on the website at: https://floridadep.gov/fco/florida-resilient-coastlines-program/documents/adaptation-planning-guidebook
- Funding provided
  - FRCP has provided 13 grants from federal funds over $576,000 that will run into 2019.
  - These grants deal with the Peril of Flood compliance for municipalities. Also helping communities with step one to do their vulnerability assessment to go to adaptation plans.
  - Currently we have a state allocation budgeted for approximately $500,000 that is currently on our website for applications to be submitted by **September 7, 2018 by 4:00 PM ET.** https://floridadep.gov/fco/florida-resilient-coastlines-program/content/funding-opportunities
  - These funds are for Peril of flood, development of adaptation action areas, resilience plans, and discussion for support with tools and outreach tools.
- Website
  - The websites for FRCP is up and running at: https://floridadep.gov/resilience
  - Quick links on the left side consist of the following:
    - Funding Opportunities, which is where our grant information is located.
    - Resilience Resources, which includes the Guidebook, and other resources.
    - Get Involved, will include information on these forum meetings, with notes.
    - Funded Projects, lists out the projects that are currently being funded through FRCP.
- Contact information for Whitney Gray, with FDEP
  - Administrator of the Florida Resilient Coastlines Program

- Main Phone Number: 850-245-2098
- Mailing Address: 3900 Commonwealth Blvd., MS235, Tallahassee, FL 32399
- Email: whitney.gray@floridadep.gov
- Website: https://floridadep.gov/FCO/Florida-Resilient-Coastlines-Program

XII. Announcements

- Anita Grove, with NOAA/ANERR advised that there will be a NOAA Adaptation Workshop to be held in October 29-30 at the Apalachicola National Estuarine Research Reserve at 108 Island Drive in East Point, Florida. The training will offer CEUs for planners and floodplain managers. Anita Grove can be reached at: anita.grove@dep.state.fl.us or 850-670-7708.
- Steve Boehning with the Florida Floodplain Managers Association (FFMA) advised that the Coastal Committee holds monthly meetings on the 4th Thursday of each month @ 1:00 pm and are looking for presenters. Contact Steve Boehning, FFMA Coastal Committee Chair, at: steve@coastalwde.com for more information, call (813) 765-3362, or go to the website at: https://www.flfloods.org.

XIII. Meeting adjourned at 10:35 AM ET


Coastal Resilience Forum
8/8/18

Coastal Resilience Forum 8/8/18

Agenda

Item	Presenter
Welcome and Introductions	Whitney Gray
East Central Florida Regional Resilience project	Tara McCue, ECFRPC
Tampa Bay Coalition update	Heather Young, TBRPC
Hillsborough County SLR study	Gene Henry, Hills. Co.
Case Law Update	Thomas Ruppert, FLSeaGrant
Statewide GIS	Richard Butgereit, FDEM
Cultural Resources – Impacts and Options	Gary Ellis, GARI
Florida Climate Institute	Carolyn Cox, FCI
Question from Kelli Levy, Pinellas County	Kelli Levy, Pinellas Co.
Status of 2018 FRCP Grants; Status of Resilience Planning Grants 2018-2019	FRCP Staff
Discussion Question from Rebecca DeLaRosa from Palm Beach County: Are there any efforts the state office will pursue or is willing to work with counties on regarding solar use?	Rebecca DeLaRosa, PBCo.
Final announcements	

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REGIONAL RESILIENCY ACTION PLAN

ECF Regional Resiliency Action Plan

COLLABORATING FOR RESILIENCE

ECF Resiliency Action Plan Project Background

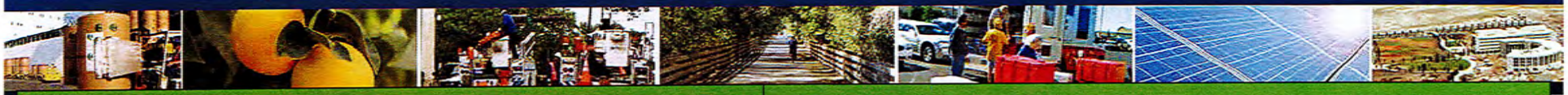
Project Goals:

- Increase local and regional stakeholders resiliency and climate adaptation capacity

- Engage stakeholders

- Obtain support for adoption of the action plan

Oversight



Agency	Agency
Brevard County GIS	Indian River Lagoon Council
Brevard County Planning	Kennedy Space Center/NASA
Brevard County Public Works	League of Women Voters Sustainability Committee
Brevard Emergency Management	NOAA
Brevard Natural Resources	Patrick Air Force Base
Canaveral Port Authority	River to Sea TPO
City of Cape Canaveral	Sea Grant
City of New Smyrna Beach	SJRWMD
City of Satellite Beach	Space Coast TPO
Deady Law	Stetson University
East Central Florida Regional Planning Council	UF Geoplan
FEMA	UF IFAS Volusia and Brevard
Florida Department of Economic Opportunity	USACE
Florida Department of Environmental Protection	Volusia County Emergency Management
Florida Department of Health Brevard	Volusia County Growth Management
Florida Department of Health Volusia	Volusia County Stormwater
Florida Department of Transportation	Volusia County Sustainability and Natural Resources
Florida Fish and Wildlife Commission	Volusia County Traffic Engineering
Florida Institute of Technology	Volusia County Water Resources and Utilities

Definition

RESILIENCY:

The capacity of individuals, communities, institutions, businesses, and systems within a region to plan, sustain, adapt, recover, improve and grow collaboratively–regardless what kind of **chronic stresses** and **acute shocks** they experience – through specific actions and implementation strategies geared to address specific vulnerabilities.

(adapted from 100 Resilient Cities for the Regional Resiliency Action Plan)

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Framework

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East Central Florida Regional Planning Council
est 1962

Goals

Overarching

Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines.

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ACTION PLAN

Goals

Leadership and Strategy:

Promote leadership, education and empowerment both in government, and public and private sectors to foster the implementation of resiliency strategies across disciplines and communities.

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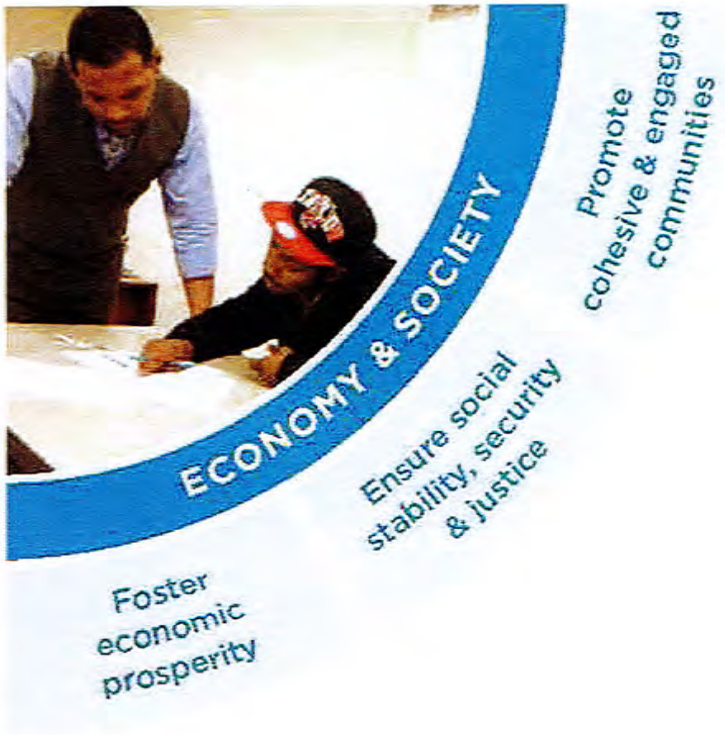
ACTION PLAN

Goals

Economic and Society:

Provide opportunities and strategies to foster economic prosperity and improve social equity and justice in preparation for and recovery from stressors and shocks.



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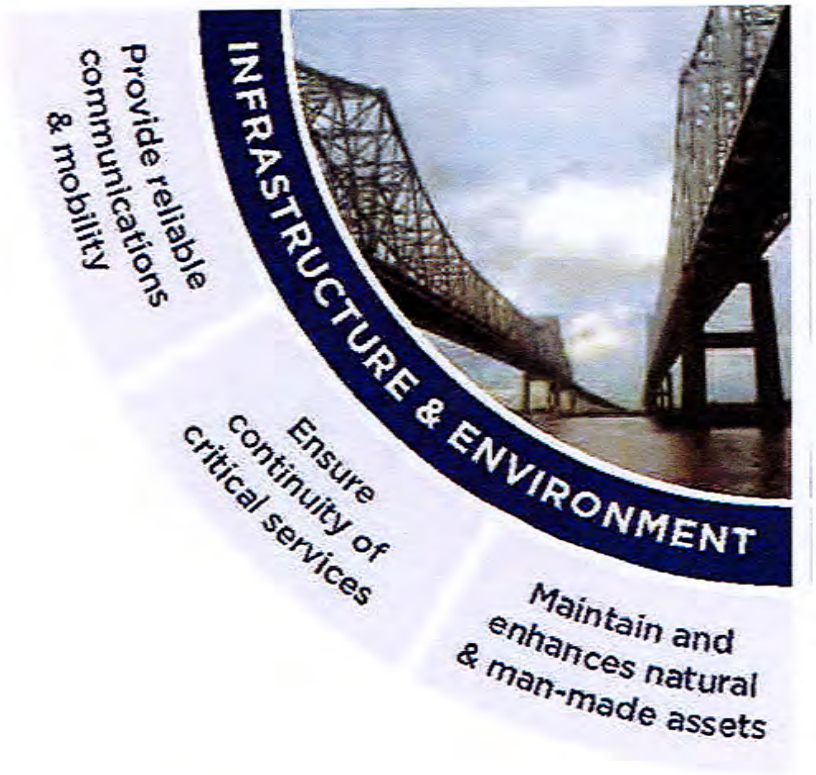
Goals



Infrastructure and Environment:

Create cross-discipline plans, policies and strategies to develop infrastructure, natural resources and a built environment that can withstand and adapt to natural disasters, changes to climate, and human manipulation to protect the health, safety and economic welfare of residents, businesses and visitors.

