

Resilience Update

Broward County
Climate Change Task Force
August 3, 2023



RESILIENT
ENVIRONMENT



Record-breaking Global Heat

— Historically Hot

Warmest June on Record

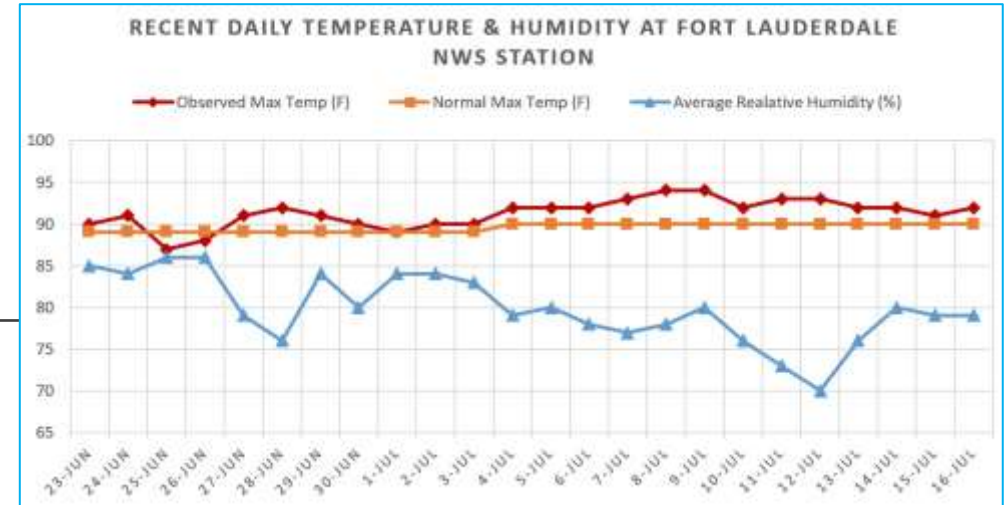
July 4TH new hottest day on Earth recorded with global avg temp = 62.92°F

July 3rd breaks hottest day on Earth record global avg temp = 62.618°F

July 5th global avg temp reached the record 62.9°F again

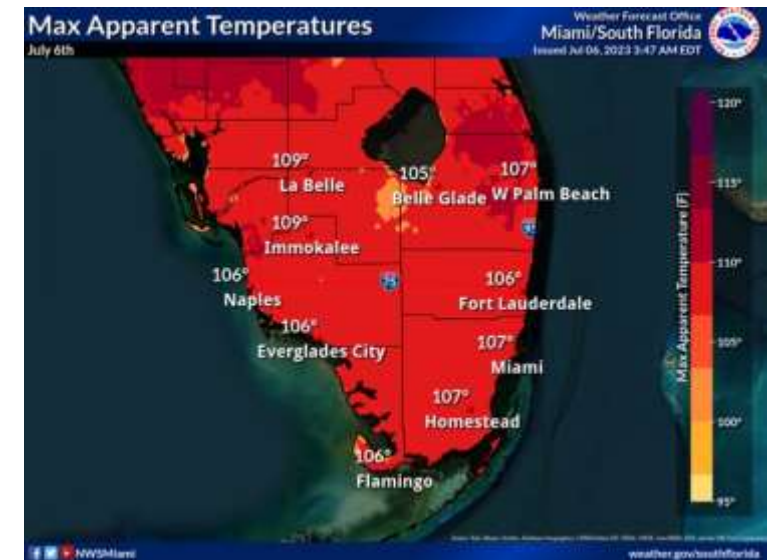
- 7-day period ending on July 5th was **hottest week on record** with daily average 0.08°F higher than any week since records began in 1979.

Hotter than Normal in Broward County



Climate normal period: 1991 to 2020

- Recently the observed maximum ambient temperature has been higher than normal (climate normal period: 1991 to 2020)
- Number of days heat index surpassed new heat advisory and warning thresholds (105°F and 110°F respectively) in June & July
 - Heat Advisory X Days
 - Heat Warning X Days



Max Apparent Temperature in South Florida on July 6TH with heat index reaching 105 – 110°F.

