Magic City Meltdown

After-Action Report/Improvement Plan July 14, 2023

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included.

TABLE OF CONTENTS

Exercise Overview	
Analysis of Core Capabilities & Objectives	
Objective 1	
Objective 2	
Objective 3	
Appendix A: Improvement Plan	A-′
Appendix B: Exercise Participants	B-′
Appendix C: Acronyms	
Appendix D: Participant Feedback	D-′

EXERCISE OVERVIEW

Exercise Name	Magic City Meltdown
Exercise Date	March 27-28, 2023
Scope	This is a tabletop exercise, planned over a 2-day period. Exercise play is limited to NOAA and agencies with a stake/role in extreme heat events that impact the Greater Miami area.
Mission Area	Mitigation & Response
Core Capabilities	Threat/Hazard Identification; Community Resilience; Communication
Objectives	 Better understand extreme heat, heat risk, and populations most at risk in the Greater Miami area. Identify and strengthen pathways of communication across and within organizations and community groups related to high heat ensuring effective communication to stakeholders. Build on the existing Miami-Dade Extreme Heat Action Plan, elaborating solutions for short-term (1-3 years) and longer term (10-15 years) heat actions that can occur at various social levels (individual, community, municipality, etc.).
Threat or Hazard	Extreme and prolonged heat event
Scenario	Extended extreme heat in the Greater Miami area poses threats to residents, especially those living with energy and housing insecurities, outdoor workers, as well as visitors. This event stresses the area's infrastructure and causes many heat-related illnesses.
Participating Organizations	Academic: Florida International University, University of Miami City: City of Miami, City of Miami Beach Community Organizations: Arsht-Rockefeller Foundation Resilience Center, Catalyst Miami, Dade County Street Response – CEOC, FCAA/Green Cars for Kids, Florida Clinicians for Climate Action, Global Empowerment Mission, Liberty City Trust, Miami Climate Alliance, Miami Homes for All, The CLEO Institute, The Miami Foundation, WeCount! County: Miami Dade County, Office of Housing Advocacy Federal: CDC, NOAA Press: Miami Herald Private: ISeeChange
	Sharon Mesick, Director, Southern Regional Climate Services, NOAA National Centers for Environmental Information (NCEI), (601) 568-1719

Sharon Mesick, Director, Southern Regional Climate Services, NOAA National Centers for Environmental Information (NCEI), (601) 568-1719, sharon.mesick@noaa.gov.

Hunter Jones, NOAA Climate Program Office, National Integrated Heat Health Information System (NIHHIS) Program Manager, (301) 734-1215,

hunter.jones@noaa.gov.

ANALYSIS OF CORE CAPABILITIES & OBJECTIVES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 (on page 3) includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Core Capability	Objective	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Threat/Hazard Identification	Better understand extreme heat, heat risk, and populations most at risk in the Greater Miami area.		✓		
Communication	Identify and strengthen pathways of communication across and within organization and community groups related to high heat ensuring effective communication to stakeholders, organizations, and citizens.		✓		
Community Resilience	Build on the existing Miami-Dade Extreme Heat Action Plan, elaborating solutions for short-term (1-3 years) and longer term (10-15 years) heat actions that can occur at various social levels (individual, community, municipality).		✓		

Table 1. Summary of Core Capability Performance

Ratings Definitions:

- Performed without Challenges: The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities.
 Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Performed with Some Challenges: The targets and critical tasks associated with the core capability were
 completed in a manner that achieved the objective(s) and did not negatively impact the performance of other
 activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for
 emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations,
 and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.
- Performed with Major Challenges: The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.
- Unable to be Performed: The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

Note: The following information provides an overview of the performance related to each objective of this exercise.

Objective 1: Better understand extreme heat, heat risk, and populations most at risk in the Greater Miami area.

The strengths and areas for improvement for each objective are described in this section.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: In early 2021, Miami-Dade County announced the appointment of a Chief Heat Officer who is responsible for improving coordination and accelerating existing heat protection efforts and initiating new work aimed to reduce the risk and impacts of heat stress and extreme heat for vulnerable populations and communities.

Strength 2: In late 2022, Miami-Dade County released their first Extreme Heat Action Plan, which covers three main goals: to inform, prepare, and protect people; to cool homes and emergency facilities; and to cool neighborhoods.

