

FORERUNNER

Lessons from Hurricane Idalia: Improving data collection, tools, & public communication

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Agenda

- 1 Introduction
- 2 Case Study: Georgetown County
- 3 Walkthrough

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THE CHALLENGE

In the aftermath of storms, accurate and timely damage assessments are crucial for driving recovery.



Post-disaster recovery is growing increasingly complex

- **Climate change** is amplifying the frequency and severity of flood events
- Hazards can be **compounding**, like flood and fire
- The **funding landscape** for flood is growing more nuanced and intricate
- **Coordinated data collection** across teams is more and more important, but also harder

The role of damage assessments is evolving

- They're crucial for **unlocking post-disaster funding** in many instances
- Damage assessments play a key role in driving the second wave of **post-disaster response**
- Damage data is important long-term as we **better understand risk and vulnerability**
- They help us better **channel resources** long-term to areas that need it most

...but they can be
challenging to
complete
effectively

- Impacted areas might be **difficult to access**
- It can be challenging to mobilize a team quickly enough to **preempt rebuilding**
- **Not all communities have access** to adequate resources to document damages efficiently
- **Residents seeking information** about their options might not know where to go for help

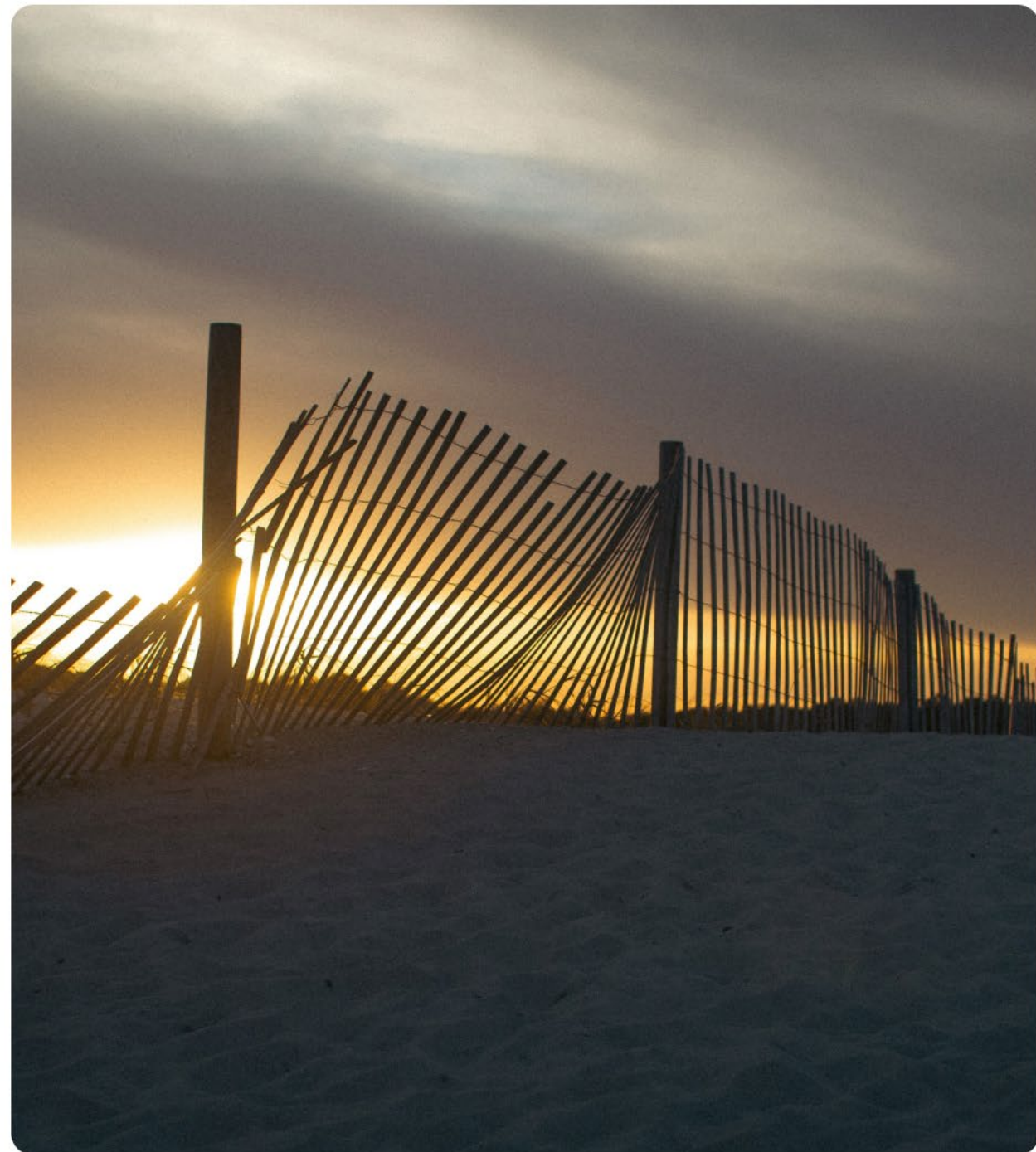
SOLUTIONS

Some communities are tackling these obstacles with digital tools and stronger processes.

