

# Mitigate FL

## 3<sup>rd</sup> Quarter Meeting

Tuesday, September 14, 2021

Webinar Only

1:00 – 2:00 pm

Audio Information

Number: 1-888-585-9008

Passcode: 258-740-256



## For Our Friends on the Phone

Please make sure your phone is muted during the meeting.

**To mute / unmute your phone press \*2.**

**Please DO NOT put your phone on hold.**



# Interactive Presentation via Mentimeter

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# Agenda

- Watershed Planning Initiative
- HMGP Update
- Non-Disaster Update
- Floodplain Management Update
- Insurance Sector Update
- Silver Jackets Update
- LMS Updates
- 2023 SHMP Update
- DEP Resilient Florida Program
- Upcoming Trainings



# What does Mitigation mean to you?

[www.menti.com](http://www.menti.com)

Code: 5792-1398



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- 3) Answer the question





# Watershed Planning Initiative



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT

# Watershed Planning Initiative

The Florida Division of Emergency Management's (FDEM) Bureau of Mitigation prioritizes flood risk management as an integral part of its mission. Florida is particularly vulnerable to tropical systems, storm surge, and other heavy rain events that contribute to flood risk. These combined conditions will result in increased flood risk exposure throughout the state. According to the Florida Demographic Forecast, growth and development are projected to increase and Florida can expect a net immigration of 375,000 people over the next six years.



# Watershed Planning Initiative

Florida residents can protect themselves against flood exposure by purchasing flood insurance through the National Flood Insurance Program (NFIP).

- The NFIP underwrites the vast majority of flood insurance in the United States, insuring more than five million homes.
- The national average annual cost of flood insurance is approximately \$700. Costs can be higher in areas with high flood risk exposure.
- To counteract this, NFIP communities can participate in the Community Rating System (CRS), which discounts flood insurance premiums to reflect the reduced flood risk resulting from a community's efforts.



# Watershed Planning Initiative

- The CRS scores NFIP communities by awarding credits for implementing higher floodplain management standards. Communities are graded along ten classes. A CRS Class 10 ranking provides no flood insurance discount and a Class 1 ranking provides a 45% discount on flood insurance premiums for policyholders within that jurisdiction.
- Importantly, CRS Class 5 communities—of which there are 42 currently in Florida—cannot progress to a CRS Class 4 ranking without the creation and adoption of a Watershed Master Plan.
- Due to this CRS Class barrier, the Watershed Master Planning Program was created to ensure Florida communities progress to better CRS Class rankings, which in turn would reduce flood insurance costs for Florida residents and enhance mitigation practices in communities vulnerable to flood risk exposure.



# Watershed Planning Initiative

The project is funded through a \$26.6 million grant under the Hazard Mitigation Grant Program (HMGP), as approved by FDEM and the Federal Emergency Management Agency (FEMA), with the purpose of creating standardized, cost-effective, and easily replicable Watershed Master Plans (WMP) throughout the state of Florida. According to NFIP (2019), there are 1.77 million flood insurance policies in Florida, and a 5% discount in communities with large concentrations of flood insurance policy holders would result in cumulative yearly savings far exceeding the cost of the grant award.



# Watershed Planning Initiative

From September 2019 – June 2021 FDEM conducted a pilot program—procuring the services of Florida Atlantic University (FAU)—that consisted of research, the creation of a framework and guidance documents for a consistent statewide approach to WMP development or updating, and the production of two complete WMPs to be used as an example for future WMPs developed by participating jurisdictions.



# Watershed Planning Initiative

**Task 1** of the program cataloged and analyzed all available data pertaining to WMP in Florida and identified data gaps within the available data. A report of FAU's findings was submitted to FDEM along with all available data.

**Task 4** produced a WMP statewide catalog that included a list of watershed, flood, and floodplain management related documents produced by Florida communities and counties. This task also identified WMP best practices examples by cataloging the best examples of WMPs within the United States.



# Watershed Planning Initiative

**Task 2** provided a WMP development strategy that identified entities that may be responsible for WMP development. Task 2 also verified the flood modelling process (CASCADE) that will be used in Phase 2 of the program, and 10-year and 100-year preliminary flood maps were created for each of the 29 4-digit HUC basins in Florida.

**Task 3** produced an instructional manual for the CASCADE screening tool produced in Task 2 that outlined how to implement the screening tool methodology and flood risk scoring system for local communities, and produced a WMP template document that standardizes WMP documents statewide and streamlines the creation of WMP documents for communities.



# Watershed Planning Initiative

**Task 5** of the program used the WMP template to develop two WMPs; one for a selected coastal community and one for an inland community. These plans were reviewed by CRS officials in Florida, who reviewed their applicability to NFIP and CRS, and confirmed that the WMP plans would satisfy the Watershed Master Plan requirements for CRS.



# Watershed Planning Initiative

With the Phase 1 process completed, FDEM will be moving forward with Phase 2 of the program.

- For Phase 2, FDEM would request applications from Florida communities for funding to produce a WMP.
- After a subgrant is granted to an individual community to produce a WMP, FDEM would require participating communities to submit their completed WMP to CRS for approval, receive CRS points, and adopt the WMP as an annex to their LMS.
- Receiving CRS points is critical, as it results in increased ratings for their community and, subsequently, flood insurance premium discounts for community residents.



# Watershed Planning Initiative

## Eligible Applicants:

- Local Governments or Communities
- County Governments
- Water Management Districts
- Intergovernmental Partnerships

*Note: An applicant must be participating in NFIP and not be on probation, suspended or withdrawn from the NFIP, and must be part of the CRS Program.*



# Watershed Planning Initiative

## **Applicant Prioritization:**

Applicants will be prioritized based on the criteria detailed below:

- Number of Community Flood Insurance Policies
- Flood Risk Exposure
- CRS Ranking of Communities
- Other Local Community Conditions



# Watershed Planning Initiative

**Estimate Individual Project Length:** 12 months

Individual timelines for communities will vary, but all communities should be able to complete a Watershed Master Plan within one year, and the Period Of Performance for each subapplicant will last for one year.

This initiative is integral to statewide mitigation practices, and to the safety and security of Florida residents. We look forward to working with communities on this endeavour.



# Watershed Planning Initiative

For more information on the Watershed Master Plan Program, please attend our Webinar on **Wednesday, September 22<sup>nd</sup> at 2pm.**

***Invitations forthcoming***

Email [Laura.Dhuwe@em.myflorida.com](mailto:Laura.Dhuwe@em.myflorida.com)  
if you would like to receive an invitation



# HMGP Update

THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



# HMGP Updates

- DR-4280 Hurricane Hermine:
  - Total approved: \$6,998,655 (55.70%)
  
- DR-4283 Hurricane Matthew:
  - Total approved: \$25,486,437 (52.19%)



# HMGP Updates

- DR-4337 Hurricane Irma:
  - Total approved: \$266,592,532 (47.18%)
- DR-4399 Hurricane Michael:
  - Total approved: \$40,173,810 (9.62%)
- FM-5178 2017 Wildfires:
  - Total approved: \$1,351,375 (79.49%)



# Hazard Mitigation Grant Program

- FM-5307 2020 Wildfires:
  - Lock-In: \$1,889,043
  - Tier 1: Santa Rosa, Walton, Collier
  - Application period closed on May 10, 2021
  - Applications Received: 2
- DR-4468 Hurricane Dorian:
  - Lock-In: \$24,829,818
  - Tier 1: Brevard, Broward, Duval, Flagler, Indian River, Martin, Nassau, Osceola, Palm Beach, Putnam, Seminole, St. Johns, St. Lucie, Volusia
  - Application period closed on May 24, 2021
  - Applications Received: 80



# Hazard Mitigation Grant Program

- DR-4564 Hurricane Sally:
  - Lock-In: \$39,136,511
  - Tier 1: Bay, Calhoun, Escambia, Franklin, Jackson, Jefferson, Liberty, Okaloosa, Santa Rosa, Walton
  - Application Period closed on August 13, 2021
  - Applications received: 51
- DR-4486 COVID-19 Pandemic
  - Lock-In: \$135,707,796
  - Tier 1: All Counties
  - NOFA to be published very soon



# Application Submission Changes

- **The HMGP is providing a 100% digital submission option**
  - This option is available for DR-4486 Covid-19
  - Sub-applicants must request access to the filesharing site prior to the application deadline to avoid late submissions.
  - Hard copies submissions are still accepted, but a copy must still be uploaded to the filesharing site as a subapplicant's required digital submission.
  - More details can be found in the NOFA and on the State HMPG website once it is published.