BROWARD COUNTY EXTREME HEAT COMMUNITY SURVEY



HEAT SURVEY

We want to hear how extreme heat impacts you!

BROWARD COUNTY RESILIENT ENVIRONMENT

RESILIENT BROWARD

RESILIENCE BRIEFING

BROWARD COUNTY RESILIENT ENVIRONMENT

Extreme Heat At Work



Science indicates that extreme heat events and other severe weather are likely to become more frequent amidst a changing climate. GHGs in the atmosphere act as a blanket around the Earth's surface, and as that blanket gets thicker, we can expect it to get warmer!

Here are 10 tips outdoor workers and employers should consider to beat the heat.

EMPLOYEES

UNDERSTAND HEAT HAZARDS

Learn to recognize the risk of heat illness due to high temperature, humidity, sun or thermal exposure, work demands, & personal risk factors.

DON'T SKIP SHADE BREAKS

A heavy workload increases heat generated by the body. Don't skip rest breaks. Drinking a cup of water every 20 minutes and resting in the shade for at least 10 minutes can allow your body to cool down & recover from the heat.

LOOK OUT FOR EACH OTHER

Say something if you see a co-worker in a potentially dangerous situation, or appears to be suffering from heat exhaustion.

DRESS FOR THE HEAT

Wear lightweight, loose fitting clothes - light colors reflect the heat better than darker colors. Shirts with long sleeves cover the body and protect against sunburn.

SPEAK UP

Do not silently overexert yourself in hazardous conditions. If you need more frequent breaks, a schedule change to a cooler time of day, or you are not feeling well, communicate with your supervisor or employer.

EMPLOYERS

PROVIDE SHADE, WATER, & REST BREAKS

Maintain access to potable water, shade, and allow frequent paid rest breaks. The duration and frequency of breaks should increase as risk of heat stress increases.

IMPLEMENT A HEAT RISK ALERT SYSTEM

Heat Stress Metering can alert employers, employees and visitors in real time when the heat index is at a dangerous level.

PREVENTION PLANNING

Have a plan for heat illness prevention & emergency response. Implement acclimatization periods for new workers, be open to work schedule adjustments, PPE requirements, and make provision for on-site medical services.


STAFF MONITORING

Designate staff to monitor conditions and workers for signs of heat related illness. Implement a Heat Illness Prevention & Emergency Response Plan.

PROVIDE TRAINING

Educate workers on heat hazards, heat illness symptoms, and health impacts. Taking proactive measures to mitigate risks will promote well-being during hot weather conditions.

BROWARD COUNTY RESILIENT ENVIRONMENT



"One of the major findings was that the hottest communities are also the communities with the highest socioeconomic vulnerability."

ADRIENNE AITKEN
BROWARD COUNTY GIS SPECIALIST, RESILIENCE UNIT

BEAT THE HEAT BROWARD

BROWARD COUNTY CLIMATE ACTION PLAN

Policy Objective #26:
Enhance the urban tree canopy to protect walkers, transit riders and bicyclists from heat and pollution.

Using GIS mapping and other tools, evaluate shade and cooling available at pedestrian, transit (train and bus) and bicycle facilities, and assess whether the urban tree canopy is sufficient to protect people from heat and pollution. Work with community and governmental partners to identify needs and involve community members in the policy and planning process.

Establish support for tree maintenance to encourage long-term canopy growth and tree retention. Enhance the tree canopy equitably countywide.

The Resilience Unit's geospatial analysts Adrienne Aitken and Saadullah Baloch have built a new Beat the Heat Storymap to help communicate risk exposure and help heat mitigation needs as the temperature rises.