- Mutual aid and regional coordination
- Robust pre-disaster planning
- Post-event imagery

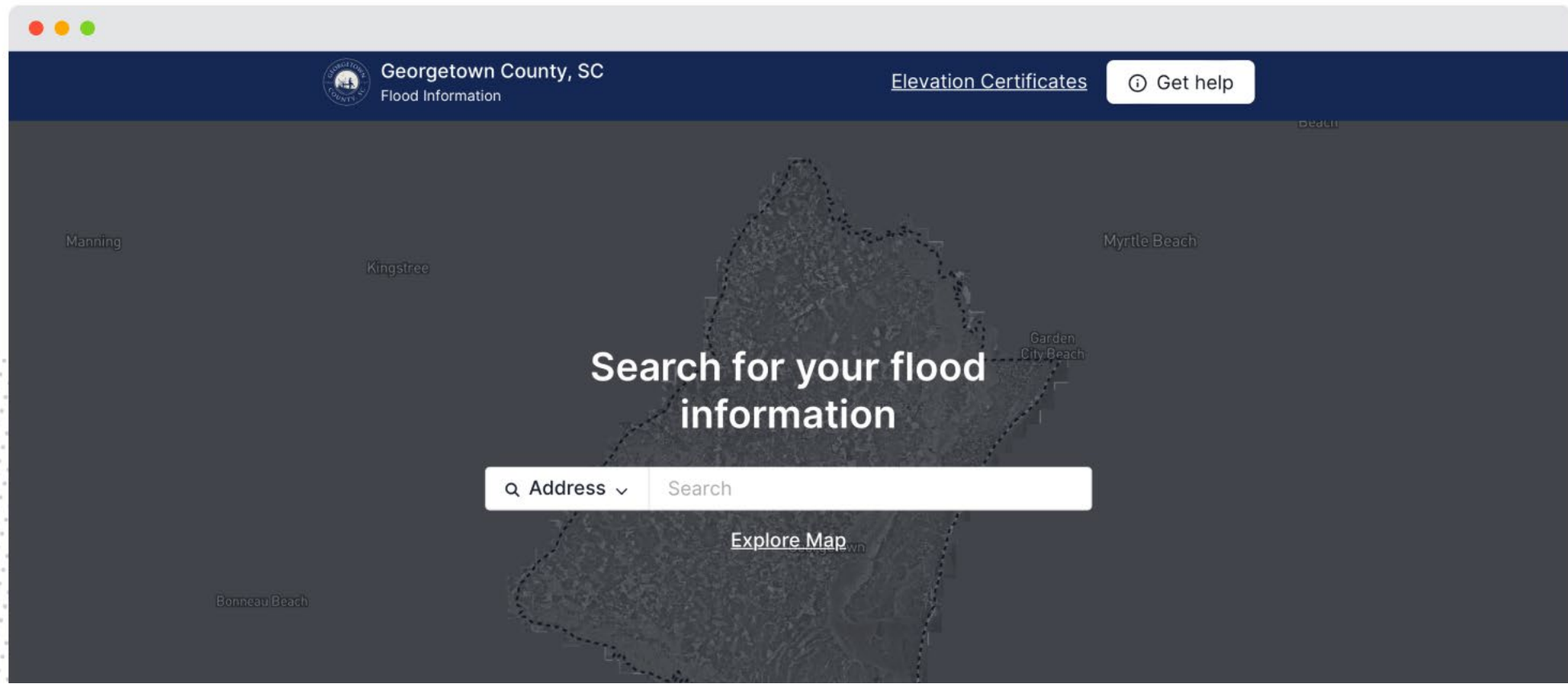
Popular solutions:

