

City of Punta Gorda
The One Year Anniversary of Hurricane Irma:
Preparation, Response and Lessons Learned

On September 10, 2017 Hurricane Irma impacted Southwest Florida and the Punta Gorda area as a Category 3 hurricane. The emergency management collaboration and work related to the storm event required the cooperation of the City, Charlotte County, State of Florida, Federal Emergency Management Agency (FEMA), Florida Power & Light, and other public, private, and nonprofit partners. The report highlights the preparation, response and lessons learned from Hurricane Irma.

Preparation

In the week leading up to the hurricane, the City's Emergency Management staff monitored the hurricane's path and prepared for a potential impact in Southwest Florida. The Fire Chief/Emergency Management Director updated elected officials and City staff regarding the status of the storm. On September 4, Governor Rick Scott declared a State of Emergency for Florida. As the hurricane approached Punta Gorda Activation Levels described in the City's



Emergency Management Plan were implemented. The intention of the preparedness was to plan and prepare for the worst and hope for safety for all citizens, businesses and visitors.

On September 7, the Charlotte County Emergency Operations Center was activated and staffed. The first operation period activities included directives such as, staff ensuring that their respective City building and vehicles remain in a state of readiness ahead of the storm. All City departments analyzed their needs ahead of the storm and made requests for goods or services through the Incident Command System. Departments were reminded as to the importance of familiarity and use of appropriate forms for storm related activities. Directors prepared for employee sheltering at designated facilities. Each operational period created by the incident command team directed the City to ensure that their perspective departments, staff, equipment and emergency plan was set in place and ready as the storm approached. Charlotte County Emergency Management and County Government released mandatory evacuations. Evacuation orders were issued for a larger area and more people than any other time in the County's history.

Preparation Highlights:

Communication/Evacuation:

- City Manager accompanied the police to warn residents of the evacuation orders.
- Fire Department staff assisted in the evacuation of all assisted living facilities within the City of Punta Gorda. Fire department staff reviewed the plans of each skilled and advanced nursing facility and advised of necessary changes to those plans.
- Fire Department provided street by street evacuation notification to residents.

- Fire Chief and Information Technology staff created and distributed real-time notifications/situation reports to the community via social media including Facebook, Next Door and City web page.
- A total of 195,672 communication contacts were made in advance of the hurricane by both Charlotte County and City of Punta Gorda Emergency Management. Including Red Zone and Mobile Home Evacuation, Red and Orange Zone Mandatory and Shelter in Place Messages.
- Building Division and Code Compliance staff notified contractors and homeowners in need of securing materials, roof tiles, or other materials in advance of the storm.
- Finance prepared Notice to Proceed to give staff the ability to engage approved contractors for goods and services necessary as a result of the hurricane.
- Public Works, Utilities and Public Safety staged First in Teams at water and wastewater treatment plants.



Shelters:

- The Water Treatment Plant accommodated approximately 110 City employees and families at the administrative building during the storm.
- The Wastewater Treatment Plant sheltered approximately 90 City employees and families.
- County opened two general population shelters, both pet friendly, and sheltered approximately 1,600 people.

Response and Recovery



Unexpectedly, water in the Peace River and Charlotte Harbor canals were pulled toward the Gulf, leaving only small amounts of water and muck for miles. While the initial forecast predicted storm surge of 13 to 15 feet, the City experienced about a four to six foot surge in selected areas. The hurricane produced unprecedented storm tides and that together with wind produced extremely strong waves in the Gulf of Mexico. These waves damaged the Gilchrist Park Pier and the coastline. The rain coupled with water drawn from the canal system resulted in significant seawall damage in the City’s canal districts. The