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Goals

Health and Wellbeing:

Create sustainable, resilient and healthier communities, programs and opportunities for all to better respond to disaster and adapt to climate and social stressors and shocks.

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Stakeholder Engagement

Plan and Policy Resiliency Integration Survey Summary 2018

Regional Resiliency Action Plan

East Central Florida Regional Planning Council

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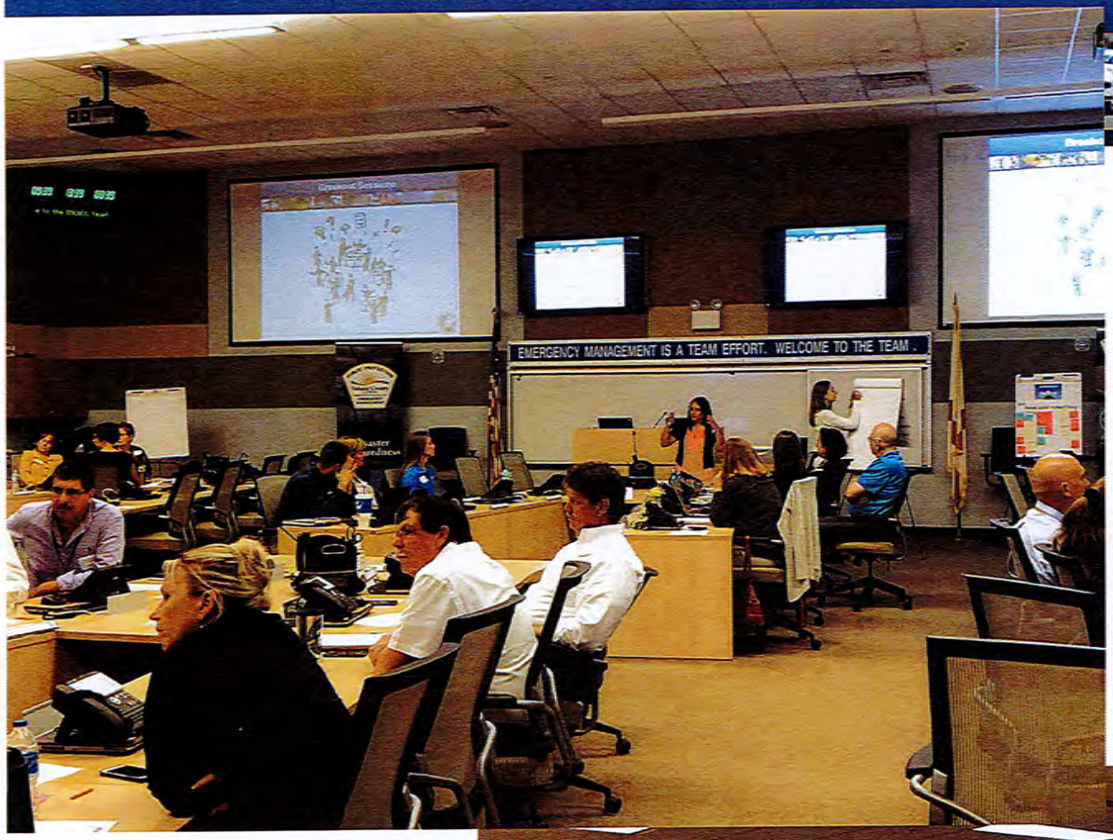
Conducted survey to provide insight into the progress of integrating resiliency into various local and regional plans and policies.

Who responded to the survey?

29 respondents

Local Governments	Agencies
City of Satellite Beach	FDOT
Volusia County	Space Coast TPO
Volusia County Emergency Management	River to Sea TPO
Volusia County Growth and Resource Management	Canaveral Port Authority
City of Rockledge	SJRWMD
City of Titusville	Indian River Lagoon Council
City of Ormond Beach	FDOT – District 5
City of Cape Canaveral	Department of Economic Opportunity
Brevard County Natural Resources Management Department	University of Florida IFAS Extension Brevard County
Town of Melbourne Beach	East Central Florida Regional Planning Council
City of Cocoa	NASA Kennedy Space Center
New Smyrna Beach	
City of Indian Harbour Beach	
City of Orange City	
County of Volusia	

Stakeholder Engagement



The Listening Sessions took place on May 7th in Volusia County and on May 8th in Brevard County.

Collaborating for Resilience
&
Building Economic and Social Resilience Listening Session

Stakeholder Engagement

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REGIONAL RESILIENCY

You're Invited to
A Regional Resiliency Action Plan Workshop

Collaborate with elected officials, agency directors and public stakeholder groups to discuss community and regional resilience.

With support from the Department of Environmental Protection, the East Central Florida Regional Planning Council is working with stakeholders to develop a Regional Resiliency Action Plan for Brevard and Volusia Counties to *"Increase the ability of local and regional stakeholders to implement resiliency and climate adaptation strategies across disciplines."*

Date: Tuesday, August 21, 2018

Location: FDOH Volusia County- 1845 Holsonback Drive | Daytona Beach 32117

Time: 9:30 am– 11:30 am

Register Here: https://www.surveymonkey.com/r/VCRRAP

Image Courtesy of UCF

Image Courtesy of Volusia County

Second Round of Workshops
August 20th and 21st
In Brevard and Volusia Counties

Audience:
Elected officials
Agency Heads
Public Interest Groups

Regional Approach to Planning for Sea Level Rise

Sea Level Rise Recommendation Sub-Committee

- *No one projection rate curve should be used for planning purposes.*
- *Range of rise should be considered based upon the vulnerability, allowable risk, and operational life span of a facility or development.*
- *Plan will include recommendation and summary*

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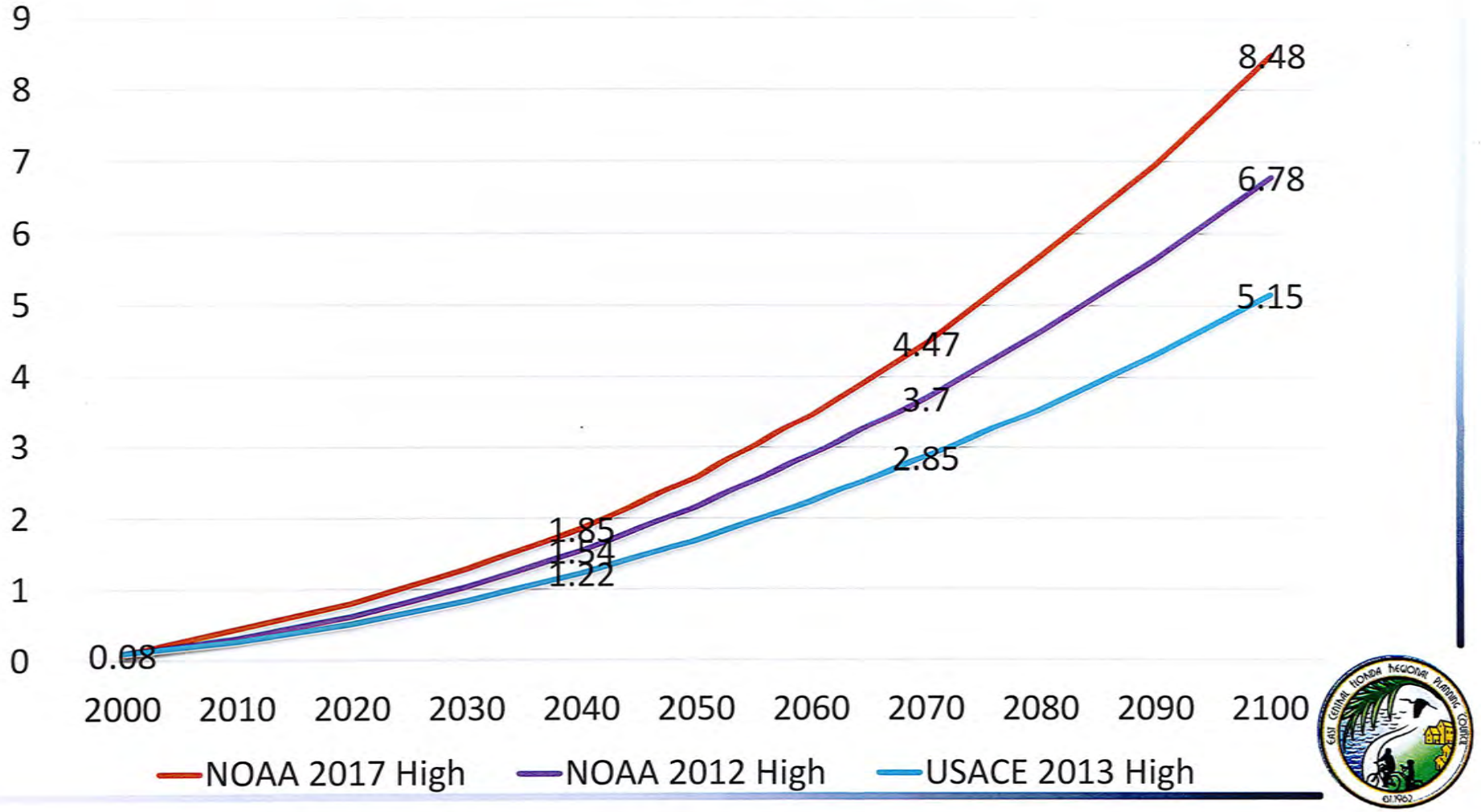
ACTION PLAN