- Crisis track
- ESRI Emergency Management apps
- Forerunner's PDA tool



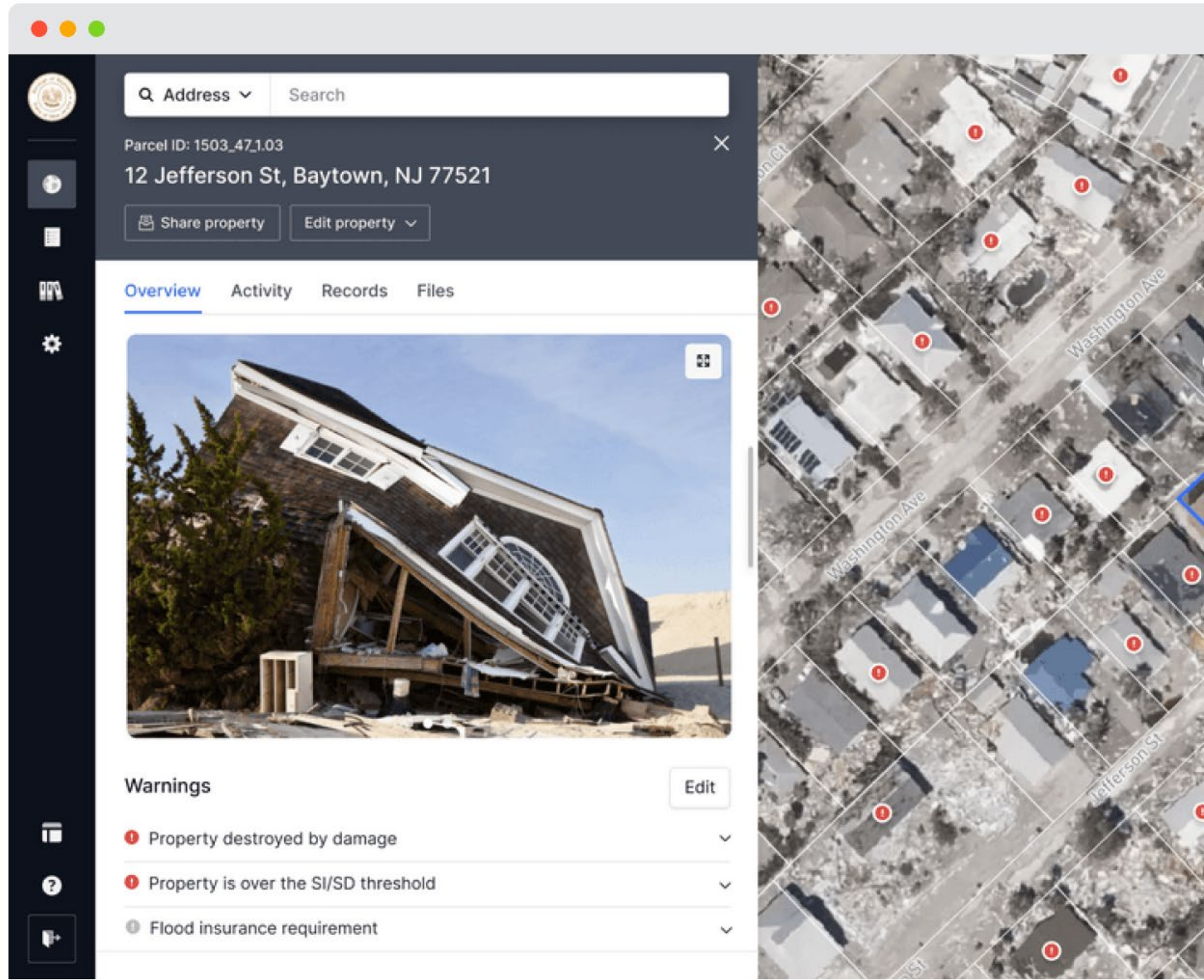
OUR SOLUTION

Forerunner empowers gov. agencies to do more.



We built Forerunner's PDA tool to help communities mobilize post-disaster.

- Gather post-disaster damage data and notes quickly, and **record them in one place**
- **Streamline** in-field data collection
- **Minimize duplication** of work across teams with software that updates in real-time
- **Stitch post-disaster data** together with day-to-day permitting/resident outreach
- **Export data** in easy-to-use formats for better internal and external reporting
- **Backfill historic data** for access on a property-by-property basis



GOV. PARTNERS

Our mission is to help communities prepare for the impacts of climate change and adapt to future conditions.



