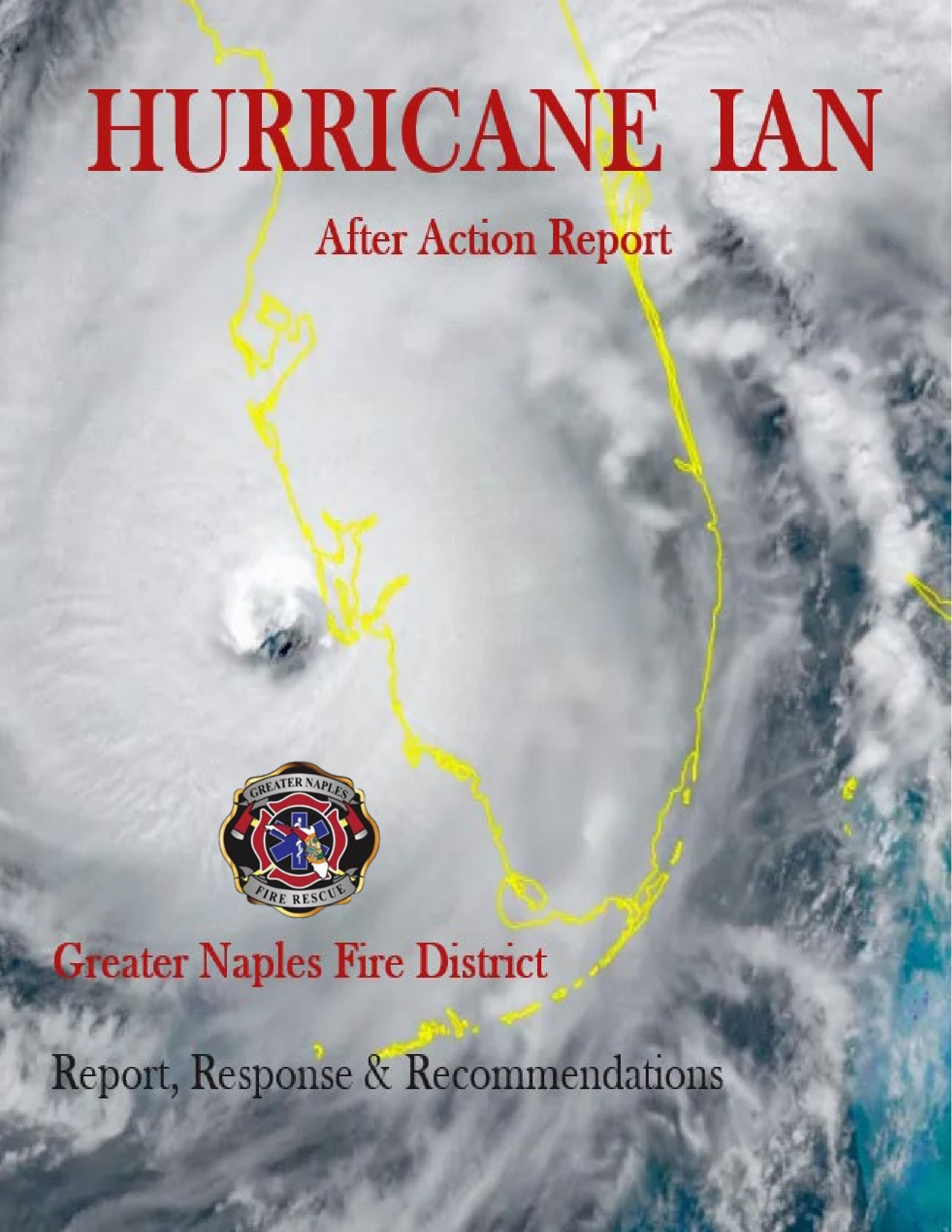
HURRICANE IAN

After Action Report



Greater Naples Fire District

Report, Response & Recommendations

February 15, 2023

The After-Action Report is a process used by emergency responders to capture the lessons learned from past successes and failures, with the goal of improving future performances. This is an opportunity for reflection on the event, its successes and failures, so that ultimately improvements can be made. The After-Action Report has been compiled based upon feedback from staff employees, Operations staff, and Section Leaders who played key roles during the response and recovery efforts of Hurricane Ian.

