

Flagler County Sheriff's Office

Hurricane Matthew After-action Report

October 2016



Prepared By Sr. Commander Stephen Cole

Summary

On Monday October 3rd 2016, the Flagler County Sheriff's Office (FCSO) began to monitor the path of Hurricane Matthew due to projections predicted that the storm would be heading north from the Caribbean staying approximately 70 miles off the coast of Florida as it continued to move north throughout the week. Flagler County was within the cone of error of either being hit directly or greatly impacted by Hurricane Matthew. As the week continued, predictions put the track of Hurricane Matthew closer to Flagler County and preparations were made.

On Thursday, October 6th 2016, all essential staff implemented an ALPHA/BRAVO shift rotation by cancelling all days off to include any vacation and/or personal leave. On Friday October 7th at approximately 0700 hours, Flagler County began to feel significant effects from Hurricane Matthew with conditions starting to improve later in the afternoon. At this time, the FCSO went into a recovery phase for the next several days and by Wednesday, October 12th 2016, the FCSO returned to normal operations.

Several outside entities/agencies responded to assist with this storm to include the National Guard, Orlando Police Department, Alachua County Sheriff's Office, Martin County Sheriff's Office, Florida Highway Patrol, and the Department of Financial Services.

Synopsis on Tropical Cyclone Matthew

Provided by Bob Pickering from EOC

Prelude

The system that would eventually become Hurricane Matthew moved off the coast of Africa on September 22nd. After strengthening to a category 5 tropical cyclone in the Caribbean, Matthew began its northward journey towards Flagler County on October 2nd at 0500hrs. On October 5th, a Hurricane Watch was raised for the east coast of Florida, including Flagler County with the center of the Tropical Cyclone about 800 miles away.

However, with high pressure to the north and the tropical cyclone to the south, Flagler County started to feel the knock on effect of the two weather features interacting. The end result was local nor'easter conditions setting in with winds gusting occasionally to gale force along the coast along with occasional showers.

A storm surge watch was also issued due to the threat of storm surges associated with the tropical cyclone. A storm surge of 3-5 feet was likely during the passage of the hurricane however, there were indications that it could be higher.

By 1945hrs that evening, voluntary evacuation orders were issued for zones A B & C with mandatory orders going into force at 0600hrs on 10/6/2016.

On October 6th 2016 mandatory evacuations were in force for zones A B & C with Zone F being included later. Nor'easter conditions continued along the coast with winds gusting up to gale force with occasional showers or squalls chiefly along the coast. NHC and NWS forecasts shifted the track further west putting Flagler County at risk for historic storm surges and severe hurricane winds on Friday; messages going out reflected this.

As we approached the midnight hour, winds to gale force began gusting across all of Flagler County triggering some of the first power failures in the county.

The approach of Hurricane Matthew

On October 7, 2016 at 0231hrs, the first wind gusts over 50 mph were reported at Marineland and at the Flagler EOC (0245hrs); gales began to overspread the county. Steady rains also had overspread the area with rainfall rates intensifying. A round of winds gusting in excess of 50 mph occurred between 0200 and 0300, causing additional power outages across the area.

Winds further picked up after 0500hrs, with multiple reports of gusts over 50-60 mph being observed or reported across the county; more so east of US 1. Winds gusting over 60 mph became commonplace along the coast. The center of the tropical cyclone was located off shore Melbourne Florida moving north-northwest with max winds of 130 mph. The good bit of news was that the track was a bit further east, decreasing the risk of severe hurricane conditions.

By daybreak, squally conditions began to rage across the county with continued reports of winds gusting over 60 mph at many locations. Conditions continued to deteriorate with tropical storm conditions reported at Flagler Beach at 0745hrs, as the center of the Tropical Cyclone passed off shore Cape Canaveral. Word was given at that time for all resources to seek shelter in safe locations for the duration of the storm.

Storm surge was already overtopping the seawalls as seen on webcams at 0846hrs with winds gusting up to 50-60 mph at multiple locations. Winds continued to increase and by 1100hrs, gusts had exceeded 70 mph with reports of rising water levels in the canals at various locations in Palm Coast and the ICW, along with reports of some damage to the pier.

The height of the storm came during the noon hour. The center of Matthew was located about 60 miles off shore however; the western edge of the eye wall was brushing the coast. The strongest wind gust reported of 86 mph was measured at 1243hrs in Flagler Beach. At 1247hrs, a 911 call was received that storm surges had trapped people in Sea Colony. Storm surges broke through the sand dunes and proceeded to flood areas north of Malacompra in the Hammock as well as areas near Marineland. At 1316hrs, chunks of A1A were confirmed to have collapsed onto the beaches between South 8th street and South 22nd street.

