



FLOOD OBSERVATION TOOLS AND ENGAGEMENT WITH LOCAL GOVERNMENTS & 298 DISTRICTS



PRESENTED BY:

Libby Pigman

External Affairs Director

South Florida Water Management District



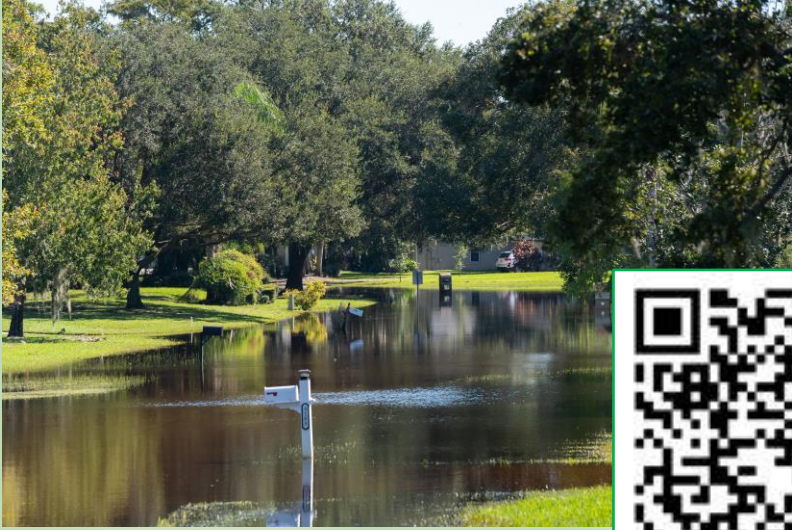
Welcome Partners

Join us in the collaboration of this new flood documentation tool.

Today we will be:

- Going through the "**Report Flooding and Early Concerns**" survey step-by-step.
- Discussing the importance of this tool and why we are looking for collaboration.
- Discussing what we will do with this data.

SFWMD.GOV/FLOODINGAPP





Overall Goals

- The goal of the Flood Observation tool is to collect and share data that supports the documentation of flood events and resiliency planning and provide real time information on flood occurrences.
- SFWMD has developed a data repository tool to compile and store relevant flood information.

Current Stage

- Currently, SFWMD is engaging local partners for outreach purposes, along with external affairs and field staff for data collection.
- We are inviting local partners to use the tool to collect, submit and visualize flood observations data.

SFWMD.GOV/FLOODINGAPP

- All required questions are symbolized with a red asterisk “*”
- Pictures can be taken directly from your mobile device by selecting the camera icon or photos can be uploaded by selecting files from your device or camera roll.

Report Flooding and Early Concerns



The information collected in this survey is used by agencies to better understand flooding conditions in Central and Southern Florida. This survey does not replace the need to contact your local drainage operator.

All flooding that poses a risk to your home or property should be reported to your local drainage operator. Life-threatening flooding should always be reported to 9-1-1.

To learn who to contact, go to [SFWMD.gov/FloodControl](https://www.sfwmd.gov/FloodControl) and enter your address.

Questions with a red * are required.

Photos (Optional)

Submit up to 3 photos.

