

# Situation Manual

## National Mutual Aid Technology Exercise (NMATE)

August 21-22, 2019



**FEMA**



**Homeland  
Security**

Science and Technology

## Table of Contents

<b>I. EXERCISE GOALS AND OBJECTIVES .....</b>	<b>2</b>
Goals 2	
Objectives.....	2
Outcomes.....	2
Output.....	3
<b>II. AGENDA .....</b>	<b>4</b>
Day 1: August 21 .....	4
Day 2: August 22 .....	5
<b>III. PARTICIPANTS .....</b>	<b>7</b>
Participant Teams .....	7
Participating Agencies and Systems .....	7
Observing Agencies and Organizations .....	8
Rules and Assumptions.....	9
<b>IV. EXERCISE FORMAT .....</b>	<b>10</b>
Venue Layout .....	10
Scenario and Simulation .....	10
Roles/Responsibilities.....	11
Staff Roles and Responsibilities .....	11
<b>V. SCENARIO NARRATIVE .....</b>	<b>13</b>
Scenario Overview .....	13
Situation.....	13
Situation 1: Wildfires in California and Texas .....	15
Situation 2: Tropical Storm > Hurricane Andy .....	16
Resource Management Information Requirements.....	17
Situational Awareness Information Requirements .....	18
<b>VI. KEY DISCUSSION QUESTIONS .....</b>	<b>21</b>
Day 1 Hot Wash Discussion Questions .....	21
Day 2 Discussion Questions .....	21
Small Group Discussion 1.....	21
Small Group Discussion 2.....	21

## I. Exercise Goals and Objectives

### Goals

Demonstrate and exercise policy and technology interoperability among crisis management and mutual aid systems, through seamless exchange of priority resource management information.

### Objectives

Mutual aid operations are an essential component of successful disaster operations needed to stabilize communities and meet the needs of survivors affected by a disaster. The National Mutual Aid Technology Exercise (NMATE) is an opportunity to collectively:

- 1) Establish and **coordinate dialogue and collaboration** among the owners and users of technology-enabled crisis management and mutual aid systems available today.
- 2) Bring leaders, operators, and technologists together in a no-fault environment to **demonstrate and exercise interoperability** among crisis management and mutual aid technology-enabled systems.
- 3) Identify ongoing **challenges and technology requirements** needed to support multi-jurisdictional and/or cross-discipline mutual aid operations.
- 4) Exercise and attempt to **resolve policy and technical interoperability issues** in real-time.
- 5) Capture and compile interoperability and information sharing: **successes, challenges, and corrective actions.**

### Outcomes

This exercise focuses on achieving the following outcomes:

- Establish a shared understanding of current and emerging policy and technology interoperability between crisis management and mutual aid systems.
- Improve collaboration across mutual aid providers and system owners – decision makers, operators, technologists.
- Define policy requirements to enable improved information sharing and interoperability among agencies, organizations, and their systems.
- Develop crisis management mutual aid technology guidance for sharing real-time information to support mutual aid resource management, situational awareness, and interoperability.
- Document un-met needs, emerging requirements, corrective actions, and solutions for further exploration.

## Output

The 2019 NMATE will result in a final After-Action Report and Improvement Plan that will include the following information and will be made available

- Summary of findings aligned with each of the objectives
- Summary of policy-related findings
- Summary of technical interoperable findings
- Identification of potential solution sets
- Detailed improvement plan that includes specific and time bound action items for all respective agencies and organizations based on the findings from the exercise

Following the exercise, NAPSG Foundation and its partners will continue coordination efforts with the participants and community at-large.

## II. Agenda

### Day 1: August 21

**0815 Participants arrive at Kentucky State EOC**

**0845 Welcome and Introductions**

Michael Dossett, Director, Kentucky Division of Emergency Management  
David Alexander, DHS S&T  
John Ford, Acting Deputy Director, National Integration Center, FEMA  
Justin Kates, Board of Directors, NAPSG Foundation

**0925 Logistics and Orientation to Facility**

**0930 Team and Participant Introductions**

**0945 Overview of Exercise, Goals, Objectives, and Rules of Play**

*Rebecca Harned, Director Federal and National, NAPSG Foundation*

**1000 (StartEx) Mutual Aid Technology Exercise**

**1000 Inject 1: Pre-Event Data Sharing Interoperability Test**

Participants will be provided with access to several resource inventories for both local and state agencies. All will have the opportunity to attempt to consume these resource inventories into their respective systems.