Regional Approach to Planning for Sea Level Rise

Sea Level Rise Planning Range Recommendation



Tara McCue, AICP – Project Manager
ECFRPC
Director of Planning and Community Development
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www.perilofflood.net
www.ecfrpc.org

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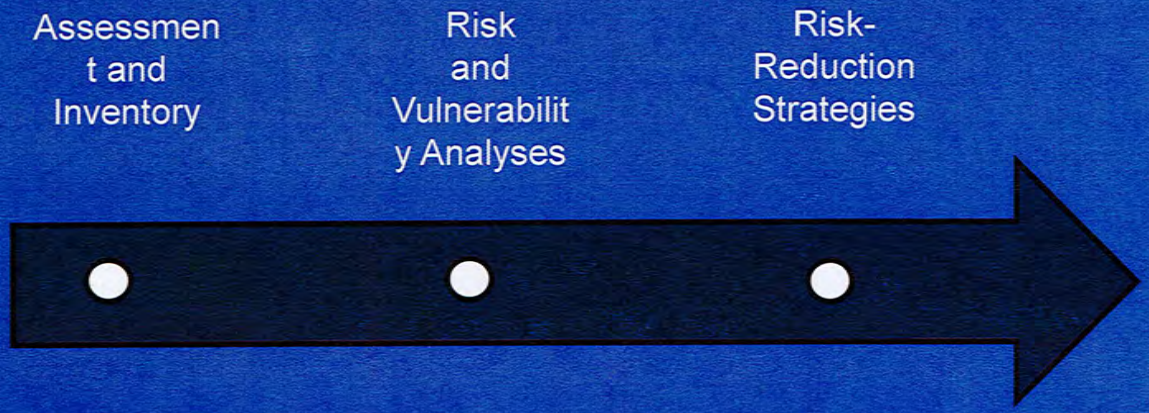
ACTION PLAN

Coastal Flood Risk and Seal Level Rise for Hillsborough County

November 16, 2017

Hillsborough County Florida

Hillsborough County – Looking Forward



Begin process of updating as appropriate plans, regulations, and programs

STATEWIDE LIDAR
STATE EMERGENCY RESPONSE TEAM

Richard Butgereit, GISP

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Chief Information Officer
FDEM – Bureau Information Technology and Management
850-851-4701

Jason Ray

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THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT

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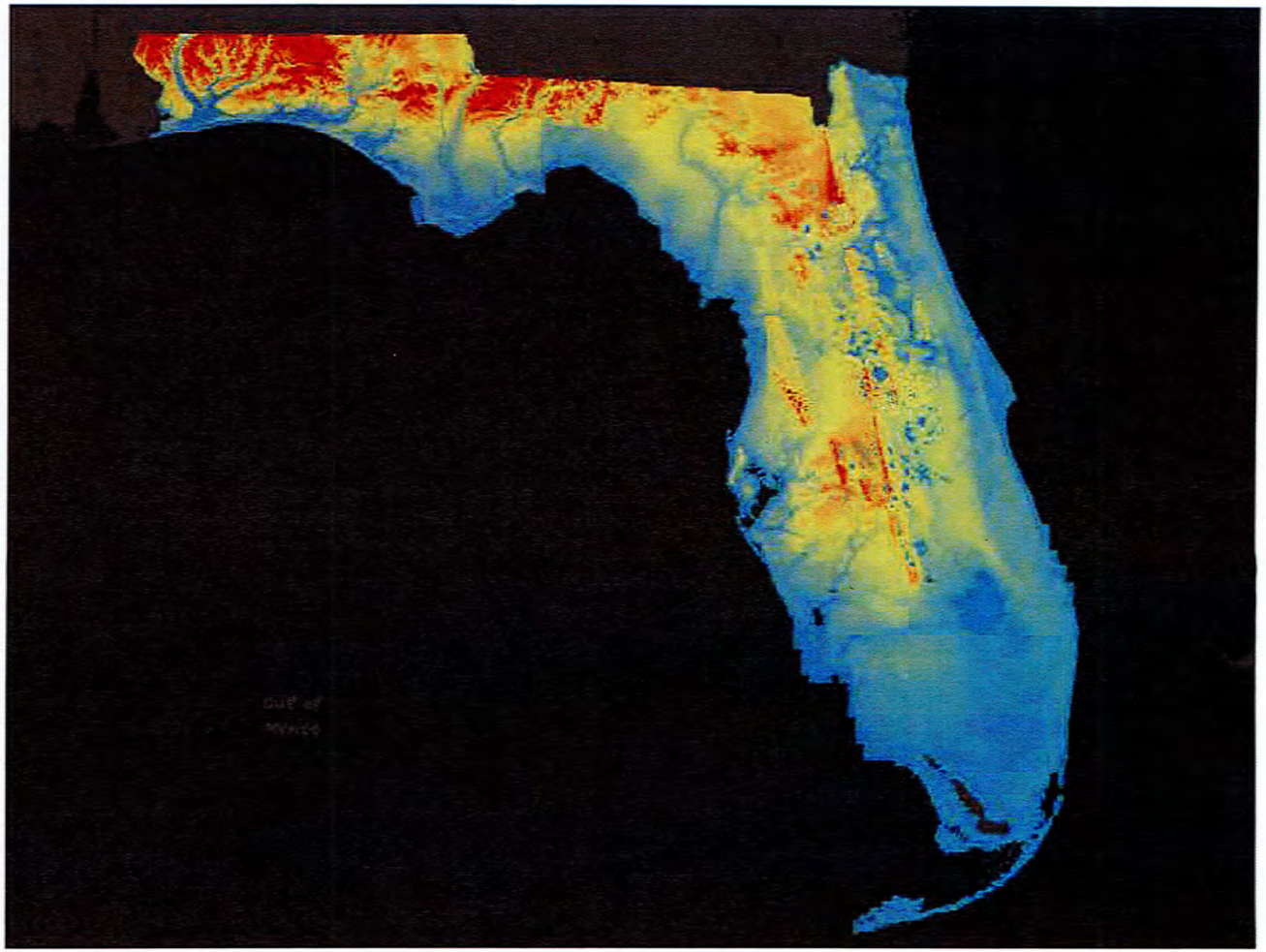
A LiDAR Story

Florida Statewide LiDAR

This Story Map provides information on past LiDAR data acquisition projects, current Florida LiDAR inventory, USGS 3DEP requirements, and new funding opportunities for Florida to acquire additional LiDAR and improve digital elevation data for the State.

To see the current 2018 LiDAR Acquisition plan, please click here to navigate directly to the panel displaying the plan in this story map.



