

Hurricane Preparedness During a Pandemic

July 30, 2020

Agenda

8:30-9:00 a.m.: Welcome and Kickoff

Ángel Cabrera, President, Georgia Institute of Technology President

Dennis Jones, Director, Chatham Emergency Management Agency

Kim Kadesch, Director, Office of National Capital Region Coordination, Federal Emergency Management Agency

9:00-9:45 a.m.: Morning Keynote – Sea Level Sensors Overview

Speakers:

Russ Clark, Ph.D., Senior Research Scientist, Georgia Institute of Technology

Kim Cobb, Ph.D., Georgia Power Chair and ADVANCE Professor, Earth and Atmospheric Sciences, Georgia Institute of Technology

Emanuele Di Lorenzo, Ph.D., Professor and Founding Director of the Ocean Science and Engineering program, Georgia Institute of Technology

Tim Cone, Program Director, CEISMC Savannah Campus

10:00-11:00 a.m.: Session 1

» How Atlantic Hurricane Prediction May Change with Climate Warming

Speaker: Eric Maloney, Ph.D., Professor, Department of Atmospheric Science, Colorado State University

Session Track: Preparation & Planning

Session Description:

Subseasonal to seasonal hurricane prediction at forecast leads of two weeks to two months is currently a new frontier for the climate and weather forecasting communities. After discussing the outlook and what we have seen so far for the current hurricane season, how predictions might change in a future warmer climate will be discussed. In the current climate, tropical phenomena called the Madden-Julian oscillation (MJO) and the El Niño-Southern oscillation provide enhanced prediction skill for Atlantic and east Pacific hurricanes and tropical storms several weeks in advance. The MJO is associated with eastward-moving regions of heavy tropical precipitation in the Indian and west Pacific Oceans that send pulses of wind over the Atlantic to affect hurricane activity. Its cycle repeats every 40-50 days. This talk will review recent evidence not only for how Atlantic and east Pacific tropical cyclone activity may change with climate warming on average, but also how predictions of tropical cyclones several weeks in advance may change with

warming. Evidence will be presented that winds associated with the MJO may weaken with climate warming. This may make tropical storms and hurricanes less predictable in the Atlantic and east Pacific in a warmer climate. Given the expected general increase in hurricane intensity in a warmer climate, the consequences of potential decreases in prediction skill will be discussed.

» Sharing Critical Information via Social Media

Speakers:

Mary McGuire, Communications & Digital Media Coordinator, City of Boca Raton

Chelsea Sawyer, Emergency Management Coordinator in Community Outreach, Chatham County Emergency Management

Session Track: Preparation & Planning

Session Description:

During large scale emergencies, such as a hurricane, it can be challenging to find innovative ways to share vital messages through social media. In this session, social media award-winner, Chatham Emergency Management Agency and Government Social Media's Southeast Region Representative and City of Boca Raton, FL will discuss how to use these networks to your advantage and successfully connect with your community during these critical times.

» Disaster Recovery and Redevelopment Planning

Speaker: Jennifer Kline, Coastal Hazards Specialist, Georgia Department of Natural Resources Coastal Resources Division

Session Track: Response & Recovery

Session Description:

The Georgia Coastal Management Program of the Department of Natural Resources has spearheaded this project since its inception in 2010. Because Georgia has a Coastal Management Program, the state is eligible to receive National Oceanic and Atmospheric Administration Coastal Zone Management Act funding to support these activities. The GCMP is focused on providing assistance and technical support to local governments on a variety of topics including Coastal Hazards. These relationships allow for a dynamic and focused mission.

The goal of this project is to strengthen the disaster resiliency of Georgia's Coastal Region through implementation of the Federal Emergency Management Agency's (FEMA) National Disaster Recovery Framework (NDRF). The NDRF supports a complex and integrated

framework of resilience activities that can be uniquely served by multi-level partnerships. In 2011, when FEMA released the NDRF there was no financial assistance to accompany the guide.

