

Weather Emergency Preparedness: Readiness Assured and Ability to Bounce Back!

Building a Weather-Ready Nation for Mississippi with the Community Resilience at JSU

Virtual Town Hall Meeting for Weather Emergency Preparedness

Tuesday, July 20, 2021, at 6:00 p.m.

Made Possible by
the: U. S.
Department of
Homeland Security

Scientific Leadership Award#: 21STSLA000010-01-00



Support with:

The National Weather Service
DHS Center for Coastal Resilience

Cooperation with:

Jackson State University (JSU)
JSU Emergency Management



CORE Community Resilience Project Team:



Dr. Jessica Murphy,
PI, Emergency Management (Technology)



Dr. Dawn McLin,
PI, Psychology



Dr. April Tanner,
Co-PI, Computer Science



Dr. Elayne Hayes Anthony,
Journalism & Media Studies-Advisor



Professor Don Spann,
Journalism & Media Studies,
Media Director



Mr. Bill Parker
National Weather Service, MIC

CORE Community Resilience Project Team:



Ms. Latrice Maxie
National Weather Service,
Meteorologist & Advisor



Police Chief Michael Ivy,
Public Safety Advisor

Vision of the CR AT JSU

“Our vision is to equip Mississippi’s underserved communities with up-to-date skills for better preparedness of natural disasters to minimize loss of life and property; thus, building resilient communities.”

MISSION OF THE CR AT JSU

“Our mission is to provide contemporary emergency/disaster management and preparedness education and training related to weather emergencies and disasters for Mississippi’s underserved communities; to lessen loss through effective preparedness; and to building a pipeline from middle school to higher education that develops future Emergency/Disaster Management Professionals.”

Interdisciplinary Approach

- Industrial Systems & Technology (Technology)
 - Emergency/Disaster Management and Tech
- Computer Science
 - Notifications and Cyber Safety
- Meteorology and Atmospheric Science
 - Weather Event Awareness and Preparedness
- Psychology (College of Liberal Arts)
 - Emotional/Mental recovery have disaster
- Journalism and Media
 - Media Response & Emergency Notifications



Tonight's Panelists

Ms. Felicia Bowser, MS Weather Events

- National Weather Service-Jackson, MS

Dr. Jessica Murphy, Emergency Preparedness

- PI and Professor of Emergency Management-Jackson State University

Professor Don Spann, Emergency Weather Lessons Learned

- Instructor of Journalism and Media Studies-Jackson State University

Ms. Jana Henderson, Mississippi Emergency Management

- Director, Office of Mitigation-Mississippi Emergency Management Agency

Ms. CeNe Harris, Weather Disasters and Psychology Distress

- Doctoral Candidate, Department of Psychology-Jackson State University

Felecia Bowser - NWS Jackson, MS

Warning Coordination Meteorologist – serve as the liaison between the NWS office and the public

Duties include but are not limited to:

- Conduct community weather awareness and education programs such as in-person and online Spotter Classes
- Work with core partners such as MEMA, Emergency Managers, the Media, state organizations, etc. to aid in coordinating and providing expert decision support
- Recognize communities and organizations that take weather preparedness seriously by way of several initiatives (i.e., StormReady and Weather-Ready Nation Ambassador)

NWS Jackson has a total of 27 staff composed of meteorologists, electronic technicians, hydrologist and support staff