*Facilitator: Dave Halstead, Senior Advisor, NAPSG Foundation*

**1020 Inject 2: Preparedness in Developing Mission Ready Packages**

In anticipation of Wildfire and Hurricane seasons, local and state agencies are gearing-up by developing Mission Ready Packages for resources and capabilities that are likely to be requested.

*Facilitator: Dave Halstead, Senior Advisor, NAPSG Foundation*

1100 Morning Break

**1110 Situation Briefing 1**

Master Control Cell provides an initial Situation Briefing.

**1120 Inject 3: Potential Response Planning**

Based on the initial Situation briefing, each mutual aid system is asked to pre-identify resources available within their organization/agency to meet anticipated resource requests based on the incidents underway.

*Facilitator: Dave Halstead, Senior Advisor, NAPSG Foundation*

**1140 Situation Briefing 2**

**1145 Inject 4: Mutual Aid for Wildfire Response**

1230 Lunch Break (Hosted)

**1315 Inject 5: Initial Response to Tropical Storm Andy**

**1345 Inject 6: Personnel Requests and Response for Hurricane Andy**

1415 Afternoon Break

**1425 Inject 7: Agency Briefings on Resource Deployments and Status**

**1500 Inject 8: Day 12 of Response Operations**

**1530 Roundtable Discussion 1: Current State of Affairs**

**1630 Day 1 - End of Exercise Play**

**Day 2: August 22**

**0830 Participants arrive at Kentucky State EOC**

**0900 Day 2 Welcome**

Michael Dossett, Director, Kentucky Division of Emergency Management

David Alexander, DHS S&T

John Ford, Acting Deputy Director, National Integration Center, FEMA

Justin Kates, Board of Directors, NAPSG Foundation

**0915 Recap of Day 1**

- 0930 Small Group Discussion 1: *Success and Challenges in Sharing Resource Management Information for Mutual Aid***
- Top 3 Success and Best Practices Identified in Policy, Operations, and Technology
  - Top 3 Challenges and Gaps Identifies in Policy, Operations, and Technology
- 1000 Group Report Outs and Open Discussion: *Success and Challenges in Sharing Resource Management Information for Mutual Aid***
- 1045 Morning Break
- 1100 Small Group Discussion 2: *Areas for Improvement***
- 1130 Team Report Outs and Open Discussion: *Areas for Improvement***
- 1200 Lunch Break (Hosted)
- 1245 Small Group Discussion 3: *Team Level Priorities***
- 1255 Team Report Outs and Open Discussion: *Team Level Priorities***
- 1315 Small Group Discussion 4: *National Requirements for Enabling Success***
- 1330 Team Report Outs and Open Discussion: *National Requirements for Enabling Success***
- 1350 Facilitated Open Discussion: *Developing a Cohesive and Unified Strategy***
- 1415 Closing Discussion**
- 1430 Closing Remarks**  
Michael Dossett, Director, Kentucky Division of Emergency Management  
David Alexander, DHS S&T  
John Ford, Acting Deputy Director, National Integration Center, FEMA  
Justin Kates, Board of Directors, NAPSG Foundation

### III. Participants

#### Participant Teams

Provided below is a list of agencies or organizations and their respective mutual aid technology systems participating in this exercise. Each agency/organization team consists of individuals capable of filling the following roles:

- **System Technician/Technologist:** Individuals in this role can discuss their system’s architecture and limitations, make just-in-time adjustments to address immediate interoperability during exercise play, and make recommendations for near/long-term enhancements.
- **Operator/Operations Specialist:** Individual in this role can fully use and operate their system and provide public safety operational insight to mutual aid business practices, procedures, and/or polices of the system owner.
- **Leader/Decision Maker/Commander:** Individual in this role can provide insight and recommendations regarding deployment, employment, and adjudication of resources requested/provided as well as inform unified mutual aid smart practices, procedures, and/or validate information exchange requirements.