Rebuilding a community after a catastrophic disaster or major storm event, such as Hurricane Irma, is a monumental undertaking. The most effective way to accomplish holistic post-disaster recovery and redevelopment is to be prepared before a disaster strikes. Developing a Disaster Recovery and Redevelopment Plan (DRRP) requires envisioning the potential obstacles to reconstructing a community in a compressed timeline and not just reconstructing what was there, but redeveloping a more sustainable and disaster-resilient community.

The purpose of a recovery and redevelopment plan should be to guide the post-disaster recovery and redevelopment process in a manner consistent with local plans, mitigation strategies, emergency management plans, or other relevant codes or planning initiatives. Each of the categories of existing plans or policies will have an impact on post-disaster recovery and redevelopment procedures.

Recovery and redevelopment plans can only be successful with input from the local communities for which they are designed. Participation from stakeholders and the general public is vital during plan development as well as during the implementation and plan update phases. Recovery and redevelopment plans outline strategies intended to fulfill the purpose of healing the community after a disaster, which must align with the community's values and vision. Citizens across the entire community must be engaged in the process of establishing that vision. Each community participating in the Georgia project will and have engaged key stakeholders and ensure their participation through every step of the process. There are two measures of success for this project. The first being the stakeholder participation, which not only gives purpose, but also achieves buy-in and provides ownership. Secondly, when the time comes to implement these plans, communities will be more fully prepared to come back stronger and more resilient.

» **Managing Volunteers during a Pandemic- Tennessee Case Study**

Speakers:

Suelen "Cece" Hernandez, Unmet Recovery Needs Branch Manager, Tennessee Emergency Management Agency (T.E.M.A.)

Julie Dimitrov, Certified South Carolina Emergency Manager

Session Track: Volunteer Organizations & Community Outreach

Session Description:

During this session, we will:

- Guide participants through the process of establishing a Volunteer Reception Center to save time, money, and decrease liability.
- Encourage best practice planning to manage both affiliated and unaffiliated Volunteers during times of Disasters.
- And Assist in Pre-Planning of Volunteer Reception Centers to improve speed and efficiency of Response and Recovery efforts.

We will also share our lessons learned as we managed Volunteer Reception Centers during a Global Pandemic and Four Federally Declared Disasters in the State. For attending this session, participants will also receive a copy of our State's Volunteer Reception Center Plan.

11:00 a.m. - 12:00 p.m.: Session 2

» Preparing for Vulnerable Populations

Speaker: Michael Whitetaker, Emergency Coordinator, Virginia Department of Health

Session Track: Preparation & Planning

Session Description:

Communities large and small are facing challenges with ensuring the unique needs of vulnerable population groups are met during an emergency or disaster event. This presentations strives to identify the lack of uniformed planning specific to vulnerable population groups, statistics associated with vulnerable populations and insight on how to adjust our mindset and truly plan strictly for this group and their unique needs.

» Crisis Communications after a Crisis

Speaker: Brooke Powell, Emergency Services Chief Administrative Office, Bay County Board of County Commissioners

Session Track: Response & Recovery

Session Description:

On October 10, 2018, Hurricane Michael devastated Bay County, Florida. This session will address some of the unique challenges communicators face as they prepare a community still reeling and recovering from a category 5 hurricane for another hurricane season.

» Food and Disaster Supply Shortages- Hurricane Season and COVID

Speaker: Danah Craft, Executive Director, Georgia Food Bank Association

Session Track: Response & Recovery

Session Description:

Food Banks play a critical role in providing emergency food during and after a natural disaster. The disruption in food supply, disappearing volunteers, and risk of COVID virus transmission pose unique challenges to this network this year. Learn more about how lessons learned in the past are informing the planning for hurricane season in this unprecedented environment.

» *#HurricaneStrong* Initiative

Speaker: Leslie Chapman-Henderson, President and Chief Executive Officer, Federal Alliance for Safe Homes (FLASH)

Session Track: Volunteer Organizations & Community Outreach

Session Description:

The National Hurricane Resilience Initiative - [*#HurricaneStrong*](#) is an award-winning program by the nonprofit [Federal Alliance for Safe Homes \(FLASH\)](#) and partners designed to save lives and homes through public awareness and education. The campaign offers information through digital channels, special events, news media partnerships, outreach to schools, and social media campaigns.