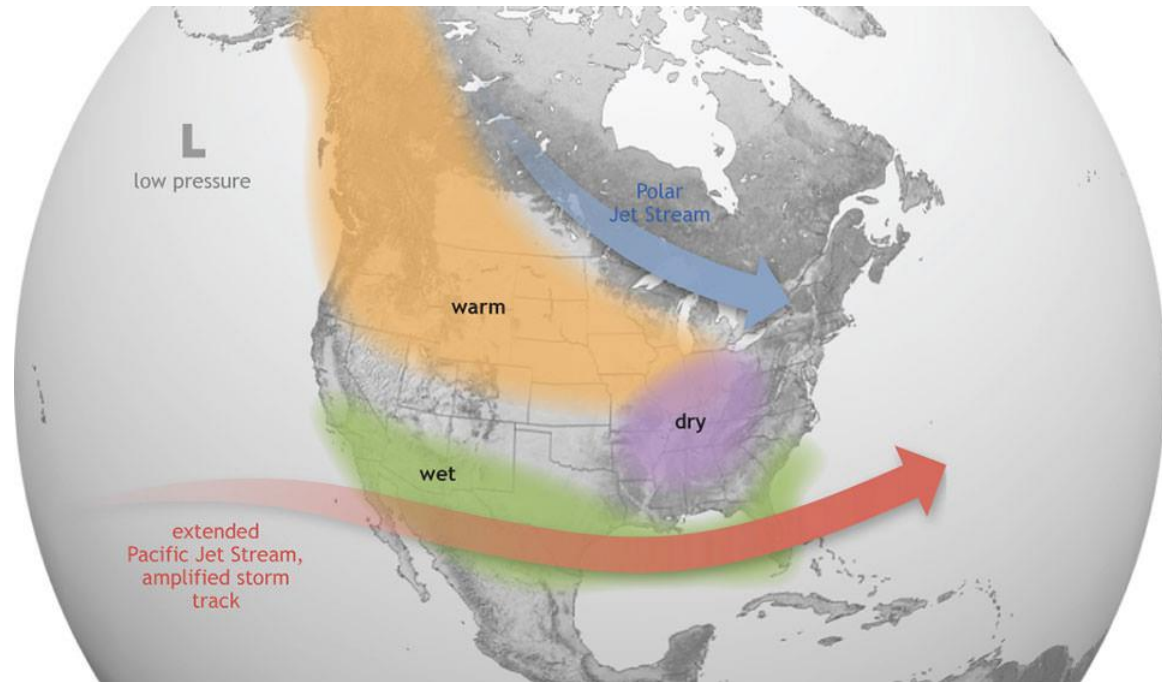
Forecasters issue weather forecasts and warnings for 58 counties and parishes in Mississippi, northeast Louisiana and southeast Arkansas



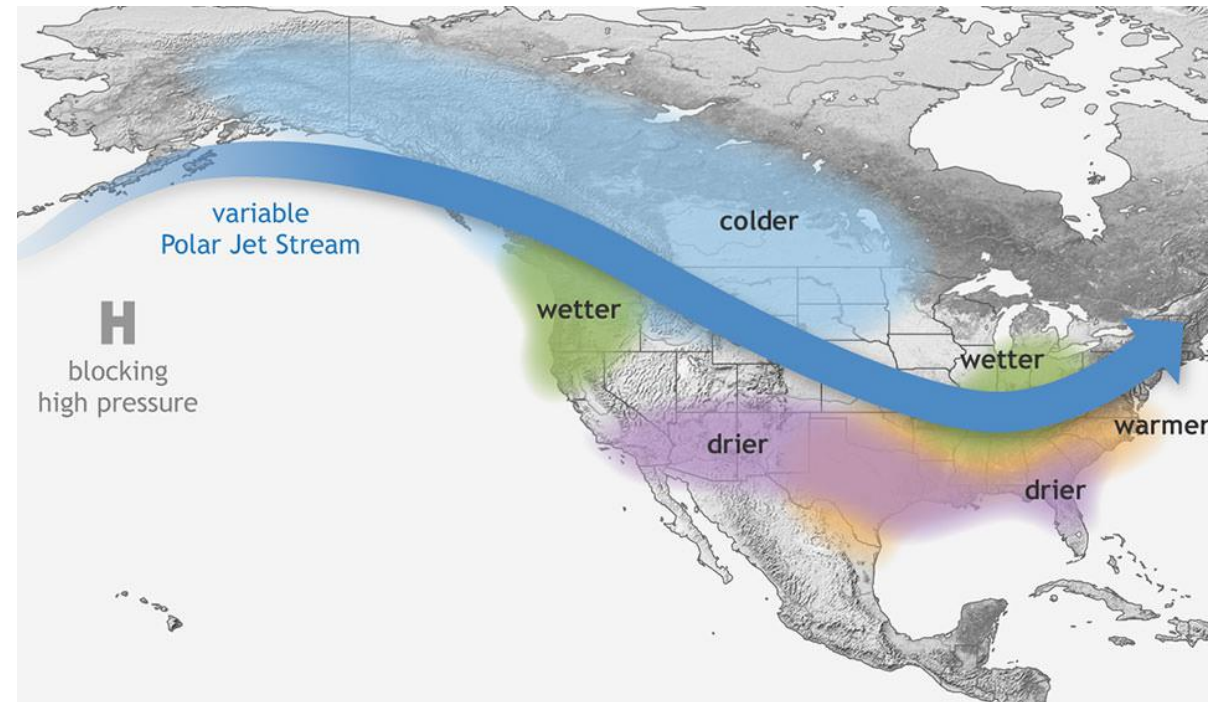
ENSO-Neutral
Conditions
expected rest of
this Summer and
into the Fall and La-
Nina conditions
expected late fall
and through the
winter

