



Hurricane Harvey 9.3.17 Analysis

Risk Services Division

3 September 2017

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Hurricane Harvey (Post Tropical Depression) September 3, 2017 9AM ET

Summary

Some residents have been allowed to return to their homes but flood waters are still rising in other areas. Harvey has been blamed for at least 47 deaths, and about 43,000 people are currently housed in shelters.

- Response and recovery efforts continue throughout the Gulf Coast
- Dry weather this weekend; area rivers and bayous to fall below major flood stage
- Record flooding will continue on the Neches River near Beaumont through next week
- Harvey's remnants may cause locally significant flash flooding, especially in Kentucky
- Isolated tornadoes possible, primarily over the Carolinas

Hurricane Irma

- Category 2 Hurricane
- Located 1,320 miles E of the Leeward Islands
- Moving W at 14 mph
- Fluctuation in strength is possible during the next few days

Impacts

- Widespread Damage: Nearly 137k (+18k) of 2.7M homes in 29 counties impacted
- Evacuations:
 - TX –Mandatory evacuations for 430k; Voluntary evacuations for 234k people
 - LA –Mandatory evacuations for 6.9k; Voluntary evacuations for 133k people
- Shelters / Occupants: 258 / 42k in TX; 6 / 1,507 in LA
- Transportation: Limited operations across the region
 - Airports: Beaumont closed (expected to open Sep 4)
 - Seaports: Dredging to begin this weekend
 - Roads/Bridges: Major roads remain closed through the impacted area
- Communications: 2.4% cell tower outage; 100k landline customers out of service
- Medical: 29 hospitals closed; 12 hospitals reopened
- Power Outages: 123k customers without power in TX
- Schools: Houston schools closed for at least 2 weeks
- Other: Numerous tornadoes, high wind, and hail events reported across the Lower Mississippi Valley and much of the Southeast

Recovery Concerns (Health)

As the recovery and relief efforts progress, it is important to note that the conditions of sanitation and proximity to other people could have negative health effects. People residing in communal living conditions, if not sanitized and aired on a regular basis, raise their level of susceptibility to communicable diseases.

As standing water is the prime area for mosquito incubation, it's imperative to be vigilant to protect against mosquitos. Additionally, standing water provides a vector for waterborne diseases and contamination from industrial and agricultural run-off.