» Volunteer and Donations Planning During COVID-19

Speaker: Sarah Jackson, Community Partnerships Manager, GEMA/HS

Session Track: Volunteer Organizations & Community Outreach

Session Description:

Now is the time to pivot. As we prepare for hurricane season, this is the time to create or re-evaluate your Local Volunteer and Donations Plan in consideration of COVID-19 and the unique challenges it has brought about. Volunteers are the heartbeat of our communities and are critical to recovery following a disaster. That said, many nonprofit and faith-based organizations have been immensely impacted by COVID-19 and some may be working with less resources and operational capacity. Now more than ever, it is important to be forming and strengthening those relationships. In this high-level overview, we will discuss the very basics of volunteer and donations management; the type of nonprofit and faith-based relationships you can form; digital tools to help manage operations; and what special

considerations need to be taken to ensure safe procedures amidst a global pandemic.

12:00-1:00 p.m. Lunch Keynote – Hurricane Planning During a Public Health Emergency

Speakers:

Dennis Jones, Chatham County Emergency Management

Kevin Kalbaugh, Meteorologist/Planner, North Carolina Emergency Management

Diana Thomas, Meteorologist/Planner, North Carolina Emergency Management

Cory Stottlemeyer, Public Information Officer, City of Houston Office of Emergency Management

Bill Johnson, Director, Palm Beach County Emergency Management

Session Description:

This panel will provide perspectives from City, County and State Emergency Management Organizations on how COVID-19 may have impacted hurricane season operations. These experts will provide input and share best practices while preparing to manage multiple emergencies simultaneously.

1:15-2:15 p.m.: Session 3

» Building Codes- Creating Resilient Homes

Speaker:

Julie Shiyou-Woodard, President and Chief Executive Officer, Smart Home America

Session Track: Preparation & Planning

Session Description:

Home has a deeper meaning for us now. Join this session to learn how changes in construction methods are improving the durability of our homes in the face of severe weather. Understand how communities can go "beyond-code" to reduce the likelihood of damage to new and existing homes from both high winds and water intrusion, two leading causes of loss and disruption.

Smart Home America educates about beyond-code construction methods such as FORTIFIED Home™. Over 19,000 homeowners in 17 states have used the nationally recognized FORTIFIED Home resilient construction standard to strengthen their homes. FORTIFIED Home is used by FEMA, HUD, and, increasingly, by state and local governments to reduce the risk of loss from storms. The research behind FORTIFIED occurs at the Insurance Institute for Business and Home Safety (IBHS). IBHS is an independent, non-profit scientific research and communications organization funded by the

Property and Casualty insurance industry.

During this session, attendees will gain familiarity with the general principles of resilient construction, the levels of FORTIFIED designation (Roof, Silver, Gold), and the benefits available to homeowners, including mitigation and tax credits. They will also be introduced to how beyond-code construction can be leveraged to support projects under FEMA's new Building Resilient Infrastructure and Communities (BRIC) program

» Emergency Sheltering During a Pandemic

Speakers:

NARSC COVID-19 Sheltering committee

Session Track: Response & Recovery

Session Description:

This hurricane season is going to be especially challenging in light of the impacts of COVID-19 is having on our communities. The pandemic will challenge jurisdictions' ability to staff and safely operate an emergency animal shelter for evacuees' pets and rescued animals.

This workshop was created by the National Animal Rescue and Sheltering Coalition's (NARSC) COVID-19 Sheltering Committee, and will teach participants about the pandemic's impacts on sheltering (and how to plan for and solve these challenges), how to adapt your shelter layout to mitigate the spread of COVID-19, and considerations for creating COVID-19 safe shelter protocols.

Participants will also learn about the free shelter consulting that is being offered by NARSC personnel, including planning assistance and live remote help during your operations.