- The Climate Prediction Center predicts a 51% chance for ENSO-Neutral conditions for the summer and into the Fall, with a 66% chance for La-Nina Conditions to develop late fall and through the winter (updated July 8, 2021)
- ENSO-Neutral conditions refer to periods in which El Nino nor La Nina are present; coinciding with the transition to one or the other in the near future
- ENSO-Neutral: Can also see large swings in weather (temperatures, rainfall, etc.)

El Niño: wetter than usual for southern states but less favorable for hurricanes due to stronger wind shear

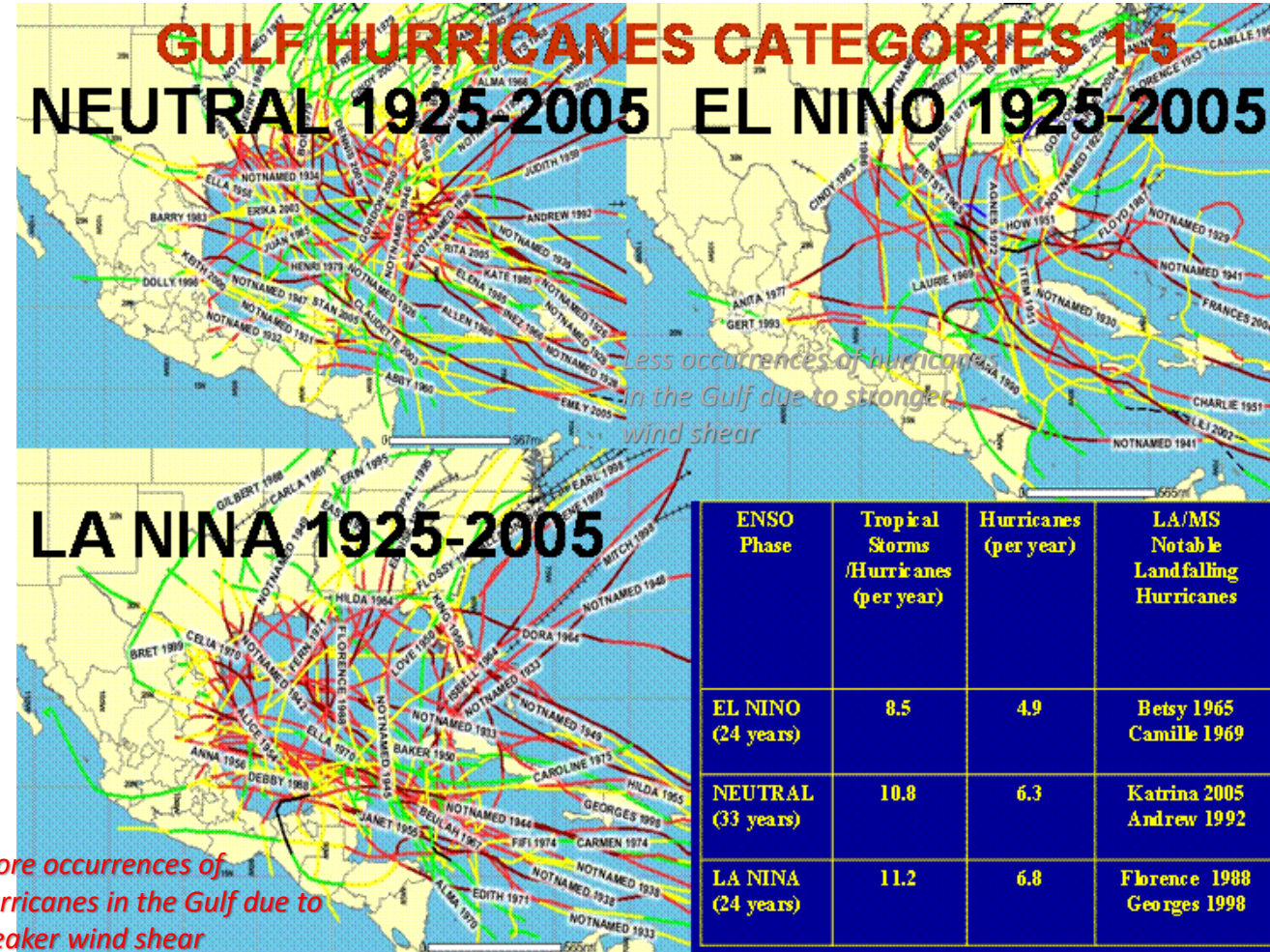


La Niña: drier than usual for southern states but more favorable for hurricanes due to weaker wind shear



ENSO-Neutral influence on Hurricanes

- ❖ The incidence of hurricanes is higher during the neutral phase than during the El Nino Phase
- ❖ Although hurricanes occur more often during La Nina episodes, significant tropical weather events have occurred during the neutral phase.
- ❖ For example, Hurricanes Katrina and Rita occurred during a 2005 neutral phase.





2021 Atlantic Hurricane Season Outlook

NOAA National Hurricane Center predict above normal activity for the Atlantic Hurricane Season

- NOAA National Hurricane Center predicts an above-average Atlantic Hurricane Season for 2021
- The tropical Atlantic Ocean is somewhat warmer than normal now, which means more fuel for cyclone formation and intensification
- Researchers predict 13-20 named storms
 - 6-10 to become hurricanes
