



CITY OF ALEXANDRIA, LOUISIANA
MAYOR JACQUES M. ROY

FOR IMMEDIATE STAFF USE AND PUBLIC DISTRIBUTION

August 28, 2017
Office of the Alexandria Mayor
Alexandria, Louisiana

HURRICANE HARVEY SUMMARY

City of Alexandria Reports Operations During Hurricane Harvey

Alexandria, Louisiana—On August 23, 2017, the city of Alexandria started its formal response preparations for the specific threats posed by T.S./Hurricane Harvey to central Louisiana. By Thursday, August 24, 2017, the near-Category Three storm system was well-formed and predicted to make landfall in Texas by Saturday. By August 25, 2017, Harvey was predicted to become a massive Category Four storm as it approached land. From Friday to Saturday, the Category Four Harvey began battering the southeast Texas coast and, eventually, southwest Louisiana corner; and then Harvey moved into Texas, meandering through the major Houston metropolitan area, doing significant, historic flood-related damage. Harvey parked itself over Texas and dumped the historic rain without moving, after its spiral bands passed one after another over Texas without giving the areas a respite.

Upon formation of the Alexandria emergency planning and response, officials noted the storm system presented risks of inundation and “training rains” in central Louisiana reminiscent of Hurricane Gustav. Training rains are those bands of rain or cells that move “like a train” over one area and dump rain, like a conveyor belt. Although presenting differently as a storm system, recall that Gustav slowed over central Louisiana (as Harvey did over southeastern Texas) and dumped historic rain levels. The concern, therefore, for central Louisiana—once Harvey’s

Mayor Jacques Roy and Utility Director and Storm Incident Leader, Michael Marcotte, warned on 8/28/17:

“Stay prepared and cautious. Weather events will remain with us for several days. We thank our state and parochial partners, and we appreciate the hard work of our employees and officials. We want citizens to be vigilant, watch official reports on our social media pages, and keep an eye out for neighbors.”

City emergency services will remain engaged until the threat is completely alleviated.



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likely initial path was determined—was if the storm system moved back out in the Gulf, organized again, and moved easterly. In that scenario, a strengthened Harvey might move through central Louisiana and linger, as in Texas, dumping rain in Texas and central Louisiana for many days. More locally, central Louisiana was at particular risk in many of these models. Heavy rains over the this week create a high risk of flash or sustained flooding in central Louisiana, especially as our diversion bodies fill to capacity leaving gathering water nowhere to go.

Accordingly, Alexandria declared an emergency state early on (August 23, 2017) and began full preparations. Citizens were warned not to let the weekend's local dearth of storm activity "lull" citizens into a false sense of security. On Friday, August 25, 2017, a comprehensive emergency management briefing was provided, streamed live and on government access.

Alexandria prepared for Harvey with additional pump/diversion assets, requested by the mayor and ICS leader. These assets were deployed to expand our local ability to move more water than for any other storm in City history. Alexandria will monitor Harvey's lingering destruction and use all lessons for future storm preparation, documenting our activities for required and educational needs.

We thank our state and parochial partners, and we appreciate the hard work of our employees and officials. Interoperability (the degree to which multiple agencies work together), citizen communications and transparency, and proper staging of resources have been the orders of the day. The parish and city teams, along with state and federal partners, appropriately prepared.

With little concerns felt in central Louisiana through August 28, 2017, note Harvey still poses historic and additional massive threats to Texas, and poses lessening *but continuing* threats (depending on models) to central Louisiana. Many models indicate the early-on fears of a Harvey reorganization now moving along the Texas-Louisiana border, greatly affecting central Louisiana with highly intense volumes of precipitation.

The most recent track is indicated, here:

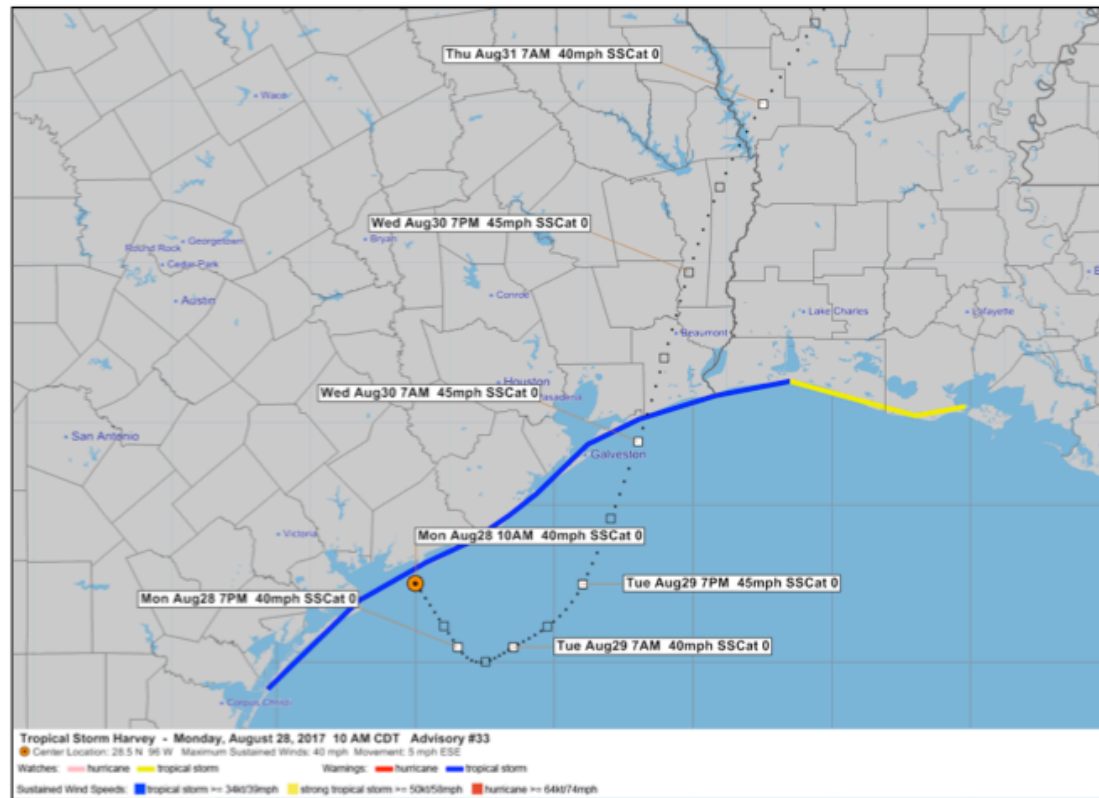
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Situation Overview

Tropical Storm Harvey



Lake Charles
WEATHER FORECAST OFFICE



NOTE: Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

8/28/2017 10:26 AM

www.weather.gov/LakeCharles

HURRICANE HARVEY SUMMARY

Summary of Important Key Concepts with Hurricane Harvey Response

- ***Rate of rainfall is distinguishable from its volume and can cause inundation, which quickly subsides. Hurricane Harvey still may cause significant rainfall in central Louisiana. Training rains refer to the movement of a band or cell of rain across the same path much like a train across the tracks, or a conveyor belt. Even when a diversion body is not full, a training high volume cell can overwhelm an area quickly, causing flash flooding usually evidenced by the area quickly returning to its normal dry state after the rain slows.***
- ***High rates of precipitation over a short period, with accumulated moisture, can inundate and overwhelm properly functioning and designed infrastructure. Infrastructure has been able to move water quickly once faster downpours cease. Alexandria saw some heavy inundation prior to Harvey. Because of that increased risk, additional resources were sought and obtained.***
- ***Risk of capacitated diversion bodies and rain events following Harvey can pose lingering risks, after citizens “feel” it is all over. Texas is measuring precipitation in feet instead of inches, with isolated areas seeing 40” or more.***
- ***By the time of Harvey, our diversion bodies and assets were pumped down, staged, and ready for full flood fighting. Technologies are deployed to assist in our responses across agencies (interoperability) to coordinate all efforts.***
 - ***A preliminary assessment reveals the storm water drainage system is operating within expected parameters and according to design. Additional assets were placed given the multiple models of Hurricane Harvey as officials considered its possibilities.***
 - ***Sonya Wiley-Gremillion and RRABB helped Alexandria place these additional assets.***
 - ***Alexandria placed additional portable pump technology, which in the future may be deployed in flood-prone areas where the margin of inundation can be affected by additional quick diversion (e.g., Prescott Road and Martin Park).***
 - ***City social media was coordinated and more active than any previous event; reports were positive for this additional use and official manner of disseminating accurate information.***