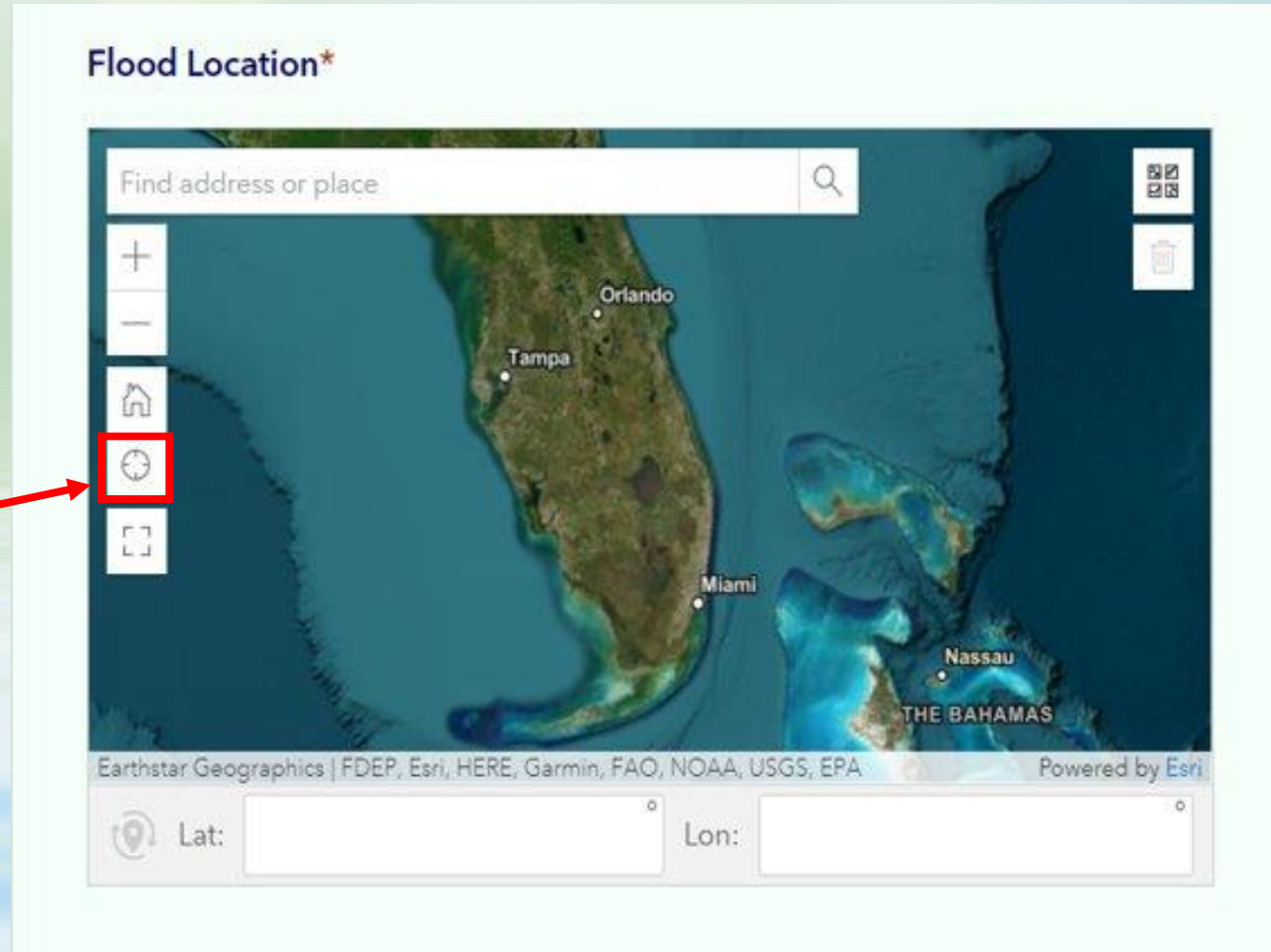
1 Drop image here or select image (maximum number of files allowed: 3)



SFWMD.GOV/FLOODINGAPP

Identify the Flood Location

- Use the camera icon to take a picture. If location services are on for the camera device, the location will automatically be uploaded.
- Use the "Find My Location" icon then accept or adjust pin location.
- Enter an address or street crossroads then place a pin once location is verified.
- Use navigation tools to zoom in and out to identify the flooding location.



SFWMD.GOV/FLOODINGAPP

- Please use the “General Observations” box to share information.
- Select one of the corresponding options based on how deep the water is and if the location has flooded before.
- If you aren’t sure of either of these answers, select “Don’t Know / NA”.

General Observations (Optional):

255

Select water depth

Don't know / NA Less than ankle deep Ankle deep Knee deep Greater than knee deep

Has this location flooded before?

Don't know /NA Never Whenever it rains Only during tropical events

SFWMD.GOV/FLOODINGAPP

- Select the option that best describes the property type
- Select the option that best identifies the affected area.
- Provide your name, email, and phone number if you would like it associated with your survey submittal.

Property Type:

<input type="radio"/> Agriculture	<input type="radio"/> Airport	<input type="radio"/> Commercial
<input type="radio"/> Governmental	<input type="radio"/> Industrial	<input type="radio"/> Mixed Use
<input type="radio"/> Natural Area / Open Land / Recreational	<input type="radio"/> Residential	

Affected areas:

<input type="radio"/> Building / Structure	<input type="radio"/> Driveway / Garage	<input type="radio"/> Parking Lot	
<input type="radio"/> Road / Street	<input type="radio"/> Seawall	<input type="radio"/> Storm Drain	<input type="radio"/> Swale
<input type="radio"/> Yard	<input type="radio"/> Field / Open / Natural Area		

Name

Email

Phone Number

Submit

WHY IS THIS IMPORTANT?