 - 3-5 to reach major hurricane strength (Category 3 or stronger)

Named storms
13-20


Hurricanes
6-10

Major hurricanes
3-5

Above-normal Near-normal Below-normal season

Season probability

NOAA National Hurricane Center predict above normal activity for the Atlantic Hurricane Season



2021 Atlantic Tropical Cyclone Names

Ana	Henri	Odette
Bill	Ida	Peter
Claudette	Julian	Rose
Danny	Kate	Sam
Elsa	Larry	Teresa
Fred	Mindy	Victor
Grace	Nicholas	Wanda

Names provided by the World Meteorological Organization

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter.

May 2021

Dr. Jessica Murphy: Weather Emergency Preparedness

Water, one gallon of water per person per day for at least three days, for drinking and sanitation

Food, at least a three-day supply of non-perishable food

Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place

Moist towelettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Can opener for food (if kit contains canned food)

Local maps/ Apps to Shelters (FEMA & RED CROSS)

Cell phone with chargers (charged prior to or solar powered)

Preparedness

- Prescription medications and glasses
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change (cards will not work in power outages)
- Complete change of clothing including a long-sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Games for kids (non electronic)
- Plan for pets
- Build a “go bag”
- Visit www.ready.gov for more prep information and go to FaceBook Live for NWS Updates.



