

# FLOODING FROM HURRICANE IAN IN FLORIDA, US

FLOOD BRIEFING SERIES POWERED BY MULTISOURCE DATA ANALYSIS  
LEVERAGING ICEYE SATELLITE IMAGERY



## DATA RELEASE 5



**1,937 SQ MI (6,499 KM<sup>2</sup>)**

total flood extent across Florida



**1.32 FT (0.40 M)**

average depth at building level

**TOTAL  
NUMBER OF  
BUILDINGS  
AFFECTED  
BY FLOOD  
WATER DEPTH  
CATEGORY**

VERY HIGH  
**2,302**

≥ 8 FT.

HIGH  
**11,137**

5 - 8 FT.

MEDIUM  
**66,394**

2 - 5 FT.

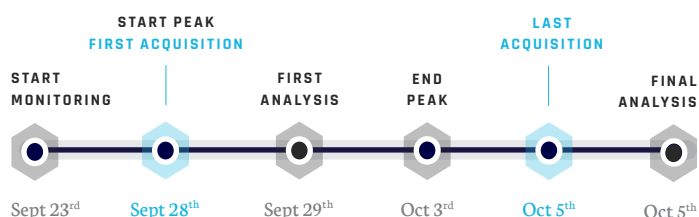
FLORIDA:  
**296,748**

LOW  
**216,915**

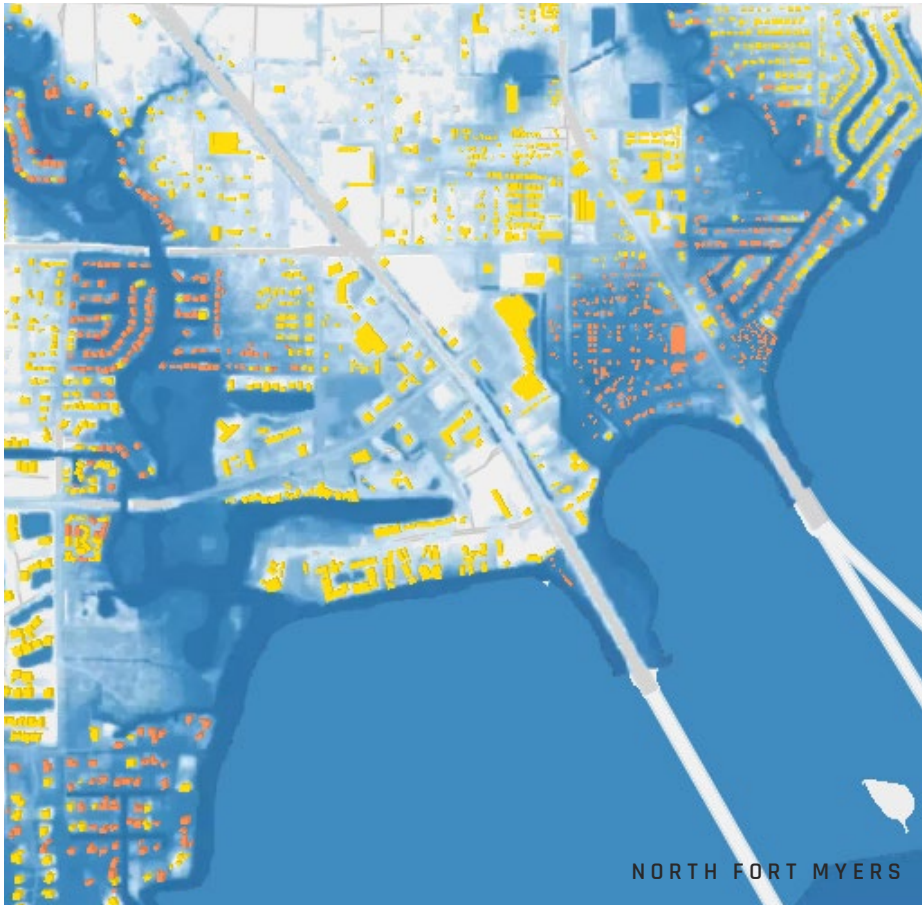
≤ 2 FT.

Hurricane Ian moved across Cuba on September 27th as a strengthening hurricane, and became a powerful Category 4 hurricane on September 28th. As the storm moved toward the US's third most populous state, Florida, millions were urged to evacuate<sup>1</sup>. In Key West, nearly 2.5 feet of storm surge flooding was observed as Ian passed by to the west. Catastrophic storm surge impacts were observed in Southwest Florida as Ian made landfall. As part of that, at least 6 feet of storm surge flooding has been observed from Naples to Fort Myers.

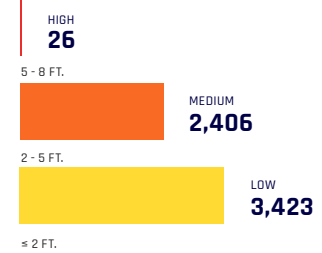
As Ian moved inland, it caused significant freshwater flooding with 10-20 inches of rainfall across central Florida. The flooding on some of the rivers in central and northeast Florida continued for several days, while the storm made a second landfall in South and North Carolina.



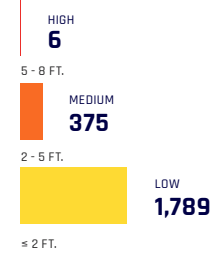
<sup>1</sup> Source: <https://www.washingtonpost.com/nation/2022/09/28/hurricane-ian-florida-evacuations/>



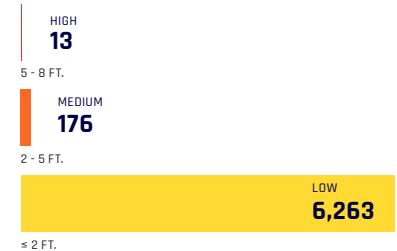
**TOTAL NUMBER OF BUILDINGS  
AFFECTED BY FLOOD WATER  
DEPTH CATEGORY**  
NAPLES: 5,855



**TOTAL NUMBER OF BUILDINGS  
AFFECTED BY FLOOD WATER  
DEPTH CATEGORY**  
NORTH FORT MYERS: 2,170



**TOTAL NUMBER OF BUILDINGS  
AFFECTED BY FLOOD WATER  
DEPTH CATEGORY**  
MARCO ISLAND: 6,452



Building footprint credit for FEMA USA Structures database

**TALK TO SALES & GAIN ACCESS  
TO OUR DETAILED ANALYSIS**

[www.ICEYE.com/flood](http://www.ICEYE.com/flood)



*Disclaimer: The impact numbers are subject to change as ICEYE continues to analyze the flood and extend the analysis area. The current data is based on ICEYE's analysis with information collected until 10.00 UTC on October 5th 2022. Some areas which have been impacted by the flooding may not be represented in this initial data.*