#### Participating Agencies and Systems

Agency/Organization	Mutual Aid System Name
National Emergency Management Association / Emergency Management Assistance Compact	<ul style="list-style-type: none"> <li>• Mutual Aid Support System (or Prototype System)</li> <li>• Emergency Operations System</li> </ul>
Kentucky Emergency Management, Department of Military Affairs	<ul style="list-style-type: none"> <li>• KY WebEOC – Juvare Exchange – AGOL</li> <li>• Lifeline Dashboards</li> </ul>
South Carolina Emergency Management Division	<ul style="list-style-type: none"> <li>• Palmetto</li> </ul>
South Carolina Office of the State Fire Marshal / ESF 4 and 9	<ul style="list-style-type: none"> <li>• Palmetto</li> </ul>
Texas Division of Emergency Management	<ul style="list-style-type: none"> <li>• Texas Fusion</li> <li>• Texas Star</li> </ul>
California Governor’s Office of Emergency Services	<ul style="list-style-type: none"> <li>• SCOUT</li> <li>• WebEOC with AGOL Extension</li> <li>• Lifeline Dashboards</li> </ul>
All-Hazards Incident Management Team Association / City of El Segundo, California	<ul style="list-style-type: none"> <li>• Local Implementation of One Responder</li> <li>• Local and Nationally Deployable Asset Perspective</li> </ul>

Agency/Organization	Mutual Aid System Name
State of Tennessee ESF 4 and ESF 9 Lead / County of Rutherford, TN	<ul style="list-style-type: none"> <li>Resource Inventory</li> <li>Local and Nationally Deployable Asset Perspective</li> </ul>
State of Florida ESF 4 and ESF 9 Lead	<ul style="list-style-type: none"> <li>Resource Inventory</li> <li>Local and Nationally Deployable Asset Perspective</li> </ul>
State of New Hampshire Emergency Management / City of Nashua, NH	<ul style="list-style-type: none"> <li>Northeast State and Local Agency Perspective</li> </ul>
USDA/US Forest Service	<ul style="list-style-type: none"> <li>Resource Ordering and Status System (ROSS) - IROC</li> <li>IRWIN</li> </ul>
International Association of Fire Chiefs	<ul style="list-style-type: none"> <li>National Mutual Aid System</li> </ul>
Federal Emergency Management Agency Office of Response and Recovery	<ul style="list-style-type: none"> <li>Crisis Management - WebEOC for HQ and Region</li> </ul>
Federal Emergency Management Agency National Preparedness Directorate	<ul style="list-style-type: none"> <li>Incident Resource Inventory System</li> <li>Resource Typing Library Tool</li> <li>One Responder</li> </ul>

### Observing Agencies and Organizations

Agency/Organization	Related Effort
Federal Emergency Management Agency National Integration Center	<ul style="list-style-type: none"> <li>Office of Response and Recovery, Response Planning and Exercise Division</li> <li>National Preparedness Directorate, National Integration Center</li> <li>Office of the Chief Information Officer</li> <li>FEMA Integration Team (FIT)</li> <li>Office of Policy and Program Analysis</li> </ul>
Department of Homeland Security	Science & Technology Directorate
Indiana Department of Homeland Security	Office of the Chief Operating Officer

## Rules and Assumptions

### Definition of policy for purposes of NMATE

- Policy refers to a course or principle of action adopted or proposed by an agency or organization.
- Policy can take the form of guidance, guidelines, directives, legislation, doctrine, memorandums of agreement or understanding, and standards. Different entities have the ability to choose policy tools and mechanisms appropriate for their organization and constituencies.

### Exercise scenario is merely intended to provide operational context

- Exercise objectives are not specific to the scenario or even to the incident type
- An incident requiring all types and levels of mutual aid could occur in any part of the country, at any time, that would put to test two or more of the mutual aid systems participating

### No-Fault Environment

- There are no hidden agendas, trick tasks, or trick questions.