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- *Assessments reveal that multiple Operation Clean Outs and other measures taken by the City prepared the City for this event and contributed to greater water diversion and less obstruction. The “gearing up” phase involved a massive clean out just before the storm’s arrival, which aids in hydraulic diversion operating in optimal capacities.*
- *Hurricane Harvey underscores the critical need for coastal protections, properly functioning and tested infrastructure, the need to assess diversion techniques to the Red River and beyond, and the need for all of us, as a community and a State, to maintain contingency plans in the face of natural disasters in a best-practice, coordinated fashion.*
- *Hurricane Harvey underscores the difficulty of agency decisions relative to evacuation plans and need for the best possible interoperability. Early preparation and practice make differences in response, although it should be pointed out the power of nature can, and will, overcome every effort—making preparation for recovery an essential task of government and private-sector partners.*
- *While weather cannot be predicted perfectly, following well-vetted and practiced plans can predict outcomes.*
- *While balancing and reducing risk to farming neighbors and including Parish concerns, the City of Alexandria must insist on diversion techniques guaranteeing the safety of citizens for serious weather events. With our Parish partners, we stand ready to help our State and federal counterparts alleviate the problems experienced by downstream farmers in Avoyelles and elsewhere while implementing the measures necessary to ensure the safety of citizens in Rapides Parish from any stalling diversion as water leaves the City to floodplain areas leading to the Atchafalaya Basin.*

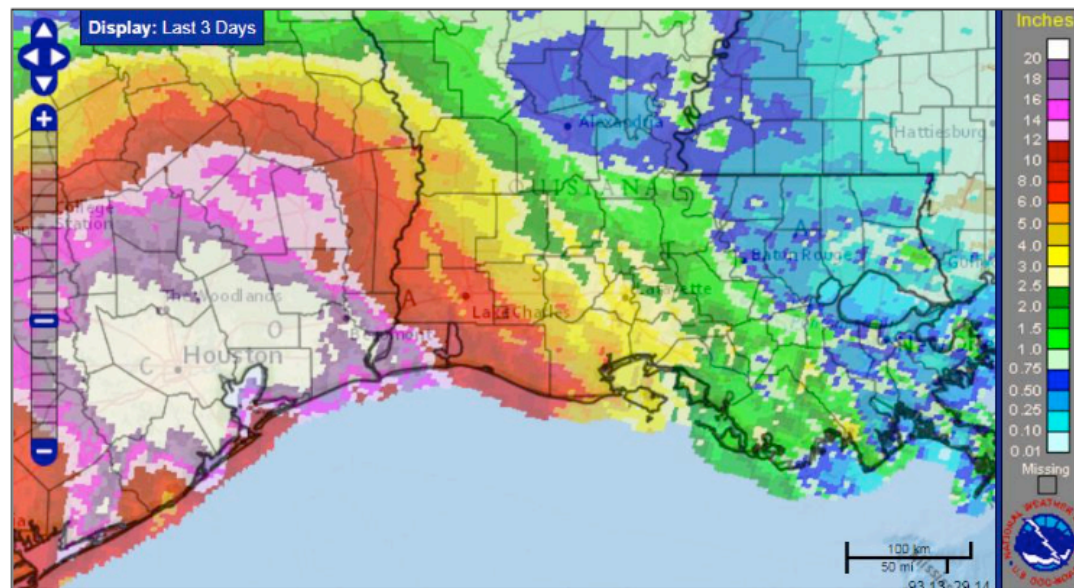
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Rain Totals So Far

Tropical Storm Harvey



Lake Charles
WEATHER FORECAST OFFICE



The Houston area has seen over 20 inches, and that now extends into parts of Hardin, Jefferson, and Orange counties. 10 to 16 inches of rain has fallen over Jasper and Tyler counties. And western Cameron Parish. 6 to 10 inches of rain has fallen over eastern Cameron, Calcasieu, western Beauregard, and Newton.

8/28/2017 10:26 AM

www.weather.gov/LakeCharles

The rain totals shown are as of August 28, 2017 reporting at 10:30 a.m. The totals are higher now, and growing.

The hurricane track continues to pose significant risk to central Louisiana as Harvey moves out to the coast and then again through Texas along the Louisiana border.

8/28/17 10:30 a.m.

Notably, a "new" color scheme in white had to be used for this storm because it exceeded the purple hues previously showing highest amounts. There are reportedly 40" of rain in specific areas of Houston.

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Introduction and Summary

Introduction to Incident Planning for Harvey

On August 23, 2017, the city of Alexandria started its formal response preparations for the specific threats posed by T.S./Hurricane Harvey. Of course, preparation for hurricanes in general fashion began many months and years prior; and specific cleaning out of diversion structure began in earnest with knowledge of the tropical storm system coalescing. At 7:00 p.m., Wednesday, August 23, 2017, the city of Alexandria declared a state of emergency in Alexandria. The Incident Command System ("ICS") was instituted at that time.