» Incorporating Social Vulnerability into Damage Assessments

Speaker:

Randall Mathews, Chatham County Emergency Management

Session Track: Response & Recovery

Session Description:

Chatham County, Georgia experienced significant damages in the wake of Hurricane Matthew in 2016. During the damage assessment process, it was hard to develop a common operating picture on the scope and severity of the event while so many areas of the County received significant damages. It was clear that the current damage assessment process was not feasible on a large scale, and the process had to be re-engineered in the

middle of a disaster. An electronic method was developed, which became the platform for the process revision following the event. A social vulnerability analysis was conducted to prioritize damage assessment areas to ensure goods and services were able to get to those that need it the most. Less than a year after Hurricane Matthew, this process got put to the test during Hurricane Irma. In the first three days of damage assessments, over 77,000 structures were assessed via windshield assessments. This information was able to be shared with local, state and federal partners in real time, which led to a Presidential Disaster Declaration

» Long Term Recovery Successes- Pensacola, Florida Case Study

Speakers:

Col. Terrance McCaffery, Director of Emergency Management, Volunteer Florida

Lynn Dobry, Project Supervisor, Be Ready Alliance Coordinating for Emergencies (BRACE)

Greg Strader, Executive Director, Be Ready Alliance Coordinating for Emergencies (BRACE)

Session Track: Volunteer Organizations & Community Outreach

Session Description:

Volunteer Florida (officially recognized as the Florida Commission on Community Service) and the Volunteer Florida Foundation partner with and support the Florida Voluntary Organizations Active in Disaster (FLVOAD) and long term recovery groups statewide. The Emergency Management Director of Volunteer Florida will discuss key functions of his department, their role in Florida Disaster Fund grants, and administration of the FEMA Disaster Case Management Program. He will discuss the many ways his organizations partners with the Florida Division of Emergency Management and FLVOAD. He will also discuss the Volunteer Florida Emergency Support Function 15 (Volunteers & Donations)/Emergency Management Convening to enhance disaster readiness.

The Be Ready Alliance Coordinating for Emergencies (BRACE), is a national award winning Community Organizations Active in Disaster (COAD) that strives to “pay it forward.” The organization adopts and adapts best practices in all phases of emergency management. Its Disaster Recovery Specialist will discuss the importance of cooperation, communication, coordination, and collaboration among long term recovery partners. She will introduce key functions of a long term recovery coalition, as well as the importance of an effectively functioning unmet needs process.

- » Are We Doing Enough Outreach to Convince People to Get Flood Insurance?

Speakers:

Lynne McChristian, Non-resident Scholar, Insurance Information Institute, and Professor, University of Illinois at Urbana-Champaign

Session Track: Volunteer Organizations & Community Outreach

Session Description:

Decades of government subsidies of flood insurance removed incentives to mitigate damage, and an over-reliance on post-disaster government assistance made it possible for communities to rebuild in vulnerable areas, often without a strategy to prevent another catastrophic flood loss. It's becoming harder to ignore flood mitigation measures as the National Flood Insurance Program (NFIP) moves to risk-based pricing. The NFIP has brought options to the forefront, as have private insurers, who are increasingly offering flood coverage. However, more options do not necessarily translate into more people buying flood protection. This session will look at what communities can do to educate residents about flood risk and options to protect themselves from the #1 disaster risk in the U.S.

2:15-3:15 p.m.: Session 4

- » Infrastructure Resilience Planning

Speakers:

Iris Tien, Ph.D., Assistant Professor, Civil and Environmental Engineering, Georgia Institute of Technology

Jorge-Mario Lozano, Graduate Student, Georgia Institute of Technology

Akhil Chavan, Research Scientist, Georgia Institute of Technology

Session Track: Preparation & Planning

Session Description:

Recent increases in flooding frequencies and intensities has become a major problem to coastal cities. Since 1980, 69% of major floods on the coast of Georgia have occurred in the last 5 years. This brings a major burden to the infrastructure of a region; buildings are damaged, roads have to be closed, and some regions lose power and potable water.