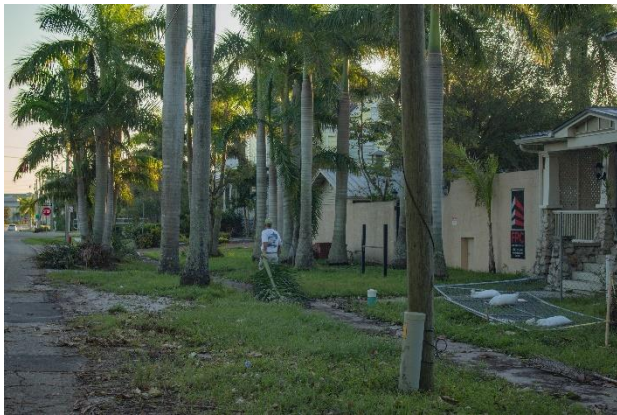
hurricane caused widespread power outages affecting thousands of Florida Power & Light customers. Customers within the City of Punta Gorda lost power immediately following Hurricane Irma. Many outages lasted for three days or more following the storm.

Response teams were organized with resources from Punta Gorda Fire, Utilities, Public Works and the Police Departments. The Fire-Rescue’s emergency plan sectors were developed for events like Hurricane Irma. These emergency plan sectors were used to plan and carry out strategic road clearing efforts.

Response Highlights:

Debris Clean Up

- Urban Design and Public Works staff worked with citizens to clean up debris. Staff assisted with press releases relating to storm debris collection; reviewed downed trees determining if they could be stood back up; organized volunteer park clean-ups with TEAM Punta Gorda in such areas as Laishley Park, Gilchrist Park, Linear Park and Sculpture Park.
- City Sanitation and Crowder Gulf collected 1,285 tons of debris. The total cost was approximately \$260,000. It is expected that FEMA will cover 90%.



- City's debris hauler, Crowder Gulf provided outstanding service. The City provided office space for Crowder Gulf. Due to Crowder Gulf's diligence the City of Punta Gorda became eligible for 90% reimbursement from FEMA, completing the debris clean up on October 16th one day before the deadline for the 90% reimbursement threshold. Crowder Gulf was awarded Contractor of the Year, APWA FL Chapter Award, for Sanitation Hurricane Debris Clean

Up on April 19, 2018 at the Annual Florida Chapter APWA Expo.

Finance

- Finance mobilized to manage all accounting and paperwork required for FEMA and State reimbursement of storm-related expenses.
- During the financial recovery process, Finance was and continues to be the lead in coordinating with the State, FEMA and stakeholders.

Police & Fire



- First responders were mobilized and available to respond to calls for service. By 12:06 a.m. on Monday morning the first post-storm police call for service was dispatched. By 9:40 a.m. Tuesday morning all pending non-emergency calls received during the storm had been responded to by officers.
- 956 police events were generated during the storm period (September 5 through September 13). Approximately 86 calls for service were received during the time frame that emergency services were suspended.
- Charlotte County Sheriff's Office and Punta Gorda Police Department dispatchers fielded 2,374 telephone calls combined between 6:00 a.m. on September 9 and 6:00 a.m. on September 10. This was approximately 4.5 times the number of telephone calls these centers would receive on a normal day for that time of year.
- Fire Department staff continued to receive calls for service at approximately four times normal call volume including wellness checks, fire alarms and medical emergencies.
- Fire Department staff coordinated several caravans of supplies including food, clothing, generators etc. for distribution both locally (Charlotte, Lee and Desoto counties) as well as supplies transported to Monroe County and surrounding areas that were significantly impacted by Irma.
- After the storm most traffic signals were not powered. Emergency vehicles and portable electronic signage was used to slow down traffic at the intersections and social media was used to get the information out to citizens.

Public Works

- 95% of calls handled by Public Works were seawall related.
- The decision was made to employ use of Geographic Information System (GIS) to manage the seawall issue. This one issue resulted in several related projects to be undertaken – inspections with FEMA; evaluation of causes; building of panels; installation of panels; and erosion control.
- Within 48 hours after storm, using GPS and sampling, staff projected 12.5 miles of seawall had fallen. Within one week of the storm all 15.87 miles of seawall locations had been visited by staff and 925 impacted parcels were identified.
- Building of panels to meet need required hiring contract firm to pour panels with the City supplying materials. Before Irma, City crews poured about 35 panels per week. Irma required 200 panels per week to meet an estimated 10,000 panels and an 18-24 month recovery. The decision was also made for panel production to be at Public Works yard to enhance quality control. By September 25, concrete forms were ordered. A comprehensive timeline of seawall repair initiatives is available on the City website.