By Thursday, August 24, 2017, the near-Category Three storm system was well-formed and predicted to make landfall in Texas by Saturday. By August 25, 2017, Harvey was predicted to become a massive Category Four storm as it approached land. From Friday to Saturday, the Category Four Harvey began battering the southeast Texas coast and, eventually, southwest Louisiana corner; and then Harvey moved into Texas, meandering through the major Houston metropolitan area, doing significant, historic flood-related damage. Harvey parked itself over Texas and dumped the historic rain without moving, after its spiral bands passed one after another over Texas without giving the areas a respite.

On August 24, 2017, an Emergency Management Team ("EMT") initial meeting occurred. Duties were assigned by the incident command, and leadership issued the charge. All divisions checked in and stated readiness and any matters of concern. No major areas of concern were noted. The EMT awaited additional pump assets to bolster storm response in problem and low-lying areas of the city.

On August 25-26, 2017, in consultation with the parish incident commander, the Bolton Avenue Community Center was determined to be the first potential shelter, supported with city security, as may be needed if opened for sheltering. The Alexandria City Council held a special meeting on August 25, 2017, to unanimously approve two (2) emergency ordinances and declare a state of emergency. Immediately thereafter, the EMT presented its formal briefing of the response plan ((to four (4) of



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the seven (7) council members, who remained after the brief meeting to study the response plans with concerned citizens and civic leaders)).

On August 26, 2017, a shorter EMT meeting assessed readiness, and the EMT noted sandbagging was slowing down. The EMT decided to loosen strictures on Alexandria users to ensure businesses received sandbags even when Alexandria business officials could not produce an Alexandria driver's license, based on their residence.

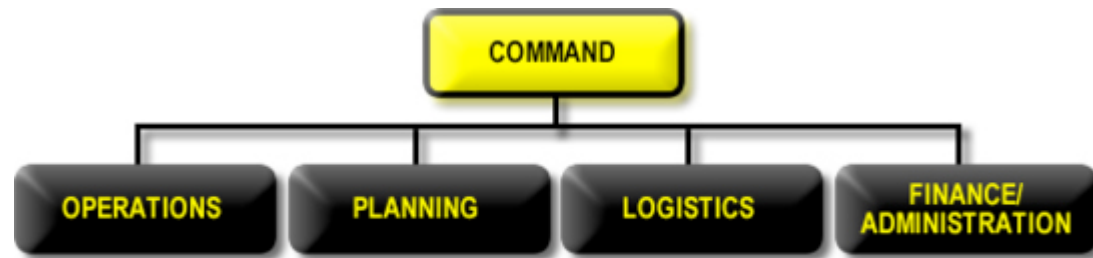
On August 27, 2017, the EMT met again at 5:00 p.m., assessing all staging and confirming readiness of all assets. The EMT remained concerned about the distance between the one-day and two-day bands of anticipated precipitation separating central Louisiana from very high precipitation areas.

By August 28, 2017, absent a re-strengthening and pass closer to central Louisiana, the anticipated precipitation bands looked better for central Louisiana. Later models in the day began to indicate reason for concern today and Wednesday.

This report was issued outlining certain contingencies, planning, and continuity measures. In the days of operations, written plans and oral plans (called "incident action plans" or "IAPs") were formulated and executed.

The city of Alexandria applied a modified version of the NIMS incident command system, integrating a combination of facilities, equipment, personnel, procedures, and communications within a common organizational structure. The command structure was formal, including an incident commander, public information officer, safety officers, and liaison officers. Answering to the command structure, division heads within the City were converted to fit a command and management structure as follows:

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INCIDENT COMMAND SYSTEM: COMMAND STAFF & GENERAL STAFF

Divisional/ Operational Preparation for Harvey

Division of Public Works

The Division of Public Works prepared for multiple problems associated with hurricanes.

The Streets and Drainage Department implemented standby sandbag operations. This department also checked and cleared catch basins, storm drains and “rabbit runs” pre-storm.

The Zoo and Animal Shelter Departments coordinated with state and other agencies for the safe placement of animals from other affected areas of the state.

The Sanitation Department prepared to assist in the removal of any debris that might occur and then handled that removal effectively. On Monday, August 28, 2017, regular sanitation services occurred.



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The Traffic Department assisted the Utilities Division, Fire Department, and Police Department in making preparations for possible street closures and re-openings, including at Prescott to stage additional pumping assets. The Motor Pool Department prepared for any possible break downs in equipment and will render aid where needed.