FDEM
Florida



Kitty Hawk
North Carolina



Pasco County
Florida



Clearwater
Florida



Jefferson Parish
Louisiana



Alexandria
Virginia



Calvert County
Maryland



Pompano Beach
Florida



Norfolk
Virginia



Hilton Head
South Carolina



Georgetown County
South Carolina



Long Branch
New Jersey



Bay Head
New Jersey



Longport
New Jersey



Parkland
Florida



Harris County
Texas

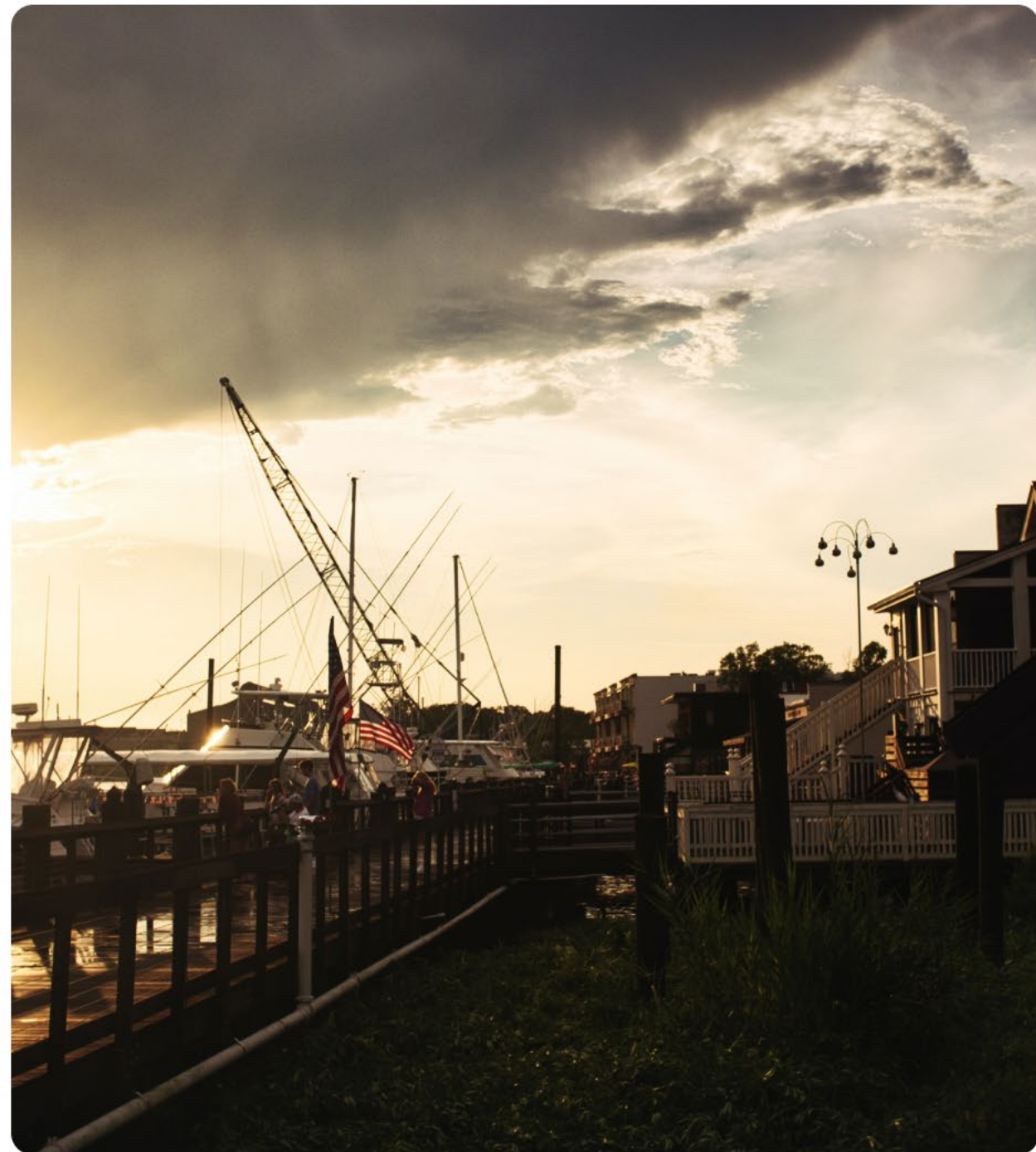
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Georgetown County includes 6,000 properties in the Special Flood Hazard Area (SFHA)

- Floodplain management team of two
- High rate of development in coastal areas
- The floodplain management team coordinates with a variety of departments including:
 - Public Works
 - Stormwater
 - Planning and Development
 - Emergency Management Division
- 2023 priorities included: resident communication, CRS program, and workflow efficiencies



GEORGETOWN COUNTY, SC

Georgetown County has been working towards several floodplain management goals.

- Incorporating resilience into its new comprehensive plan
- Improving SI/SD tracking across the County
- Adopting Forerunner to support resident communication and outreach



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PRE-STORM

Georgetown County uses Forerunner to ensure residents understand their flood risk.

"Forerunner helps to streamline the county's flood risk management efforts and provides potentially life- and property-saving information and resources for our residents. The amount of phone calls has gone down tremendously since launching the website."