# Contacts

## HMGP

Kathleen Marshall  
Community Program Administrator, HMGP  
(850)815-4503  
[Kathleen.Marshall@em.myflorida.com](mailto:Kathleen.Marshall@em.myflorida.com)

Jared Jaworski  
Senior Management Analyst  
(850)815-4537  
[Jared.Jaworski@em.myflorida.com](mailto:Jared.Jaworski@em.myflorida.com)



# Non-Disaster Grants Update

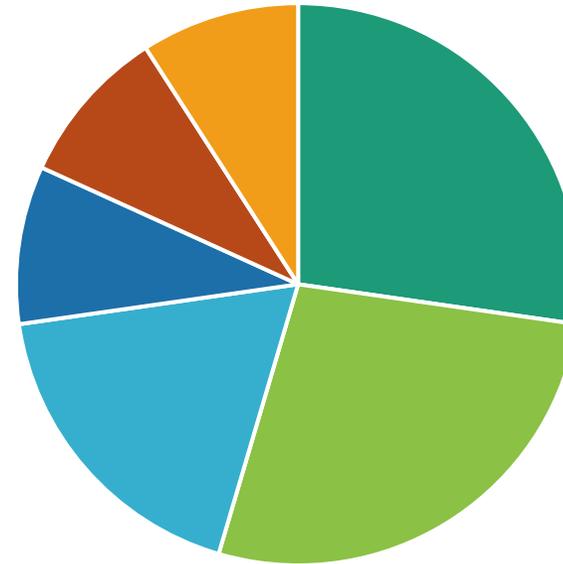


# Non-Disaster Update – FY 2020

## • Flood Mitigation Assistance (FMA) – FY 2020

|                             |  |
|-----------------------------|--|
| Subapplications Received    | 22                                       |
| Submitted to FEMA           | 17                                       |
| Selected for Further Review | 11                                       |
| Not Selected                | 5  |
| Ineligible                  | 3 (2 reconsiderations pending with FEMA) |

FMA Florida Project Types Selected



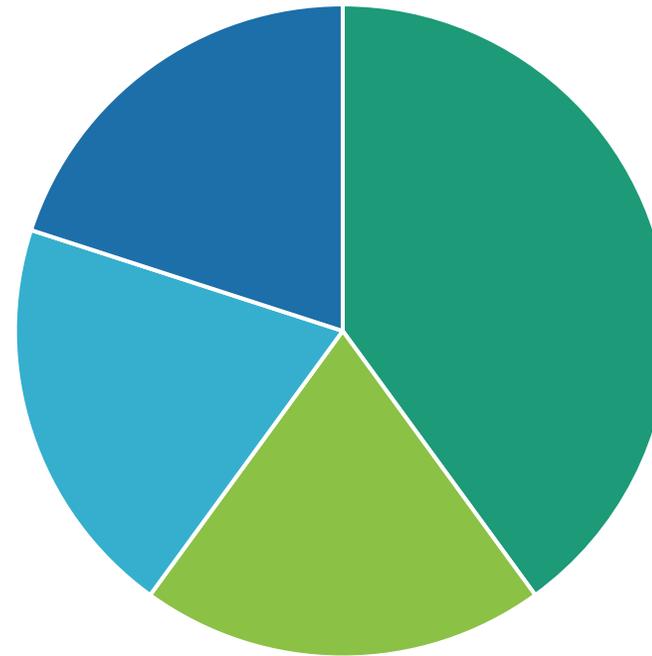
- Acquisition and Demolition
- Elevation
- Mitigation Reconstruction
- Drainage
- State Management Costs
- Technical Assistance



# Non-Disaster Update – FY 2020

- Building Resilient Infrastructure and Communities (BRIC) – FY 2020

BRIC Florida Project Types Selected



■ Generator  
■ Wind Retrofit  
■ Acquisition and Demolition  
■ State Management Costs

|                             |                                 |
|-----------------------------|---------------------------------|
| Subapplications Received    | 68                              |
| Submitted to FEMA           | 20                              |
| Selected for Further Review | 5                               |
| Not Selected                | 10                              |
| Not Eligible                | 5 (2 appeals pending with FEMA) |
| Withdrawn                   | 1                               |



# Non-Disaster Update – FY 2021

- August 9: FEMA NOFO published
- August 13: FDEM Announcement emailed
- September 30: Application Period Begins
- November 12: Deadline to Submit Subapplications to FDEM

**Deadline to Submit Subapplication to FDEM:  
NOVEMBER 12, 2021 AT 5:00 PM EST**

*Only complete subapplications will be accepted and reviewed  
before submission to FEMA*

# Do you intend to apply for Non-Disaster Grants?

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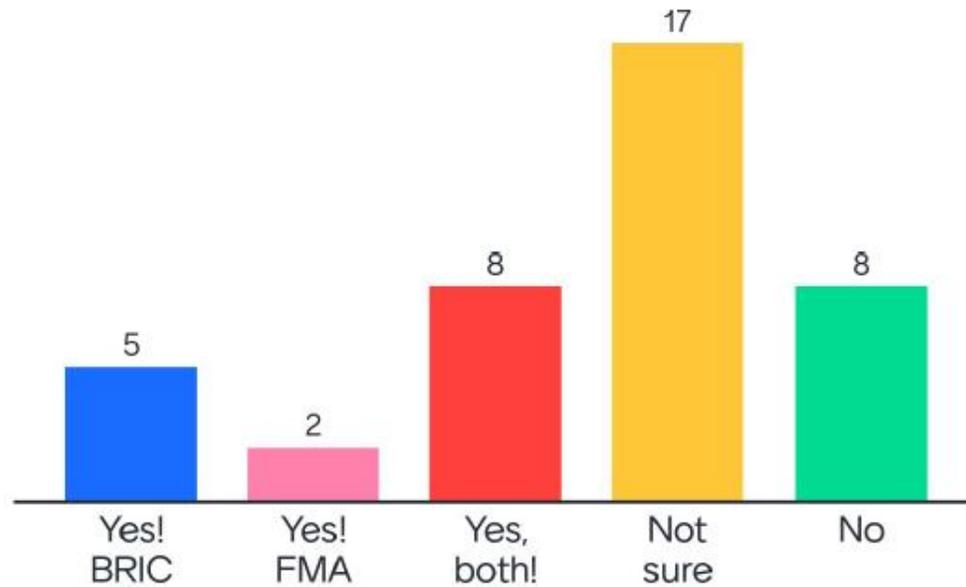
- 1) Open your phone camera and aim at the QR code
- 2) Go to Menti.com and enter code: 5792-1398
- 3) Answer the question!



# Do you intend to apply for Non-Disaster Grants?

Do you intend to apply for Non-Disaster Grants for FY 2021?

Mentimeter



40

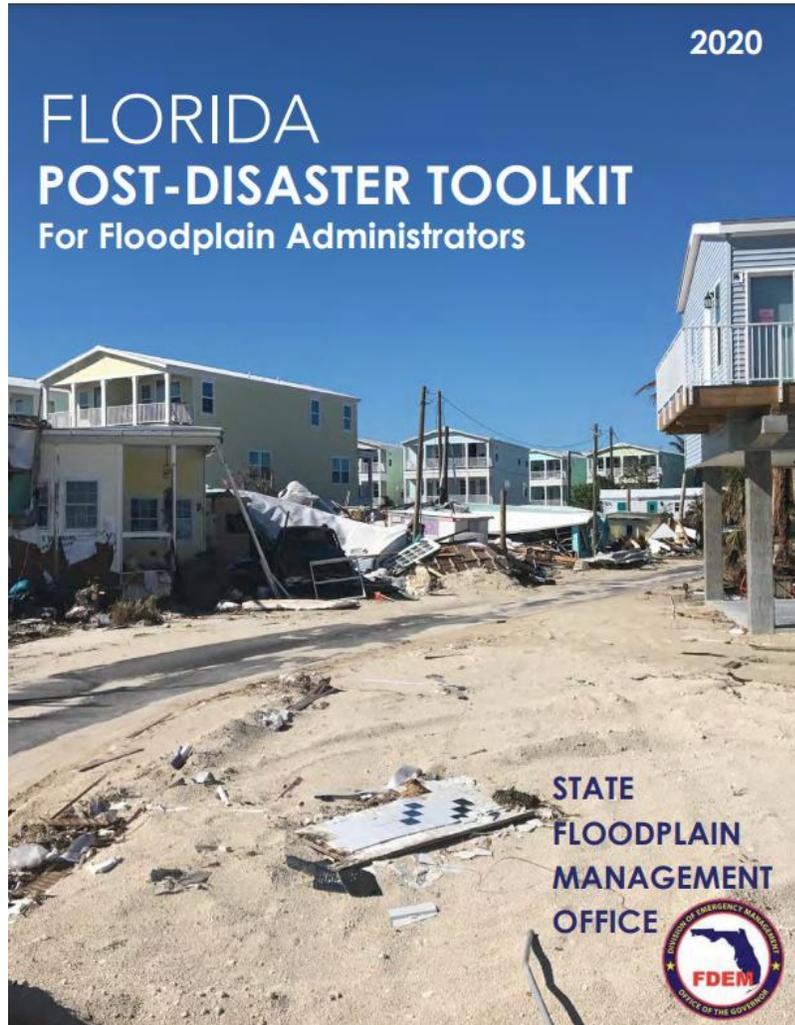


# Floodplain Management

THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



# Floodplain Management



Post-Disaster Toolkit sent-out in early July to all 468 NFIP-participating communities in FL



# Floodplain Management

- Post-disaster webinar series available for on-demand viewing, recorded on October 9, 2020
- Another recording to come in 2021



The flyer features a background image of a flooded area with debris and a blue truck. At the top, it reads 'STATE FLOODPLAIN MANAGEMENT OFFICE' and 'WEBINAR SERIES' in large, bold letters. A circular logo for FDEM is on the right. Below the image, it says 'PHOTO CREDIT: COMPLETE INC.' and '- NO COST - ON DEMAND -'. The main content is divided into two columns. The left column is titled 'ABOUT THE SERIES' and describes a three-part series. The right column is titled 'Post-Disaster RESPONSIBILITIES' and lists three topics with speakers' names and titles.