Professor Don Spann: Weather Emergency Lessons Learned

Reflections for Easter 2020 Tornado Victims

Learned to better prepare before weather event

Citizens appreciate follow-up & require services

- Who continues to follow-up on victims' well-being?
- What psychology and mental wellness services are available?
- How does one cope with loss of pets?
- Etc.

Learned to adhere to notifications and warnings

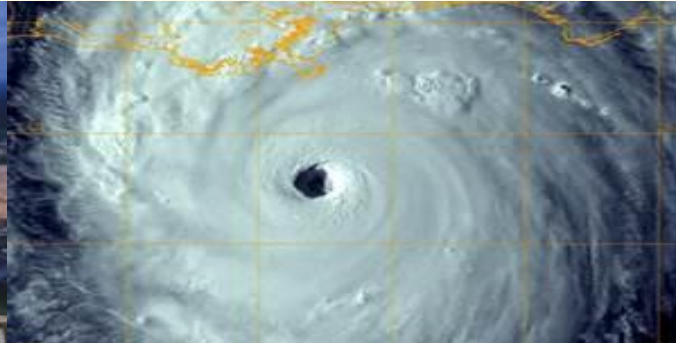


Ms. Jana Henderson, CFM-MS Emergency Management Agency

- MEMA Function
- MEMA Services
- MEMA is here to mitigate, prepare, respond and recover
- MEMA is here to help!!!!



Prevention, Mitigation, Preparedness, Response, Recovery



Our mission is to safeguard Mississippi and her citizens by fostering a culture of preparedness, executing timely response during a disaster, and quickly restoring quality of life post-event.





Mental Health and Weather Disasters: Trauma

- Mental health is a key part of every aspect of the human experience. However, it is unfortunately often disregarded due to the prioritization of life preservation efforts.
 - Challenges in mental health may, but do not also result in full mental disorders.
 - These challenges usually do manifest in symptoms and behaviors that impact the three major areas of functioning: Academic, Social, and Occupational
- Weather emergencies and disasters are typically unpredictable, but more so uncontrollable.
 - That uncontrollable situation may arise feelings of hopelessness and helplessness.
 - Weather emergencies also engage our fight or flight symptoms in order to save us.
 - However, as with many anxiety and trauma disorders, prolonged effects of the flight-or-flight response can have detrimental effects such as mental disorders (i.e., depression, generalized anxiety, acute stress disorder, and PTSD.)



Psychological Preparedness: Devastation

- Weather disasters have effects on not only the environment
 - Psychological effects
- In disaster prone areas when is there a chance to prepare?
 - Stay READY.
 - Although (in MS) seasons are continuous always have a supply of necessary items.
 - Meds, non-perishables, candles, etc.
- Recurring disasters can make you feel helpless
 - You are still in control.
 - Being prepared reduces feelings of helplessness
- Stay aware of the weather
 - NWS (Jackson, NOLA, Memphis)
 - MEMA
- Have plans (Staying in, evacuating, etc.)



CREATE Scholarships Available!!!

- Industrial Systems & Technology (Technology)
- Computer Science
- Psychology (College of Liberal Arts)
- See link for scholarship
 - <https://www.jsums.edu/communityresilience/createproject/>
 - Scholarship Application
 - https://docs.google.com/forms/d/1_EZ1gkJNeIzum_Hutwv_FtCSJy54ATTva1pInfgMqeM/viewform?edit_requested=true





Thank you for your
time and
cooperation

Visit the Community Resilience Website at JSU
<https://www.jsums.edu/communityresilience/>

You may also email the Community
community.resilience@jsums.edu