Strength 3: The Urban Heat Research Group (UHRG) grew out of the Resilient305 collaborative and comprises local faculty and student researchers primarily from Florida International University and University of Miami, local non-profits, government staff, and community leaders. This group is designed to share updates on data and studies centered around the growing risks associated with extreme heat and initiatives that push towards tackling the issue.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: As efforts and activities are identified it the Greater Miami area related to heat, continually assess the needs for additional capacity and resources to assists the Chief Heat Officer in their role and duties.

Area for Improvement 2: In coordination with identified community partners, continue to improve heat-related short- and long-term actions in the Greater Miami area based on the activities outlined in the Extreme Heat Action Plan.

Area for Improvement 3: Continue to support the Urban Heat Research Group as they are the body that can assist with conducting valuable heat-related research which is necessary to both formulate and evaluate interventions.

Objective 2: Identify and strengthen pathways of communication across and within organizations and community groups related to high heat ensuring effective communication to stakeholders, organizations, and citizens.

The strengths and areas for improvement for each objective are described in this section.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Through organizations such as Miami-Dade County, The Miami Foundation, and others in the area, awareness and education efforts are currently taking place to share vital information about extreme heat to those in the Greater Miami area.

Strength 2: Extreme heat is a known hazard in the Greater Miami area and as such, there are already many heat advocates throughout the area who work to reach the most at-risk populations and share heat-related information.

Strength 3: In the Greater Miami area, the National Weather Service (NWS) issues extreme heat advisories, watches, and warnings as well as provides products and services to inform stakeholders, decision-makers, advocates, and the public about the will impacts of heat on the area.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: To facilitate community education on how to handle heat and the related impacts, continue to ensure annual funding of the Heat Season Campaign.

Area for Improvement 2: Although there are many heat-related advocates within the Greater Miami area, more are needed to ensure as many at-risk people and populations are continually reached with vital information and resources, particularly through coordinated, multi-lingual and multi-media information sharing.

Area for Improvement 3: To ensure stakeholders, decision-makers, advocates, and the public all understand the heat-related advisories, watches, warnings, and other impacts and ensure these are being effectively shared.

Objective 3: Build on the existing Miami-Dade Extreme Heat Action Plan, elaborating solutions for short-term (1-3 years) and longer term (10-15 years) heat actions that can occur at various social levels (individual, community, municipality).

The strengths and areas for improvement for each objective are described in this section.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: In the Greater Miami area, the National Weather Service (NWS) issues heat advisories, watches, and warnings based on pre-defined temperature thresholds in order to help ensure the public is aware and safe from heat-related impacts.

Strength 2: Through planning efforts prior to this exercise as well as during the exercise, the most at-risk populations in the Greater Miami area were identified, which included those who are unhoused or have housing insecurities. Heat-related mitigation efforts in the area are specifically targeted to those populations that have been identified as "at-risk".

Strength 3: In the Greater Miami area, efforts to gather heat-related information and data are inplace associated with medical records, the special needs registry, and as for those who rent.

Strength 4: Based on the Miami-Dade Extreme Heat Action Plan, efforts such as creating additional tree canopies (for example) are in progress to help with energy-related activities to reduce heat impacts.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: A major area of concern for the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people including those receiving medical attention.

Area for Improvement 2: It was identified that there are additional actions needed to improve the protection of at-risk populations in the Greater Miami area, including those who are unhoused as well as renters.

Area for Improvement 3: Through this exercise, at-risk populations were identified as targets of the most critically needed improvements including needs associated with medical records, expanding the special needs registry¹, and renter protections.

Area for Improvement 4: In the Greater Miami area, there is an identified need to reduce urban heat island and energy burdens for at-risk populations.

¹ The Florida Special Needs Registry is for persons with special needs to register with their local emergency management agency to receive assistance during a disaster.

APPENDIX A: IMPROVEMENT PLAN

This Improvement Plan (IP) has been developed specifically for those who participated in The Magic City Meltdown exercise conducted March 27-28, 3023. These documented recommendations are based on the participant's discussions that occurred during the exercise. The IP can be used as a worksheet to guide future planning, and to track actions. The Primary Responsible Organization, Organization Point of Contact (POC), Start and End dates are intentionally left blank for this purpose.