BEAT THE HEAT BROWARD provides temperature trends, including surface temperature and hotspots, mitigation & adaptation strategies and examples of what we can do in a heat emergency.

Analyses reveal that while the average and maximum temperature are increasing, we are seeing the most accelerated increase in average minimum temperature. This means reduced periods of cooling, experiencing historic summer highs earlier in the year, and seeing days above 90°F extending later into the year.

Land surface temperature maps are a great tool to visualize communities with relatively higher surface temperatures. Check out the interactive maps to visualize the spatial distribution of heat in Broward County.

Go to Broward.org/Climate and choose 'Beat The Heat'.

It takes 10 minutes to go on with the hottest weather around Broward County and the surrounding area combined to beat heat index 100°F on average, 2020

BROWARD RESILIENCE

BEAT THE HEAT

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BROWARD COUNTY RESILIENT ENVIRONMENT

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RESILIENCE! MAY 2023 UNDERWATER VOICES

Send us your photos and videos of flooding in your neighborhood. We'll feature them in our newsletter and use them to help spread awareness of sea level rise and climate change.

RESILIENT BROWARD

PLUS
When the Rains Came: The Historic Floods of April 12, 2023

Underwater Broward Ready, Set, Solar Irrigation Made Easy April's Historic Floods

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RESILIENT BROWARD

PLUS
When the Rains Came: The Historic Floods of April 12, 2023

If king tides bring floods to your neighborhood we want to hear from you

send **PHOTOS**

[FLOODING.BROWARD.ORG](https://flooding.broward.org)

Flooding • Clean Energy • Climate Change • Sea Level Rise

Broward Resilience

Broward.org/Resilience

BROWARD COUNTY RESILIENT ENVIRONMENT

Beach and Shore • Heat and Drought • Adaptation Planning

RESILIENCE! FEBRUARY 2023 OUR RACE TO ZERO

More Florida leads the move away from fossil fuels and how Broward County is doing its part.

RESILIENT BROWARD

Document the Floods

send **PHOTOS & VIDEOS**

[FLOODING.BROWARD.ORG](https://flooding.broward.org)

BROWARD COUNTY King Tides

SATURDAY SEPTEMBER 10
SATURDAY-TUESDAY OCTOBER 8-11
TUESDAY-SATURDAY OCTOBER 25-29
THURSDAY-SATURDAY NOVEMBER 24-26

Source: National Oceanic and Atmospheric Administration (NOAA)



[Broward.org/Resilience](https://www.broward.org/Resilience)



\$44.3m in state grant funds

Awarded for
municipal infrastructure
improvement projects

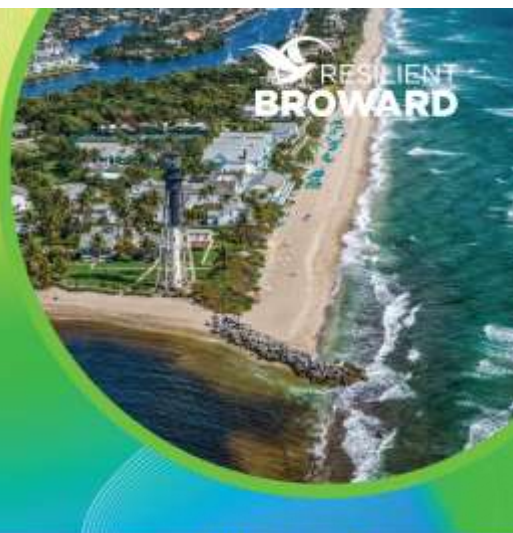


We're Hiring

Environmental
Project Coordinator

[Broward.org/Careers](https://www.broward.org/Careers)

#ResilientBroward



A new framework for local and regional climate action

SOUTHEAST FLORIDA
REGIONAL COMPACT
**CLIMATE
CHANGE**



REGIONAL CLIMATE
ACTION PLAN 3.0

Resilience Plan Update

- Outreach Plan
 - In final stages of review
- Critical Asset Analysis
 - Series of stakeholder meetings held this summer - near completion.
 - Roadway Methodology is complete – analysis underway.
 - Capital Planning Checklist – in development
- Economic Modelling
 - No-action results expected to be delivered in late August
- Next Steps
 - Steering Committee – August 23rd
 - Adaptation Planning
 - Platform Development

RCAP Implementation Workshop: Climate-Resilient Affordable Housing

- According to 2020 data, more than 750,000 low-income people in the four-county region were paying more than 30% of their income in housing costs, which is considered unaffordable.