Tropical storm conditions continued until near 1410hrs when winds dramatically decreased. Resources were given the all clear to head out as conditions had improved with sustained winds in the 20's with a few gusts into the 40's.

Initial reports indicated that many beachfront homes in Flagler Beach suffered some kind of wind damage, most of it minor, but some homes suffered worse damage. A1A remained flooded north of Malacompra and Beverly Beach Surfside Estates appeared to suffer some major damage.

However, storm surge levels were still increasing especially in the Palm Coast canals with a maximum surge of 44 inches above the seawall reported off of Cheyenne Court, which was about 6 feet above normal high tide. Water levels began to recede at 1755hrs in Palm Coast.

Conditions continued to rapidly improve into the evening hours.

Impacts

Most of the wind damage was located in the eastern side of the county due to a steep wind gradient from the center of the cyclone proportional to distance from it. Winds of 50-60, with gust of over 80 likely occurred along the coast and with 40-50, with gust of over 70 between US 1 and the coast and 30-40 with gusts to 60 inland mainly west of US 1.

The storm surge was very significant and was greater than the 1893 and 1964 tropical cyclones making it the largest storm surge ever recorded since reliable records have been kept (1873). The worst of the surge occurred north of Malacompra to Marineland where the storm surge flooded from the ocean to the ICW; a few breaches also occurred south of Varn Park.

Beach erosion was also severe with A1A being compromised in south Flagler Beach and a number of homes north of Beverly Beach through Painters Hill threatening to fall off eroded dunes and onto the beaches. A dune breach in Washing Oaks State Park threatened that area with additional flooding.

Rainfall amounts of 3 to 6 inches were reported.

Aftermath

Evacuation orders were lifted on the morning of October 8th, with only residents and business owners being allowed back into Zone A with the remainder of the zones being fully opened up.

Normal access to beachside was opened up on October 11th.

Damage Assessment

Flagler County homes and businesses sustained an estimated \$72.8 million in damages. This includes damage to a reported 462 single-family homes; 242 had minor damage and 159 with significant major damage. There were a reported 6 homes that were completely destroyed. An additional \$35 million in damages was estimated to a major washout on SR A1A.

Immediately after the storm, on Friday almost 100% of Flagler County's 59,000 customers were without power. The rate of power restoration includes:

- Saturday: 50,000 customers without power.
- Sunday 1500 hours: 43,670 customers without power.

- Sunday 2100 hours: 22,790 customers without power.
- Monday 0900 hours: 17,000 customers without power.

Tuesday 0900 hours: Most customers were fully restored

FCSO Pre-Storm Preparation

On Monday October 3rd, the FCSO began monitoring Hurricane Matthew; this included participating in daily conference calls hosted by the EOC with other county stakeholders. FCSO staff was notified that we were in a monitoring phase and were advised to prepare their families and to be ready to activate later in the week.

On Tuesday October 4th, FCSO staff was notified and was advised to take the next 36 hours to get prepared, making sure that there was a plan in place for their families and to stock up on food, water, batteries, etc. The Command Staff met at 1500 hours to prepare to implement the FCSO Hurricane Plan.

At approximately 1730, hours an email was sent out to FCSO staff with the following notification:

Effective Thursday at 0600 hours, the FCSO will implement our deployment for Hurricane Matthew. All days off are cancelled for all sworn and communications employees. Any prior days off that were approved need secondary approval by your Commander. This shall remain in effect until 0600 hours on Monday, October 10, 2016.

At approximately 1745, hours a Code Red was sent to all Law Enforcement advising of the activation.

The PIO was tasked with photographing all FCSO assets, buildings, and locations to document the pre-storm conditions. [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] Civilian staff members were directed to acquire bottled water to be used for our personnel during the storm.

On Wednesday October 5th at 1500, hours a pre-storm Command Staff meeting was held to go over our operational readiness as the storm was approaching. At this time, multiple mattresses were secured from the FCIF that were staged in the Training Room to be used by our personnel as a comfort zone due to the expectation of working long hours. It was also decided at this time, that if needed, personnel would be allowed to let family member stay at the Operations Center during the storm.

Hurricane Activation

On Thursday October 6th at 0600 hours, the FCSO went into full activation of our Hurricane Plan.