Objective	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Better understand extreme heat, heat risk, and	As efforts and activities are identified it the Greater Miami area related to heat, continually assess the	a. On a regular basis (to be determined by the appropriate people), assess the role and responsibilities of the Chief Heat Officer in an effort to determine if additional assets, capacity, etc. is needed to support this role and efforts.	Miami-Dade County	James Murley, Chief Resilience Officer		
populations most at risk in the Greater Miami area.	needs for additional capacity and resources to assists the Chief Heat Officer in their role and duties.	b. To the extent possible, continue to support the Chief Heat Officer in activities related to education and awareness so the community understands heat, heat risk, and the resources currently available in the area.	Miami-Dade County			

	2. In coordination with identified community partners, continue to improve heat-related short- and long-term actions in the Greater Miami area based on the activities outlined in the Extreme Heat Action Plan.	a. As outlined in the Plan, continue working on efforts outlined in Goal 1: Inform, prepare, and protect people.		
		b. As outlined in the Plan, continue working on efforts outlined in Goal 2: Cool our homes and emergency facilities.		
		c. As outlined in the Plan, continue working on efforts outlined in Goal 3: Cool our neighborhoods.		
	Continue to support the Urban Heat	Continually assess and determine if new organizations/members are appropriate for the Urban Heat Research Group.		
	Research Group as they are the body that can assist with conducting valuable heat-related research which is necessary to both formulate and evaluate interventions.	b. Find links between heat- related activities/mitigation efforts and other resilience plans and efforts to lessen the burden (financially, etc.) of these actions and help the community get more bang for their buck.		

Objective	Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
		 a. Identify heat experts who are able/willing to create an advisory group (or similar) to help gather heat-related information for school-aged children. b. Working with experts 				
Identify and strengthen pathways of communication across and	1. To facilitate	throughout the school system(s), create educational materials about heat that can be shared/taught to schoolaged children.				
within organizations and community groups related to high heat	community education on how to handle heat and the related impacts, continue to ensure annual funding	 Work with NWS and others to learn best practices of incorporating heat material(s) into teaching curriculum. 				
ensuring effective communication	of the Heat Season Campaign.	 d. Determine appropriate information for each range of school-aged children. 				
to stakeholders, organizations, and citizens.		e. Coordinate with the school system(s), nonprofit education partners, and after school programs to incorporate heat-related activities to improve awareness.				
		f. Continue to implement recommendations as part of the ongoing improvement of this campaign.				

2. Although there are many heat-related advocates within the Greater Miami area, more are needed to ensure as many at-risk	a. Research and identify any other community partners who could be beneficial/helpful advocates for heat-related information and resource sharing.
people and populations are continually reached with vital information and resources, particularly through	b. Determine the appropriate information that these newly identified advocates can share and ensure they are appropriate for the intended audience.
coordinated, multi- lingual and multi- media information sharing.	c. Determine the feasibility of these advocates being able to go "door-to-door" to share information.
3. To ensure stakeholders, decision-makers, advocates, and the	a. Working with stakeholders and trusted community advocates, continue to share easy-to-understand information related to heat advisories, watches, and warnings including the health impacts associated with each/certain temperature ranges.
public all understand the heat-related advisories, watches, warnings, and other impacts and ensure these are being	b. Ensure all heat-related information designed for safety is posted on all available social media platforms via a recognized community entity.
effectively shared.	c. As heat-related information is available/generated, ensure that it is properly translated into languages that reflect the diverse population.