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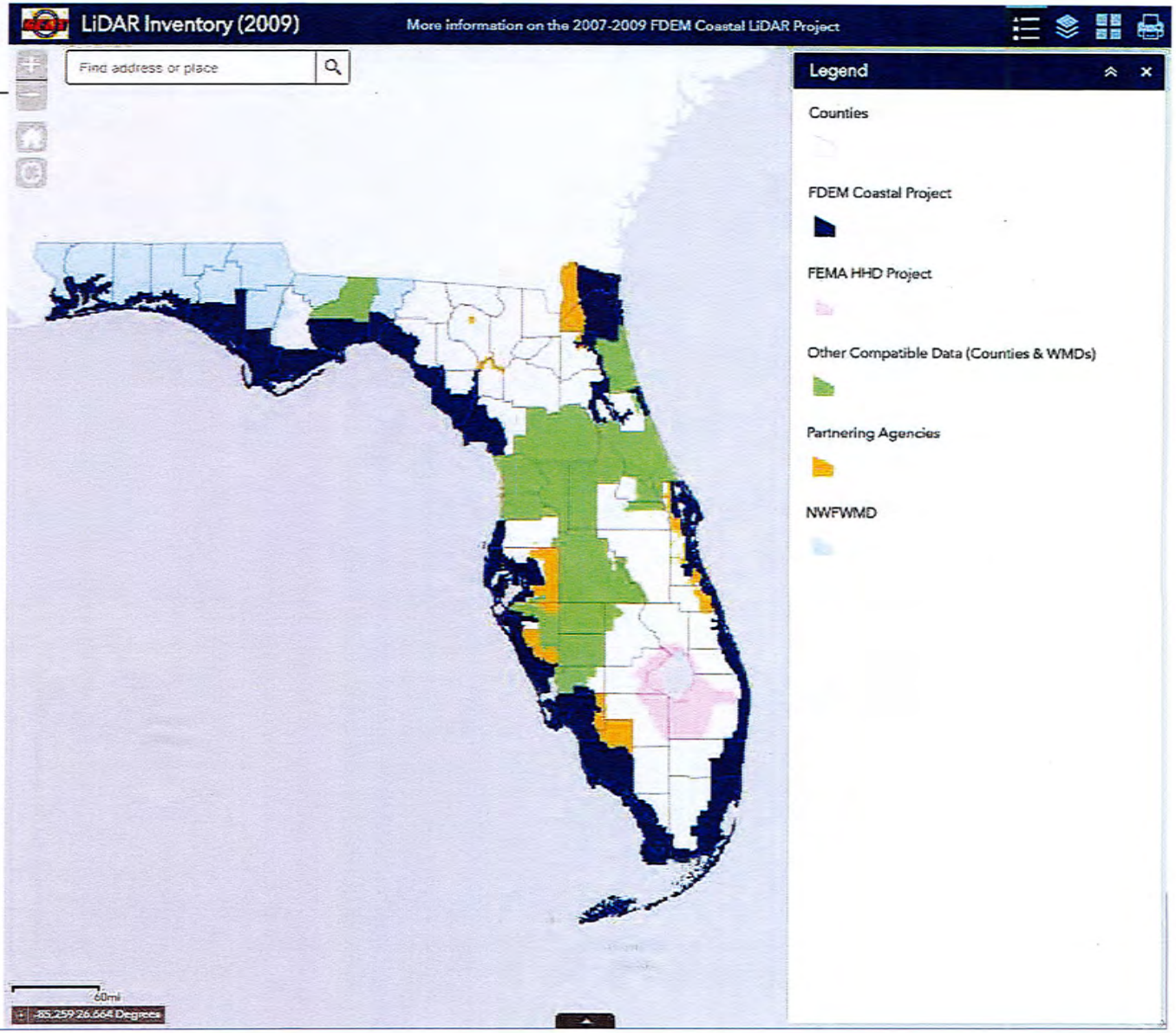
A LiDAR Story

Florida Statewide LiDAR

Previous LiDAR Collections

By 2009, efforts between counties, Water Management Districts, and FDEM's Coastal LiDAR Project resulted in LiDAR coverage over 28,000 square miles of Florida.



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A LiDAR Story

Florida Statewide LiDAR

U.S. Interagency Elevation Inventory

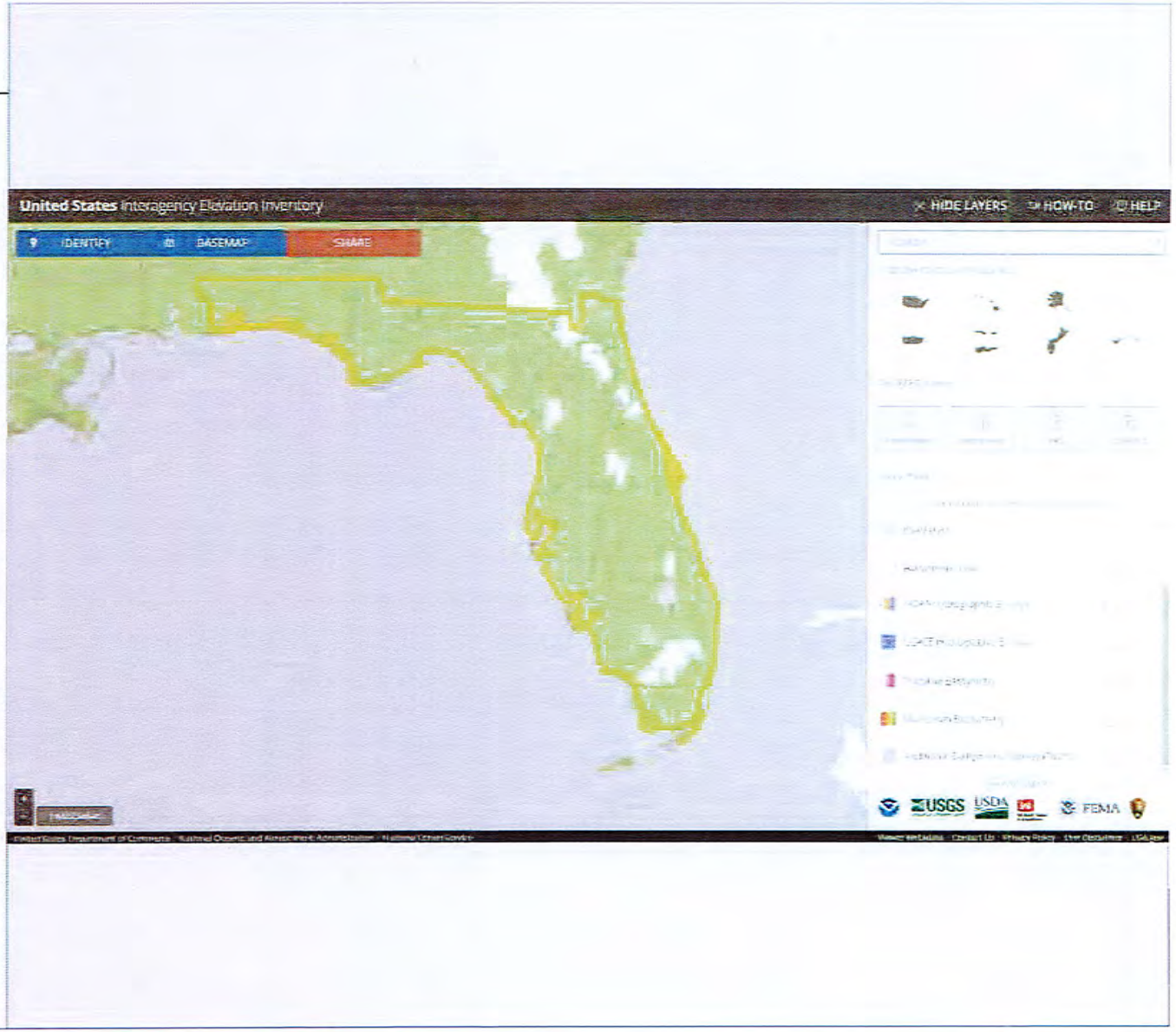
For full details on LiDAR data acquisition for Florida, visit the U.S. Interagency Elevation Inventory.

The USIEI is a comprehensive, nationwide listing of known high-accuracy topographic and bathymetric data for the United States and its territories. The project is a collaborative effort of the USGS and National Oceanic and Atmospheric Administration with contributions from the Federal Emergency Management Agency, U.S. Department of Agriculture, and U.S. Army Corps of Engineers. The inventory supports the 3D Elevation Program and the Integrated Ocean and Coastal Mapping effort.

This inventory is updated quarterly. Please contact Lou Driber USGS National Map Liaison to FL/PR/US-VI to provide updates or receive more information.

As you can see from the map, much more data has been collected within Florida since the 2009 FDEM LiDAR Project.

This inventory forms the basis of data presented elsewhere in this story map, but due to the need to add additional fields and update more frequently, this story map may contain data that appears



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A LiDAR Story

Florida Statewide LiDAR

USGS 3DEP Requirements

USGS 3DEP Program sets Quality Levels (QL) specifications, and for the program set QL2 as the minimum acceptable QL and a time constraint of having been collected within the past 8 years.

Most of the data for Florida fails both on achieving QL2 and collected within the past 8 years.

USGS 3DEP

What is 3DEP –

The 3D Elevation Program (3DEP) initiative was developed to respond to growing needs for high-quality topographic data and for a wide range of other three-dimensional representations of the Nation's natural and constructed features. The primary goal of 3DEP is to systematically collect enhanced elevation data in the form of high-quality light detection and ranging (lidar) data over the conterminous United States, Hawaii, and the U.S. territories.