- As flood occurrences increase, the SFWMD is looking for better ways to know where it is occurring and how often.
- SFWMD is seeking improved insights into how frequently and under what types of conditions flooding occurs.
- SFWMD wants to improve communication, collaboration and coordination between Water Managers, county and city governments and local drainage districts on reported emerging conditions.
- SFWMD wants to provide resources to assist stakeholder agencies in the evaluation of conditions and the collection of information to assist with mitigation project planning and documentation.

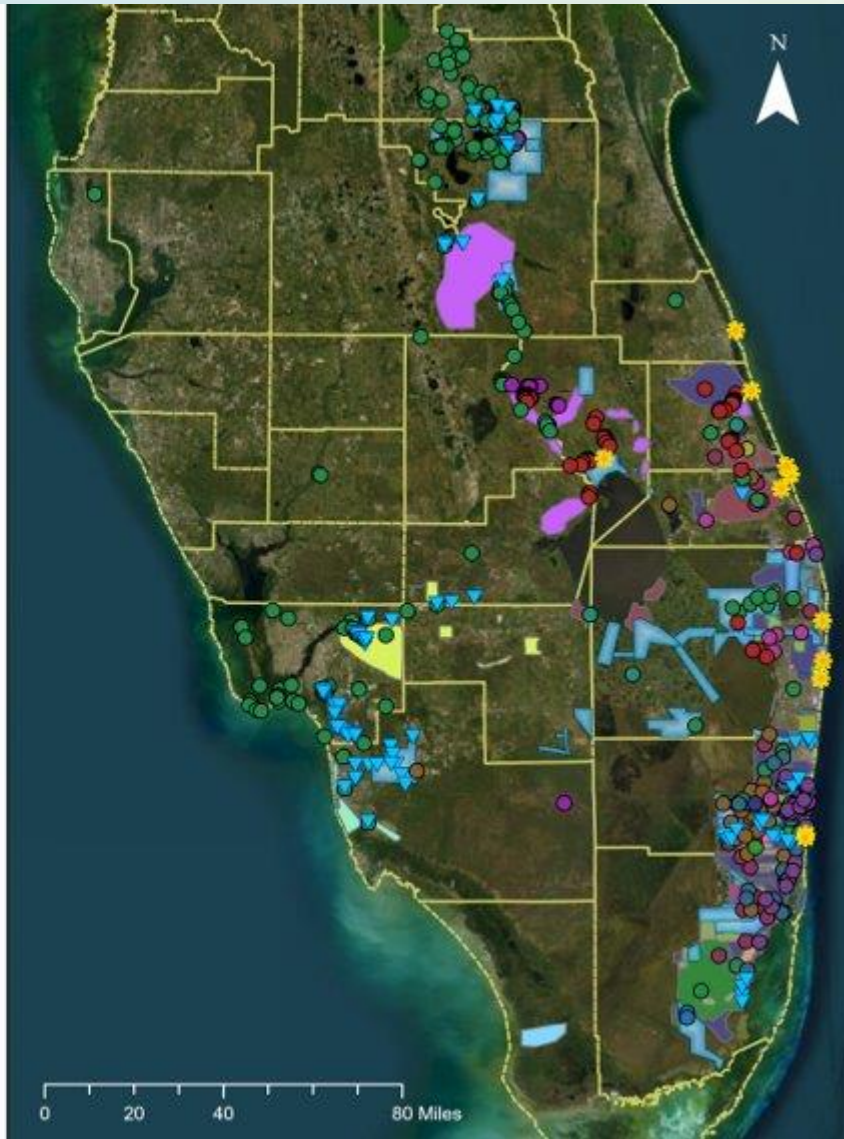
HOW WILL SUBMITTED FLOOD OBSERVATION INFORMATION BE USED?



- This information will be used to deploy additional resources to evaluate flood conditions and if appropriate mark and measure elevations associated with high water.
- This information is being incorporated into the new SFWMD flood information repository. This repository includes an inventory of the best available information on flood locations dating back to 1991 as well as the new information acquired going forward.
- Location information will be used in the Flood Protection Level of Service (FPLOS) modeling to calibrate and validate model simulated overland flood levels and in remote sensing analyses to validate estimated flood extension.
- Location information will be used in planning to identify areas most vulnerable to recurrent flooding.
- Flood Repository information will be made available to support grant applications and other initiatives that require documentation of past flood occurrences.