EOC Staffing

The FCSO staffed the EOC with one administrator with agency decision making authority, one Administrative Supervisor to handle the ESF 16 function, and two SIU Investigators to provide security to

the EOC. Staffing was for a 24 hour period with personnel working 12 hour shifts. The FCSO PIO was also assigned to the EOC.

Shelter Staffing

During this incident, 3 shelters were activated; Rymfire Elementary (Special Needs), Bunnell Elementary (General Population and Companion Animals), and BTMS (General Population). [REDACTED]

[REDACTED]

Shelters were staffed on a 24 hour period covered by two 12 hour shifts each day with a minimum of 2 deputies working each shift at each shelter. This coverage was provided by School Resource Deputies and Courthouse/Civil Deputies that answered to the ISD Commander.

Law Enforcement Operations

Law enforcement operations consisted of ALPHA and CHARLIE shifts working each day from 0600 hours to 1800 hours reporting to a Commander and BRAVO and DELTA shifts working each day from 1800 hours to 0600 hours reporting to a Commander.

Each 12 hour work period consisted of the following:

- One shift handling normal patrol operations divided into Patrol North and Patrol South each answering to a Sergeant or Corporal.
- One shift was set up as strike teams divided into Strike Force North and Strike Force South each answering to a Sergeant or Corporal.

K9 Deputies were integrated into patrol and were assigned to either normal patrol or to a strike team. The traffic unit was assigned to the day shift to handle traffic control points.

ISD established 3 strike teams with two teams assigned to the day shift and one assigned to night shift. Each team consisted of a supervisor (Sergeant or Corporal) and 4 Detectives to assist with any special details or investigative needs.

[REDACTED]

[REDACTED]

The following operational sheltering guidance was given prior to deployment:

- *All North Patrol Units and North Strike Teams will shelter at [REDACTED]. This [REDACTED] will serve as a rally point in case of radio failure or dangerous conditions. All deputies will physically check in with supervisor on site.*
- *All South Patrol Units and South Strike Teams will shelter at [REDACTED]. [REDACTED] will serve as a rally point in case of radio failure or dangerous conditions. All deputies will physically check in with supervisor on site.*

Some pre-storm operational assignments included traffic control points, assisting with the evacuation of listed zones, patrolling areas that had been evacuated, and enforcing county issued curfews and no-alcohol sales.

On Friday October 7th, during the peak of the storm, there was an approximate 6 hour time frame from mid-morning to the early afternoon that normal patrol operations ceased due to conditions being unsafe. During this time, a Law Enforcement Supervisor was staged in the Communications Center to triage any potential calls for service that there was a necessity for response. One rescue mission was successfully conducted during this time involving a motorist stranded at an intersection; ERT members were able to respond with their special purpose vehicle to successfully rescue this individual.

By 1500 hours, all patrol units and strike teams were redeployed and began assessing the damage from the storm to include traffic lights out, down wires, and road blockage. In addition, multiple law enforcement missions were dispatched to include:

- Alarms
- Welfare checks
- Escorts to include escorting utility companies not familiar with the area
- Wires down
- Road obstructions
- Burglaries
- Thefts

On Friday October 7th, the FCSO responded to 908 Calls for Service and on Saturday October 8th the FCSO responded to 677 calls for service. On average, the FCSO responds to approximately 300 Calls for Service each day. The call for service remained somewhat elevated through Saturday October 15th and at this time began to return to a normal pattern.

Outside Resources

The following outside resources were sent to assist the FCSO:

- Friday 10/07, the National Guard responded with approximately 130 guardsmen. They were assigned to bridge security and barrier island patrol. This deployment was released on 10/10.
- Friday 10/07, Orlando Police Department responded with approximately 15 officers prepared to assist with clearing of the roadways. They were released on 10/08.
- Friday 10/07, the Alachua County Sheriff's Office responded with 12 deputies to assist with shelter security. They were released on 10/10.
- Saturday 10/08, the National Guard sent an additional 50 guardsmen to assist with the PODS. This deployment was released on 10/11.
- Saturday 10/08, the Department of Financial Services sent 8 officers to handle POD security. They were released on 10/10.
- Saturday 10/08, the FHP dispatched 32 troopers to provide 24 hour coverage on the barrier island for traffic control points. They remained in place until Saturday 10/15.

- Sunday 10/09, Martin County SO arrived with 14 deputies to assist Flagler Beach and stayed through Sunday 10/16.

After-action Debriefing

On Thursday October 27th at 1500 hours, an after-action meeting/debriefing was conducted at the FCSO Operations Center to discuss the execution and the Hurricane Plan. This meeting was attended by FCSO Law Enforcement Commanders and Line Supervisors (Sergeants/Corporals).

