IDSS in Response and Recovery: How NWS Offices Combined to Support Public Safety Messaging for Hurricane Laura

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…and the operational and supporting staff at each of these offices, as well as core public safety and broadcast media partners in Texas and Louisiana. Without them, success could not be achieved.
Laura: NWS Operational Timeline (2020)


26 Aug, 8 PM through 27 Aug, 11 AM: Landfall operations

28 Aug through 24 Sep: Multiple NWS Offices provided service backup to LCH until location is restored and safe

Early October: Additional “standby” needed during Hurricane Delta
The Service Backup Plan

NWS SR Service Backup Operations and Teamwork for WFO Lake Charles

- WFO Brownsville (BRG):
  - LCH's Guided, Phone, Convective Warnings, DSS/Social Media, and Tropical Products.
- WFO Houston (HGX):
  - LCH's Hydrologic Products
- WFO New Orleans (LUX) hosted LCH Meteorologists for continued DSS Support and Social Media during Landfall
- WFO Austin/San Antonio (EWX):
  - BRG's Aviation, Short Fuse Products
- WFO Tampa Bay (TBW):
  - LCH's Aviation Forecasts
- WFO Corpus Christi (CRP) provided temporary Social Media assistance

In response to Hurricane Laura (Category 4) Backup Operations Began on August 26, 2020

WFO/Brownsville became primary service back-up pairing with WFO/Lake Charles, LA on 07 May 2020.
The Last Mile: Core Partner Service

- After Evacuation, NWS LCH Warning Coordination Meteorologist (Erickson) deployed to LCH EOC and provided 2-hour briefings through daybreak, 27 Aug!
- NWS BRO continued to “feed” critical information, such as Hurricane Threats/Impacts graphics and text Hurricane Local Statements and Warnings, through Laura’s exit
The Last Mile: Public Service

- BRO had extra staffing in place to quickly assume duties from Lake Charles (LCH) the morning of 26 Aug
- This included answering **at least two dozen calls** from concerned public, and taking local and national media interviews

- LCH’s **Supplemental Assistance Volunteer Initiative (SAVI)** Guide proved to be an indispensable tool
- BRO took to Facebook Live to update LCH’s followers
  - **Urged followers to remain calm and heed evacuation orders**
- Overnight (26 into 27 Aug), LCH handled Facebook Live duties while BRO collected reports as SAVI office
The **Very** Last Mile: Landfall Warning

During Hurricane Laura:

- WFO Brownsville/Rio Grande Valley issued an Extreme Wind Warning (for ≥115 mph/51.4 ms⁻¹) during landfall with more than 1 hr lead time
Recovery Phase: Core Partner Service

River/Tidal Flooding
- Hurricane Laura
- Storm surge receding to minor flood at Vermilion Bay
- Major flooding at Perry

Final Thoughts
- The transition from response to recovery phase has begun. Safety is CRUCIAL.
- In most cases, more people die indirectly than directly.
- Urge residents and others to be safe and patient during the prolonged recovery phase.

https://www.cdc.gov/disasters/hurricanes/be-safe-after.html
Recovery Phase:

Generator Safety Tips

- Never use a generator indoors or in an attached garage
- Don’t connect your generator directly to your home’s wiring
- Don’t plug a portable generator into an electrical outlet in your home or garage
- Don’t overload the generator
- Make sure your generator is properly grounded
- Do not store gasoline for the generator indoors
- Read and adhere to the manufacturer’s directions for safe operations

Food and Water Safety

- If power is out, keep fridge/freezer doors closed
- Get rid of food that
  - Is in an open, damaged, or bulging can
  - Has an abnormal smell, color or texture
  - Needs to be refrigerated but has risen above 40°F
- Clean off cans that came in contact with flood water
- Ask local officials about local water safety. If water is unsafe:
  - Bring water to a rolling boil for 1 minute before use
  - Add 1/8 tsp of new, unscented bleach to 1 gal of water and let sit for 30 minutes before use
  - Use water purifying tablets (follow tablet directions)

WFO BRO reached out to WFO New Orleans/Baton Rouge for guidance with these graphics, then redeveloped them for use after Laura

- Each were shared among NWS offices as well as core partners; posted as “tabs” on LCH/WFO Shreveport webpages

- Recovery graphics were “pinned” at the top of the LCH Facebook and and Twitter pages

Message Transition

Preventing Injury After Storms

- Prevent carbon monoxide poisoning
  - Never use generators, power washers, grills or other gasoline burning devices inside your home.

- Use chain saws safely
  - Wear appropriate protective equipment, such as hard hat, safety glasses, hearing protection. Be sure that bystanders are at a safe distance from cutting.

- Avoid electrical hazards
  - Never make contact with power lines, regardless of whether they are on the ground or intact.

- Be aware of hazardous materials
  - Call the fire department to inspect or remove chemicals or other dangerous materials. Wash skin that came in contact with hazardous materials.


These graphics, when shared, attained reaches generally between 65k-105k users
Recovery Phase: Message Transition

Should I return home?

Do my state and local officials say it’s safe?
Does my neighborhood have power?
Is there a safe route home?

Will I be able to communicate once I’m there?
Can I access food, water, and healthcare?
Do I have a backup place to stay?

If no, don’t go.

The US Army Corps of Engineers is providing temporary roofing for portions of the area impacted by Hurricane Laura. This is a free service to homeowners. The website and number for the program are: usace.army.mil/BlueRoof/ and 1-888-766-3258.

Shelter in Place warnings remain in effect until further notice for the Westlake/Moss Bluff/Sulphur areas due to an ongoing chemical fire. Louisiana State Police are responding to the event have shut down areas of I-10 near the fire.

14,102 People Reached
730 Engagements

Note: Video is archival prior to social distancing requirements
Recovery Phase: Heat Safety

Prolonged Heat Concern

- Temps in the 90s with heat indices in the 100-115°F range Friday through the weekend.
- As early as Thursday, August 27th, it was identified that marginal heat advisory level heat would be an issue due to widespread power outages in Louisiana and Texas.
- The extra heat-related illnesses due to power outages and heat stresses in recovery efforts were highlighted in Heat Advisories on the 27th.

Before continued...

- On August 28th, the lengthy duration of power outages became more evident.
- Neighboring offices (LCH/LJX/LZK) were asked to consider this and a consensus was reached to recommend to our partners that we lower our criteria to 100F.

During – Messaging the Prolonged Heat Threat

- WFO BRO issued around 15 Heat Advisories with this new criteria through 15 September
- For more information, reference Poster #108: Impact-Based Heat Messaging after Hurricane Laura
Key Findings

- NWS Southern Region’s robust service backup plan and pre-season testing was crucial for office readiness to support the mission for Laura.
- NWS message consistency for a devastating to catastrophic outcome during the final hours before landfall was critical to evacuation and life protection, no matter which office it originated from.
- Rapid transition of multi-platform messages from direct impacts to recovery/post-storm safety helped protect life, even though there were more than two dozen fatalities.
- Temporary, recovery-driven alteration of traditional NWS Heat Advisory criteria was implemented to increase awareness of numerous communities without power.