On September 27, 2022, Greater Naples Fire District, and Collier County as a whole, experienced the effects of Hurricane Ian, a major hurricane that made a direct landfall in Lee county. Many areas of the Greater Naples Fire District response area experienced strong tropical storm force winds, severe storm surge, and flooding.

This After-Action Report is submitted for review to determine administrative and budgetary priorities for consideration and implementation. Part of the information contained herein was compiled from NWS Miami's Post Tropical Cyclone Report as reported under the Collier County Comprehensive Emergency Management Plan.

Hurricane Ian Incident Command and General Staff

Fire Chief Nolan Sapp: Incident Commander

Deputy Chief Chris Wolfe: Deputy Incident Commander

Deputy Chief Sal D'Angelo: Liaison / Emergency Management

Chief of Staff Nicole Chesser: PIO / Finance Section Chief

Assistant Chief Forrest Campbell: Operations Section Chief

Assistant Chief Andy Krajewski: Safety Officer / Strike Team Leader

Assistant Chief Shawn Hanson: Planning Section Chief

Battalion Chief Chris Rossi: Deputy Planning Section Chief

Lieutenant Matt Nixon: Logistics Section Chief

Division Chief Dennis DiSarro: Medical Group Leader

Division Chief Caleb Morris: Logistical Fleet Support

PREPARATION

In preparation for the storm and its impacts several steps were taken to ensure the safety of personnel and security of the stations. Administration participated in daily conference call briefings with Emergency Management. This information was passed on to all personnel. Three days before the storm crews removed all loose debris from around the stations. Storm shutters were checked for working condition. Liaisons were assigned to Emergency Management to staff the ESF4 desk. Two days before the storm's arrival crews were advised of who would be called back and the date/time to report to duty. All crews being recalled to up-staff additional apparatus were advised to bring in provisions for three days. Administration made decisions ahead of time on stations that may need to be evacuated. These stations included 60, 61, 23, 90 and 22. Based on the most up to date information, the day prior to storm impact, Administration made the decision to evacuate stations 60, 90 and 23. The crew of Station 60 was moved to Station 61 and the crew of Station 23 was move to Station 21. Several days prior to storm impact all station fuel and propane tanks were topped off. Station 22 did not evacuate. Station 90 was going to be evacuated however, while responding to emergency calls on Isles of Capri the storm surge came in causing them to remain in Station 90.

THE HURRICANE

Hurricane Ian made landfall in Southwest Florida at Cayo Costa in Lee County as a category 4 hurricane around 3 PM on September 28th, then moved northeast across the central Florida peninsula before moving off the east central Florida coast near Cape Canaveral on the morning of September 29th. A significant to devastating storm surge affected the Gulf of Mexico coasts of Charlotte, Lee, and Collier counties, penetrating a few miles inland across low-lying areas and along rivers and canals. In Collier County, extensive storm surge flooding occurred over most areas south and west of US 41/Tamiami Trail, as well as near the Gordon River, Cocohatchee River, and connecting creeks and canals. Hurricane force winds were observed in western sections of Collier, Hendry, and Glades counties near the southern and eastern eye wall of Ian. A total of 11 tornadoes were confirmed across South Florida in the northeastern quadrant of the hurricane, almost all of them in Southeast Florida from early afternoon on September 27th through the early morning of September 28th.

Significant to major storm surge flooding covered almost all of Collier County south/west of Tamiami Trail/US 41 from Everglades City to the Lee County line. Major storm surge flooding occurred within a mile of the coast, both at the beachfront as well as the intracoastal waterways. Wind damage was mainly confined to trees/fences/screens, with minor wind damage to vulnerable structures. Of the 5 reported deaths in Collier County, 3 were from drowning by storm surge. Two occurred in the Sandpiper Street/Palm Street area south of Tamiami Trail about 1/3 to 1/2 mile east of Naples Bay, Greater Naples Fire District response area.