**STATE FLOODPLAIN MANAGEMENT OFFICE**  
**WEBINAR SERIES**

PHOTO CREDIT: COMPLETE INC.

- NO COST -  
- ON DEMAND -

**ABOUT THE SERIES**

IN THIS THREE PART SERIES, YOU CAN VIEW ON YOUR OWN TIME ANY OF THE THREE DIFFERENT WEBINARS THAT ARE ABOUT 45 MINUTES EACH.

ON OCTOBER 9, 2020, THE STATE FLOODPLAIN MANAGEMENT OFFICE AND FEMA REGION 4 OFFERED A JOINT TRAINING THAT DETAILED POST-DISASTER RESPONSIBILITIES AND OFFERED TRAINING TO LOCAL OFFICIALS TO BE ABLE TO EFFECTIVELY CONDUCT SUBSTANTIAL DAMAGE ASSESSMENTS. THE STATE IS OFFERING RECORDED VERSIONS OF THOSE PRESENTATIONS IN THIS FRIENDLY ON DEMAND FORMAT AT NO CHARGE.

(850) 815-4556  
Floods@em.myflorida.com

**Post-Disaster RESPONSIBILITIES**

CLICK THIS FLYER TO VIEW!

> **Prepping Teams for SDE & Permitting**  
Kristabel Moore FDEM Eddy Bouza FDEM

> **Statewide Mutual Aid & FEMA Reimbursement (PA)**  
Shannon Riess FDEM Buck Dickinson FDEM Recovery

> **FEMA's SDE Tool & FDEM's Survey 123**  
Patricia Smithline FEMA Jenna Fiocco FDEM GIS



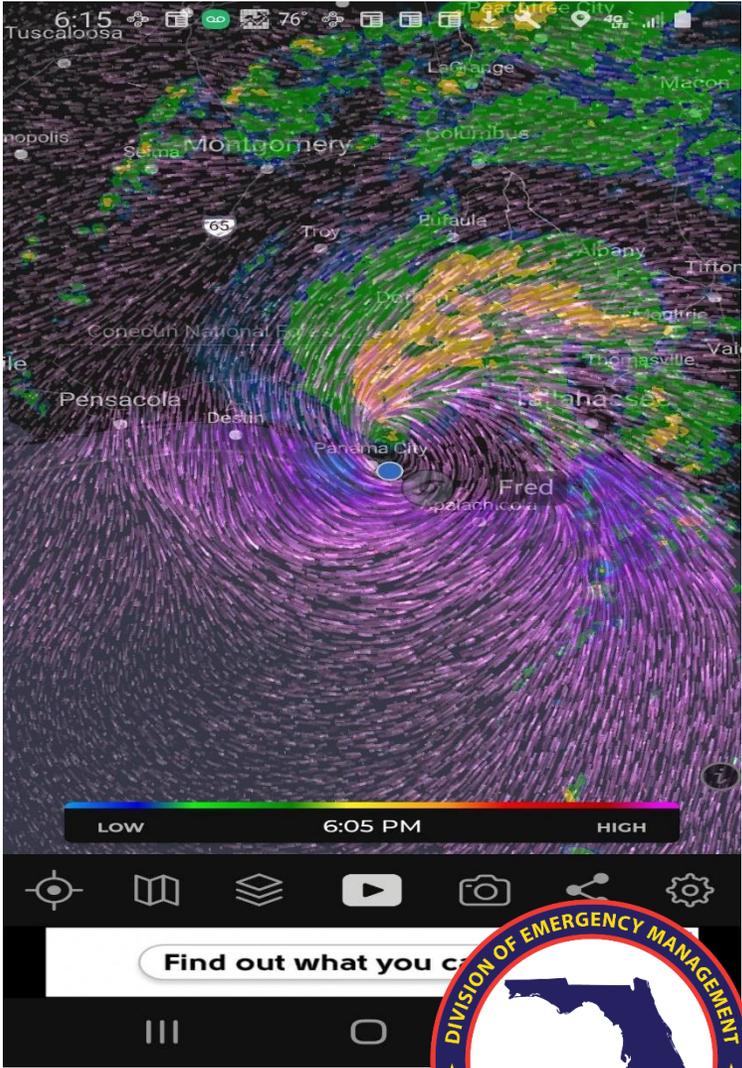
# Floodplain Management

- State Floodplain Management Office staff have conducted field assessments in 41 communities since June of 2021
- Will be in Walton, Okaloosa, Santa Rosa, and Escambia in October of 2021



# Floodplain Management

## TS Fred During Landfall



# Floodplain Management

**ATTENTION** 

**CRS Communities!**

THE STATE FLOODPLAIN MANAGEMENT OFFICE

REMINDS YOU:

**IF YOU ARE A CLASS 8 OR HIGHER COMMUNITY**



 You may need to consider updating your regulations

The State Floodplain Management Office provides FREE technical assistance drafting amendments to regulations to meet the new Pre-Requisites, adding higher standards, and conforming to FEMA Policy.

Refer to the attached letter for communities expecting a 2022 Cycle Visit

Reminder: any changes to your floodplain management ordinance should be reviewed by the State Floodplain Management Office

[FLOODS@EM.MYFLORIDA.COM](mailto:FLOODS@EM.MYFLORIDA.COM)

Communities in the attached letter who chose not to address the new pre-requisites are at risk of retrograding to Class 9 in 2022

SFMMO will send correspondence to all 2022 CRS Cycle Visit communities to review regulations and determine if amendments are needed to meet the new CRS Class 8 Pre-Requisite.



# Floodplain Management



## New Deputy State Floodplain Managers for the SFMO – Grants & Programs

**Kristabel Moore, CFM**

B.A. Environmental Science & Policy and Religious Studies – FSU  
Certificate in Emergency Management & Homeland Security - FSU



# Floodplain Management



**Eddy Bouza, CFM**

B.S. Biological Sciences – Florida State University  
Certificate in Supervisory Management  
Pursuing Master's in Public Administration

New Deputy State Floodplain  
Managers for the SFMO –  
Operations & Personnel



# Floodplain Management

Welcome to our new floodplain  
management specialists for the SFMO



**Sam Politano**

B.S. Environmental Science & Policy – Florida State University

B.A. Editing, Writing, & Media – Florida State University

# Floodplain Management



Welcome to our new floodplain  
management specialists for the SFMO

**Lyn Collins**

B.S. Environmental Science – Florida State University

Master II – Introduction to Florida Soils and the Site Evaluation Process



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT

# Floodplain Management



**Nathaniel Cantin**

B.A. Communication – Aquinas College (Grand Rapids, MI)

Welcome to our new floodplain  
management specialists for the SFMO



# Floodplain Management



Welcome to our new floodplain  
management intern for the  
SFMO

**William “Sam” Peacock**

B.A. International Studies – University of Central Florida  
Pursuing Master’s in International Affairs with a concentration in  
Urban & Regional Planning



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT

# Floodplain Management

All 3 new specialists will sit for  
the CFM Exam in October



# Floodplain Management



Send resumes to [floods@em.myflorida.com](mailto:floods@em.myflorida.com)



# Insurance Sector

THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



# Insurance Sector

Barbara Cartwright

[Barbara.Cartwright@em.myflorida.com](mailto:Barbara.Cartwright@em.myflorida.com)

Office Phone: (850) 815-4510



# Silver Jackets

THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



# Florida Silver Jackets Team





# SILVER JACKETS

Many Agencies One Solution

## H&H Study on Lake Martin – Progress Update

- An Estuary Resilience Assessment was recently completed by a team from Florida State University
  - This group delivered a report on sediment and water quality
  - They also explored feasible alternatives for lake restoration
- Work on this project is ongoing
- Members of the Silver Jackets Team will provide updates on the study's findings when it is complete



US Army Corps  
of Engineers®  
Jacksonville District



# SILVER JACKETS

Many Agencies One Solution

## Approved Projects for FY 2022

- **Immokalee Regional Water Plan**
  - Project will bring local, state, and federal partners together to develop a comprehensive water resource plan
    - Infrastructure proposals for improved drainage
    - Non-structural or hybrid solutions
- **Florida Coastal Resilience Workshop**
  - Share information and tools to increase coastal resilience
    - Support risk management/assessment/communication
    - Contextual data products and tools that support decision making
    - Support project design and evaluation
    - Support expedient coastal storm response prediction, emergency management, and operations