Steven Elliott

Georgetown County Building Official



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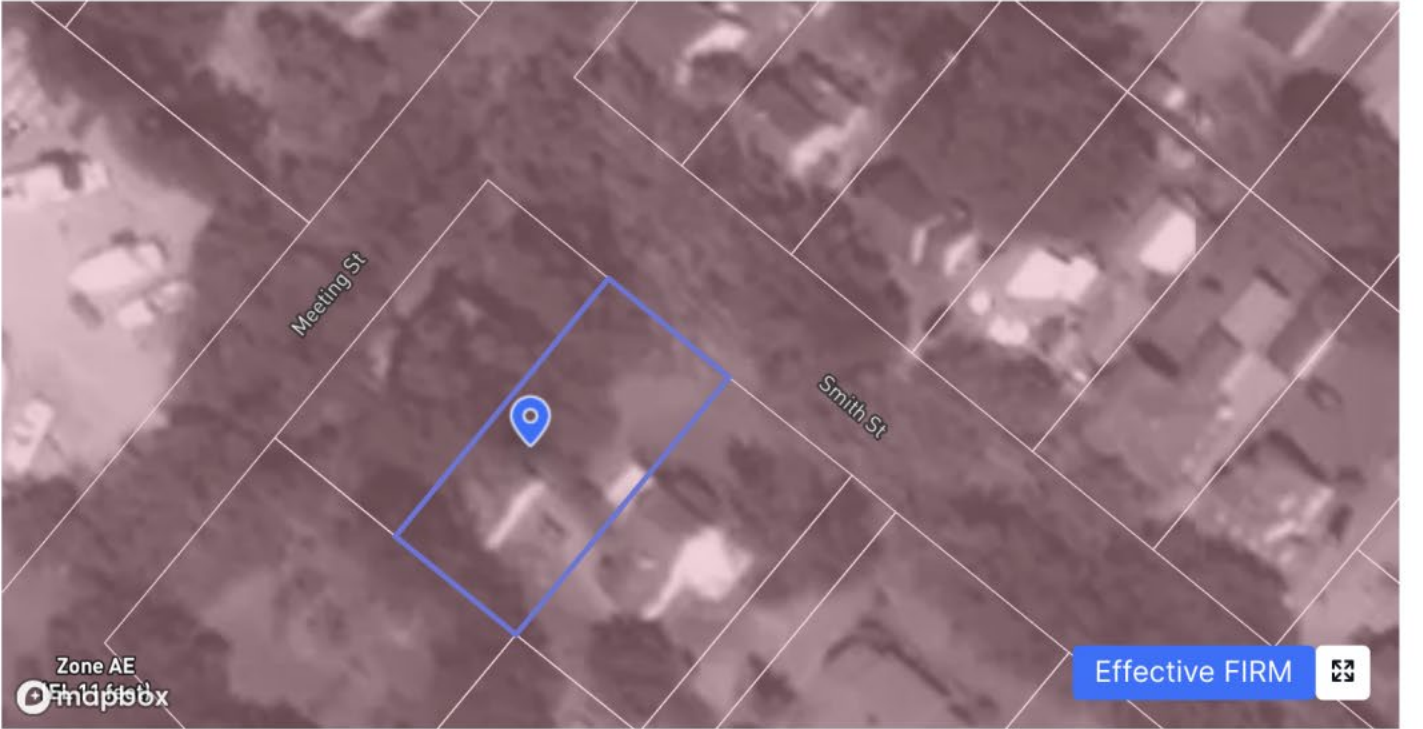


Georgetown County, SC
Flood Information

[Elevation Certificates](#)

[Get Help](#)

[Go to Georgetown County, SC's homepage](#)[Print page](#)