Highest Land Winds (mph) in Collier County

(NOTE: It is unlikely that the point-based observations provided in this report sampled the peak values for the event.)

Station	Sustained	Gust
Naples Grand Beach Resort	66	112
Naples Airport Tower	67	105
East Naples	58	89

Collier EOC's peak wind speed at 3pm, 28 Sept., was 64mph

Rainfall total from 8:00am Sept. 26 to 8:00am Sept. 29

Location	Rainfall (in)
Belle Mead (area immediately south of ST23)	8.16
NNE East Naples	6.99
ESE Sunniland	6.19
ESE Ochopee	5.13
NW Miles City	5.06
Oasis Ranger Station	4.26

Storm Surge/Tide Information

Location	Storm Surge/Tide
S end, Gordon Pass to Naples Pier	7-9 ft*
Naples Bay, Tin City, Cove Inn areas	4-7 ft*
E side of Naples Bay in Royal Harbor area	4-7 ft*
Naples Airport/Rock Creek/Baker Park	4-6 ft*
Tamiami Trl near Bayshore Dr intersection, E. Naples, from Tamiami Trl N to Davis to Rock Creek	2-3 ft**
Naples/River Park/Central Ave	3-4 ft**
Marco Island (MI)	7 ft*
MI, inundation in lower elevations	2-4 ft**
Goodland at Stan's Hideaway	4 ft**
Stan's Hideaway to Goodland Bay	7 ft*
Everglades City (common across town)	2-4 ft**

(NOTE: Storm surge made it as far inland as Tamiami Trl from Ochopee to SR 92)

Chokoloskee, at Outdoor Resorts Hotel 6 ft*

* **Mean Higher High Water (MHHW)**. The average of the higher high-water height of each tidal day observed over the National Tidal Datum Epoch.

** **Above Ground Level** (AGL)

As the storm approached on the morning of September 27th, Greater Naples Fire units continued to respond to emergency calls for service. One of the first areas to be challenged by the storm was Marco Island. Marco Island was quickly being overtaken by storm surge and was receiving multiple emergency calls for high-water rescues. Marco Island Fire Department requested a Brush Truck Strike Team to assist with high-water rescues. Greater Naples Fire sent CH220, as

Strike Team Leader, Brush 72 and Brush 73 as part of the Strike Team. CH220 was unable to make it to Marco Island due to the quickly rising and swift moving sea water across Collier Blvd. Brush 72 and Brush 73 performed multiple high-water rescues and moved dozens of citizens to higher ground to safety. This Strike Team was released by Marco Island Fire by mid-afternoon September 27. As the day progressed the areas south of Davis Blvd/West of Airport Road continued to be inundated by rising sea water. The Greater Naples Fire District area alone received 53 calls for high-water rescue in this area. The following units aided in search and rescue of trapped victims on these incidents:

Boat 901 Crew: Driver/Engineer John Pipitone, Driver/Engineer Chris Mercier

Brush 22 Crew: Lieutenant Jake Beckman, Driver/Engineer Aaron Douglas

Attack 63 Crew: Driver/Engineer Vaughn Palmateer, Firefighter Hunter Close

Brush 72 Crew: Captain Jason Sellers, Firefighter David Rotkvich

Brush 21 Crew: Lieutenant Ray Kilmer, Firefighter Nathan Pratt

CH220: Andy Krajewski

Battalion 70: Chris Diaz **Battalion 70 Aide**: Jace Perkins

Units from other Collier County First Response agencies that aided in this response were as follows:

CCSO: Airboat 1, Airboat 2, Marine 112, Marine 111, Swamp Buggy 1

Civilian Swamp Buggies: Buggy 1, Buggy 2, Buggy 3

Strike Team Garrett: Swamp buggy 2

CCEMS: EM800, M090

CC Transit: Cat bus 1, Cat bus 2

Greater Naples Fire crews also fought several residential structure fires using only high-water apparatus (Brush Trucks). The crew of Boat 601, Driver/Engineer Matthew Stoller and Driver/Engineer Daniel Garretto, while performing reconnaissance in Everglades City, performed the rescue of two citizens from a burning commercial structure.