Issue/Area for Improvement	Corrective Action	Primary Responsible Organization	Organization POC	Start Date	Completion Date
1. A major area of concern for the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people	 a. Continue the conversations generated during the exercise between the NWS and the Greater Miami stakeholders to find the appropriate temperature balance for heatrelated advisories, watches, and/or warnings in the area. b. Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). c. Identify and Implement policies to collect better impact data (hospital, ambulance, etc.) related to clinical response, and improve data standardization and availability. d. Conduct a social science study on warning fatigue and message effectiveness 				
els including those receiving medical attention.	e. Develop spatially-explicit data collection (211, 311) and tools (e.g., GIS system) for response and long-term study. f. Study seasonal cumulative impacts of heat on economy				
It was identified that there are additional actions needed to	and critical infrastructure. a. Identify data on outside areas where the unhoused gather (near hospitals, under bridges,				
	1. A major area of concern for the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people including those receiving medical attention.	a. Continue the conversations generated during the exercise between the NWS and the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people including those receiving medical attention. Continue the conversations generated during the exercise between the NWS and the Greater Miami stakeholders to find the appropriate temperature balance for heat-related advisories, watches, and/or warnings in the area. b. Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). c. Identify and Implement policies to collect better impact data (hospital, ambulance, etc.) related to clinical response, and improve data standardization and availability. d. Conduct a social science study on warning fatigue and message effectiveness. e. Develop spatially-explicit data collection (211, 311) and tools (e.g., GIS system) for response and long-term study. f. Study seasonal cumulative impacts of heat on economy and critical infrastructure. 2. It was identified that there are additional actions needed to	a. Continue the conversations generated during the exercise between the NWS and the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people including those receiving medical attention. Continue the conversations generated during the exercise between the NWS and the Greater Miami stakeholders to find the appropriate temperature balance for heat-related advisories, watches, and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to ensure correlation with in-situ data). Collect heat impacts and thermal exposure data to ensure correlation with in-situ data. Conduct a social science study on warning fatigue and message effectiveness. Exposure data to model possible thresholds (and ensure correlation with in-situ	a. Continue the conversations generated during the exercise between the NWS and the Greater Miami stakeholders to find the appropriate temperature balance for heatrelated advisories, watches, and/or warnings in the area. b. Collect heat impacts and the model possible thresholds (and ensure correlation with in-situ data). c. Identify and Implement policies to collect better impact data (hospital, ambulance, etc.) related to clinical response, and improved/additional data from heat-related impacts on people including those receiving medical attention. c. Identify and Implement policies to collect better impact data (hospital, ambulance, etc.) related to clinical response, and improve data standardization and availability. d. Conduct a social science study on warning fatigue and message effectiveness. e. Develop spatially-explicit data collection (211, 311) and tools (e.g., GIS system) for response and long-term study. f. Study seasonal cumulative impacts of heat on economy and critical infrastructure. a. Identify data on outside areas where the unhoused gather (near hospitals, under bridges,	a. Continue the conversations generated during the exercise between the NWS and the Greater Miami area that was identified during exercise discussion revolved around heat risk thresholds and indices. This discussion included the need to re-evaluate the temperature thresholds for heat advisories, watches, and warnings, as well as the need to gather improved/additional data from heat-related impacts on people including those receiving medical attention. Improvement a. Continue the conversations generated during the exercise between the NWS and the Greater Miami stakeholders to find the appropriate temperature balance for heat-related advisories, watches, and thermal exposure data to model possible thresholds (and ensure correlation with in-situ data). c. Identify and Implement policies to collect better impact data (hospital, ambulance, etc.) related to clinical response, and improve data standardization and availability. d. Conduct a social science study on warning fatigue and message effectiveness. e. Develop spatially-explicit data collection (211, 311) and tools (e.g., GIS system) for response and long-term study. f. Study seasonal cumulative impacts of heat on economy and critical infrastructure. 2. It was identified that there are additional actions needed to

of at-risk populations in the Greater Miami area, including those who are unhoused as well as renters.	 b. Work to designate or approve areas for shelter that would provide a variety of services. c. Based on the Extreme Heat Action Plan, continue to plant trees for shade in identified areas where highly vulnerable populations reside. 	
	d. Collaborate with businesses to provide free drinking water to people seeking it.	
	e. Determine the feasibility of cooling center availability for after-hours and during weekends.	
	f. Explore the option of using schools as cooling centers after regular hours and during summer for students and their families.	
	g. Advocate for hiring the unhoused during heat season in facilities that are cooling centers.	
	h. Train cooling center staff on cooling procedures and increased sensitivities toward the unhoused or anyone seeking shelter.	
	i. Explore the ability of the county to provide reusable cups with carabiners or bottles with electrolyte packets.	
	j. Determine the feasibility of developing a revolving loan fund that would help those in the Greater Miami area who can't afford/don't qualify for weatherization and LIHEAP.	