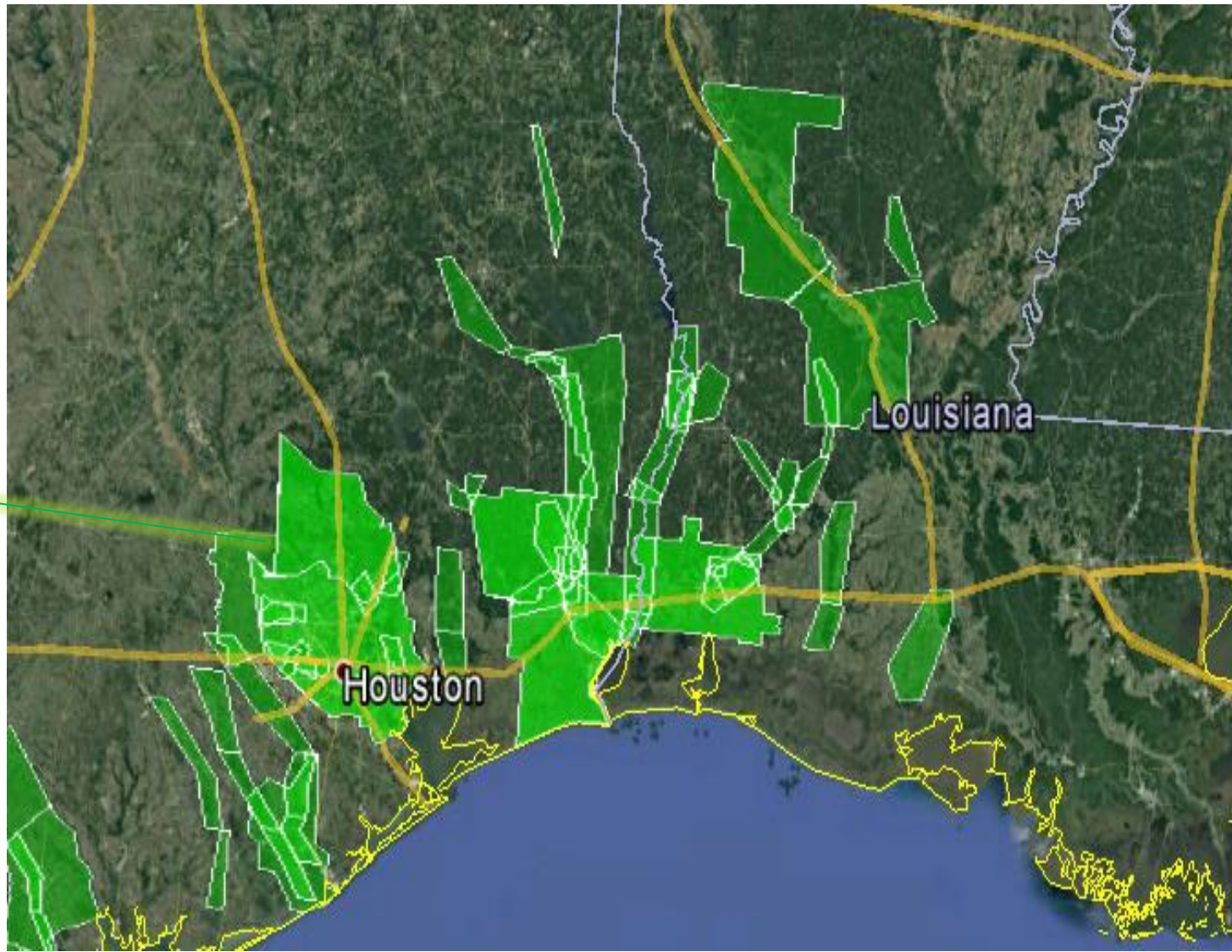
Additionally, standing water provides a vector for waterborne diseases and contamination from industrial and agricultural run-off. Proactive measures should be taken to purify drinking water via boiling for 3 mins, the addition of bleach and iodine. Filtration systems coupled with chemical additives provide the best solution for purifying drinking water.

For additional information, see [after a flood](#) and [personal hygiene after a flood](#).

Advice - Mold After a Disaster

- People with asthma, allergies, or other breathing conditions may be more sensitive to mold. People with immune suppression (such as people with HIV infection, cancer patients taking chemotherapy, and people who have received an organ transplant) are more susceptible to mold infections.
- You may recognize mold by:
 - Sight. Are the walls and ceiling discolored, or do they show signs of mold growth or water damage?
 - Smell. Do you smell a bad odor, such as a musty, earthy smell or a foul stench?
- Preventing Mold:
 - Clean up and dry out the building quickly (within 24 to 48 hours). Open doors and windows. Use fans to dry out the building.
 - Remove all porous items that have been wet for more than 48 hours and that cannot be thoroughly cleaned and dried.
 - These items can remain a source of mold growth and should be removed from the home.
 - Porous, noncleanable items include carpeting and carpet padding, upholstery, wallpaper, drywall, floor and ceiling tiles, insulation material, some clothing, leather, paper, wood, and food.
 - Removal and cleaning are important because even dead mold may cause allergic reactions in some people.
 - To prevent mold growth, clean wet items and surfaces with detergent and water.