Greater Naples crews ran emergency calls throughout the storm. The vast majority of the emergency calls were high water related. A confirmed 40 rescues were made between the actions taken at Everglades City and areas south of Davis Blvd.

IMPACTS TO THE DISTRICT

The District sustained significant storm related impacts to structures and equipment. These included the complete interior destruction of Station 60, water intrusion to stations 23 and 90, and damage to the chiller at Station 73. Engine 90 sustained damage such that is was determined to be a total loss. Brush 21, Brush 22, Brush 72, and Brush 73 required repairs due to being utilized in high water (3 to 5 feet of water) to perform water rescues. Many of the front line apparatus required minor repairs due to being out in the storm responding to emergency calls as well as some Staff vehicles.

ISSUES AND RECOMMENDED SOLUTIONS

In reviewing plans, preparations and response for Hurricane Ian, the following issues and recommendations have been identified. While everything went generally well, this does not mean that everything went perfect or as necessarily planned. To develop these issues and recommended solutions, Administration sought feedback and constructive criticism from District employees as well as holding a Post Incident Analysis by Command Staff. The issues and solutions presented should in no way be deemed as the only solutions to address these issues and the overall answers to the issues may require additional brainstorming. Moreover, it is not anticipated that every solution listed will be financially or functionally practicable, nor that it can be achieved in a short timeframe.

Issue: Not all Greater Naples Facilities are structurally built to withstand all hurricane force winds and/or flood waters from storm surge. Station 60 was destroyed. Stations 23 and 90 sustained water intrusion.

Solutions:

- Seek grant funds to build stations that meet current hurricane code requirements
- Continued talks with the City of Ochopee and Collier County to build appropriate facilities within the Ochopee area

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Issue: District Communications Procedure needs to be updated

Solutions:

- Give the individuals assigned as our Liaisons to EM – ESF4 the authority to make financial and logistical decisions for the District
- Conduct a semi-annual review of the District and County Communications Plans
    - Ensure all applicable individuals have the necessary understanding of the plans
- Develop a plan for backup communications
    - District owns two (2) standalone Repeaters – ensure they are in working order and deploy during an incident
    - Purchase StarLink for phone and/or Wi-Fi connectivity

- District is the current keeper of MARC 6 – have all VHF radios ready for deployment prior to event
- Determine a meeting place within each field Division where the Division Supervisor can meet with the different leaders within the respective Divisions

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Issue: District Command Procedures need to be updated

Solutions:

- Develop a "Disaster Team" or Committee to tackle many of the below issues
- Develop position specific taskbooks for internal personnel
- Identify personnel to fill General Staff and Deputy positions so as to conduct training on the positions that would be filled – this would fulfill our lack of depth
  - Fill critical Deputy positions within General Staff (OPS/PSC/LSC/FLS Branch)
- Have a person with a direct link to Dispatch to sit in the District EOC – assist in prioritization of incoming incidents
- Place an Assistant Safety Officer within each Division
- Better utilize the capabilities of the personnel within the Fire & Life Safety Division
  - Damage assessments post incident
  - Assist with delivering logistical needs to stations
  - Assist clearing critical roadways within the District
- Forecast when to switch to Alpha/Bravos
- Conduct a "training day" for completing 214's
- Have all 214's turned into the Division Supervisor by the end of EACH Operational Period
- Operational Period should coincide with shift operational period (24 hrs)
- Make planning for an event a practice – use events at Paradise Coast, the Everglades Seafood Festival, etc. as practice
  - Get personnel prepared and accustomed to being in these positions
- Establish a consensus on a Standard response to high winds prior to an event – this was disregarded/misunderstood during Ian
  - Be steadfast to a common shut-down procedure
- Weather Stem Grant
  - Some sort of weather monitoring should be placed at each Battalion Chief station
- ALL injuries MUST be reported to the Safety Officer and IC

Issue: ESF4 Desk Staffing

Solutions:

- Provide the authorization to the individuals assigned to man the ESF4 desk to make financial and logistical decisions for the District – EM conducting "real time" decisions and need our personnel to be able to make decisions on behalf of the District
- ALL requests for resources need to be run through ESF4 and EM – it was difficult to manage agency requests that they (EM) were not being notified about the needs
- ESF4 must be notified when resources are being demobilized and/or reassigned
- Develop a tasking document for the ESF4 desk position
- Make all requests through ESF4 very detailed and specific

Issue: Liaison/Logistical Communications and Needs

Solution:

- Develop relationships with food suppliers prior to an event for any long-term events
- Identify when Logistical staff need to be recalled and who that is
- Develop burn rates for District generators
- Service all stations prior to seasons approaching including fuel farms and marine vessels.
- Ensure photos have been taken of all stations and apparatus pre-storm/event
- Establish contracts with vendors and identify when to pull the trigger on any specific contract
- Develop pre-identified sleeping areas/accommodations

Issue: Financial Constraints and Needs

Solution:

- Have cash on-hand
- Have a means to secure the cash once taken out of the bank (safe)
- Hire a third-party to review our reimbursement potential – what have we submitted thus far – are we missing anything for reimbursement

The Finance personnel did a very good job in submitting receipts and required paperwork for reimbursement

Also developed a Food log to show who had meals for reimbursement purposes

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Issue: Equipment Gaps

Solution:

- Purchase a set of chaps for every response capable apparatus
- Purchase additional Hotsticks for deployment during disasters
- Convert a 5-ton brush apparatus to a high-water response vehicle
- Purchase additional shallow-water boats – can be used on flooded roads
- Review the cache of the District's Technical Rescue Team and make appropriate equipment purchases

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Issue: Communication Across Divisions/Sections

Solution:

- Communicate when different phases of the "Plan" are going into effect
- Address Cultural issue of Officers not reading emails so they are up to date on information being pushed out
- Have a site or phone number where personnel can go to should they miss information related to the event going on
- Have a standardized ICS 214 for the District – several different versions were used during this event
- ICS 204 to be completed and update all Station Officers and return to IC by 08:30

Issue: Difficulty in Field Communications

Solution:

- MARC Unit VHF radios ready prior to storm coming in
- Set up Alpha/Bravo Repeater – VHF/UHF – 2 to 3 days prior to event coming in
- Set up a COW (Cellular On Wheels) – standalone cellular tower – generally requested through EM
- Request County to build out the 700 series of our radios – can accommodate our needs more broadly
- Conduct training on the use of this equipment
- Developed a phased plan for communications
    - State 8TAC or State MA channels
- Select a safe area as a daily meeting point should communications go down
- StarLink for data – certain sites have a dual data capacity
- Quarterly – exercise the Communications Plan