SOUTH FLORIDA FLOOD INFORMATION RESOURCES

- Social Media Crowd Sourced Reports
- ▼ High Water Mark
- February 2008 Rain Event
- July 2008 Rain Event
- Tropical Storm Fay 2008
- April 2009 Rain Event
- September 2010 Rain Event
- Spring 2020 Rain Event
- Tropical Storm Eta 2020
- King Tide Season 2021
- January 2022 Rain Event
- Summer 2022 Rain Event
- May 2022 Tidal Event
- Tropical Storm Alex 2022
- Hurricane Ian 2022
- Hurricane Nicole 2022
- September Tidal Event 2022
- King Tide Season 2022
- County
- Frequently Flooded Area (circa 2016)
- Severe rain 1991
- Severe rain 1995
- Hurricane Georges 1998
- Hurricane Mitch 1998
- Hurricane Floyd 1999
- Hurricane Irene 1999
- Oct 2000 Rain Event
- Hurricane Charley 2004
- Hurricane Frances 2004
- Hurricane Jeanne 2004
- Hurricane Dennis 2005
- Hurricane Katrina 2005
- Hurricane Wilma 2005
- Hurricane Ernesto 2006
- June 2008 Rain Event
- Tropical Storm Fay 2008
- Hurricane Michelle 2011
- Severe Storm 2012
- Tropical Storm Isaac 2012
- Tropical Storm Andrea 2013
- Severe Storm 2014
- King Tide in 2016
- Severe Rainfall 2017
- Hurricane Irma 2017
- May 2018 Rain Event
- Memorial day rainfall 2020
- Tropical Storm Arthur 2020
- Tropical Storm Eta 2020
- Hurricane Eta 2020
- Tropical Storm Elsa 2021
- Hurricane Elsa 2021
- Tropical Storm Alex 2022
- Hurricane Ian 2022
- Hurricane Nicole 2022
- April 2023 Rain Event



Flood Data and Information

- Inventory of past flood documentation
- High Water Marks
- Flood Photos and Survey Information
- Estimated Flood extents mapped from satellite or other remotely sensed products