The Building Services Department (or ICS) coordinated with other agencies to prepare for any evacuees at designated public structures. ATRANS Department monitored the transportation needs of the City.

Division of Finance

In preparation for the possible event of Hurricane Harvey affecting Alexandria by either direct weather impact or an influx of evacuees, the city of Alexandria made multiple financial decisions. The emergency operations communications were set up and tested. Back up generators were fueled and tested. Inventories of various supplies were counted, and orders made to increase supplies of items commonly used for emergency operations (utilities, fuel and general warehouse).

The City planned and prepared an amendment to the operating budget to appropriate \$200,000 to a line item to be available for emergency response in the general fund and \$300,000 in the utility fund. Finance considered recommendation of an ordinance authorizing exempt employees to receive overtime pay for emergency response to the hurricane.

Any needed emergency contracts that were not in place were submitted for council approval (or will be under the emergency enactments). The public was informed of the first call phone number to be answered at the city of Alexandria Emergency Operations Center. Finance stockpiled thousands of sandbags.



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Division of Utilities

Storm restoration supplies were on-site and available for immediate distribution following a storm event. Crews ensured vegetation around water wells and any other issues concerning them were acceptable to help preserve local water production during the storm. Arrangements were made for additional resources from contractors and the APPA mutual assistance group.

All storm water pumps were in service; back-up generators were fueled and ready. Kisatchie Emergency Generators were in place and ready; fuel supply was on standby order.

Divisions of Police and Fire Suppression and Prevention

The Divisions of Police and Fire stand by to assist all other public safety agencies to handle, assist, and ensure continuity of government operations in addition to performing all regular duties. Agencies worked with sister agencies in collaborative fashion. Security for public infrastructure and delivery systems was maintained, and public safety officers operated on heightened alert.

These agencies planned for traffic assistance, evacuee issues, and contingencies for evacuation of local citizens in crisis.

Division of Planning

The Planning Division personnel prepare and ready for distribution of city of Alexandria maps and indices to provide emergency crews and other organizations with help in locating citizens in need of assistance as well as maps identifying and locating key infrastructure sites such as: pump stations, drainage ditches, and flood control structures for the crews responsible for maintaining the drainage system.



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Division of Administration

Personnel visited construction sites to check storm water protection and ensure structure openings are clear of obstructions. The City communicated with RRABB personnel to coordinate flood protection locations within the city of Alexandria.

Continuity of Government

The Emergency Operations Center, or EOC, is prepared for use as housed at the COA Consolidated Compound. There, coordination of information and resources to support hurricane and hurricane-related issues may take place. The Incident Command Post (ICP) was housed at the office of the Public Works Director. Regular meetings and IAP re-assessments shall occur in four-hour (or less when needed) intervals from a declared incident onset.

The city of Alexandria will detail inter-operational critiques of the planning and operational response.

Future plans also assess predetermined incident action plans (IAPs) for the following, in addition to other emergency preparedness public works, financial, and utility division preparations:

DG Hunter ("power plant") generation

Conservation recommendations and "tool kit" information

Inmate needs (if applicable)

Zoo and Animal Shelter needs



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Council information (for declaring emergency, emergency expenditures)

Flooding risk assessments

“Pumping down” diversion bodies

Considerations on backflow of diversion canal at Bayou Rapides Control Structure

FEMA PA funds

Use of supplies and materials

Vendor identification before, during, and after storm

Payroll policy and overtime expenses

Emergency response funds expended

Functions critical to the operation of the municipality

Barriers or obstacles to operations during the event

EOC organization

Debris Removal – Clearance of trees and woody debris; building wreckage, sand, mud, silt and gravel; vehicles; and other material deposited on public and, in public safety situations, private property

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Emergency Protective Measures:

- Search and rescue
- Security forces (police and guards)
- Construction of temporary levees
- Provision of shelters or emergency care
- Sandbagging
- Bracing/shoring up of damaged structures
- Provision of food, water, ice and other essential needs
- Emergency repairs
- Emergency demolition
- Removal of health and safety hazards

Roads and Bridges – Repair of roads, bridges, shoulders, ditches, lighting and signs

Water Control Facilities – Repair of irrigation systems, drainage channels and pumping facilities; repair of levees, dams and flood control channels

Buildings and Equipment – Repair or replacement of public buildings, including contents and systems; heavy equipment; and vehicles

Utilities – Repair of water treatment and delivery systems; power generation facilities and distribution lines; and sewage collection and treatment facilities

Parks, Recreational Facilities, Other – Repair and restoration of parks, playgrounds, pools, cemeteries