Zone AE
Effective FIRM

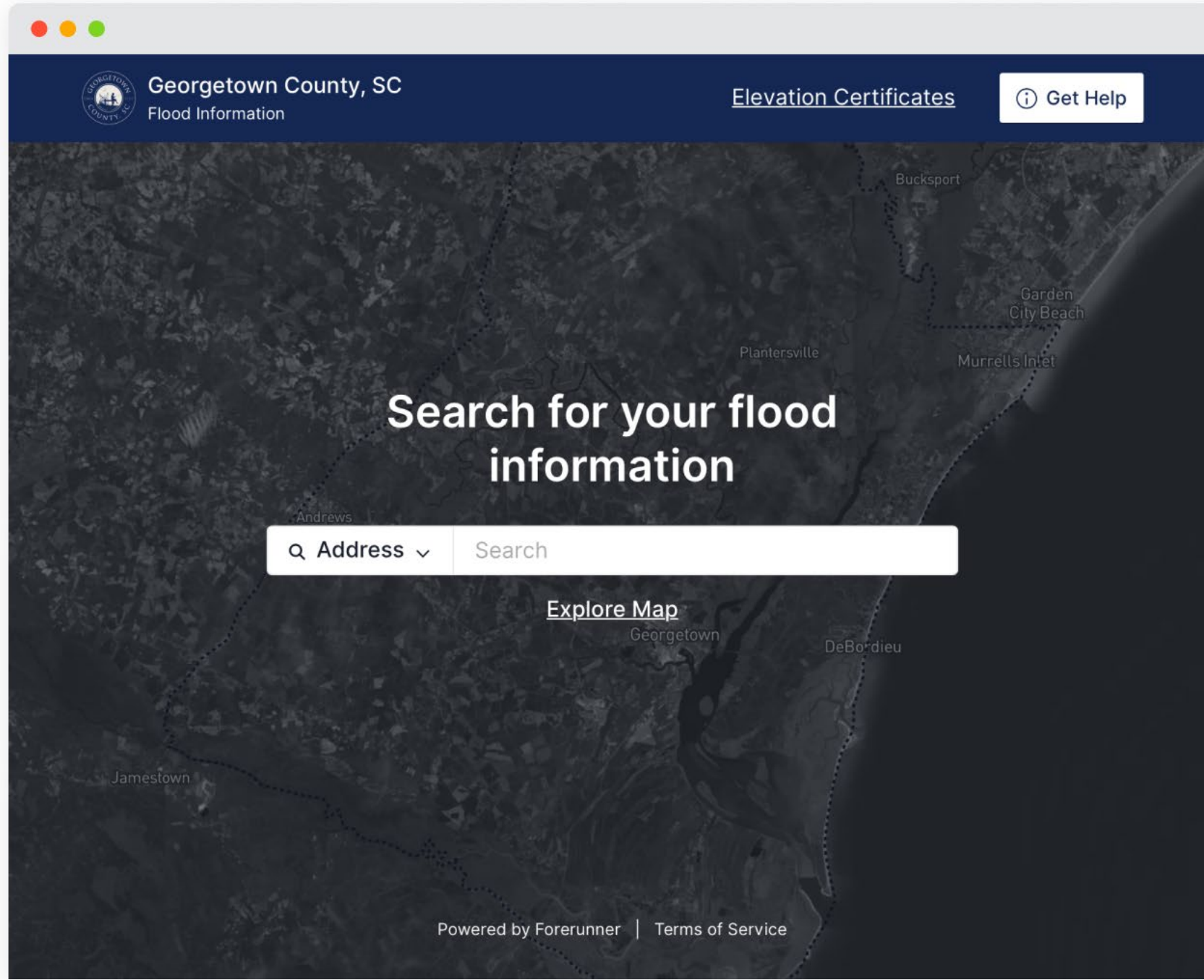
Effective FIRM

78 Clinton Street
Baytown, NJ 77521
Parcel ID 00-3103-213-00-03

[View on Google Streetview](#)

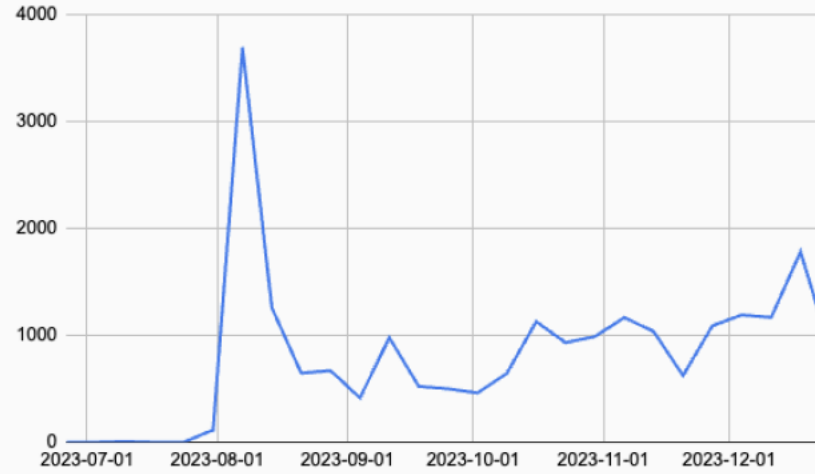
The public website empowers Georgetown County residents.

- **Helps residents make better decisions** by sharing property-level flood risk data and important documents
- **Minimizes the amount of public requests** and streamlines requests with the 'Get Help' feature. Previously ~50% of day spent responding to the public.
- **Consolidates all of their information**, so that residents don't have to use multiple datasets to get a full picture of their flood risk