To meet 3DEP criteria data must –

- **Be Quality Level 2 (or higher)**
- **Have been collected within the last 8 years**

Quality Level (QL)	Density (≥ pts/m²)	Precision (RMSE ≤ cm)	Swath Overlap Difference (RMSE ≤ cm)
QL0	8	3	4
QL1	8	6	8
QL2	2	6	8
QL3	0.5	12	16

https://nationalmap.gov/3DEP

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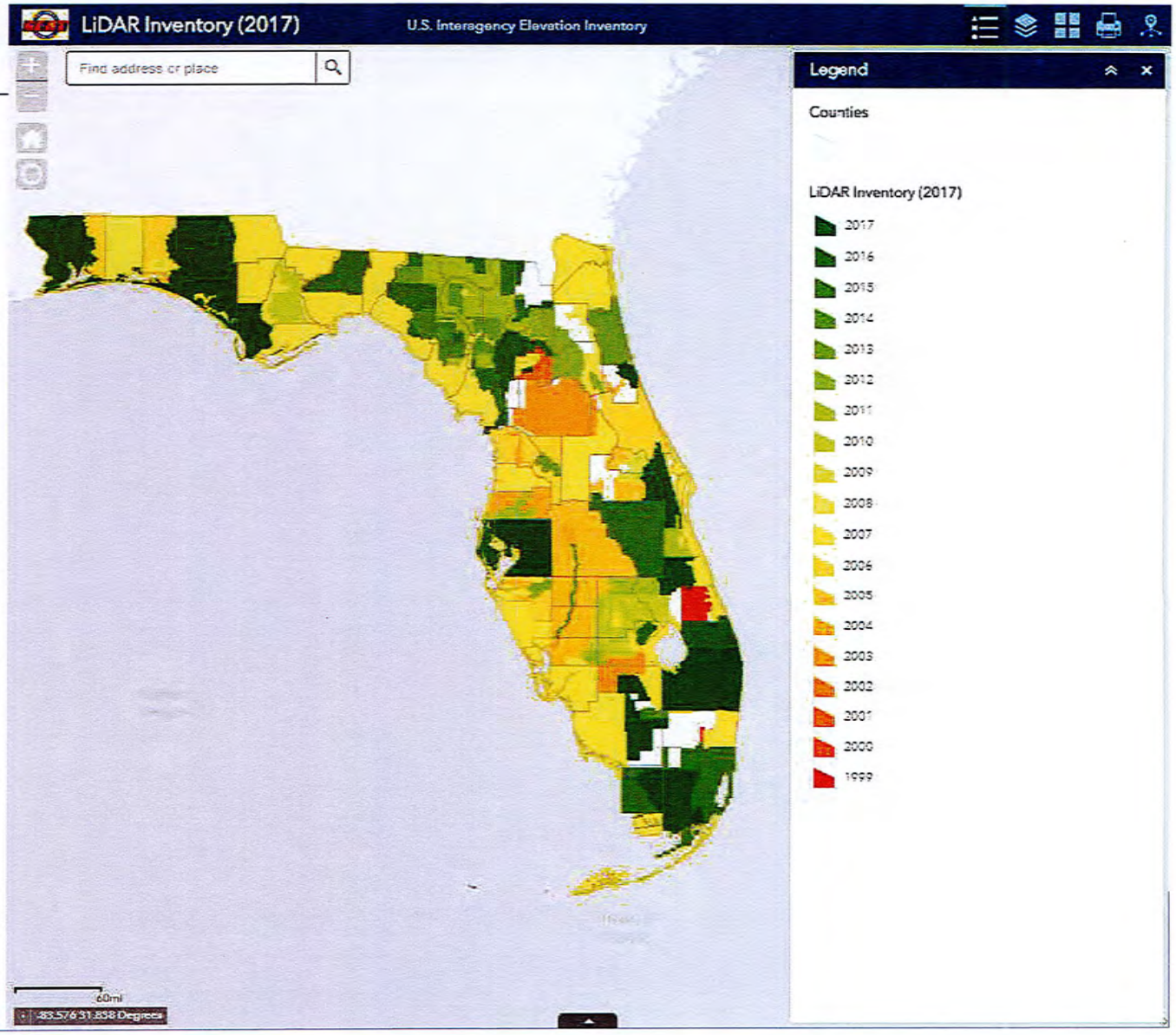
A LiDAR Story

Florida Statewide LiDAR

LiDAR Inventory (2017)

We can see this when we classify data from the U.S. Interagency Elevation Inventory by acquisition year.



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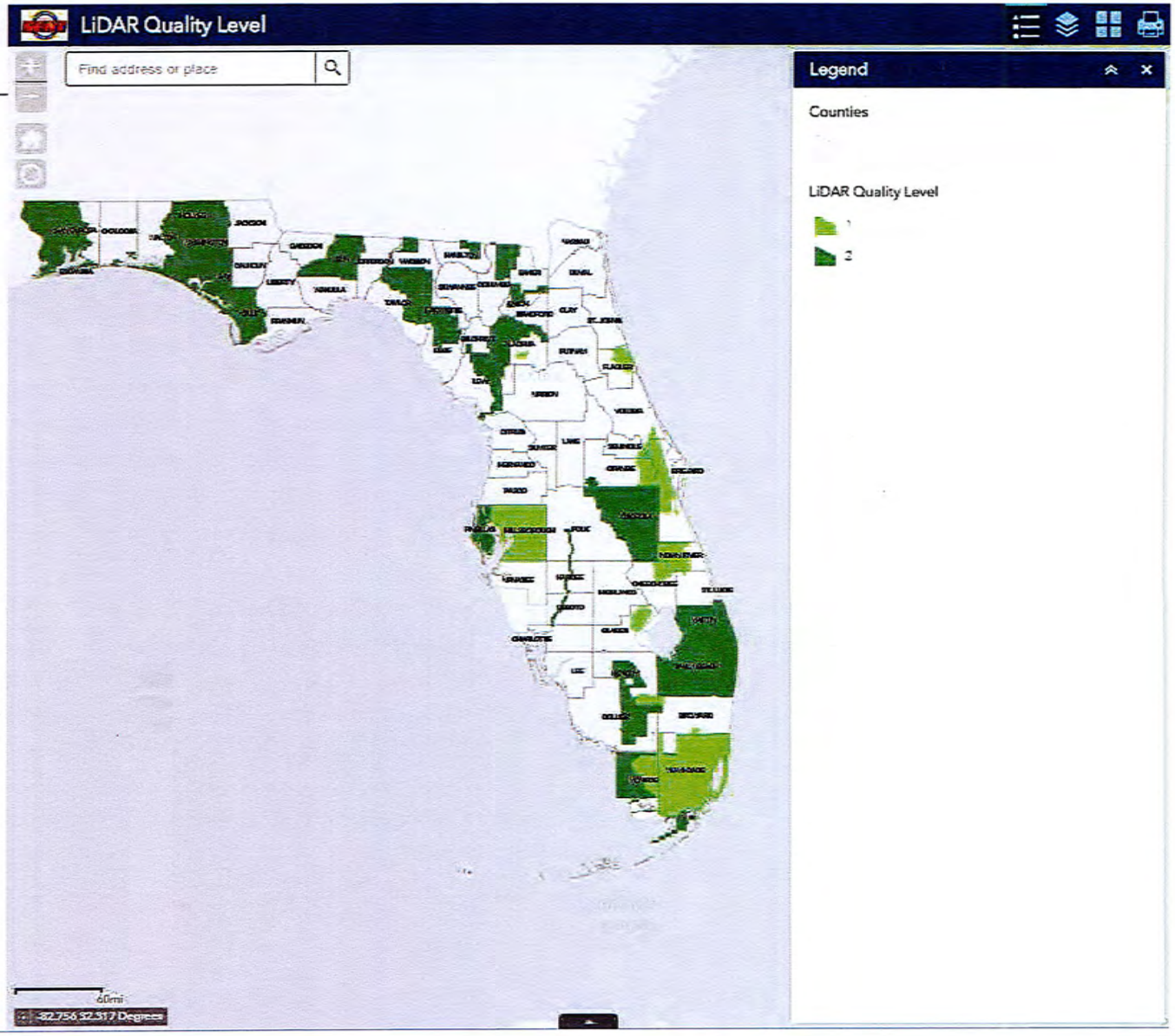
A LiDAR Story

Florida Statewide LiDAR

LiDAR Inventory (2017) - Quality Level

And when we classify data from the U.S. Interagency Elevation Inventory by acquisition quality level, you can further see that large areas of the state do not meet 3DEP requirements.



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A LiDAR Story

Florida Statewide LiDAR

2018 State Budget - LiDAR

In 2018, the Florida State Legislature passed a budget appropriation for $15 million to FDEM to "competitively procure professional LiDAR mapping services for the production of a complete and accurate 3D map of the entire State..."

LiDAR – 2018 State Budget

From the funds provided in Specific Appropriation 2564, **$15,000,000** of nonrecurring funds from the General Revenue Fund is provided to the Division of Emergency Management to **competitively procure professional LiDAR mapping services for the production of a complete and accurate 3D map of the entire state** for use in emergency management, infrastructure planning, agriculture, and forestry, among other purposes. The 3D map must meet the requirements of all state agencies. The division shall consult with the Department of Transportation on the procurement. The division shall submit quarterly project status reports to the Executive Office of the Governor and the chairs of the Senate Appropriations Committee and the House of Representatives Appropriations Committee.