### Participate openly and focus discussions on appropriate topics related to exercise objectives

- Ask questions; share thoughts; and offer forward-looking, problem-solving ideas and solutions on the fly
- This is a safe environment for you to share information about your system, including any technical limitations or technical architecture considerations.

### Focus your comments and consider time constraints

- Scenario and likely affects to the communities and surrounding area(s) are plausible, and events occur as they are presented.
- Be prepared to “parking lot” certain issues and discussions due to time constraints.

## IV. Exercise Format

The exercise is designed as a technically-oriented functional exercise and tabletop discussion for all participants and observers, across all disciplines and roles. It has been designed to go beyond discussions and provide an environment for developing, testing, and examining potential solutions and defining next steps that will strengthen mutual aid technologies and business practices.

### Venue Layout

The exercise will be conducted in the State of Kentucky Emergency Operations Center (EOC) environment with participants in pre-assigned sections and seats based on their organization and role. Screens are configured at the front of the room that the Master Control Cell (MCC) will coordinate for the sharing of applications as needed.



KY EOC

### Scenario and Simulation

The exercise is based on multiple events occurring simultaneously to provide context for complex resource management and allocation. All participants will receive the injects at the same time via facilitator discussions. These injects will also be shared on the screens. Since this is a technology exercise, ***the scenario is not the focus of the exercise***. The scenario is only intended to provide incident context to the exercise. This exercise has been designed so that

you can essentially replace it with any other incident type for the scenario and replay the injects with minor modification.

The exercise has been designed to achieve a basic level of simulation. The MCC is simulating multiple agencies based on those likely to be involved in the incident scenario. However, the technologies being employed by the MCC are not necessarily those used by the agencies being simulated. This was intentional in the exercise design process to reaffirm that the exercise is focused on technology and is not specific to any one incident type or scenario. Where relevant, each participant will simulate their own agency or organization using their existing mutual aid technology system(s), operational procedures, and workflows throughout the exercise.

### Roles/Responsibilities

Participants, observers, and staff/facilitators will be responsible for recording discussions, capturing notes and ideas, and informing after-action products.

- **Staff:** Each of the NAPSG Foundation team members provides either operational or technical subject matter expertise to their specific roles and responsibilities
- **Facilitators:** Facilitates discussions, ensuring discussions stay on target to achieve objectives.
- **Participants:** Participate and take detailed notes of discussions, successes, innovations, and areas for improvement.
  - System Technician/Technologist
  - Operator/Operations Specialist
  - Decision Maker/Commander
- **Observers:** Contribute to discussions, observe exercise play, and take detailed notes of discussions, successes, innovations, and areas for improvement based on your domain or discipline.

### Staff Roles and Responsibilities

Staff Member	Roles/Responsibilities in Exercise
<b>David Halstead</b> NAPSG Senior Advisor	<ul style="list-style-type: none"><li>• Facilitator throughout the exercise</li><li>• Floating between teams to cultivate group-level discussion and observe systems and applications</li></ul>
<b>Tommy Hicks</b> NAPSG Senior Advisor	<ul style="list-style-type: none"><li>• Facilitator throughout the exercise</li><li>• Floating between teams to cultivate group-level discussion and observe systems and applications</li></ul>
<b>Rebecca Harned</b> NAPSG Staff Director	<ul style="list-style-type: none"><li>• Co-Facilitator for discussion sessions and hot wash</li></ul>

<p>Rebecca Harned (cont.)</p>	<ul style="list-style-type: none"> <li>• Floating between teams to cultivate group-level discussion and observe systems and applications</li> <li>• Managing the Master Scenario Exercise List</li> <li>• Capturing ideas and solution sets for After Action Report</li> </ul>
<p><b>Charlotte Abel</b> NAPSG Program Specialist</p>	<ul style="list-style-type: none"> <li>• Supporting discussion facilitation as needed</li> <li>• Capturing technical needs and requirements for solution sets</li> <li>• Floating between teams to cultivate group-level discussion and observe systems and applications</li> <li>• Running the local-level instance of IRIS</li> </ul>
<p><b>Tricia Lawson</b> NAPSG Project Manager</p>	<ul style="list-style-type: none"> <li>• Capturing ideas and solution sets for After Action Report</li> <li>• Supporting discussion facilitation as needed</li> <li>• Floating between teams to cultivate group-level discussion and observe systems and applications</li> </ul>