- Implement the two standalone repeaters owned by the District

Issue: Mental Health of Our Personnel

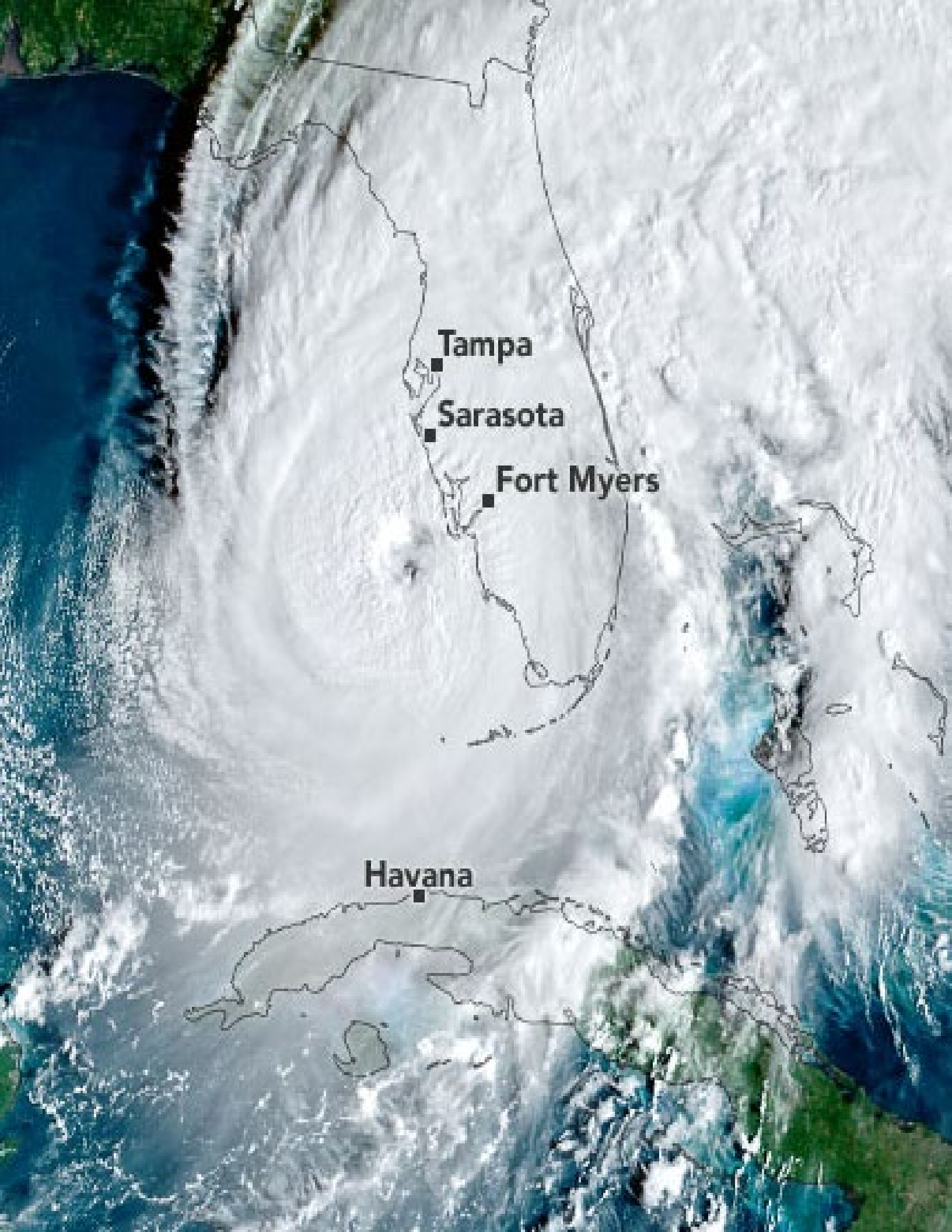
Solution:

- Develop a District CISM team
- Reach out to other agencies to bring in Mental Health practitioners and Professionals
- Pre-event (do this now for daily activities) hand out information on mental health resources – REDLINE (redlinerescue.org) for example

CONCLUSION

Hurricane Ian had devastating effects on many people within the Greater Naples Fire District. Many within the Greater Naples Fire District family lost their possessions and homes. Structures and equipment were lost and we are still in the process of recovery. Staff has identified issues with Command Procedures, Operational constraints, Communications and Communications Procedures, Liaison and Logistical needs, Financial constraints, and the mental health of our personnel. Staff deliberated and has offered possible solutions to the issues described. Throughout this event the personnel of the Greater Naples Fire District were the consummate professionals and responded to the needs and requests for service from the community we serve. The response was completed with the utmost dedication, and often times heroism, of the men and women in the field. The overall assessment of the Greater Naples Fire District to coordinate, respond to and recover from the storm seemed to be positive and meet the needs of the citizens of our District.

The Greater Naples Fire District recognizes that it must continue to enhance its plans, strategies, capabilities, and communication process to prepare for another potentially more impactful natural disaster. The issues and recommended solutions within this After-Action Report will help to further enhance the preparedness and continuous improvement for future emergency events. Our commitment to the learning process and the development and implementation of the recommendations to identified issues, will allow us to better serve our community.


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Sarasota
Fort Myers
Havana