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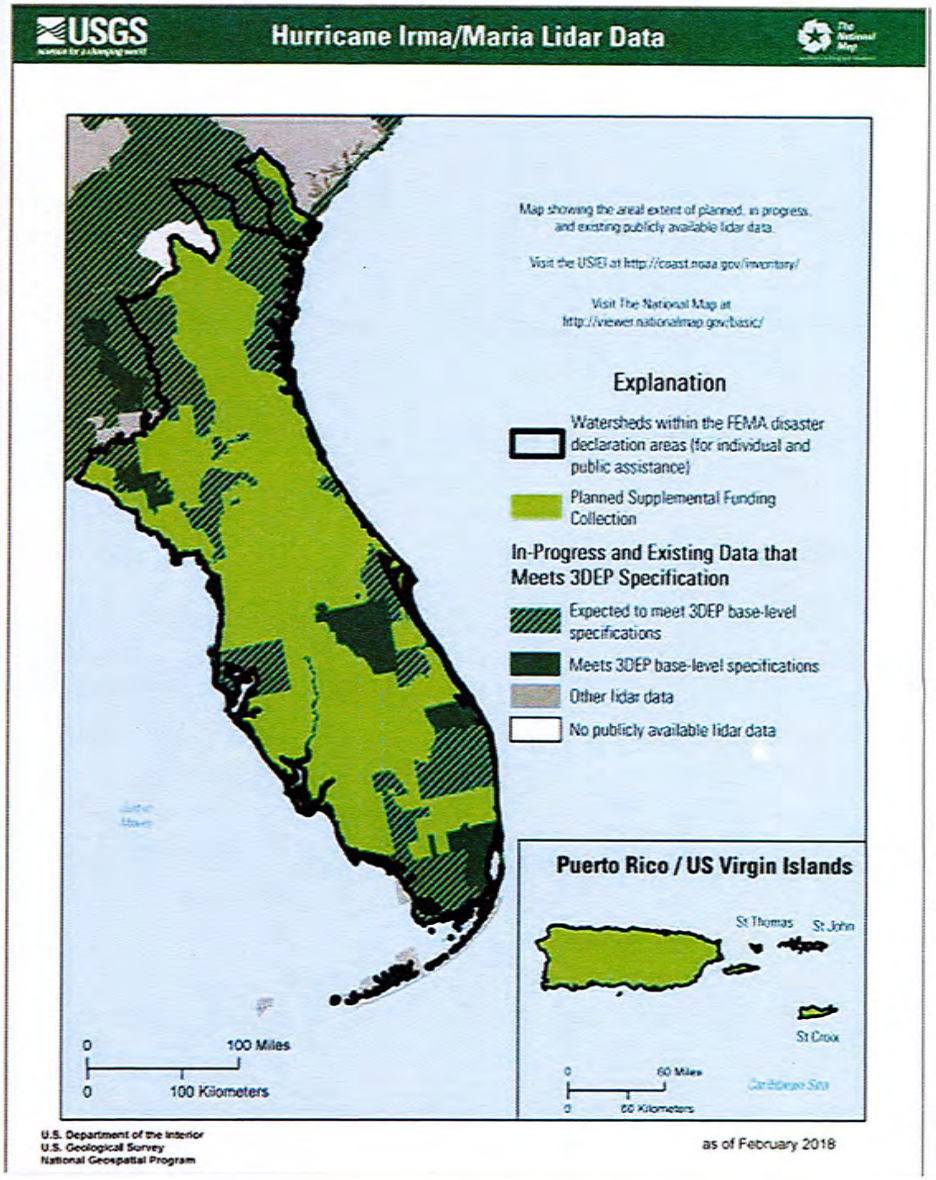
A LiDAR Story

Florida Statewide LiDAR

USGS Disaster Supplemental

Additionally, following Hurricanes Harvey, Irma, and Maria, USGS was provided funding to be made available to affected states for further LiDAR data acquisition.

USGS has allocated approximately $7.6 million to Florida for LiDAR acquisition.



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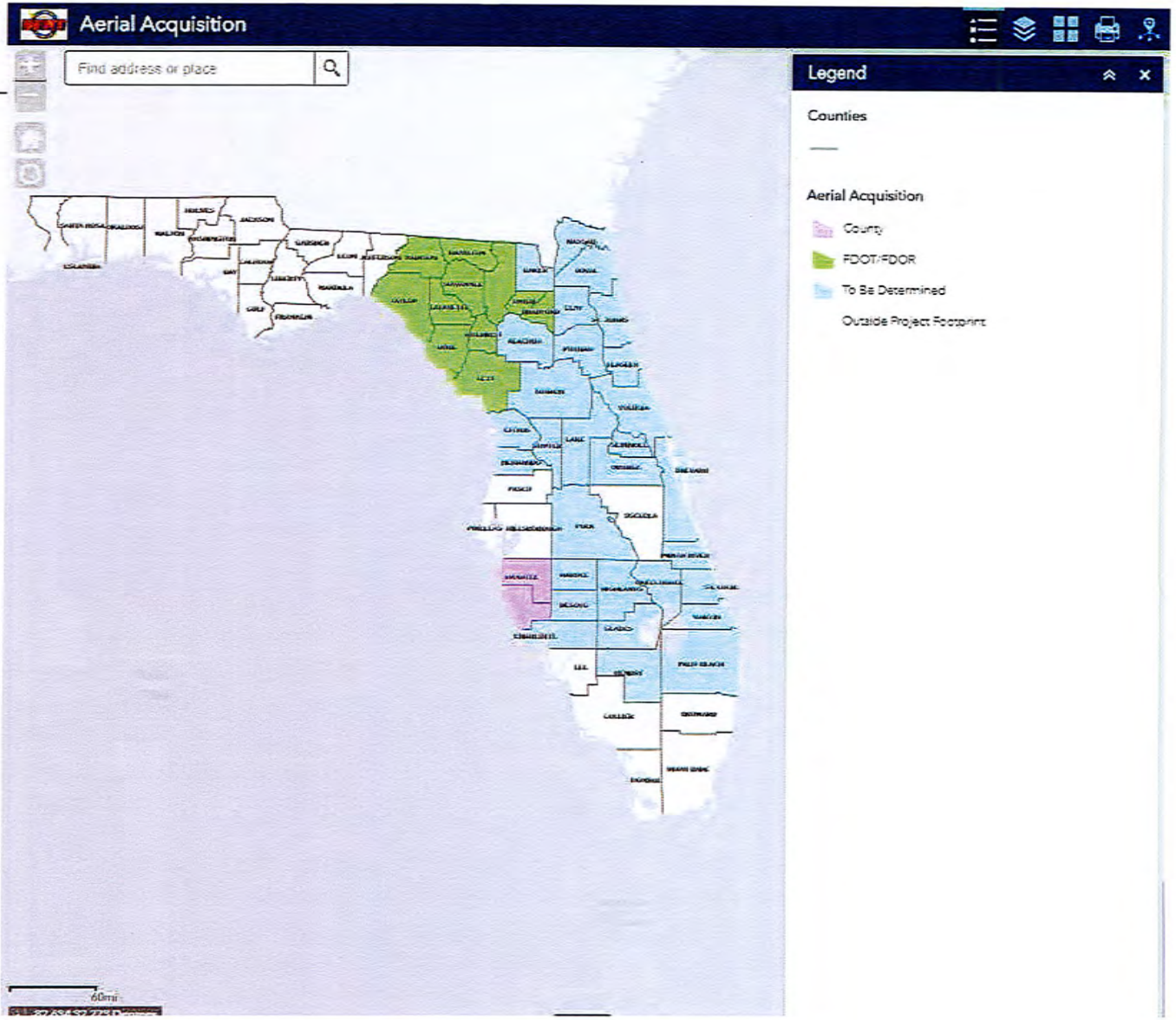
A LiDAR Story

Florida Statewide LiDAR

Aerial Acquisition

A goal of the 2018 LiDAR Project is to collect contemporaneous aerials within the project footprint. This map depicts the footprint where aerials will be collected by their funding source. Funding for aerial collection will coincide with the 3-year aerial acquisition plan by FDOT/FDOR as determined by FS 195.022. In addition, FDEM will be coordinating with those Counties whom have already budgeted for their own aerial collections to coincide with the FDEM LiDAR collection.