US Army Corps  
of Engineers®  
Jacksonville District

# Florida Silver Jackets

## Many Agencies / One Solution



# For more information on Silver Jackets:

[Ian.Ohlin@em.myflorida.com](mailto:Ian.Ohlin@em.myflorida.com)

[Jennifer.H.John@usace.army.mil](mailto:Jennifer.H.John@usace.army.mil)



US Army Corps  
of Engineers®  
Jacksonville District

# LMS Updates



# LMS Plan Reviews

| Status       | Counties  |
|--------------|---|
| Expired      | 4   |
| Under Review | Okeechobee, Orange, Sumter  |
| In Revisions | Bradford, Okaloosa, Washington                                      |
| APA          | Levy  |
| Approved     | Brevard, Flagler, Gilchrist, Glades, Liberty, Santa Rosa, St. Lucie |

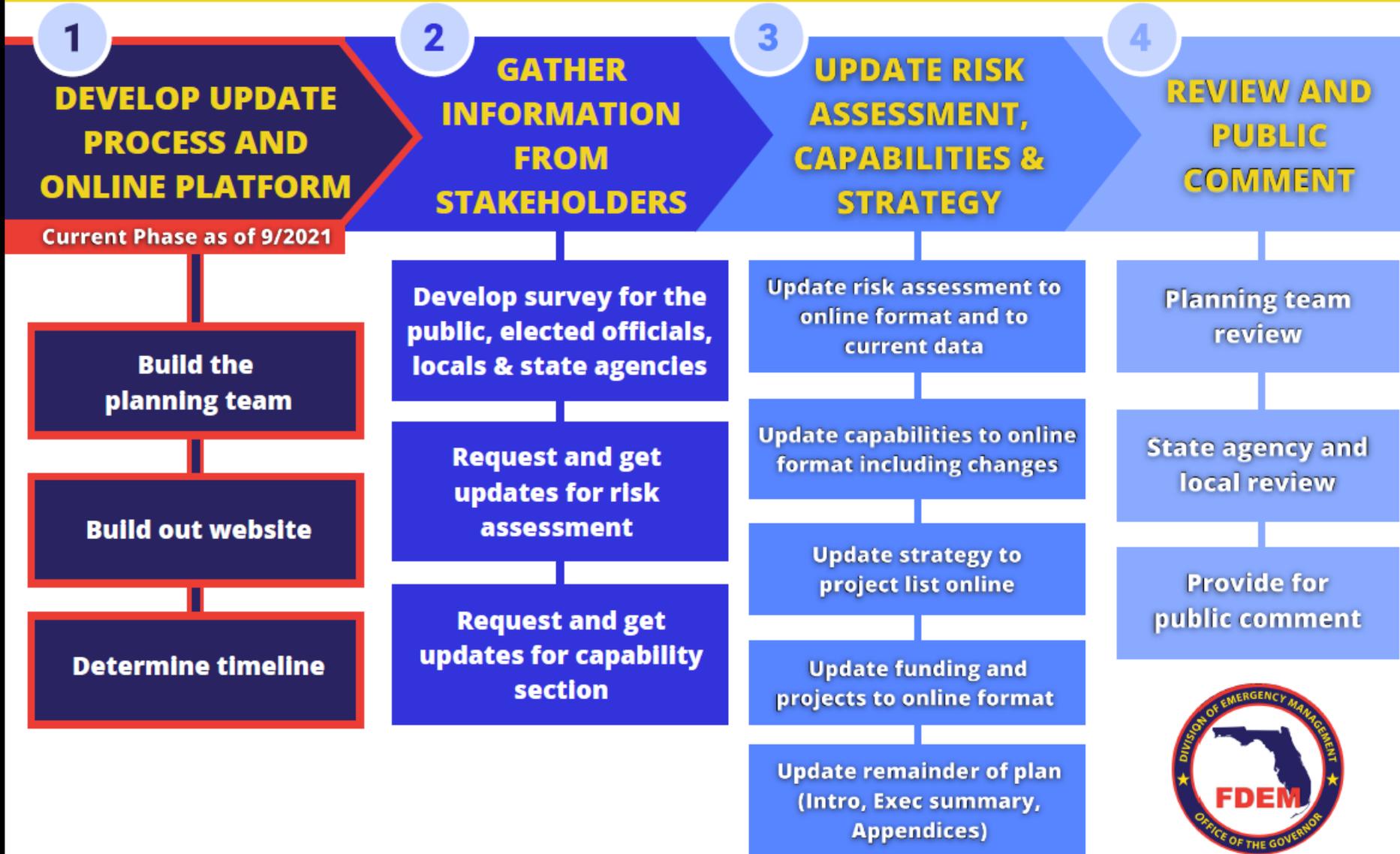
**TOTAL APPROVED THIS CYCLE: 58**

# LMS Reminder

- Please encourage your jurisdictions to adopt ASAP when your plan is approved
- Please send those resolutions to us ASAP so we can get them to FEMA
- **This impacts current and future grant eligibility and will cause time delays with your grants!**
- Missing resolutions from ~15 counties right now



# STATE HAZARD MITIGATION PLAN UPDATE PROCESS



# SHMP Update

*Input Survey coming soon*

If you are interested in being involved in the SHMP Update Sub-Committee, please email

[Laura.Dhuwe@em.myflorida.com](mailto:Laura.Dhuwe@em.myflorida.com)



# DEP Resilient Florida Program



THE FLORIDA DIVISION OF EMERGENCY MANAGEMENT



# Working Together to Create More Resilient Florida Communities

Whitney Gray, Administrator  
FRCP, Tallahassee

850-245-2098, [Whitney.Gray@FloridaDEP.gov](mailto:Whitney.Gray@FloridaDEP.gov)



# Sea Level Impact Projection Studies

Section 161.551, F.S., Public Financing of Coastal Construction, and 62S-7, F.A.C.



# 161.551, F.S.

## *Sea Level Impact Projection Studies*

An act relating to public financing of construction projects; creating s. 161.551, F.S.; defining terms; prohibiting state-financed constructors from commencing construction of certain structures in coastal areas after a specified date without first taking certain steps regarding a *sea level impact projection study*..



# 161.551, F.S.

## *Sea Level Impact Projection Studies*

Beginning 1 year after the date the rule developed by the department pursuant to subsection (3) is finalized and is otherwise in effect,

a state-financed constructor may not commence construction of a coastal structure without:

- (a) *Conducting a SLIP study* that meets the requirements established by the department;
- (b) *Submitting the study to the department*; and
- (c) *Receiving notification from the department that the study was received and that it has been published on the department's website pursuant to paragraph (6) (a) for at least 30 days*. The state-financed constructor is solely responsible for ensuring that the study submitted to the department for publication meets the requirements under subsection (3).



# 62S-7.011

## *Requirements of the State-Financed Constructor*

- 3) The state-financed constructor may not commence construction until notified by DEP that:
  - a. the SLIP study was approved as meeting the requirements of s. 161.551, F.S. and
  - b. the 30-day publication period has finished.
- 4) DEP will send such notification via the web-based SLIP study tool or email.
- 5) All SLIP studies will be maintained on DEP's website for a minimum of 10 years.

1. A state-financed constructor choosing not to use the Department's web-based tool to conduct the SLIP study required under s. 161.551, F.S., shall do all of the following:
  - a) **Show the amount of sea level rise expected over 50 years or the expected life of the structure, whichever is less.**
    - i. Use NOAA 2017 Intermediate-High + any others desired
    - ii. Use interpolation method
    - iii. Use NAVD 88 for all elevations
    - iv. Figure in land subsidence
  - b) **Show the amount of flooding, inundation, and wave action damage risk expected over 50 years or the expected life of the structure, whichever is less.**
    - i. Use the FEMA storm surge water surface elevation for the 1% annual chance (100 year) flood event
    - ii. Add the FEMA 1% annual chance water surface elevation to the sea level rise scenario, and then compare to the project's critical elevations
    - iii. Use the USACE Depth-Damage Curves from the 2015 North Atlantic Coast Comprehensive Study to estimate the cost of future flood damage, for vertical construction only, by assessing the approximate flood depth within the structure, using the comparison of the critical elevations to the previously calculated 1% annual chance water surface elevation added to the local sea level rise scenarios.
  - c) **Show the risk to public safety and environmental impacts** by assigning a risk category per the Florida Building Code and providing the ultimate design wind speed.
  - d) **Provide alternatives for the project's design and siting**, which take into account the SLIP study analysis and aim to reduce future flood risk to the structure and the risks and costs associated with construction, maintenance and repair of the structure.



SLIP Studies

Section 161.551, F.S.

Adaptation

# Sea Level Impact Projection Study Tool

Determining risk for Florida coastline construction projects

The purpose of the Sea Level Impact Projection (SLIP) Study Tool is to facilitate the conduction of SLIP studies for state-funded construction within the coastal building zone in accordance with Section 161.551, F.S.