PUBLIC WEBSITE UTILIZATION

July 2023– December 2023



Total Actions

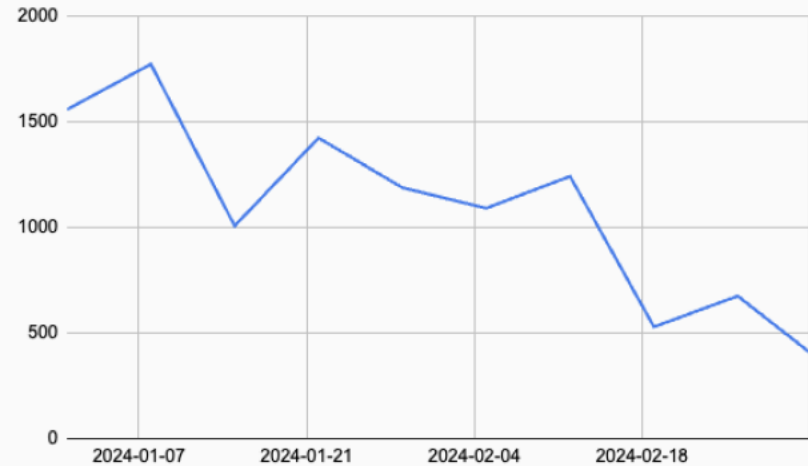
21.88k

Top Actions

Property Viewed
Map Layers Opened
View SI/SD

January 2024– March 2024

*as of March 15, 2024



Total Actions

11.57k

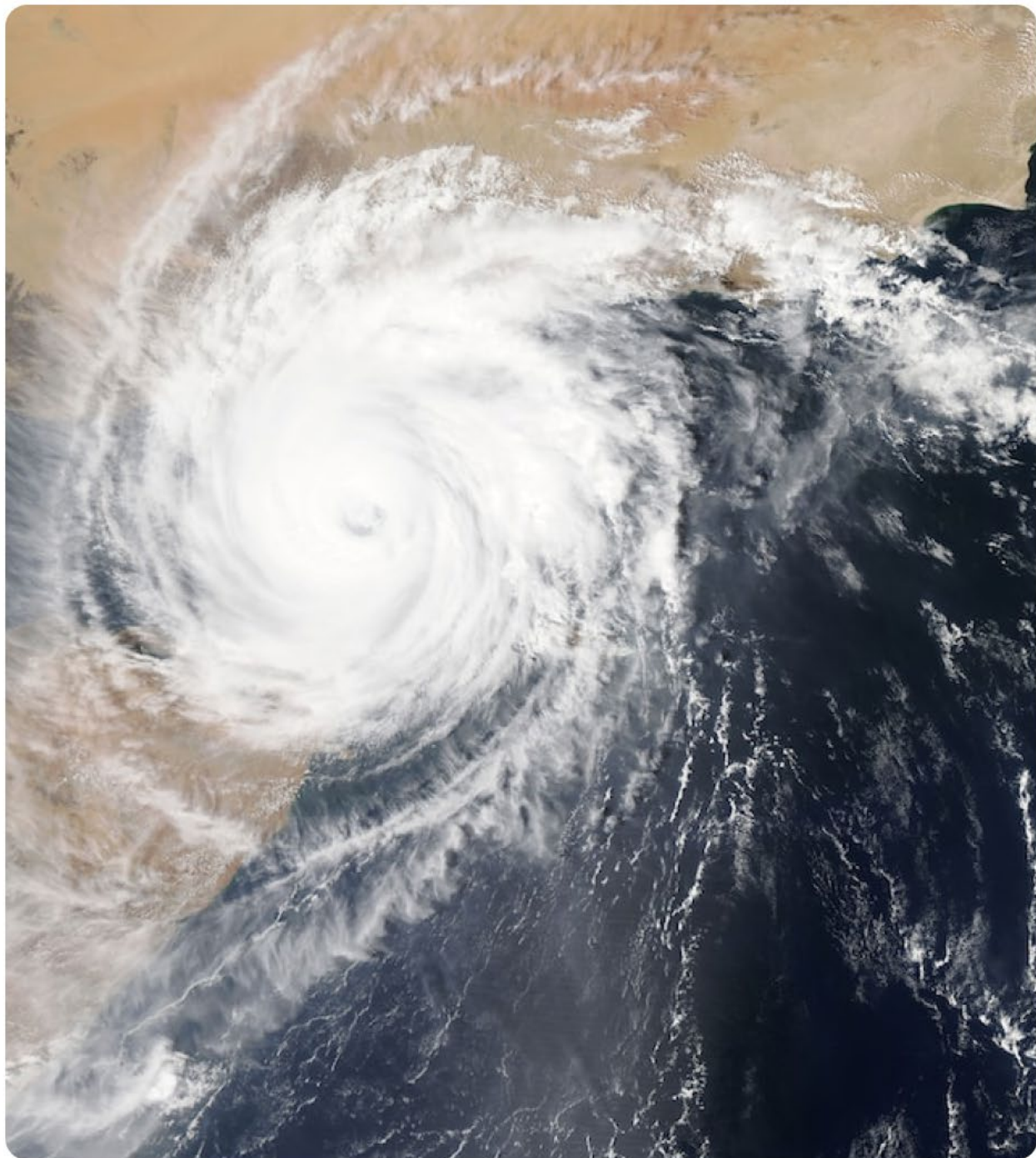
Top Actions

Property Viewed
Map Layers Opened
View SI/SD



STORM

Hurricane Idalia hit South Carolina at the end of August.



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DISASTER RECOVERY

Georgetown County planned to use Forerunner to help in post-storm recovery.

The Preliminary Damage Assessment feature is designed to help collect critical data and information on damage quickly after disasters, allowing communities to respond to residents faster and save on crucial response time.



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The screenshot displays the Forerunner web application interface. On the left is a dark sidebar with icons for home, search, map, reports, and settings. The main content area has a top header with a search bar and a close button. Below this, the property details for "12 Jefferson St, Baytown, NJ 77521" (Parcel ID: 1503_47_1.03) are shown, including "Share property" and "Edit property" buttons. A tabbed interface below shows "Overview", "Activity", "Records", and "Files". The "Overview" tab features a large photo of a beachfront property. At the bottom, a "Warnings" section lists three items: "Property destroyed by damage", "Property is over the SI/SD threshold", and "Flood insurance requirement", each with a red circular icon and a dropdown arrow. To the right of the main content is a large map showing an aerial view of the property area with several red circular markers indicating specific locations.

Georgetown County planned to use Forerunner to help in post-storm recovery.

The Preliminary Damage Assessment feature is designed to help collect critical data and information on damage quickly after disasters, allowing communities to respond to residents faster and save on crucial response time.



