



New Orleans East

Climate Vulnerability Assessment & Green Infrastructure Project

The New Orleans East Green Infrastructure Collective



WHO IS NEW ORLEANS EAST GREEN INFRASTRUCTURE COLLECTIVE?



The New Orleans East Green Infrastructure Collective's (NOEGIC) mission is to equip residents with the knowledge and tools to manage stormwater where it falls, effectively reducing flooding, enhancing community resilience, promoting environmental stewardship, and improving the quality of life for all residents by fostering innovative solutions for stormwater management, urban agriculture, and heat mitigation.



Vision Statement

NOEGIC strives to create a cooler, healthier environment that mitigates extreme heat impacts on our residents. Through collaborative efforts, we aim to foster a greener, healthier, sustainable, and vibrant community for current and future generations.

MEET THE TEAM



Pamela Carrie

*Co-Founder,
Executive Director,
Green Infrastructure
Project Coordinator*



Trina Hudson

*Outreach Coordinator,
Environmental Health
Coordinator,
Treasurer*



Jackie Baham

*Secretary, Grant Writer,
Environmental Coordinator,
Urban Agriculture
Coordinator*

THE WATER WISE MODEL



The New Orleans East Green Infrastructure Collective is utilizing the Water Wise Gulf South Model to increase green infrastructure interventions in New Orleans East.

The Water Wise Model includes hosting **Green Infrastructure 101 Workshops** and **Green Infrastructure Tours** to inform residents in green infrastructure techniques. Hosting a Vision Session to gather lived experience expertise from residents to help determine where Green Infrastructure should be implemented.

Once residents complete the two trainings they are “Water Wise Neighborhood Champions”. From there, they qualify for a green infrastructure project on their property.



PROJECTS

NEW ORLEANS EAST GREEN INFRASTRUCTURE COLLECTIVE



100 New Orleans East Residents Completed the Water Wise Green Infrastructure 101 and Tour!

Projects Completed:

- We have installed 50 green infrastructure projects- like rain gardens and French drains- valued around \$7,500 each.
- 45 Rain Barrels in New Orleans East
- 64 Trees Planted along Wright Road and Laine Avenue

Currently these projects collectively manage more than 60,000 gallons of stormwater during a rainstorm event.



Rain Garden Installation at Suburban Baptist Church

SCALING UP GREEN INFRASTRUCTURE IN NEW ORLEANS EAST

The New Orleans East Green Infrastructure Collective in partnership with Water Wise, Water Wise youth, the Pressburg Homeowners Association, and Tulane University School of Architecture students implemented a Bioswale on Chef Menture highway at Sierra Madre that captures 6,000 gallons of stormwater runoff from the highway every rain event which is an evacuation route.



SCALING UP GREEN INFRASTRUCTURE IN NEW ORLEANS EAST



New Orleans East Green Infrastructure Collective - The project goal will enhance stormwater management with a native plant rain garden around the Pressburg neighborhood entrance. The property is adjacent to a demonstration stormwater retention lot at Chef Mentour Highway/Highway 90 and Sierra Madre Drive that captures and filters over 6000 gallons of storm water per rain event. The lot was created in collaboration with the Tulane University School of Architecture, the Pressburg Neighborhood Association, and Water Wise Gulf South Youth. The youth team will lead the effort by designing and doing the hands-on work of creating the new garden.

EXAMPLES OF PROJECTS BY THE NEW ORLEANS EAST GREEN INFRASTRUCTURE COLLECTIVE!



Tree Planting on Wright Road



Rain Garden Installation on Wave Dr.

EXAMPLES OF PROJECTS BY THE NEW ORLEANS EAST GREEN INFRASTRUCTURE COLLECTIVE!



French Drain Installation on Jahnke Road



Bioswale Installation on Ivy Lane

MY GREEN INFRASTRUCTURE PROJECT: TRINA WARREN ON TRICIA COURT



SUMMER 2025

1-DAY CITY-WIDE HEAT STUDY

Purpose: The Heat Watch campaign in New Orleans mapped heat distribution to understand where and when heat concentrates in the city, helping to protect public health, guide interventions, and build resilience, especially in vulnerable communities.

Partnerships: The campaign was a collaborative effort involving the Hollygrove-Dixon Neighborhood Association, New Orleans East Green Infrastructure Collective, the Center for Collaborative Heat Monitoring, CAPA Strategies, and local community members. Various national agencies, universities, and regional hubs also provided support.

Data Collection: On July 29th, 2025, 44 community data collectors used vehicle-mounted sensors to collect over 65,000 measurements of air temperature and relative humidity along 11 routes, covering 112 square miles.

SUMMER 2025

1-DAY CITY-WIDE HEAT STUDY

Methodology: CAPA Strategies generated high-resolution models of ambient air temperature and heat index by integrating collected field data with satellite imagery (Sentinel-2). The models undergo a repeated random sub-sampling validation process to assess accuracy.

Outputs: The project produced high-resolution maps of air temperature and humidity (heat index), processed traverse point data (vector shapefiles), area-wide maps (geotiff rasters), and supporting metadata. These are available through the Open Science Framework and an interactive web map

SUMMER 2025

1-DAY CITY-WIDE HEAT STUDY



CCMR Heat Monitoring Study Results NOE Area

Key Findings (New Orleans Specific)

- Maximum temperature recorded: 101.2°F (afternoon traverse).
- Maximum temperature differential: 11.6°F (afternoon).
- Morning (6-7 am): Heat concentrated in the city center (I-10 and Highway 61/Tulane Avenue). Cooler areas included Audubon Park, City Park, and the northeastern region with Bayou Sauvage.
- Afternoon (3-4 pm): A northeastern wind brought cool air from Lake Pontchartrain. Hot spots were noted in the industrial area from the Desire Area east along Highway 90, and in areas with impervious surfaces in Gert Town, Algiers, and Jefferson.
- Evening (7-8 pm): A brief rain event around 6 PM cooled the city. The evening map showed a strong west-to-east temperature gradient, with cool spots in vegetated areas and warmer temperatures in developed areas.

SUMMER 2025

1-DAY CITY-WIDE HEAT STUDY

CAPA Strategies: CAPA is a team of social and environmental scientists that generates data, develops tools, and designs actionable strategies for community adaptation to climate change. Heat Watch is part of their broader 'heat planning' framework.

Accuracy: The temperature probe is accurate to $\pm 0.5^{\circ}\text{F}$ with a 1-second response time. Relative humidity sensor accuracy is $\pm 3\%$.

Heat Index: An approximation of felt heat combining temperature and relative humidity, calculated using National Weather Service equations.

SUMMER 2025

1-DAY CITY-WIDE HEAT STUDY