Utilities

- Wastewater Collection system was mostly back to normal by Sept. 15 except for FPL power at lift stations 32 and 62 which was completed by Sept. 21.
- Water Distribution crew assessed the distribution system to determine damage and leaks. The system suffered no leaks as a result of the hurricane.
- State Emergency Management Department generators under the supervision of Florida Rural Water Association (FRWA) and for use at utilities with no power were off loaded at our water plant, towed to our wastewater plant and then deployed and moved by Circuit Riders for FRWA.
- Following Hurricane Irma the City Manager reached out to all of the Southwest Florida Utilities affected by hurricane Irma to determine what assistance they needed. The City of Naples Florida requested help with their sewage pumping station repairs and power connections to generators for the pumping stations. Punta Gorda Wastewater Collection Division dispatched a two person crew, which included an electrician, to assist Naples' with their recovery.
- The City provided the staging site for many of the crews and equipment sent to and used in Lee, Collier, and Monroe counties to the south.

Lessons Learned

There were five main areas of concern; intersections without operable traffic signals, communications between the agencies and within the agency, shelter arrangements, public parking at the Herald Courte Centre, and supplies. Some of the lessons learned and solutions for the future are highlighted below:

Intersection control

- Loss of power caused safety concerns at intersections. Signs that can be placed at the intersections to warn drivers that the signal is out will be used in future signal outages.



Shelter arrangements

- Water Treatment Plant administration building was used as a shelter during Hurricane Irma last year and experienced flooding on the bottom floor as a result of the storm. Through Emergency Management funds the City's Fire Department purchased the flood barrier (orange tube) being tested at the Water Treatment Plant. The barrier test was successful and should help protect the building from flooding.
 - Staff also determined that the City should look into funding for cots for future storm deployment needs (possibly utilize a grant for storm related equipment).



Herald Court Centre

- Staff recommends better management of Herald Court Centre parking arrangements. If a storm surge had occurred, the vehicles parked in the garage could have been moved by the flooding and blocked access into the garage preventing staff from retrieving City fleet and equipment needed for post storm deployment from the third floor.



Communications

- Better communication is needed between the Emergency Operations Center and shelters. A command post at each shelter will be implemented.
- Improved communications with Code Enforcement needed. A plan to communicate directly with code officials is being created.

Supplies

- Staff determined the City has some areas for improvement establishing contracts for both pre and post storm needs. Procurement staff is recommending that Meals Ready to Eat (MRE) be purchased in advance of storm season and stored. Some issues such as fuel are out of the control of the City. A contract is in place for mobile fueling but that only works when fuel is available. A comprehensive list of ancillary services that may be provided by debris contractors is in place that addresses power, communications, sanitation, refrigeration, water, fleet repair, tents, temporary signage, traffic control, security, lighting, fueling, equipment, and fencing.

Conclusion

Hurricane Irma provided a comprehensive test of the City of Punta Gorda's ability to manage a hurricane storm event. The City demonstrated it was able to respond to this disaster from sheltering employees, to the efficient removal of horticultural debris, to quickly assessing seawall damage and developing a plan of action for repair of the infrastructure. The storm caused damage that left City residents without electricity for days, some downtown streets flooded and the aforementioned seawall damage. Hurricane Irma's challenges presented an opportunity for the City organization to implement its plans, training, resources, partnerships and response abilities.

The City recognizes that it must continue to enhance its plans, strategies, capabilities and communication processes to prepare for another potentially larger, more severe disaster. The lessons learned will help to further enhance the City's preparedness and continuous improvement for future emergency events. The commitment to learning lessons from every emergency event, developing solutions to identified issues, and following through with implementation of ideas will allow the City to better serve the residents, visitors and the community.