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A LiDAR Story

Florida Statewide LiDAR

2018 LiDAR Acquisition Plan

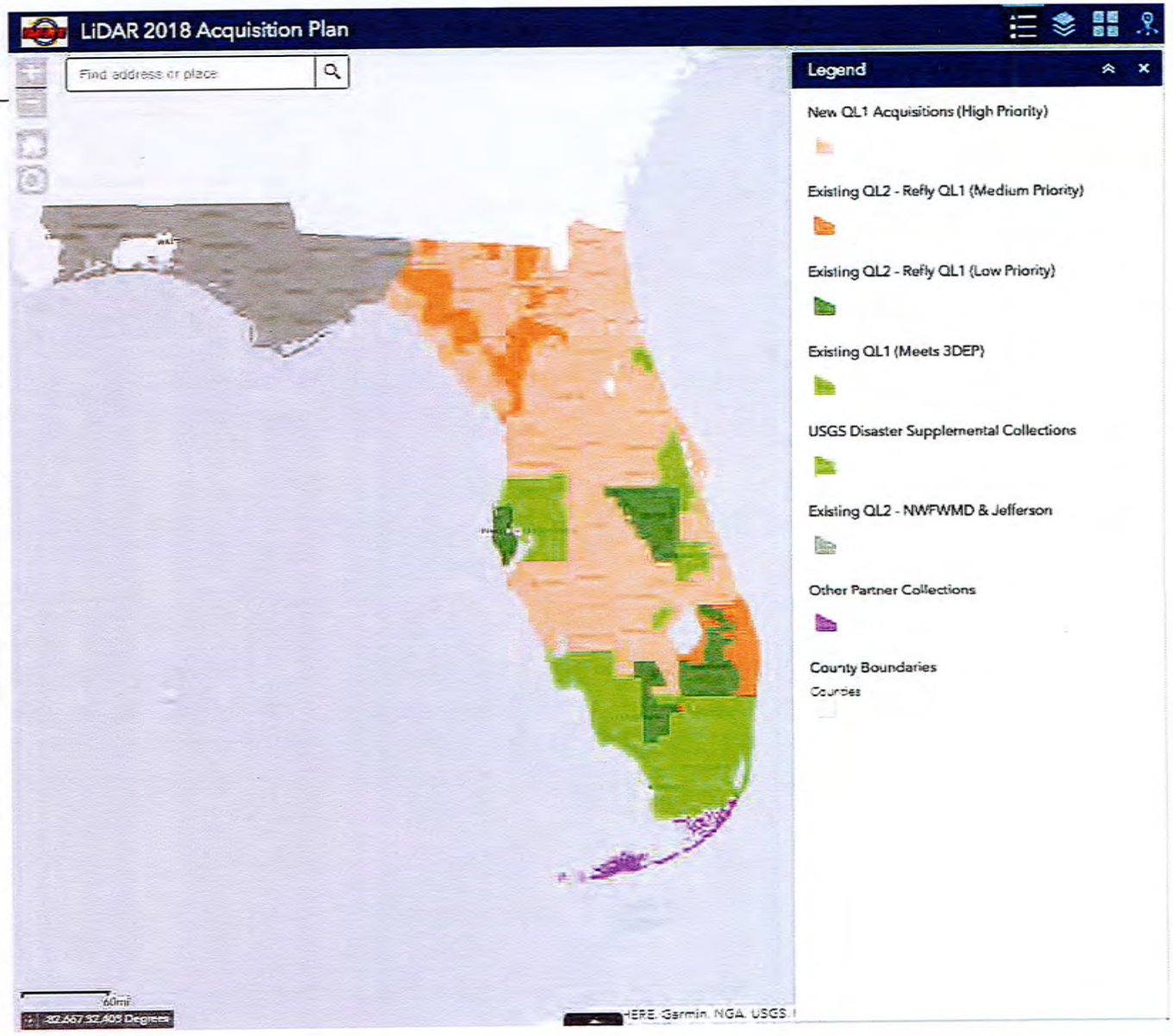
Removing those areas that fail to meet 3DEP requirements by quality level and or age and only displaying areas that meet QL1 or QL2 and have been acquired after 2012, we can focus on those areas outside of those display as the areas of Florida lacking adequate LiDAR coverage.

In late 2017 and early 2018, Northwest Florida Water Management District led the charge with stakeholders to collect QL2 data within the Florida panhandle.

In addition, USGS has identified two areas within South Florida to target for collection with QL1 specification funded under the USGS Disaster Supplemental.

This map depicts the targeted FDEM LiDAR acquisition plan collecting QL1 over remaining areas of the Florida peninsula that do not meet at least QL2. Additionally, some existing QL2 in the peninsula is also targeted for re-collection to QL1.

To view the acquisition footprint of contemporaneous aerials within the project footprint, click here.



ARCG.IS/1ZVJBQ

A LiDAR Story

Florida Statewide LiDAR

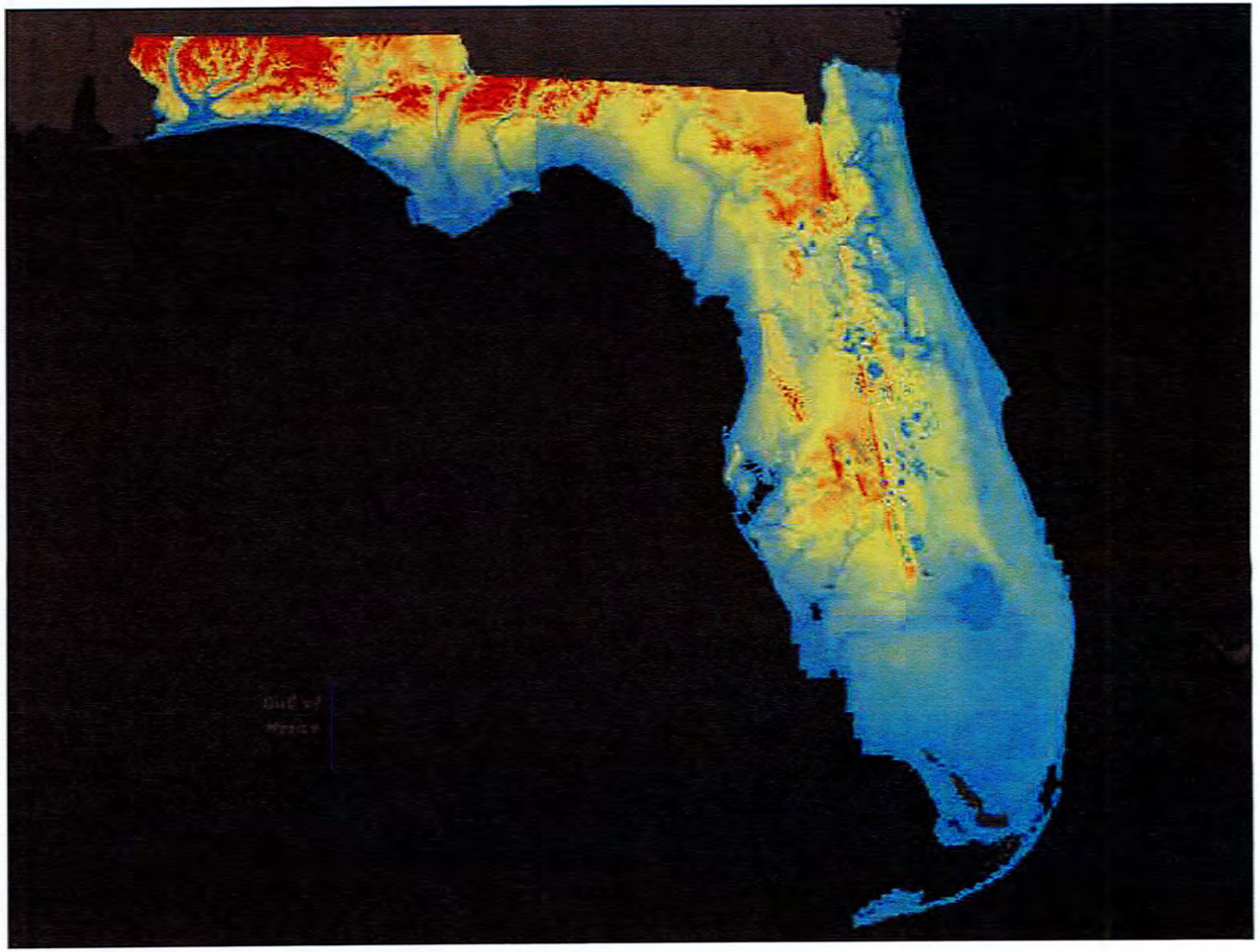
Conclusion

FDEM is working with Florida state agencies, water management districts, counties, and federal agencies to refine requirements, identify other acquisition efforts already in process, identify partnership funding opportunities, and to prepare an acquisition plan for investment in Florida's digital elevation future.

Please follow this story map for more information as the project evolves and/or reach out to:

Richard Butgereit, GISP, CIO
850-815-4701

Jason Ray, GIS Administrator
850-815-4730



Gulf Archaeology Research Institute

Impacts and Options

Coastal Resources Program 1995- Present

GARI was founded in 1995 as a professionally staffed non-profit research organization based in Crystal River, Florida with social, physical, and natural science divisions.