## V. Scenario Narrative

### Scenario Overview

Exercise and demonstration activities explore information-sharing needed for unified mutual aid and resource management decision-making across five key Resource Categories, Emergency Support Functions (ESFs), and Community Lifelines:

Resource Category	Emergency Support Function	Community Lifeline
<b>Incident Management</b>	ESF 5: Information and Planning	Safety and Security
<b>Firefighting</b>	ESF 4: Firefighting	Safety and Security
<b>Search and Rescue</b>	ESF 9: Search and Rescue	Safety and Security
<b>Public Works</b>	ESF 3: Public Works and Engineering	Safety and Security
<b>Mass Care Services</b>	ESF 6: Mass Care, Emergency Assistance, Temporary Housing and Human Services	Food, Water, and Sheltering

In support of exploring these five Resource Category, ESF, and Lifeline groupings, the exercise is built upon the following scenarios.

### Situation

*As a reminder, this exercise is based on multiple events occurring simultaneously to provide context for complex resource management and allocation. Since this is a technology exercise, the scenario is not the focus of the exercise; rather the context to simulate mutual aid needs.*

Wildfires in California and Texas occur simultaneously with a large Tropical Storm forming off the Southeastern seaboard with hurricane force winds.



The tropical storm is forecasted to make landfall in Florida, Georgia, and South Carolina, bringing high precipitation and flooding into Tennessee and Kentucky.

#### **Phase 1**

- Preparedness phase for large-scale and catastrophic incidents
- Local response in effect for California and Texas Wildfires

#### **Phase 2**

- Local to State-level response in effect for California and Texas wildfires. Evacuations issued and sheltering operations in effect.
- Southeastern states begin to plan and pre-stage intrastate resources for response to tropical storm

#### **Phase 3**

- Wildfire response escalates requiring support by USFS and interstate mutual aid
- Tropical storm makes landfall, Governors declare state of emergency in Southeastern states
- Southeastern states in full-scale response, fully expended available resources at the intrastate level scaling to interstate aid
- Both wildfires and tropical storm receive Federal disaster declarations

#### **Phase 4**

- Tropical storm response operations continue and transition to initial recovery
- High precipitation and flooding conditions in Tennessee and Kentucky

## Situation 1: Wildfires in California and Texas

### Overview

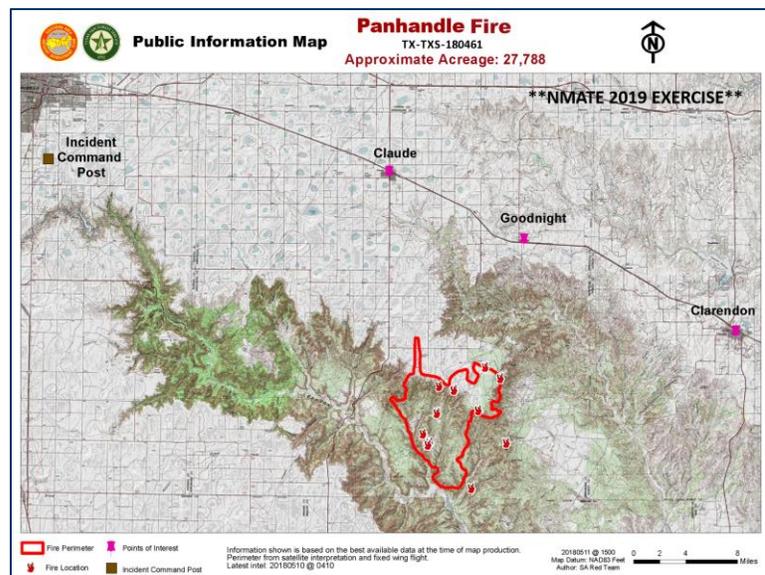
The weather patterns in 2019 have set the stage for a catastrophic wildfire season stretching from California to as far east as Texas. Springtime storm patterns off the Pacific and moving east contributed to a historical amount of rain promoting vegetation growth and setting the stage for a challenging wildfire season. Now, the past four weeks of drought like condition amplified by a pattern of dry winds has many communities on high alert. This past week, active fires have been starting across the west coast and have spread southeast as far as Texas. The low humidity and heavy vegetation continue to be a challenge to first responders.