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Edit preliminary damage assessment

Edit a preliminary damage assessment

Provide details on the property's damage

Save

Date of assessment*

8/29/2022

Is the structure accessible?*

Yes

Structure use*

Residential

Type of structure*

Conventional

Degree of damage*

Major

Is the structure flooded?*

Yes

Owner or renter?*

Owner

Is there insurance?*

Unknown

PROBLEM-SOLVING

The County provided valuable feedback about their data collection needs to Forerunner

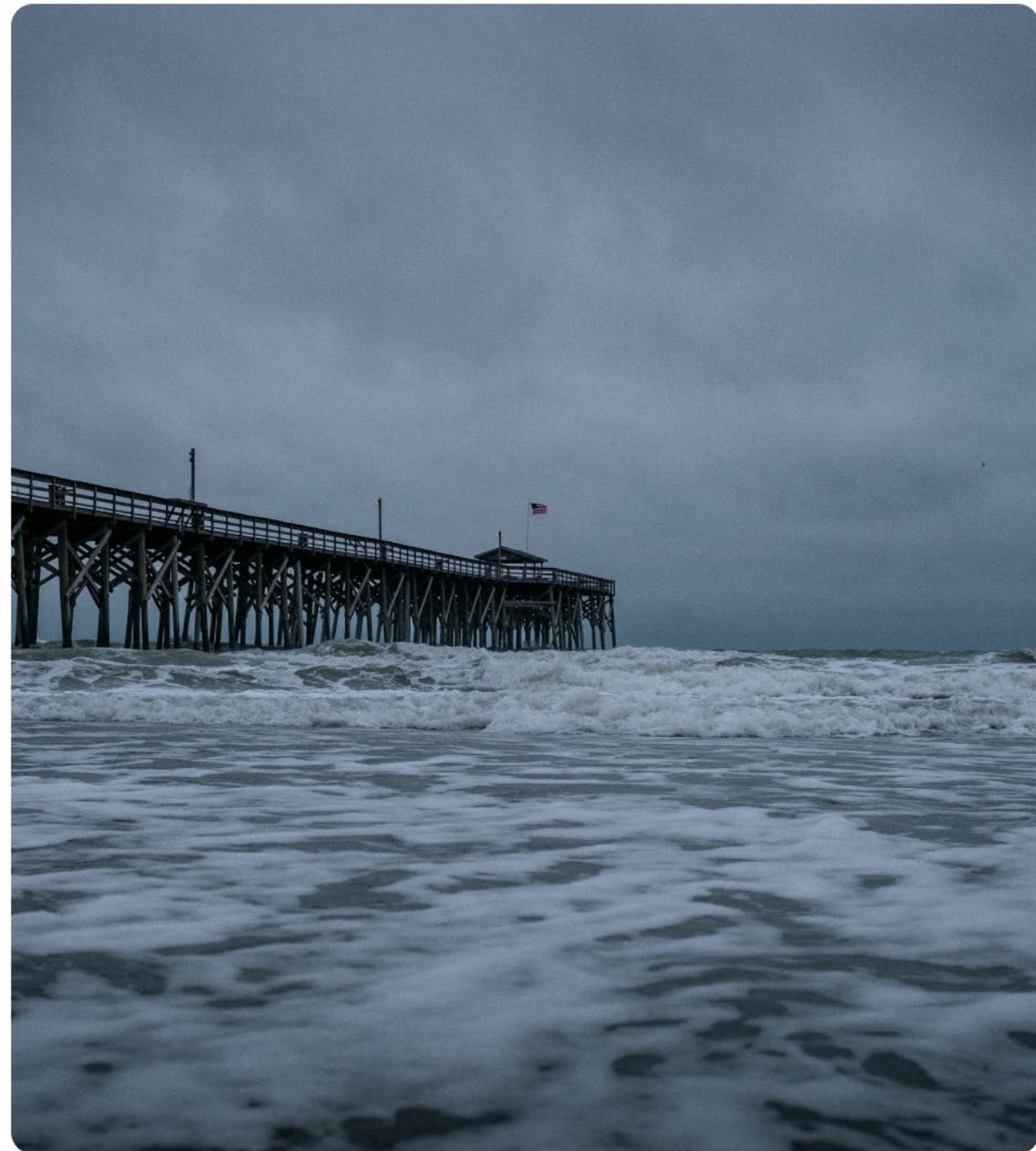
- One of the first large-scale users of Forerunner's PDA tool
- The team's partnership and feedback was crucial to making the feature better for everyone

Highlighted improvements:

- **Faster data exports** without a middle-man to speed up time to service and reporting
- **Better mapping of assessments** for more visibility into progress and extents of damage
- Calibration of the PDA form for **maximum data collection flexibility**



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LEARNINGS

Many of the County's suggestions have been implemented

- Processes and tools should **dynamically evolve** to meet needs
- The best software is that which is created in **partnership with users**
- **Testing is the best way to improve** software quickly
- Small changes in software functionality can have **big positive impacts** for usage when it matters most

“We have seen so much growth with the software between our initial contact and now.”

Steven Elliott

Building Official in Georgetown County



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Thank you!

Questions? Email me at:
jennifer@withforerunner.com

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