Real-Time Access to Information

- Emerging Conditions
- Stakeholder submitted flood observations

Provide Regional Insights

- Flood Occurrence and Recurrence
- Communities most vulnerable to flooding

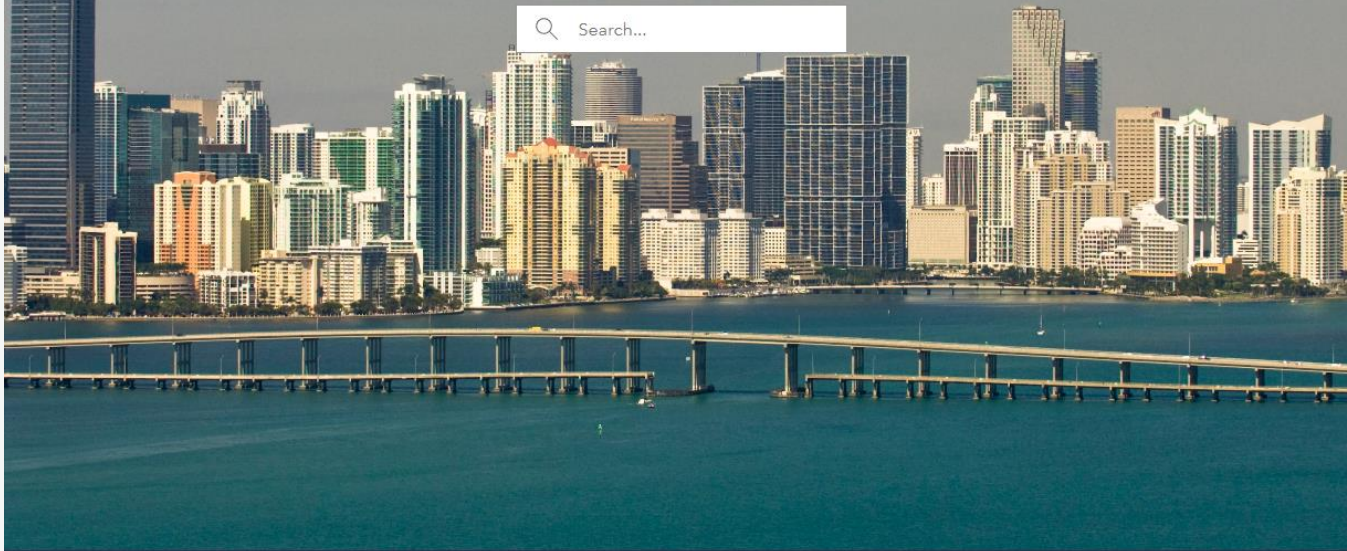
Provide Documentation

- Mitigation Grants
- Model Calibration and Validation
- Mitigation Project Planning



South Florida Flood Information Resource

Search, Visualize, Download, Create, Communicate, Collaborate



A resource for collecting and consolidating flood observations to help us better understand evolving flood patterns associated with King Tides, Rainfall, Tropical Storms, Hurricanes and Storm Surge.

[Sfwmd.gov/FloodResource](https://sfwmd.gov/FloodResource)

- Launched in November 2023
- Resource account creation enabled August 2024
- Training held August 16, 2024
- 138 stakeholders participated

Note: Access to secured applications and information within the South Florida Flood Information Resource is granted based on organizational affiliation with a state agency, local government or 298 / Special District and is for use in documenting flood occurrence for resiliency adaptation / mitigation planning, hydrologic and hydraulic model calibration, economic assessment of flood damages, infrastructure design, and grant funding applications.

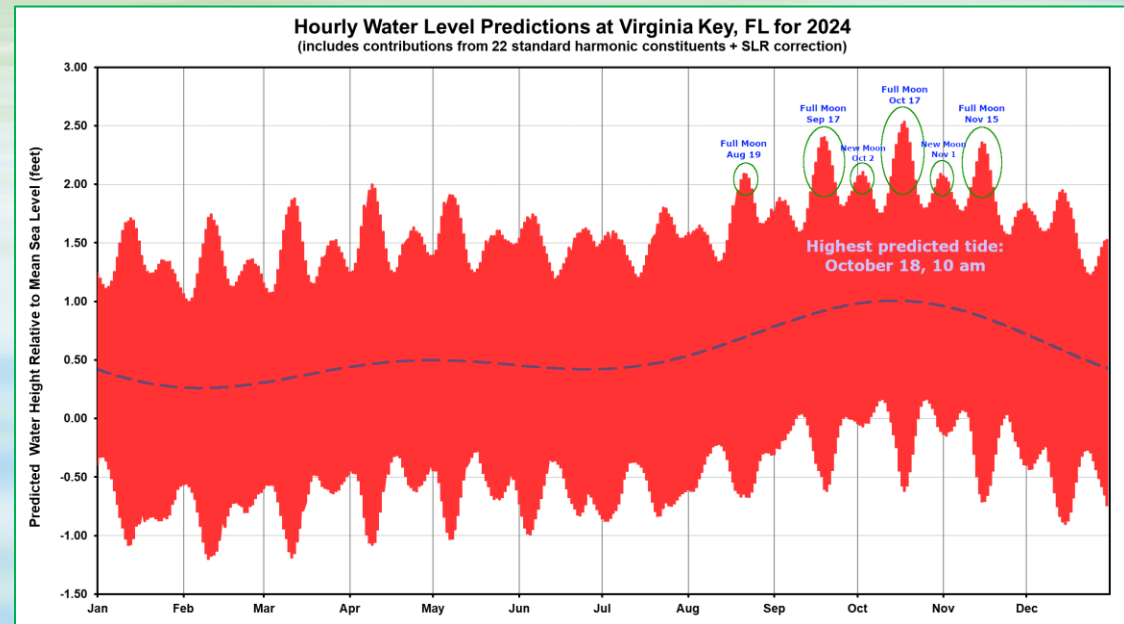


SFWMD.GOV/FLOODINGAPP

The same survey can be used to document any flood event including King Tides.



- As part of the 2024 King Tide Season, SFWMD is continuing efforts for the monitoring, operational response, and documentation of these events.
- SFWMD staff employs advanced tools, user-friendly apps, latest technology, and traditional methodologies to collect data, photos, and high-water marks to document flood conditions.





QUESTIONS?