Source: Shimberg Center for Housing Studies at the University of Florida



[Multifamily Building Resilience Toolkit](#)

CLIMATE SAFE HOUSING
Strategies for Multifamily Building Resilience

CHRISTIAN KAMRATH

*Resilience Program Manager, Office of Resilience
Miami-Dade County*

Adaptation approaches
to sea level rise and flooding



Source: Miami-Dade County
Sea Level Rise Strategy

<https://miami-dade-county-sea-level-rise-strategy-draft-mdc.hub.arcgis.com/>



<https://southeastfloridacclimatecompact.org/wp-content/uploads/2023/06/MDC-Case-Study-Integrating-Resiliency-in-Multifamily-Housing-Capital-Planning.pdf>

Update on the Carbon Pollution Reduction Grant (CPRG)

This grant will provide funding to states, local governments, tribes, and territories to develop and implement plans for reducing greenhouse gas emissions and other harmful air pollution. This two-phase grant program provides funding of \$250 million for noncompetitive planning grants (\$1 million award), and \$4.6 billion for competitive implementation grants. Miami-Dade County is the lead organization on this regional grant that includes participation by Broward, Monroe and Palm Beach County.

Timeline of critical deliverables

The Compact will produce and submit three deliverables: the PCAP, CCAP and subsequent Status Report (in addition to meeting standard grant reporting requirements) over the course of the 4-year program period running to 2027.

- Key Deliverable #1: Priority Climate Action Plan (PCAP) - **Due March 1, 2024**
- Key Deliverable #2: Comprehensive Climate Action Plan “CCAP” - **Due Summer/Fall 2025**
- Key Deliverable #3: Status Report - **Due Summer/Fall 2027**

Update on the Carbon Pollution Reduction Grant (CPRG)

Coordinating Entities- CBO and Municipal Engagement

To ensure successful grant administration, development, and efficient decision-making structure, the Compact will establish a CPRG advisory committee that will include the following key 'Coordinating Entities:'

- Community based organizations (CBO) will be provided subgrants to participate on the advisory committee and to lead Low-income and Disadvantaged Communities (LIDAC) outreach and engagement work under this grant.
- One representative (at minimum) from each of the four Compact counties (Broward, Miami-Dade, Monroe, and Palm Beach)
- One municipal representative per county.
- One representative per tribal government.

SAVE
— THE —
DATE

NOVEMBER
16 and 17
2023



Southeast Florida Climate Leadership Summit

Miami Beach Convention Center



MIAMI BEACH
RISING
ABOVE

To obtain this information in accessible format, please call 305-372-6779.

Questions ?

bit.ly/BrowardHeat



RESILIENT
ENVIRONMENT

A vertical poster for the Broward County Extreme Heat Community Survey. The background is a sunset over a beach with birds in flight. At the top, the text reads "BROWARD COUNTY EXTREME HEAT COMMUNITY SURVEY". In the center, a hand holds a smartphone displaying the survey's QR code and a question: "How would you rate your level of preparedness for extended periods of extreme heat?". Below the QR code, it says "HEAT SURVEY". At the bottom, the text reads "We want to hear how extreme heat impacts you!". Logos for Broward County and Resilient Broward are at the bottom.

BROWARD
COUNTY
EXTREME
HEAT
COMMUNITY
SURVEY



We want to hear how
extreme heat impacts you!