3. Through this exercise, at-risk populations were identified as targets of the most critically needed improvements including needs	a. Continue to work with hospitals and other medical facilities for accurate medical records coding related to heat and climate illnesses/impacts (ensuring no HIPAA violations). b. Expand the special needs
associated with medical records,	registry to include heat events and needs.
expanding the special needs registry, and renter protections.	c. Explore possible law(s) that would require land lords to provide adequate cooling to renters.
	a. Explore ways to expand the Weatherization Assistance Program (WAP) to supplement funds in an effort to reach more households that don't typically "qualify".
4. In the Greater Miami area, there is an	b. Train staff on additional WAP supplemental funds and how to access those, when applicable.
identified need to reduce urban heat island and energy burdens for at-risk populations.	c. Determine feasibility of one universal application form for homeowners (or renters) to complete that with/works for multiple agencies for heat- related funding and support.
	d. Train staff on universal application and process, when applicable.
	e. Explore options for improving client services for utility assistance, weatherization, and other retrofit programs offered by Community Action

		 1	
	and Human Services		
	Department. One possible		
	option is creating a one-stop		
	shop program for retrofit		
	services in partnership with		
	NGOs.		
	Based on the Miami-Dade		
	Extreme Heat Action Plan (#3		
	& 7), explore ways to expedite		
	tree planting in critical areas.		
g.	Research and develop a		
	comprehensive list of the		
	infrastructure projects that are		
	currently underway and those		
	that are in process of being		
	done in an effort to coordinate		
	tree planting with construction		
	timelines.		
h.	Coordinate with Florida Power		
	and Light (FPL) in an effort to		
	plant trees when lines are		
	being buried.		
i.	Identify and create a team of		
	Subject Matter Experts		
	(SMEs) to address area trees		
	and their needs/health. This		
	includes, but is not limited to:		
	ecologists, FLP, architects,		
	landscapers, arborists, County		
	Parks & Recreation, Urban		
	Planning, etc.		

APPENDIX B: EXERCISE PARTICIPANTS

Last	First	Agency	Email
Argento	Adam	NOAA	adam.argento@noaa.gov
Bhatti	Shawn	NWS Miami	shawn.bhatti@noaa.gov
Black	Elaine	Liberty City Trust	eblack805@gmail.com
*Brown	Natalia	Catalyst Miami	nataliab@catalystmiami.org
Brubaker	Sonia	City of Miami, Chief Resilience Officer	sbrubaker@miamigov.com
Bryant	Trenise	Miami Climate Alliance	Trenisebryant@ gmail.com
Chevalier	Marc	City of Miami Beach	marcchevalier@miamibeachfl.gov
Christakis	Georgia	Florida Clinicians for Climate Action	gchrista89@gmail.com
*Clement	Amy	University of Miami	aclement@miami.edu
Collins	Olivia	The CLEO Institute	olivia@cleoinstitute.org
Cruz	Mayra	University of Miami	mxc2530@miami.edu
Farina	Alissa	City of Miami	afarina@miamigov.com
*Finn	Aly	NOAA	alyson.finn@noaa.gov
Gilbert	Jane	Miami-Dade County	jane.gilbert@miamidade.gov
*Gore	Karla	NOAA	karla.gore@noaa.gov
Grant	Faith	The Miami Foundation	fgrant@miamifoundation.org
Hadi	Sammy	National Weather Service Miami	sammy.hadi@noaa.gov
Henderson	Armen	Dade County Street Response- CEOC	dadecsr@gmail.com
Holder	Cheryl	Florida Clinicians for Climate Action	Drcherylholder@gmail.com
Horner	Alicia	Miami-Dade Department of Emergency Management	ahorner@miamidade.gov
*Jones	Hunter	NOAA	hunter.jones@noaa.gov
Kanazeh	Rita	Florida Clinicians for Climate Action (FCCA)	rkana003@fiu.edu
*Krushinski	Katie	NOAA	katherine.krushinski@noaa.gov
Lindsey	Carol	Florida Clinicians for Climate Action	Carollindsey2@gmail.com
Lipner	Shari	City of Miami Beach	sharilipner@miamibeachfl.gov
Madriz	Adrian	SMASH	Adrian@smash.miami
Martella	Ludovica	Miami Dade	Ludovica.Martella@miamidade.gov
Marturano	Julia	Office of Resilience	jxm1738@miami.edu
McDougal	David	Miami Climate Alliance	dmcdougal@gmail.com
McMahon	Kimberly	NOAA National Weather Service	kimberly.mcmahon@noaa.gov
*Mesick	Sharon	NOAA	sharon.mesick@noaa.gov
Milano	Claudia	Miami-Dad Dept of Health	Claudia.Milano@flheath.gov
Milfort	Rayna	Miami Homes for All	rayna@miamihomesforall.org
Miller	Rick	Arsht-Rock Resilience Center	rmiller@atlanticcouncil.org
*Molleda	Robert	NOAA National Weather Service	robert.molleda@noaa.gov