### Update 1

The Ventura Fire Wildfire Complex has started North of the city and east of highway 33 located in the Southern part of CA and is burning out of control. The fire is immediately threatening 1600 homes as it continues to spread and move to the north east. At the rate the fire is moving it may endanger as many as 5,000 more homes and businesses if current conditions continue.



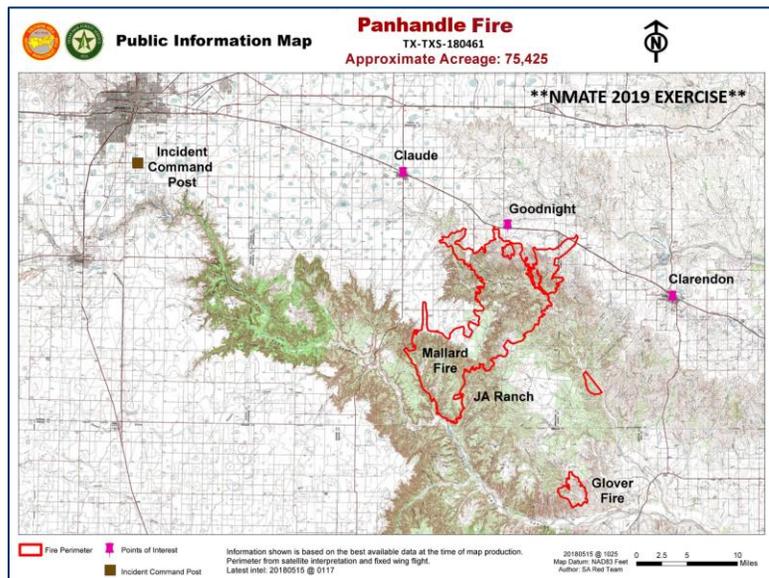
A 27,000-acre known as the Panhandle Wildfire Complex has started off of highway 207 South of Panhandle, TX and is burning out of control. The fire is immediately threatening 800 homes as it continues to spread and move to the north. At the rate the fire is moving it may endanger as many as 1,200 more homes and businesses if current conditions continue. Both incidents are reporting zero containment at this time.



### Update 2

The Ventura wildfire is 55% contained and has grown rapidly to 272,000 acres overnight and a growing concern on changing wind patterns and a lack of natural barriers to more populated area continues to be a risk. The community of Santa Paula is at significant risk. Evacuation and sheltering is in place for over 15,000 people and local and State resources are already limited in California as a result of statewide activities.

At the Panhandle Fire which is now 20% contained because the Weather forecast improved overnight with an increase in humidity as a result in changes in the wind pattern directly related to the tropical storm system off the east coast, however, sustain winds of 20 mph continues to challenge responders with flying embers which threatening homes. 1,100 homes, buildings and businesses still remain at risk, with residents seeking shelter at the fire moved into the populated areas of Panhandle. As a result of the damages overnight were significant there is a challenge to maintain the public water infrastructure as a result of power outages.