The following positive observations were noted during this meeting:

- The activation of our troops was seamless.
- The use and test of CODE RED worked in notifying our staff.
- The staffing of EOC was correct with an Administrator and an Admin. Supervisor. In the past we have failed to have the appropriate decision making authority at EOC.
- [REDACTED]
- Staging the boats at a safe location.
- Predesignated shelters for our staff.
- Proper staffing of shelters.
- Placing a supervisor in the Communications Center during the down time was successful and useful.
- Securing new mattresses from the Inmate Facility to create comfort/rest areas for our employees.
- Being able to monitor the storm and modify shift changes on Friday 10/07 worked and enabled us to get our staff home safely and bring them back safely keeping the troops somewhat fresh.
- Being able to redeploy of troops with minimal downtime during the worst portion of the storm.
- Being able to modify some days off to attempt to get everyone a day off.
- Ultimately everyone worked as a team and successfully and professionally worked through this event.

Some future considerations and items that can be added to the FCSO Hurricane Plan include:

- Platoon Commanders should remain in place. Sending one to the City of Palm Coast strapped our resources. If a second person is needed, this should be staffed by an administrative Sergeant.
- There is a need to assign someone to handle food, water, and supply needs.
This can be accomplished by designating a Commander from the Inmate Facility to assume this role. In addition, the agency should consider the purchase of a kitchen trailer.
- There is a need to have an administrative logistics Commander and assistant assigned to just deal with responding agencies and/or request (National Guard, LEO, etc.). This fell back on the Incident Commander(s), which found this difficult to manage.
This can be accomplished by designating the Training Commander and Training Deputy to handle this task.

- Phases of deployment should be considered. Depending on the circumstances, we consider leaving some essential staff off-duty until after the event and then deploy them.
This should be added to the plan as a point of consideration prior to full scale deployment.
- ISD roles and assignments need to be better identified in the Hurricane Plan.
[REDACTED]
- Consider utilizing the Class C Uniform.
- Consider staffing the EOC with members that have specific Emergency Management Training/Experience.
- If using multiple operational radio channels, units should be placed on the same channel based on geographical responsibilities rather than mission type.
- Consider having access to road barriers or traffic signs to assist after the storm.
- There is a need to keep some civilian staff on duty to assist with some issues. (custodial, equipment, prior dispatch experience, food prep/delivery etc.).
This should be added to the plan as a discussing point at the Pre-Event Command Staff Planning Meeting.
- Mobile Command should have been brought back sooner.
The Logistics Commander will have this responsibility and depending on the impacted area, it should be staged in a centralized/needed location.
- Consider a plan with the school superintendent to arrange a shelter for family members.
The plan should have the ISD Commander set this up prior to our activation.
- We started to relieve some essential staff a little prematurely.
The Commanders need to properly assess this prior to scheduling days off. After the storm, we experienced criminal activity and many unexpected law enforcement missions (escorts/security details). Possibly consider creating a swing shift to cover peak hours during the recovery phase.
- Consider creating an electronic operational document in SharePoint that is up to date and available to all personnel.
- Use Code Red to send out messages 1 hour prior to each shift updating employees status, assignments, and rally points.
- Technical Support Unit should offer services to employees after the fact to assist families if individuals that are on duty have trees down etc. at their homes.
Consideration should be given to activating ERT to assist with this function.
- It would potentially be beneficial to create a leaflet that could be distributed to citizens at traffic posts reflecting emergency contact information, EOC, FP&L, sand bag locations etc. pertinent contact phone numbers.
The PIO or other non-essential staff could possibly be utilized for this.
- [REDACTED]
[REDACTED]
During the post-storm phase we should reflect specific orders such as the initial cleaning of main thoroughfares so that supplies can be dispersed. Particular sections need to be broken down reflecting priority one clearings.

- A better radio back up plan is needed at the EOC. It is essential that we have a solid plan to be able to communicate better with agencies that are coming to assist us. If we have a radio system failure, we have no redundancy in place; we did not have a cache of radios. State repeaters would also be down. Radio system failure is imminent without a new system. We need a backup channel test plan for portables and radios.

Conclusion

The purpose of this document is to provide the FCSO with a historical analysis of the preparation and response to Hurricane Matthew. In addition, this document should be utilized in updating the FCSO Hurricane Response Plan. The after-action report should be available as a resource to prepare and respond for any future weather threats to Flagler County.