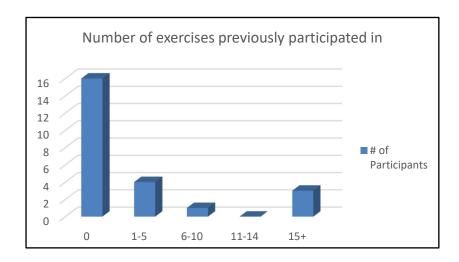
Murley	Jim	James.Murley@miamidade.gov	Jim Murley
Muse	Nkosi	University of Miami	nmm35@miami.edu
Navarro	Claudia	WeCount!	cnavarro@we-count.org
Onyango	Izegbe	Catalyst Miami	izegbeo@catalystmiami.org
Plasencia	Adrian	City of Miami Fire-Rescue	Aplasencia@miamigov.com
Reynes	Tony	NWS Miami	anthony.reynes@noaa.gov
Rivero	Nicolas	Miami Herald	nrivero@miamiherald.com
Ruiz	Jeanette	Miami Climate Alliance	miamiclimatealliance@gmail.com
Sandoval	Jessica	Miami-Dade County Dept. of Emergency Management	Jessica.Sandoval@miamidade.gov
Santos	Pablo	NWS Miami	pablo.santos@noaa.gov
Schramm	Paul	CDC	imw3@cdc.gov
Sebastiani	Claudia	ISeeChange	claudia@iseechange.org
*Spearo	Jesse	Miami-Dade County Department of Emergency Management	jesse.spearo@miamidade.gov
Straka	Sarah	Adrienne Arsht-Rockefeller Foundation Resilience Center	ssconsulting25@gmail.com
Telfort	Arlette	Office of Housing Advocacy	arlette.telfort@miamidade.gov
Toms	Catherine	FCCA /Green Cars For Kids	ctoms@greencars4kids.org
Torres-Vazquez	Ana	National Weather Service	ana.torres-vazquez@noaa.gov
Treuer	Galen	Miami-Dade County	galen.treuer@miamidade.gov
Troxler	Tiffany	Florida International University	troxlert@fiu.edu
Turek-Hankins	Turek	University of Miami	lturek@miami.edu
Ukani	Zahra	Dade County Street Response	zukani001@med.fiu.edu
Williams	Nikisha	The Miami Foundation	nwilliams@miamifoundation.org

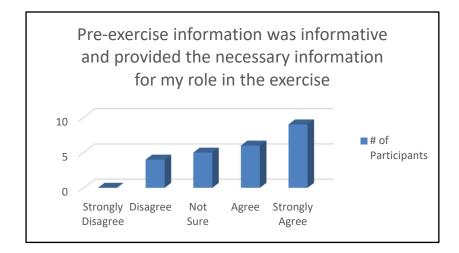
^{*}Denotes Exercise Design Team members.

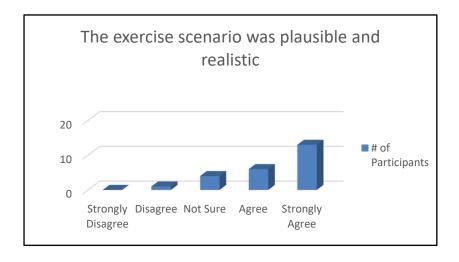
APPENDIX C: ACRONYMS

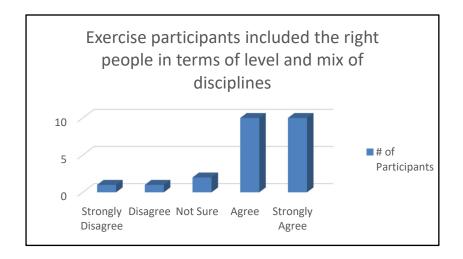
Acronym	Term	
AAR	After Action Report	
FL	Florida	
FLP	Florida Power & Light	
GIS	Geographic Information System	
HIPAA	Health Insurance Portability and Accountability Act	
IP	Improvement Plan	
LIHEAP	Low Income Home Energy Assistance Program	
NCEI	National Centers for Environmental Information	
NIHHIS	National Integrated Heat Health Information System	
NOAA	National Oceanic and Atmospheric Administration	
NWS	National Weather Service	
SME	Subject Matter Expert	
TTX	Tabletop Exercise	
WAP	Weatherization Assistance Program	