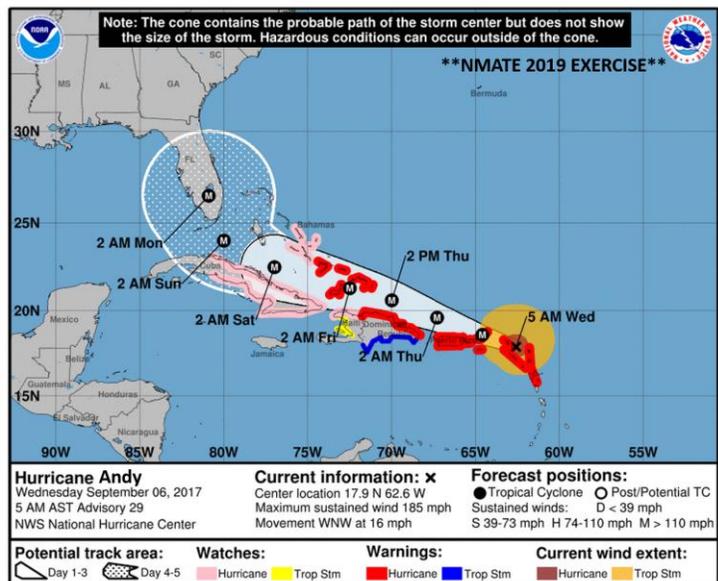


## Situation 2: Tropical Storm > Hurricane Andy

### Overview

The hurricane season officially began on June 1 and ends on November 30. These dates historically describe the period of year when most tropical cyclones form in the Atlantic basin. This Atlantic hurricane season is projected to be one of the costliest tropical cyclone season on record.

Initial predictions for the season anticipated that an El Niño would develop, lowering tropical cyclone activity. However, the predicted El Niño failed to develop, with cool-neutral conditions developing instead, later progressing to a La Niña – the second one in a row. This led forecasters to raise their predicted totals, estimating that there will be 17 named storms, 10 hurricanes, and 6 major hurricanes. Collectively, the tropical cyclones could be responsible for the most fatalities in a single season since 2005.



**Update 1**

The favorable conditions in the Atlantic have given way to rapid and intense tropical development to some of the most powerful Hurricanes seen in decades. The Tropical Storm developed near the Cape Verde Islands, from a tropical wave that had moved off the West African coast three days prior. Under favorable conditions, the named storm, Andy, rapidly intensified shortly after formation, becoming a Category 2 hurricane on the Saffir–Simpson scale within a mere 24 hours. Andy then became a Category 3 hurricane (and therefore a major hurricane). It intensified, becoming a Category 5 hurricane by early the next day.

**Update 2**

What has developed into major Hurricane Andy is forecasted to make landfall somewhere in Florida, and then to threaten Georgia, and/or South Carolina. The storm is forecasted to cause widespread and catastrophic damage throughout its lifetime, particularly in parts of Florida, Georgia, South Carolina, Tennessee and Kentucky. This catastrophic damage may include; rivers flooding, massive power outages and destruction of property. 5.4 million people are in the path of the storm and will be requested to evacuate.



**Resource Management Information Requirements**

Provided below is a summary of the [highest priority resource information](#) point that is required to support resource management during an incident requiring mutual aid. This list was developed by a group of local, state, and federal stakeholders during a work session conducted in December 2016 and was validated again during the [2017 National Mutual Aid Technology Exercise](#). The list below is not ranked in order of priority. Additional background information can be found at: <https://www.napsgfoundation.org/all-resources/standard-operating-guide-templates/>.

Resource Information Point	Description
<b>1. Resource kind/type</b>	The most critical information point resource requestors need to know when assessing if a resource can fulfill the necessary capability is the resource kind & type. This information should be consistent with NIMS resource typing definitions. Additionally, this information should be maintained by resource owners as an integral

	component of their preparedness efforts, which facilitates readiness. This information should be available prior to an event and is required within 0-12 hours from initial incident.
<b>2. Resource response availability</b>	The next most important information point for resource requestors is the response availability of a given resource. This relates to determining if the resource is fully available now and for what type/level of mutual aid.
<b>3. Deployment time</b>	This information point is critical for resource requestor to select/accept a given resource. The requestor needs to know how long (or how fast) it will be until the resource arrives at staging and can be employed in operations. This point includes variables associated with time to deployment and travel time to the assigned area.
<b>4. Resource cost</b>	The estimated cost of a resource and identification of “responsible party” with fiscal obligation to pay for the resource is also a key information point requestors need prior to accepting a resource.
<b>5. Resource readiness</b>	Status of a resource and its readiness to deploy is also a critical information point for requestors. They need to know if a resource is already deployed, available for request, in-service, out of service, etc. This is information needed in the first 0-12 hour operational period in order to determine which resources to request and/or offer for potential deployment. In the case of forecasted noticed events, resource readiness information should be pre-determined.