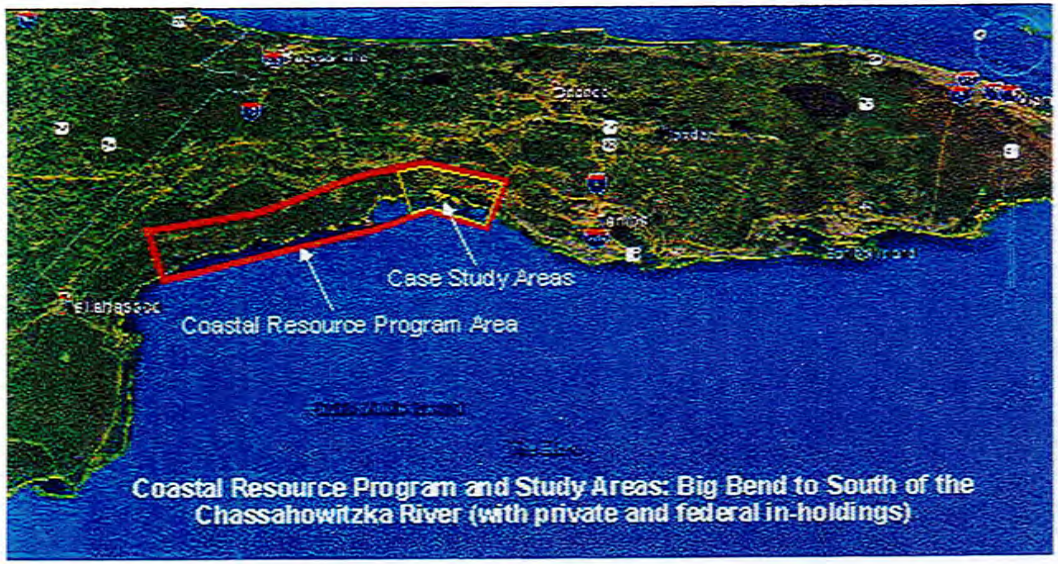
GARI conducts long-term research in a number of areas of archaeology keyed to humans as parts of living systems through time. Our Coastal Resources Program is but one of many research foci and coastal survey, testing and monitoring has been on-going since 1995. This effort addresses the relationship between *natural* and *cultural* resources and the need to monitor both to provide best management practices for coastal managers and application research.

Coastal research is primarily conducted on the West Central Gulf Coast of Florida, but programming will expand to the East and upper Gulf Coasts. This effort utilizes field survey and monitoring, aerial, satellite, LIDAR, sediment sampling and coring, physiographic sampling and analyses, and geomorphologic investigative methods to analyze the nature and extent of coastal change impacts due to natural and human agents of change/affecting agents on our natural and cultural resources.

Gulf Archaeology Research Institute
5990 N. Tallahassee Road
Crystal River, Florida 34428

gari.arch@gmail.com

www.gulfarchaeology.org
Check us out on **FaceBook**
352-464-4274



Coastal Resource Program and Study Areas: Big Bend to South of the Chassahowitzka River (with private and federal in-holdings)

GARI Program Elements Include:

-Land Owner/Agency Cooperative Program; establish protection goals

-Develop Area Study Profiles: Built on archaeological-historical, biological/ physiographical, sediment, and geomorphological investigations as well as data basing and GIS programming

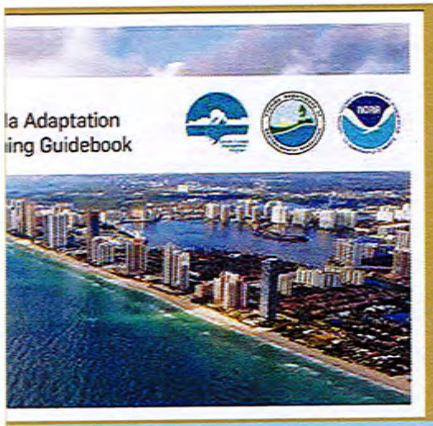
-Conduct Reiterative Photographic Survey of ecozones and geomorphic contexts

-Conduct Sediment Sampling within ecozones and geomorphic contexts

-Field survey and monitoring. Requisite professionals are at hand to do real-time resource assessments, surveys and reiterative monitoring. Coverage is better, more time- and cost-efficient, and allows field teams to rapidly respond to pre- and post-storm assessments

-GARI uses Volunteers only after comprehensive training and never without professional supervision

What's New with FRCP?



GUIDEBOOKS

le as a PDF download

FUNDING

Resilience Planning Grants

WEBSITE

FloridaDEP.gov/resi

Guidebooks

Florida Adaptation Planning Guidebook & PDRP Addendum

- Provide research-developed best practices and step-by-step processes
- Appropriate for city, county, regional planners and emergency/floodplain managers

Funding Opportunities

- FRCP 2018 Grants being contracted; 13 projects, $576,157
- RPG 2018-2019 notice out 7/30; proposals due 9/7; projects due 6/21/2019; $500,000 total

Website https://FloridaDEP.gov/resilience

Florida Department of Environmental Protection

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SEARCH...

Florida Resilient Coastlines Program

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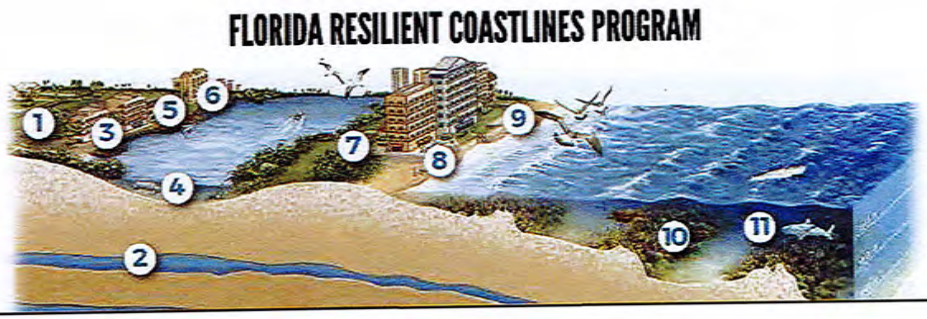
Florida Resilient Coastlines Program Quick Links

- Home
- Funding Opportunities
- Resilience Resources
- Get Involved
- Funded Projects
- All Florida Resilient Coastlines Program Content

The Florida Department of Environmental Protection is committed to marshalling resources to prepare Florida's coastal communities and habitats for the effects of climate change, especially rising sea levels. Through the Florida Resilient Coastlines Program, DEP continues its efforts to help ensure collaboration among Florida's coastal communities, to offer technical assistance and funding to coastal communities dealing with increasingly complex flooding, erosion, and habitat shifts.




FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Next webinar November 7

Register at www.adaptationplanning.evenbrite.com

Adaptation Planning for Coastal Communities

Coastal communities increasingly realize the need for adaptation strategies, but many are unsure where to begin. This intensive and interactive course provides individuals with a thorough grounding and practical skills for incorporating adaptation strategies into planning processes. Time in class is provided to practice applying what you learn, and opportunities for local collaboration and next steps are emphasized through discussion, participant activities, and local speakers and examples.

Continuing education credits are available through the **American Planning Association** and the **Association of State Floodplain Managers**.

You will learn how to

- Apply the basic elements of an adaptation planning framework to organize future preparedness efforts
- Translate climate science into impacts on local community assets
- Practice a qualitative approach to scope and compile a vulnerability assessment, and describe how to apply the results
- Identify, compare, and prioritize locally relevant adaptation strategies and actions
- Describe implementation options for different strategies
- Recognize the importance of stakeholder involvement in adaptation planning and demonstrate the applicability of engagement processes and tools

June 6-7, 2018

St Joe Buffer Preserve, 3915 State Road 30A, Port St Joe, FL 32456

REGISTRATION IS REQUIRED, PLEASE CONTACT:

Anita Grove with the Apalachicola National Estuarine Research Reserve
and the Florida Department of Environmental Protection, Florida Coastal Office
at ***Anita.Grove@dep.state.fl.us***

Or

Gwen Shaughnessy with NOAA's Office for Coastal Management
gwen.shaughnessy@noaa.gov

Adaptation Planning for Coastal Communities
https://coast.noaa.gov/digitalcoast/training/climate-adaptation.html

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TRAINING PARTNERS

Apalachicola National Estuarine Research Reserve

NOAA

Florida Department of Environmental Protection

COURSE TOPICS

Getting Started

Trainers introduce the adaptation planning framework that provides the foundation of the training.
Participants will:

- Lean about others in the room and their work in adaptation
- Discuss what local circumstances might be present to support or hinder adaptation efforts
- Brainstorm key community assets
- Identify relevant stakeholders to engage for assets being discussed

Climate and Impacts

Local experts share the latest science on the regional climate trends, observations, and projections for the future. Trainers discuss the role uncertainty can play in adaptation planning, and how scenario planning is a useful tool in moving beyond the challenges of making decisions in light of unknowns.
Participants will:

- Discuss their own observations of changes in the physical environment
- Apply information on climate impacts to an asset of their choice
- Describe the potential consequences of climate stressors to the resilience of the community

Assessing Vulnerability

A local speaker shares their experiences vulnerability assessments. Trainers introduce the basic components of vulnerability, the range of assessment types, and how assessments support the planning process.
Participants will:

- Develop a plan for conducting a vulnerability assessment for an asset of their choice
- Learn about different sources and types of vulnerability for assets across sectors
- Work through a qualitative vulnerability assessment in a collaborative setting
- Learn about the importance and challenges in communicating assessment results
- Discuss how to use the information gathered in an assessment to begin considering adaptation actions

Strategies and Actions

A local speaker will share insights on their experience in developing and implementing adaptation strategies and actions.
Participants will:

- Learn about of a variety of adaptation strategies used by coastal communities
- Identify adaptation strategies for specific assets
- Describe factors that contribute to the feasibility of strategies

Selecting and Implementing

Trainers share examples of methods used for analyzing and prioritizing adaptation actions, as well as key components of implementation plans.
Participants will:

- Assess and prioritize the list of actions developed in an earlier activity using selected criteria
- Develop an implementation plan for an adaptation strategy.
- Share commitments for applying what they've learned to move forward with adaptation