## SLIP Studies

Learn more about SLIP Studies and how to create a report using this website

[Continue](#)



## Section 161.551, F.S.

Learn more about the Florida statute that mandates SLIP studies.

[Continue](#)



## Adaptation

Learn about adaptation strategies for your construction projects.

[Continue](#)



Use the tools below to view base map and coastal flooding spatial data.

SLIP Study Tool

Create Report

Coastal Layers

- Sea Level Rise
- NOAA Regional Scenarios
- Flood Zones
- Storm Surge Flood Depths
- High Tide Flooding
- Wind Zones
- Terrain
- Wildlife Index
- None

### Sea Level Rise

Use the vertical slider to simulate water level rise, the resulting inundation footprint, and relative depth.

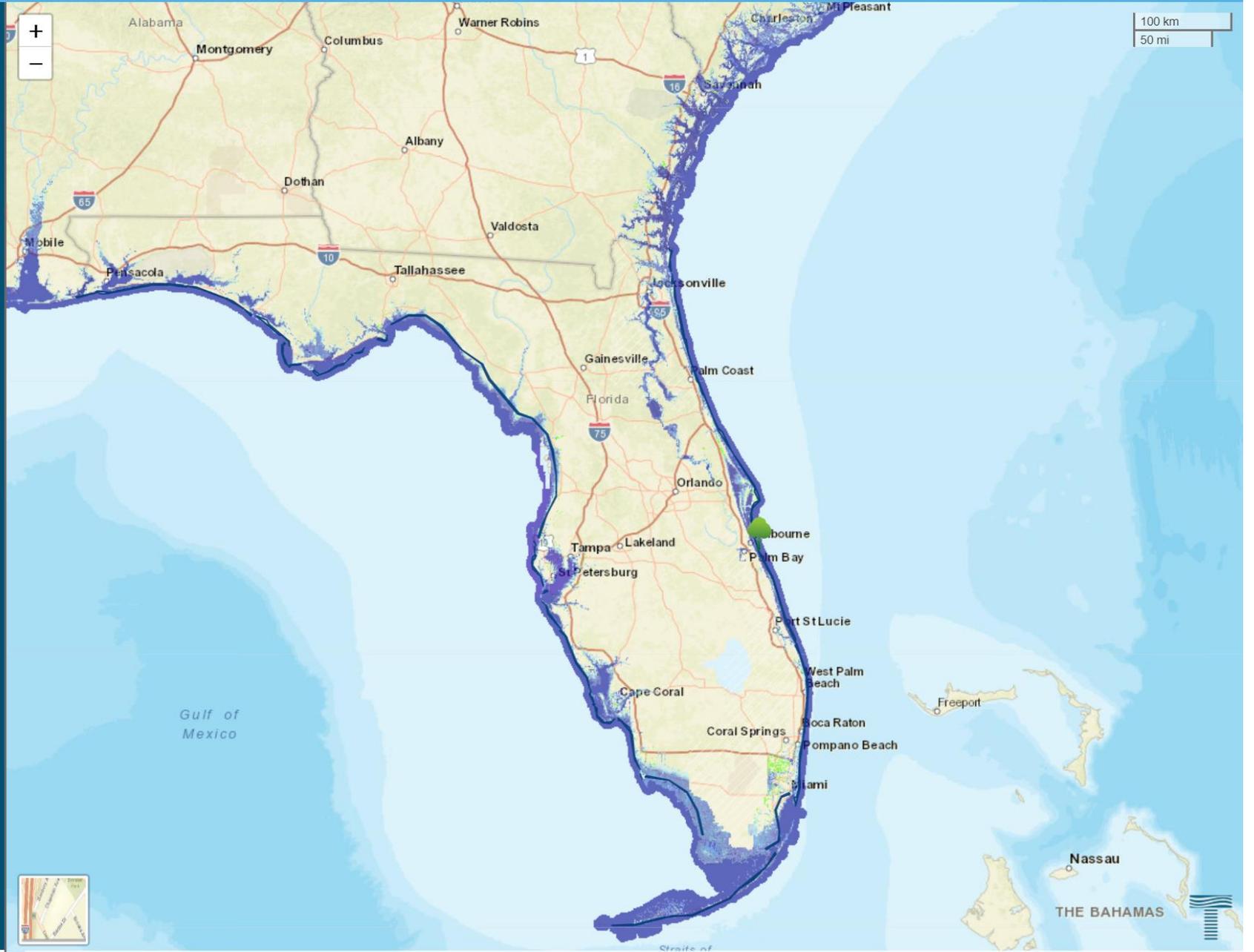
Water Depth

Low-lying inland areas prone to flood at selected sea level rise scenario

Water levels are relative to local Mean Higher High Water Datum. Areas that are hydrologically connected to the ocean are shown in shades of blue (darker blue = greater depth).



Water Level (feet)



Nassau THE BAHAMAS



Use the tools below to view base map and coastal flooding spatial data.

Coastal Layers

- Sea Level Rise ⓘ
- > NOAA Regional Scenarios ⓘ
- Flood Zones ⓘ
- Storm Surge Flood Depths ⓘ
- High Tide Flooding ⓘ
- Wind Zones ⓘ
- Terrain ⓘ
- Wildlife Index ⓘ
- None ⓘ

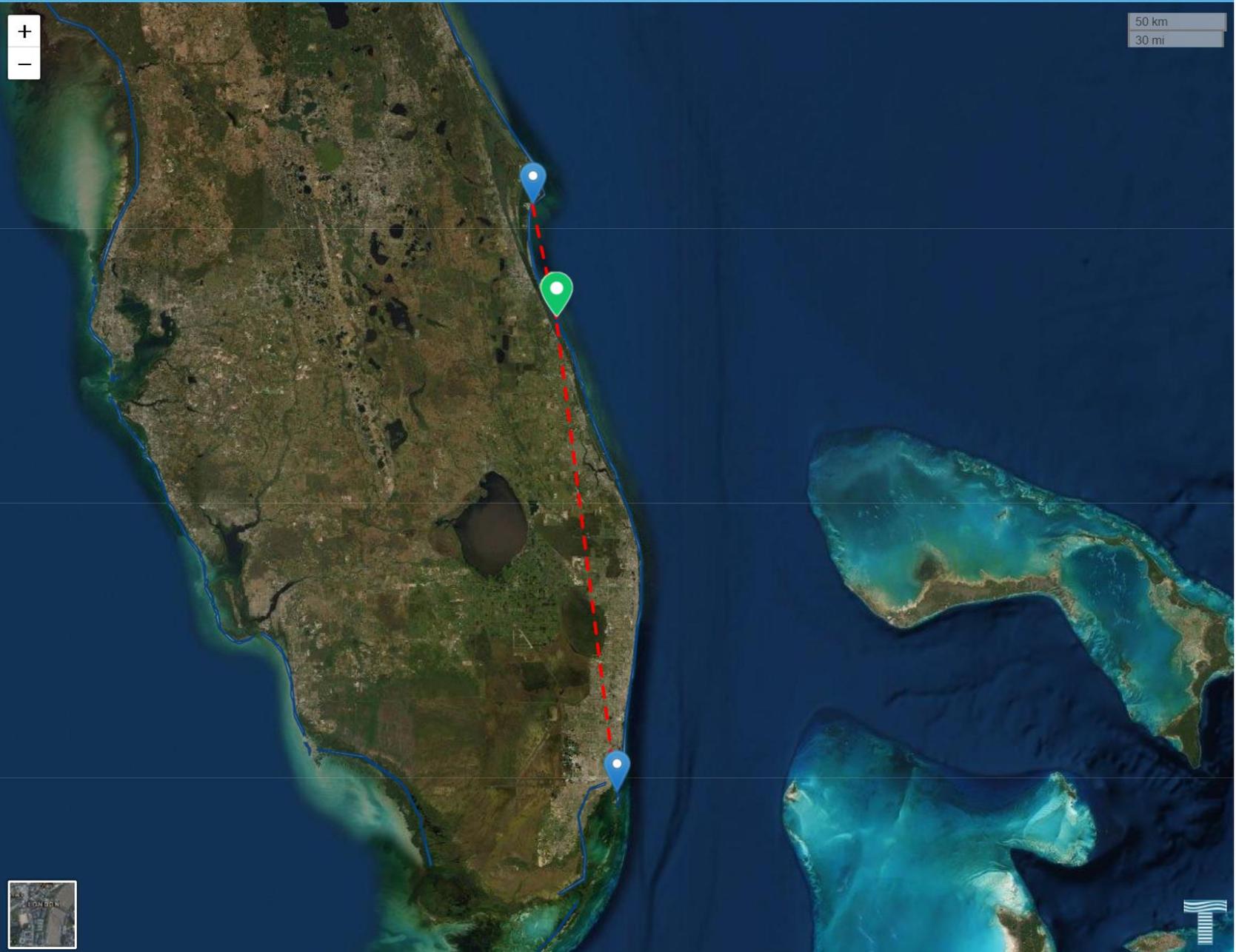
NOAA Regional Scenarios

Click a location on the map to see the interpolated regional sea level rise for the selected scenario. Elevations are in NAVD88 (ft).