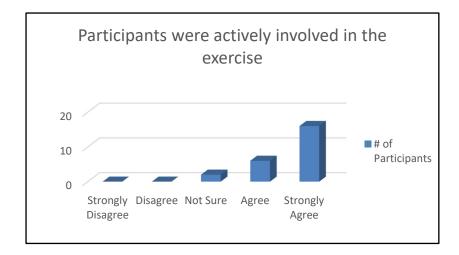
APPENDIX D: PARTICIPANT FEEDBACK





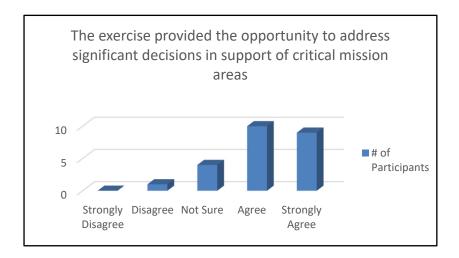


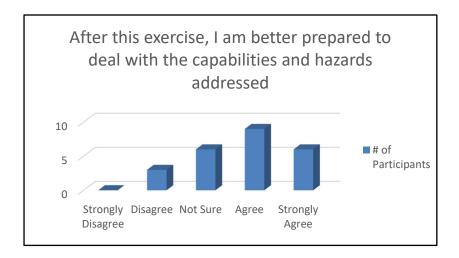












Note: The following views, thoughts, and opinions expressed in the text below belongs solely to the author, and not necessarily to the organization, committee, or other exercise participants.

I observed the following strengths during this exercise:

- Very detail presentation on heat in Miami Dade
- Teamwork and idea sharing.
- Great communication between participants of different disciplines and information shared.
- Great to have the emergency managers and city and county staff in the room!
- Good group interaction and a wide variety of tangible ideas
- The varied fields of participants brought a lot to the table. Ample discussion time
- Vulnerability and honesty from participants, open brainstorming and collaboration
- Networking, hearing different perspectives
- Discussion modules were useful to better see the gaps in the process and how to correct them.
- I enjoyed how we started with the big picture in discussing local heat issues and then drilled down into the specifics and were goal oriented during that process and identified plausible solutions and ways to implement these actions. It was extremely helpful to have NWS in the room to further discuss how thresholds are created so that we can continue this conversation and make decisions soon.
- Collaboration, open-mindedness, and really strong understanding of the immediate community
- Good mix of participants. Good prompts for conversation. Liked Module 2 discussion on the science and NWS resources.
- Good mix of participants working to guide the actions and implement actions.
- Strength among community partners and organizations
- Opportunity for people to do a deeper dive on some actions; more community conversation and input on excessive heat advisory thresholds, heat messaging and response protocols; more community input on how to address needs of energy burdened/AC insecure
- There was a lot of good knowledge in the room, and most participants felt comfortable sharing information.
- There were people with so much experience with the common theme. We identified gaps and found solutions.
- Participant engagement and interest was high across the room. Modules and objectives were clear.
- Discussion of workable solutions
- The right people present county and city employees, local organizations involved in climate actions

I observed the following areas for improvement during this exercise:

- Not enough variety in the interactive activities
- Respectable discourse needed.
- This exercise could have focused more on the partnership between local NWS office and local stakeholders, the climate change module was less effective.
- Would like to see a more formal way to implement some of these changes that have been listed.
- Time management for discussion
- Maybe too much overlap in modules. Make a more succinct process with more open discussion time to "debate."
- No participants/missing direct perspective from Florida Power and Light, public schools, assisted living or nursing facilities, Miami Dade community action and human services department, and directly impacted residents in target populations; little to no consideration of individuals disadvantaged by language barriers or the digital divide
- It gets to be a little long
- Opportunity to follow up on discussion point by creating an "open chat/discussion board" for possible future events
- I think it would have been helpful to have more of a background on how NWS sets their heat advisories, warnings, and watches given that this was such a contentious topic.
- I think for people who may be new to sofl. Community or may not have that much of a background on local policies and organizations a quick briefing (before the workshop) of available resources could have been useful
- Day 1 had no breakout sessions so it was easy to disengage not many people spoke/got involved. Also local staff should present on their protocols and initiatives so visiting staff know what the baseline is.
- The first day was more introductory and background material as was necessary to conduct the exercise. The presentations were good, but unnecessarily long.
- Communication across departments
- Needed more County dept representation.
- General lack of familiarity with NWS products and services beyond warnings/advisories.
- Maybe you could have some regular citizens from the community participate to get their perspectives

What specific training opportunities helped you (or could have helped you) prepare for this exercise? Please provide specific course names if possible.

- Access to the heat plan ahead of time
- Sitman was helpful to have ahead of time
- Both of my degrees in Atmospheric Science and Marketing/Communications gave me the knowledge and experience to assist in this exercise.
- It was all good
- Emergency management, environmental health statutory programs training.
- Heat equity is fairly new to me especially in terms of health impacts information on health impacts could have been useful. (Maybe it was discussed I missed the 1st day)

- More training on the science and projections available from NWS. Hands on exercise where participants find and pull information from the website because that can be challenging! Knowing what to look for, what's available, and how to interpret.
- Have everyone submit what they were/are working on in terms of heat
- All other agencies' thresholds to take action and listing of roles & responsibility.
- IS-271
- Training on climate change and resilience.
- Something related to heat health impacts
- My extensive background in climate change, climate solutions, and health impacts from Climate change.

Which exercise materials were most useful? Please identify any additional materials or resources that would have been useful

- The Heat Action Plan
- Breakout rooms
- The most useful moment was the discussion of what everyone in the room would have done with the heat advisory (day 1).
- Hearing other groups talks and presentations was helpful
- Provided action plan evaluation
- Notes from the conference and material produced from the group discussion
- I enjoyed the setting the stage presentations. While familiar with the information, I thought everyone did a great job of catching the room up to speed with local context.
- Presentations on large screen. Wish slides were sent in advance to better follow along/take notes. Maybe need more computer chargers.
- Discussing how each sector and player responds or would respond to heat events, and how we can best work together for the future.
- Diving deep on specific actions was helpful
- Extreme Heat Action Plan was helpful but more of a strategic plan, not and EAP in the traditional sense of an operational plan.
- Amplification at each table so all participants could be heard
- Extreme Heat Action Plan
- Situation manual, Miami-Dade Extreme Heat Action Plan
- Heat Action plan

Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

- More community involvement and more interactions
- This exercise was great but it did get a bit tense at times, perhaps a second meeting between certain parties should be arranged to iron out differences.
- this exercise could have focused more on the partnership between local NWS office and local stakeholders
- Overall, the group I was in had good engaging discussion and seemed interested on devising improved messaging methods going forward. I'd like to see a few real-life case studies related to the local area that shows how previous heat related disasters had materialized.
- Make modules more succinct with more open discussion
- Request for participants to make/assert commitments to action at the end of the exercise
- I felt like the breaks were too long
- I would have enjoyed more small group discussions on the first day. This may happen, but I want to ensure we are sent all the tools and resources that were discussed these two days.
- More breakouts and collaborations. Intros at beginning of the workshop so everyone knows who is in the room. Understanding the key questions the community has prior to the exercise so conversation can be driven towards answering them.
- Miami has done significant work on building consensus on this issue this exercise seems to be most directed towards communities that are a little more nascent on this topic.
- The most productive part of the exercise were the actual table top discussions. If the exercise is 2 days, more time should be focused on elaborating the activities (e.g., not limited to 2 activities).
- I think it would be important to identify in advance what is the most pressing issue that people participating have on our minds prior to the meeting. Then that should be given enough time for people to talk through
- 2 days was great this time but I think for a future Heat TTX in our community we'll need to keep it to one day.
- Discussions need to be had before the meeting with entities involved in a potentially controversial discussion point.
- It looks like you anticipated enough time to cover our breakout sessions, thanks for your patience when we went slightly off the rails.
- Have water bottles available. Thank you!