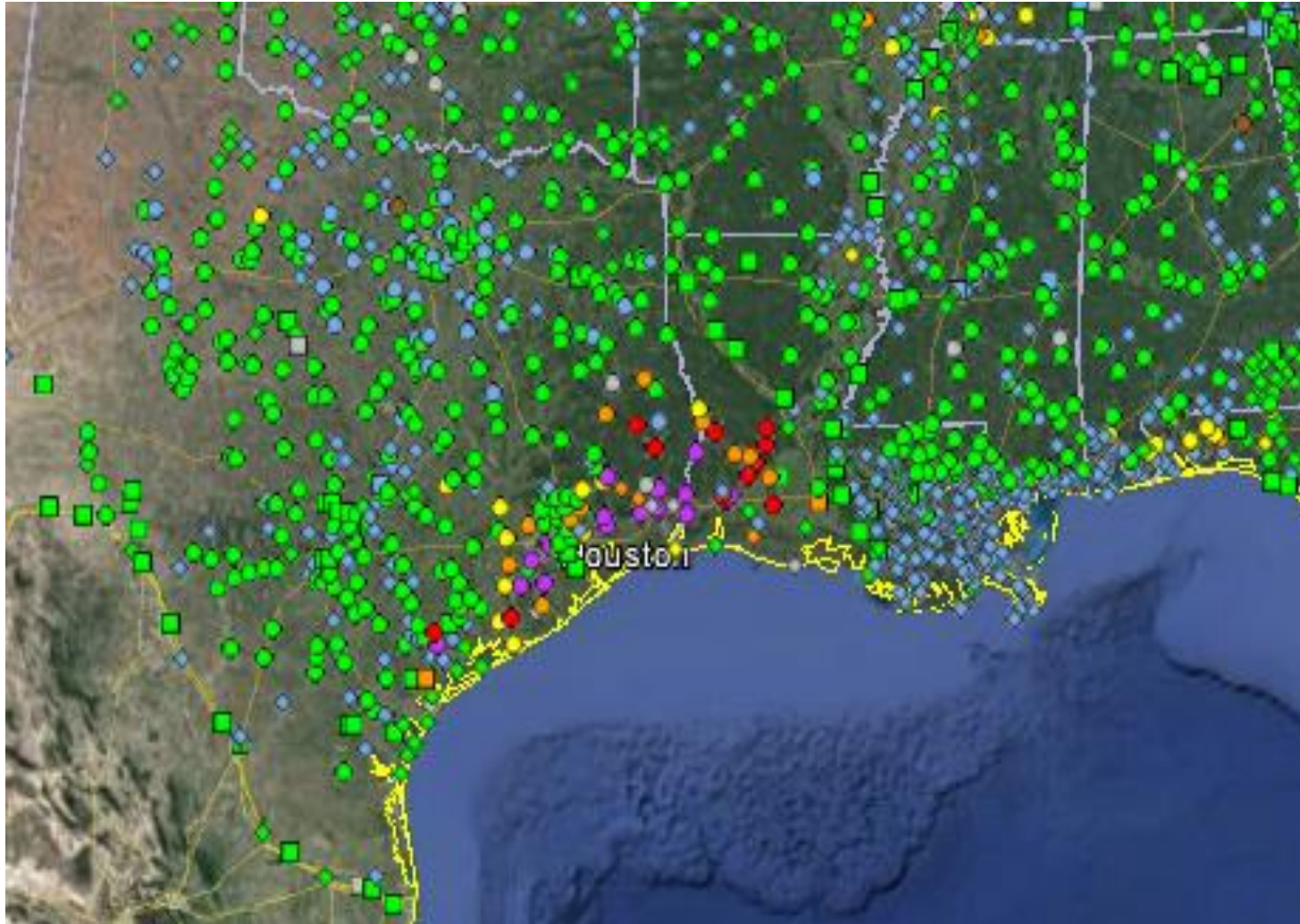
Current Watches and Warnings



Flood Warnings

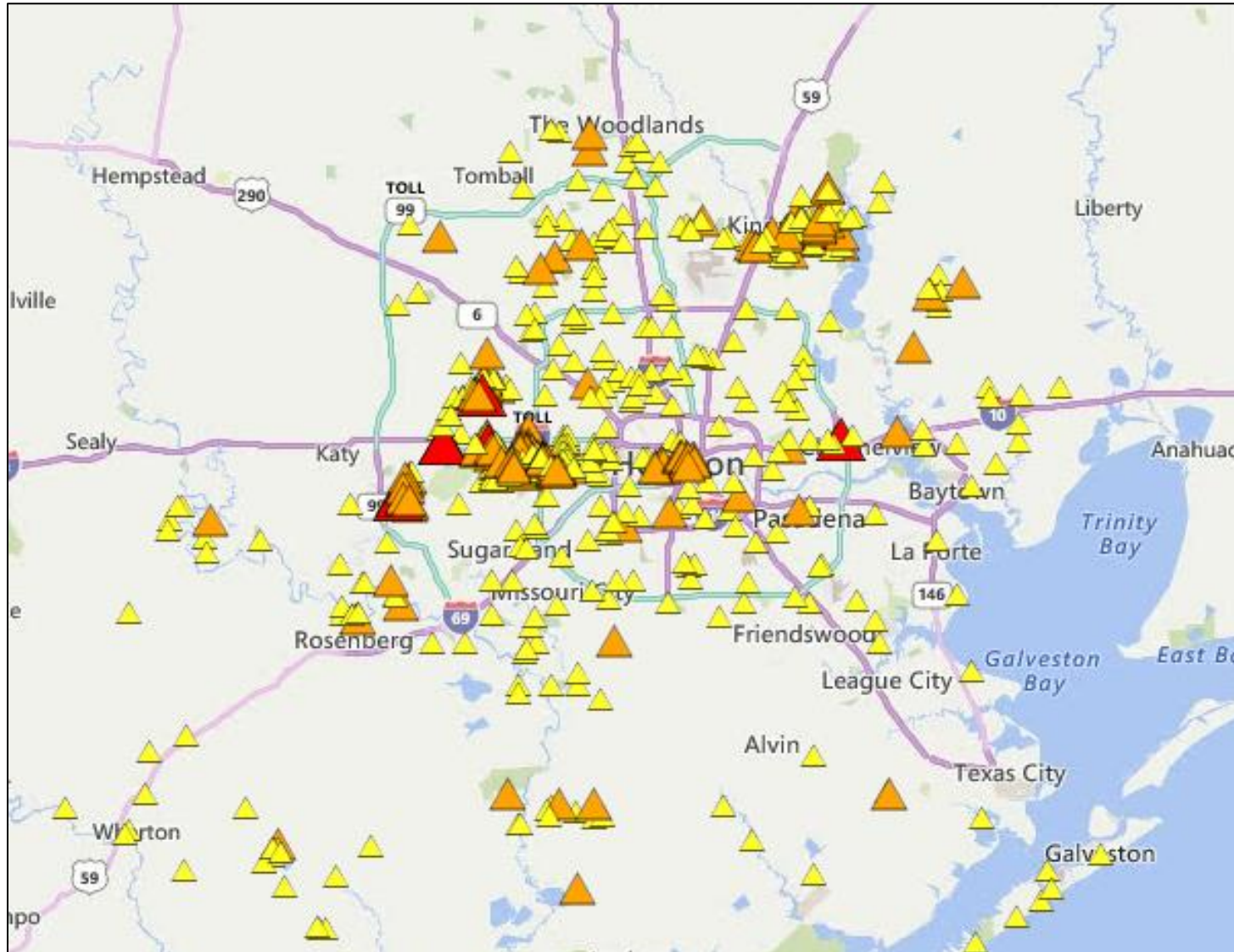
Flood Watches

Purple – Major Flooding ; Red – Moderate Flooding; Orange – Minor Flooding; Green – No Flooding



Power Outage

- CenterPoint Energy reporting 5,911 Customers without lights.



For Additional Information:

American Red Cross
<http://www.redcross.org/>

Texas Department of Transportation
<https://drivetexas.org/#/7/32.340/-99.500?future=false>

Texas Hotels and Lodging
https://texaslodging.com/uploads/files/general/Hotel_Brands_Toll_Free_Numbers.pdf

Texas Department of Insurance
<http://www.tdi.texas.gov/consumer/storms/helpafterharvey.html>

US Coast Guard Storm Center
<https://www.uscg.mil/news/stormcenter/>

US National Hurricane Center
www.nhc.noaa.gov

US Federal Emergency Management Agency
<http://www.ready.gov/hurricanes>

Governor's Office of Homeland Security and Emergency Preparedness - Louisiana
<http://gohsep.la.gov/RESPOND/ALERTS>

Emergency Management – Louisiana
<http://emergency.la.gov/>

National Hurricane Center
<http://www.nhc.noaa.gov/>

FBI Internet Crime Complaint Center
<https://www.ic3.gov/default.aspx>