Intermediate High ▾

Virginia Key, FL  
Trident Pier, FL

|      |            |
|------|------------|
| 2100 | : 2.86 ft  |
| 2080 | : 1.81 ft  |
| 2060 | : 0.99 ft  |
| 2040 | : 0.37 ft  |
| 2020 | : -0.06 ft |





Use the tools below to view base map and coastal flooding spatial data.

SLIP Study Tool

Create Report

Coastal Layers

- Sea Level Rise (i)
- NOAA Regional Scenarios (i)
- Flood Zones (i)
- Storm Surge Flood Depths (i)
- > High Tide Flooding (i)
- Wind Zones (i)
- Terrain (i)
- Wildlife Index (i)
- None

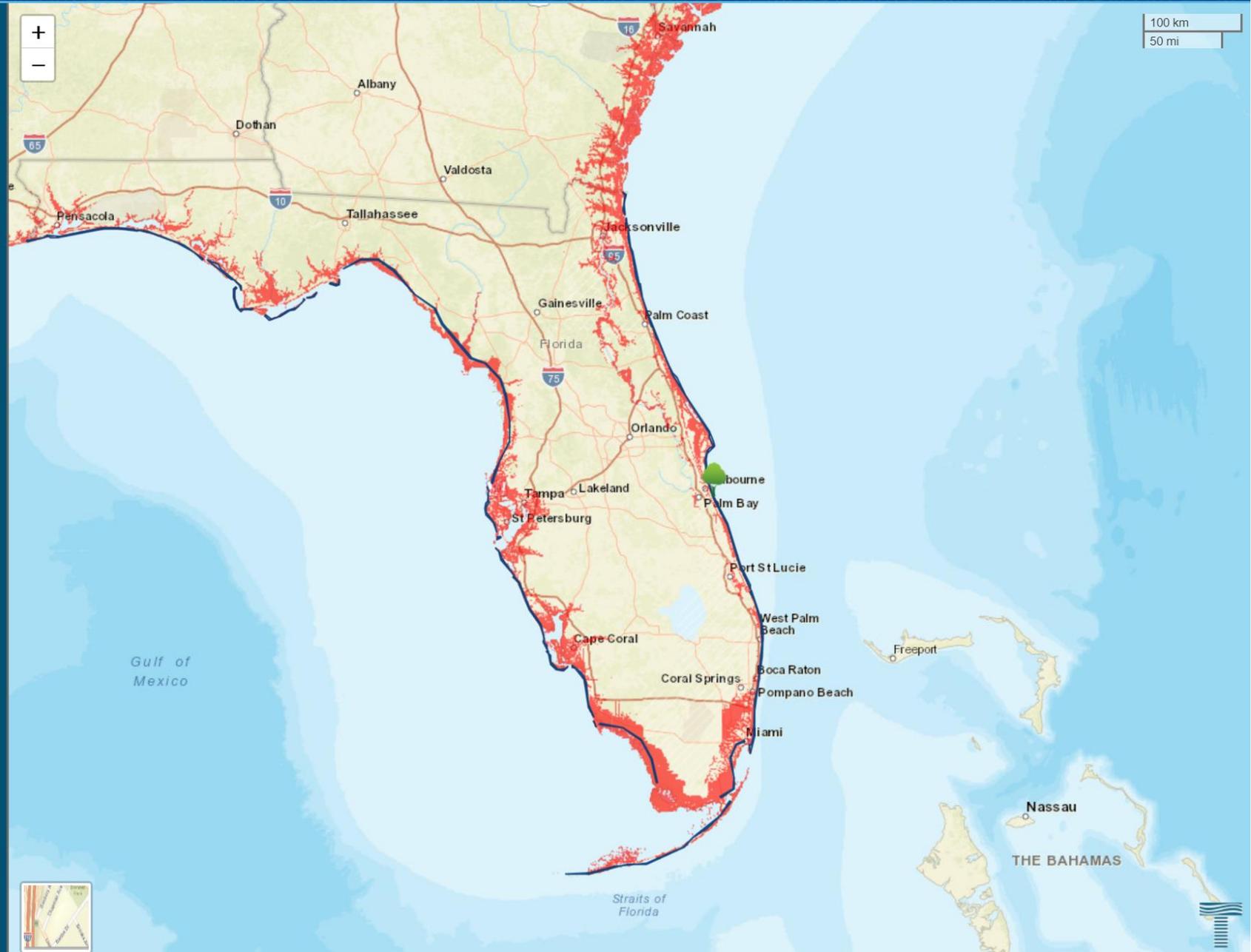
### High Tide Flooding

#### ● Shallow Coastal Flooding

Annual occurrences of tidal flooding—exceeding local thresholds for minor impacts to infrastructure—have increased 5- to 10-fold since the 1960s in several U.S. coastal cities. The changes in high tide flooding over time are greatest where elevation is lower, local RSL rise is higher, or extreme variability is less.

In a sense, today's flood will become tomorrow's high tide, as sea level rise will cause flooding to occur more frequently and last for longer durations of time.

The red layer in the map represents areas currently subject to tidal flooding, often called "recurrent or nuisance flooding."





Use the tools below to view base map and coastal flooding spatial data.

### Create Report

You have activated the "Create Report" tool. In order to create a new SLIP Study report use the map pane to the right to navigate to your project area. Click on the desired project area on the map and the "Create Report" form will pop up. Enter the required information and click "Create Report".

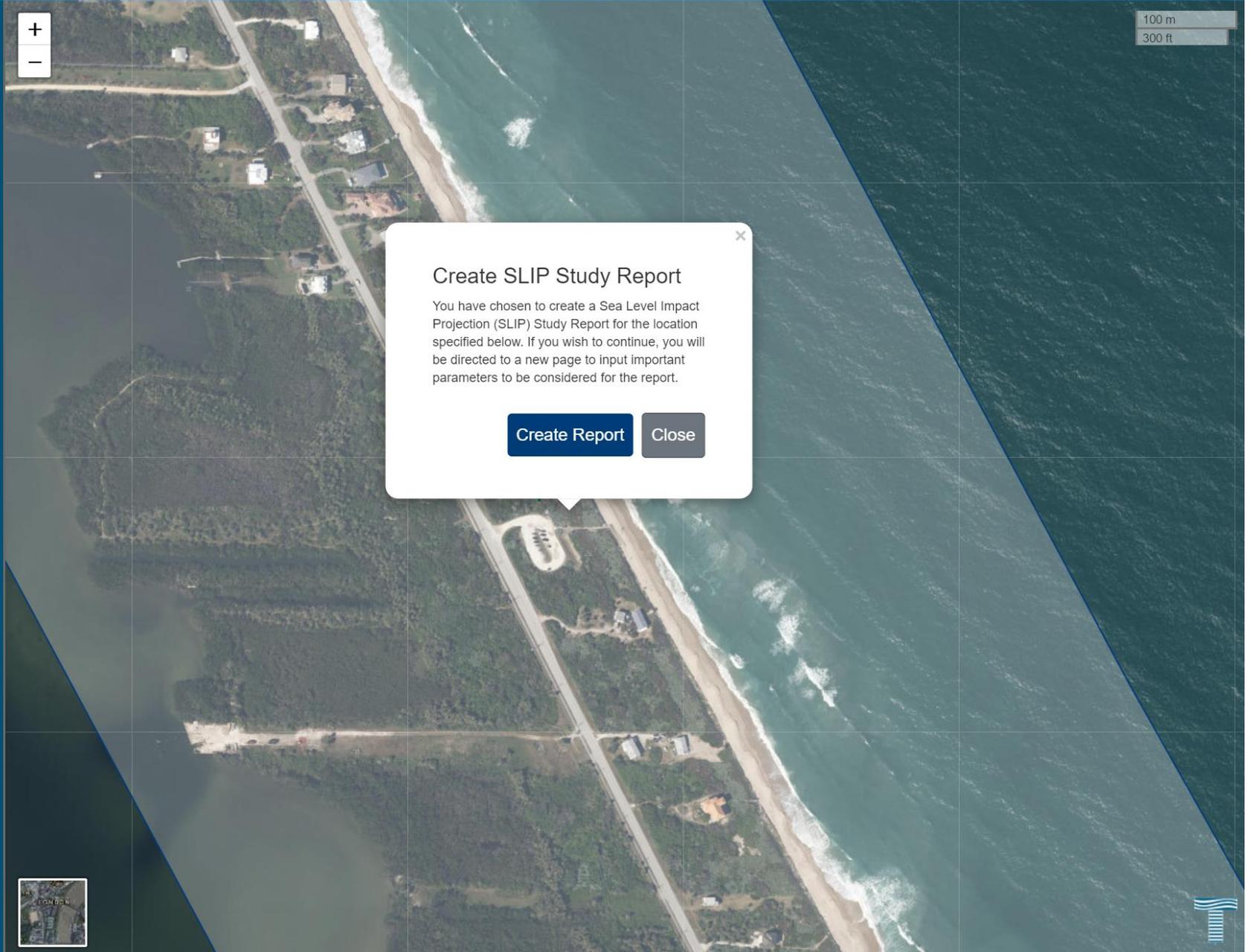
If you would like to cancel the "Create Report" process, click "Cancel Report" on the left side of this page.