Therefore, having an understanding of possible flooding scenarios is paramount to determine optimal mitigation strategies to lessen the impacts of these events. This work focuses on the impacts to critical infrastructure, including public facilities, fire stations, police stations, schools, and hospitals. With spatial analysis and GIS tools, this work shows a quantitative approach to measure the vulnerability of critical infrastructure in

Chatham County. This analysis is able to decrease the uncertainty in the estimation of inundation extents with the use of a dense network of sea level sensors that provide valuable localized water-level data to this process. Moreover, by merging this data with state-of-the-art techniques of risk assessment, this work provides quantitative support to relevant decision-makers to improve the resilience of valuable facilities that are required to fulfill high standards of performance during and after these pressing and recurring events.

» **Damage Assessment in a COVID Environment**

Speakers:

Beatrice Soler, Individual Assistance Program Manager, Georgia Emergency Management & Homeland Security Agency

Session Track: Response & Recovery

Session Description:

While the Pandemic continues, it does not mean other disasters are on hold. The 2020 Hurricane season is in full swing, and now is the time to be prepared. Individual Assistance is an active part of the recovery process and due to the pandemic, changes are necessary. This workshop focuses on what community recovery looks like in terms of individual assistance, how Covid-19 has altered the processes, and how it effects the community.

» **Social Inequities During a Disaster**

Speakers:

Alison Hare, Public Health Community Resilience Officer, Office of Public Health Preparedness and Response – Harris County, TX

Session Track: Response & Recovery

Session Description:

Harris County, including the City of Houston, is home to over 4.5 million people, and is one of the most diverse and faster growing counties in the United States. In the Houston area alone, over 145 languages are spoken and the county has a minority majority with Hispanics/Latinos making up over 40% of the population. The county is also a hub for the petroleum industry, boasts one of the busiest ports in the nation, and sits on the Gulf Coast where it is susceptible to a variety of natural disasters. Since 20015, the area has experienced two 100-year floods, Hurricane Harvey, three major fires at chemical plants, Hurricane Imelda, and COVID-19, in addition to the traditional water main breaks, etc.

Throughout all these events, it is important that messaging, as well as response and

recovery activities include all segments of the population so that as a county community we are able to be resilient and recover more quickly and more efficiently. The key is to engage with diverse communities to prepare for emergencies, as well as to continue to cultivate and strengthen these ties during disasters. This workshop will explain how the community resilience team at Harris County Public Health works on engaging diverse communities to strengthen resilience and ensure equity before, during, and after disasters.

» Faith Based Outreach in a COVID Environment

Speakers:

Kevin Smith, Director, DHS Center for Faith and Opportunity Initiatives, Federal Emergency Management Agency

Session Track: Volunteer Organizations & Community Outreach

Session Description:

This session will focus on government out reach to faith and community-based organizations in a COVID environment. Key topics will introduce how faith based organizations have stepped into service in new ways in partnership with local and state governments from around the United States. Additional lessons learned will be presented for future success in response to pandemic events.

3:30-4:30 p.m. Afternoon Keynote – Hurricane Hazard Messaging Best Practices

Speakers:

- » Hallie Frazee, Emergency Public Information Planner, Harris County, Texas
- » David Nadler, Warning Coordination Meteorologist, Peachtree City National Weather Service
- » Kevin Guthrie, Deputy Director and State Emergency Response Team, Florida Emergency Management
- » William Smith, Director, Office of Emergency Preparedness, Georgia Institute of Technology
- » John Buckovich, Vice President for SCAD Savannah and University Safety, Savannah College of Art and Design

Session Description:

In this keynote presentation, we will be discussing hurricane hazard messaging best practices. Each of the panelist have a unique perspective as they represent vastly different agencies including a large County in Texas, a local National Weather Service office that

serves the state EMA, a State EMA, a coastal university and a large state university. Each have distinct audiences that receive messages in diverse ways. A university caters to a younger audience and the use of social media and campus wide email may be prevalent. SCAD recruits students from across the globe, some who have never heard of a hurricane-messaging to those students and faculty will differ. Harris County, Texas, home to the City of Houston, is an incredibly diverse community with numerous languages and a vast age range. These are only a few examples of our panelists and the experiences that they bring to the table. Our hope is that you will identify with at least one of these panelists and will be able to take home some messaging strategies for your community members and stakeholders.