### Situational Awareness Information Requirements

Provided below is a summary of the highest priority common operational information for situational awareness information specifically. This list was developed by a group of local, state, and federal stakeholders during a work session conducted in December 2016. The list below is not ranked in order of priority.

Situational Awareness Information Point	Description
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<p><b>1. Event scale</b></p>	<p>This point refers to event complexity, extent, and general location. It is an initial information point needed as soon as available, even if it is a preliminary determination of event location and extent based on best available data or just-in-time/predetermined planning assumptions immediately following an incident.</p>
<p><b>2. Event forecast/prediction</b></p>	<p>For notice events, such as hurricanes and planned events, assumptions and predictions are commonly used to assess event magnitude and severity. This includes forecasting consequences to areas directly affected and potential cascading consequences to/from neighboring communities.</p>
<p><b>3. Event magnitude</b></p>	<p>For both notice and no-notice events, magnitude is generally assessed within 0-12 hours of initial incident. By about 24 hours, the magnitude of the event has typically been ground-truthed and decision makers are provided with updated consequence analysis.</p>
<p><b>4. Demographic trends</b></p>	<p>Key demographic indicators within affected areas are critical information points for both notice and no-notice events. Demographic information for aiding decision-making is not just basic population and data on number of households. This information must go deeper to include trends and other factors, such as primary languages spoken, socio-economic/income brackets, populations with access or functional needs, transportation dependencies, and analysis of commodity and support service requirements based on demographic trends.</p>
<p><b>5. Critical Infrastructure Impact</b></p>	<p>No later than 24 hours post incident, decision makers need to be provided with information regarding effects on critical infrastructure. This specifically relates to impacts on community lifelines such as transportation infrastructure, electricity, communications, health systems, potable water, sewer/sanitation, and others. Updates to this information should be provided on a regular basis, but updated once a day at minimum, or as additional information becomes available.</p>



## VI. Key Discussion Questions

### Day 1 Hot Wash Discussion Questions

1. Do your current capabilities support the most effective resource management practices for life saving missions?
2. Did you see any capabilities or hear any ideas from partners that could be leveraged to improve your agencies or organizations?
3. What is one new or emerging goal that you have identified for your agency to work on?
  - a. One policy/governance goal
  - b. One operational goal
  - c. One technology/information sharing goal

### Day 2 Discussion Questions

#### Small Group Discussion 1

##### Successes and challenges in sharing information for resource management and mutual aid

1. Top 3 Successes/Best Practices Identified in Policy, Operations, and Technology
2. Top 3 Challenges/Obstacles/Gaps/Constraints Identified in Policy, Operations, and Technology

#### Small Group Discussion 2

##### Road Ahead Part 1 – Areas for Improvement

1. How does that information sharing need to be established and/or improved to support better/faster mutual aid operations?
2. How does policy and governance need to be established and/or improved to support better/faster mutual aid operations?
3. How does technology need to be integrated and/or improved to support better/faster mutual aid operations?

##### Road Ahead Part 2 – Team Level Priorities

1. What are your top priorities for enhancing your own resource management and mutual aid capabilities?

##### Road Ahead Part 3 – National Requirements for Enabling Success

1. Outside of funding, what resources and tools do you need from national associations and national agencies to help enable your success?

##### Road Ahead Part 4 – Developing a Cohesive and Unified Strategy

1. What does a cohesive and unified strategy for a hybrid (bottom-up AND top-down) national mutual aid capability look like?

2. What are the elements of this strategy?
3. Who can/should serve as the steward or secretariat for this strategy?

**Closing Discussion**

1. What did you gain from the NMATE process over the past one and a half days? What will you bring home?