#### SLIP Study Tool

Cancel Report

#### Coastal Layers

- > Sea Level Rise ⓘ
- NOAA Regional Scenarios ⓘ
- Flood Zones ⓘ
- Storm Surge Flood Depths ⓘ
- High Tide Flooding ⓘ
- Wind Zones ⓘ
- Terrain ⓘ
- Wildlife Index ⓘ
- None ⓘ



×

### Create SLIP Study Report

You have chosen to create a Sea Level Impact Projection (SLIP) Study Report for the location specified below. If you wish to continue, you will be directed to a new page to input important parameters to be considered for the report.

Create Report
Close



## Create SLIP Study Report

\*Denotes required values

\*Project Name:  
Bonsteel Park Driveway

\*Category:  
Horizontal (road/bridge/parking lot, etc)

\*Construction type:  
Risk Category I

Critical Elevation (ft NAVD88):  
1.3

\*Construction Start Year:  
2021

\*Expected Life (years):  
50

\*Estimated Construction Cost (\$):  
20000

Create Report

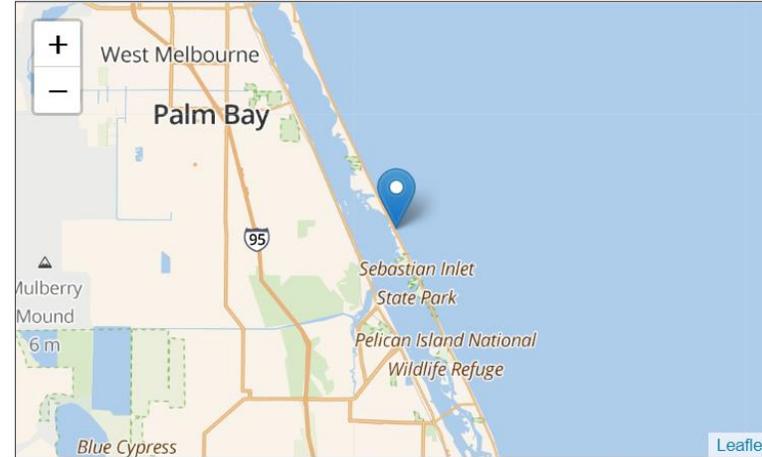
Cancel



Save Report

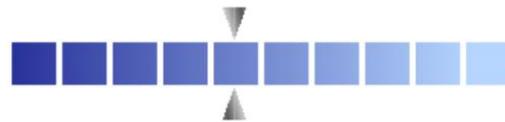
# Sea Level Impact Projection (SLIP) Study Report (Demo version)

|                                  |                          |
|----------------------------------|--------------------------|
| Project name                     | Bonsteel Park Platform   |
| Coordinates                      | -80.47 W, 27.90 N        |
| Project category                 | Horizontal               |
| Construction type                | Bridge                   |
| Construction start year          | 2021                     |
| Expected life (years)            | 40                       |
| Estimated Construction Cost (\$) | \$20,000                 |
| Critical elevation (ft NAVD88)   | 20.1                     |
| Organization                     | Taylor Engineering, Inc. |
| Report Date                      | 5/4/2021, 10:07:14 AM    |



## Results

Average Annual Chance of Flood Damage: **5%**

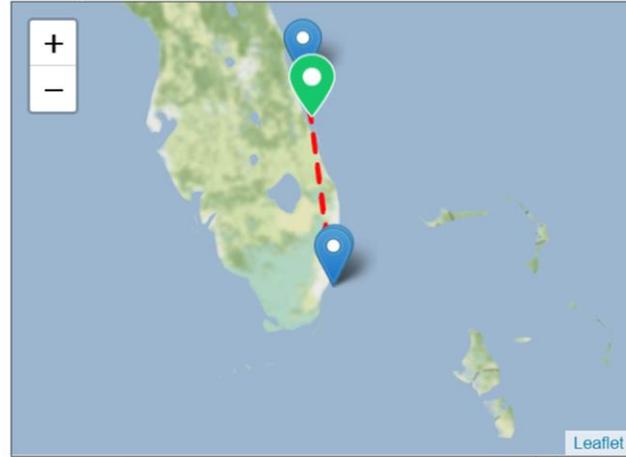


| Metric  | Value |
|---|-------|
| FEMA Flood Hazard Zone                          | VE    |
| Base Flood Elevation (ft NAVD88)                | 13    |
| Int-High Sea Level Rise (year 2060) (ft NAVD88) | 0.85  |
| Wind Zone (mph)                                 | 180   |

The cumulative results of the SLIP Study were found to be moderate, meaning the selected location is moderately favorable when considering coastal hazards related to potential sea level impacts. More explanation will be forthcoming in future versions.



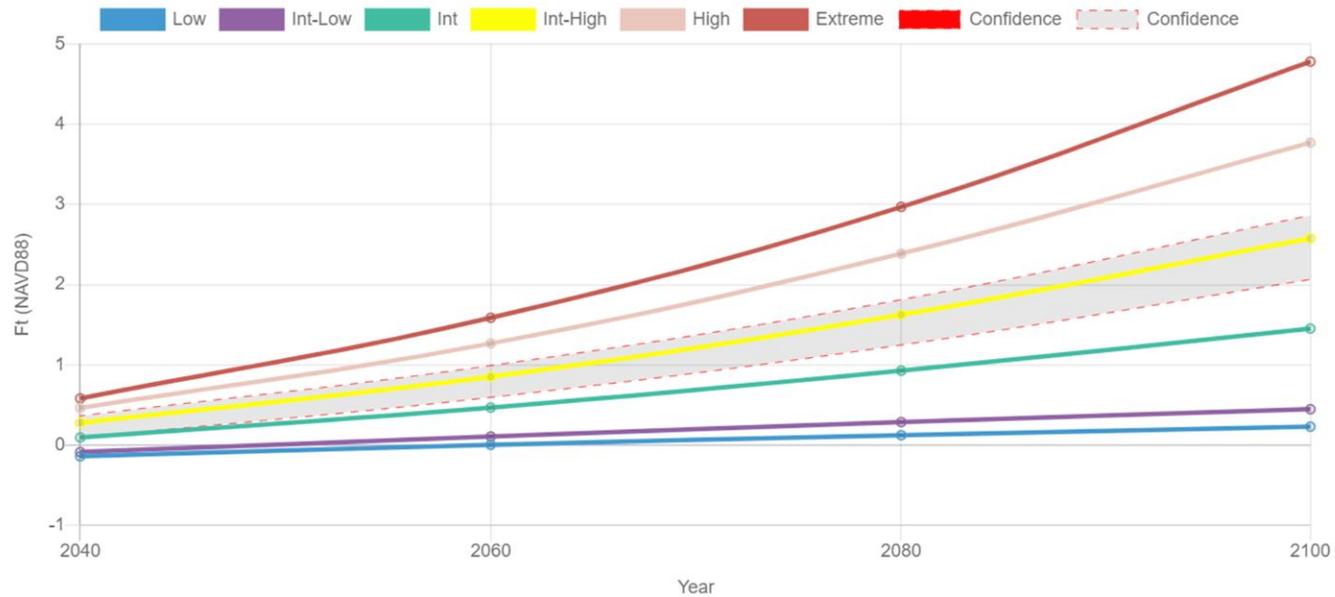
## Regional Sea Level Rise Scenarios



NOAA Regional Scenarios (ft)

| Scenario                 | 2040        | 2060        | 2080        | 2100        |
|--------------------------|-------------|-------------|-------------|-------------|
| Low                      | -0.14       | 0.01        | 0.12        | 0.23        |
| Intermediate Low         | -0.08       | 0.11        | 0.29        | 0.45        |
| Intermediate             | 0.10        | 0.47        | 0.93        | 1.45        |
| <b>Intermediate High</b> | <b>0.28</b> | <b>0.85</b> | <b>1.63</b> | <b>2.58</b> |
| High                     | 0.46        | 1.27        | 2.39        | 3.77        |
| Extreme                  | 0.58        | 1.59        | 2.97        | 4.78        |

Regional Scenario Curves





## Project SLIP Study Reports

---

Below are the SLIP Study reports for this project:

| Report                      | Report Date           | Date Submitted       | Publish Date         | Action                          |
|-----------------------------|-----------------------|----------------------|----------------------|---------------------------------|
| <a href="#">View Report</a> | 3/29/2021 4:22:37 PM  |                      |                      | Not Submitted                   |
| <a href="#">View Report</a> | 3/29/2021 3:27:40 PM  |                      |                      | Not Submitted                   |
| <a href="#">View Report</a> | 3/29/2021 12:15:55 PM |                      |                      | Not Submitted                   |
| <a href="#">View Report</a> | 3/29/2021 10:42:54 AM | 3/29/2021 1:52:31 PM | 4/28/2021 1:52:31 PM | <a href="#">Unsubmit Report</a> |



# Resilient Florida

Section 380.093, F.S.



# Resilient Florida

- **5 major sections**
  - **“Resilient Florida Grant Program” Planning + Critical Asset Adaptation Grants (s. 380.093 (1)(3), F.S.)**
  - **Comprehensive Statewide Flood Vulnerability Data Set and Assessment (s. 380.093 (1)(4), F.S.)**
  - **Statewide Flooding and Sea Level Rise Resilience Plan (s. 380.093 (1)(5), F.S.)**
  - **Regional Resilience Entities (s. 380.093 (1)(6), F.S.)**
  - **Florida Flood Hub (s. 380.093 (2), F.S.)**



# Resilient Florida Grant Program

- Focused on planning
  - Comp plan amendments, especially compliance with the Peril of Flood statute
  - Vulnerability assessments
  - Adaptation/resilience plans
  - Projects to adapt critical assets



Figure 1. Communities can follow this roadmap of steps to create an adaptation plan.



# Consistent Vulnerability Assessments

- Will comprise the Statewide Vulnerability Assessment and be the basis for the Statewide Resilience Plan
- Encompass entire city or county and all critical assets\*
- Use most recent publicly available DEM and generally accepted analysis and modeling
- Address Peril of Flood compliance if applicable
- Assess flooding using, at least, Intermediate Low and Intermediate High scenarios from NOAA 2017 for at least 2040 and 2070
  - Tidal flooding, including future high tide flooding
  - Current and future storm surge flooding
  - Rain-fall induced flooding to the extent practicable
  - Compound flooding



# Statewide Data Set and Vulnerability Assessment

- By July 1, 2022, DEP must complete the development of a statewide flood vulnerability and sea level rise data set sufficient to conduct a vulnerability assessment.
- The data set will include critical assets, flooding and sea level rise data, and other relevant information needed to complete the VA.
- Data will come from existing local vulnerability assessments and other data sources necessary to complete the data set.
- Compilation of the data set and completion of the vulnerability assessment will be done in coordination with the Chief Science Officer and the Flood Hub.



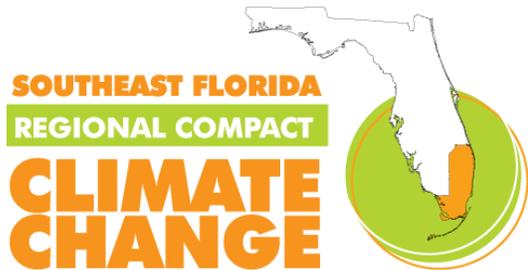
# Statewide Flooding & Sea Level Rise Resilience Plan

- 3-year rolling plan of projects taken from vulnerability assessments
- Year 1 Preliminary Plan uses already completed local vulnerability assessments
- Year 2 will update the Year 1 plan
- Year 3 and following will use projects identified in the Statewide Vulnerability Assessment
- Counties and municipalities, regional resilience entities (on behalf of a member), WMDs and flood control districts may submit projects to DEP starting 9/1/21.
- Minimum 50% cost share unless the applicant is a “financially disadvantaged small community”



# Regional Resilience Entities

- Funding for regional resilience entities to assist communities and coordinate intergovernmental solutions
  - Technical assistance
  - Coordinate multijurisdictional vulnerability assessments
  - Develop project proposals to go into the Resilience Plan





# Florida Flood Hub

- Designates the College of Marine Science at USF to serve as the lead institution to engage other academic and research institutions, private partners, and financial sponsors to coordinate efforts to support applied research and innovation to address the flooding and sea level rise challenges of the state.



|                        | Resilient Florida Grant Program  |   | Comprehensive Statewide Flood Vulnerability Data Set and Assessment  |   | Statewide Flooding and Sea Level Rise Resilience Plan   | Regional Resilience Entities   | Florida Flood Hub  |
|------------------------|--|---|--|---|---|--|--|
|                        | <i>Planning Grants</i>   | <i>Resilience Projects</i>  | <i>Data Set</i>  | <i>Assessment</i>   |   |  |  |
| Activities             | Provides funding for comprehensive plan amendments, Peril of Flood, vulnerability assessments, adaptation plans, and projects to adapt critical assets to the effects of flooding and sea level rise. Provides a methodology for completing vulnerability assessments. | “The nonrecurring sum of \$500,000,000 from the Resilient Florida Trust Fund is appropriated in Fixed Capital Outlay for the Resilient Florida Grant Program authorized in Senate Bill 1954.” | Provides for the collection and aggregation of data from vulnerability assessments that are existing , those completed from grant program, and to fill any gaps. | This section provides for the incorporation of the data collected for the data set and other analyses into a statewide sea level rise vulnerability assessment. | Statewide Flooding and Sea Level Rise Resilience Plan will be developed and submitted to the Governor and Legislature. The Plan will work on a 3-year rolling planning horizon and will consist of ranked projects that address the risks of flooding and sea level rise identified in the Statewide Flood and Sea Level Rise Vulnerability Assessment. | Provides funding to regional entities that are established by local governments to provide technical assistance on multijurisdictional projects. | Provides for the establishment of the Florida Flood Hub at USF's College of Marine Science. The Flood Hub will serve as the lead institution and will engage other institutions and partners to coordinate research and innovation around the flooding and sea level rise challenges facing the state. |
| Deadlines              | Application portal opens July 1, 2021<br>Applications due September 1, 2021  |   | Data Set due July 1, 2022  | Assessment due July 1, 2023   | Application portal opens July 1, 2021. Applications Due September 1, 2021. Plan due to EOG/Legislature December 1, 2021. Starting December 1, 2023, the Resilience Plan will be based on the Statewide Assessment.  | Application portal opens July 1, 2021. Applications due September 1, 2021  | Annual Report due July 1, 2022   |
| Annual Funding         |  |   |  |   |   |  |  |
| FY 21-22               | \$20,000,000   | \$500,000,000   | \$4,000,000  |   |   | \$2,000,000  |  |
| FY 22-23 (anticipated) | ?  | ?   | ?  |   | Up to \$100,000,000   | ?  |  |

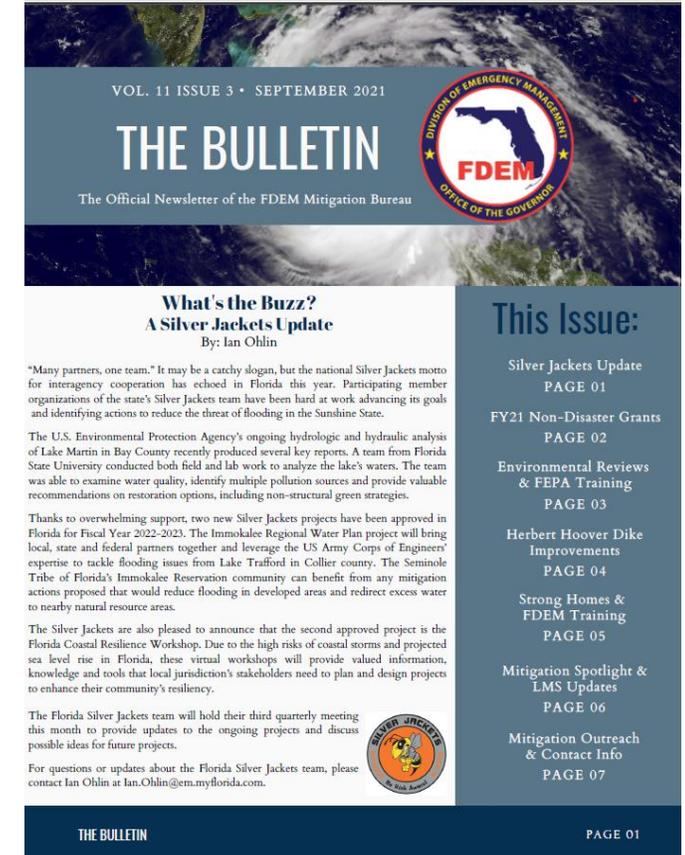


**Thank you!**

**Contact Whitney Gray at 850-245-2098  
or [Whitney.Gray@FloridaDEP.gov](mailto:Whitney.Gray@FloridaDEP.gov)**

# Announcements

- Bulletin published yesterday
- Meeting notes and materials will be available [here](#)
- Next Mitigate FL Meeting
  - Tuesday, December 14, 2021
  - 1:00 pm – 2:00 pm
  - Webinar



# Upcoming Trainings

| Course | County | Date            |
|--------|--------|-----------------|
| G-393  | Polk   | October 12 – 14 |
| G-393  | Leon   | December 7 – 9  |

Contact us if you want to host a G-393 in 2022!

<https://trac.floridadisaster.org/TRAC/trainingcalendar.aspx>



# Questions or Comments?

For any additional questions, suggestions  
or comments please contact:

Laura Dhuwe

[Laura.Dhuwe@em.myflorida.com](mailto:Laura.Dhuwe@em.myflorida.com)

850-879-0872

