

July 2026

NEW ORLEANS EAST

CLIMATE VULNERABILITY & GREEN INFRASTRUCTURE PROJECT

Key Findings

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Acknowledgements

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We gratefully acknowledge **Anissa Hyde** (Consultant, Janae Metrics and Strategies) for her valuable input during survey development, review of survey findings, and support of the community vulnerability assessment workshop. We also sincerely thank **Jasmine Pettie** (Project Manager, Water Wise Gulf South) for her support and facilitation of the community vulnerability assessment workshop.

We thank **LifeCity** for providing access to its New Orleans East-specific mapping and demographic data resources.

We are grateful to the organizations that supported the project's tree-planting initiative, including the **New Orleans Recreation Development Commission** (NORDC), **RR Enterprises**, and **Savage Construction, LLC**.

Finally, we thank the **Audubon Louisiana Nature Center** for hosting the community workshop that helped inform the vulnerability assessment presented in this report.

Photos

We thank **Trina Hudson, Jacqueline Baham, and Kimberly Doley** for generously providing pictures for this report. All other photographs are either in the public domain or used under applicable open-access licenses. All credits appear in the photo captions.

Our sincere appreciation is extended to the many individuals who contributed their time and resources and participated in the workshops, survey, community gatherings, and other engagement activities associated with this project.

Special thanks are also extended to the broader New Orleans East community for supporting this initiative and for its continued commitment to strengthening climate resilience and expanding green infrastructure throughout the community.

Funding

This report was prepared by EcoAdapt using federal funds under award NA23OAR4310630 from the National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the authors and do not necessarily reflect the views of the National Oceanic and Atmospheric Administration or the U.S. Department of Commerce.

This project is made possible in part by support from the Climate Smart Communities Initiative (CSCI), a unique public-private partnership that provides financial, technical, and other assistance to help communities across the country advance their climate resilience plans and projects. www.climatesmartcommunity.org



Introduction

This document synthesizes the findings of the **New Orleans East Climate Vulnerability & Green Infrastructure Project Report**, which highlights climate science, local data, and community experiences to better understand how climate change is affecting New Orleans East.

New Orleans East Climate Vulnerability & Green Infrastructure Project

The New Orleans East Climate Vulnerability & Green Infrastructure Project was developed to help create a greener, healthier, and more climate-resilient New Orleans East.

The project brought together the New Orleans East Green Infrastructure Collective, EcoAdapt, Water Wise Gulf South, the City of New Orleans Department of Parks and Parkways, and New Orleans East residents.

Project activities included research on climate projections, impacts, and vulnerabilities; community outreach and education; and neighborhood tree plantings.

The key findings featured here are intended to describe the project's outcomes as well as serve as a resource for future action. This information can:

- communicate climate risks and community priorities;
- support grant applications and funding requests;
- identify opportunities for future projects;
- inform conversations with residents, partners, and decision makers;
- guide tree planting and green infrastructure planning; and
- connect readers with additional data and tools.

Read the full report & find definitions and data citations at
EcoAdapt.org/projects/40/New-Orleans-East-Climate-Vulnerability-Green-Infrastructure-Project



Climate Change Adaptation & Vulnerability

Climate change adaptation is the process of getting ready for and adjusting to climate changes happening now or expected in the future. Adaptation helps reduce harm from climate-related stressors and strengthens a community's ability to handle changing conditions. Adaptation can include changes to policies, improvements to infrastructure, protecting or restoring natural systems, emergency preparedness, and programs that strengthen community resources and support networks.

Climate change vulnerability is how much people, communities, resources, or systems may be harmed by climate change. Vulnerability depends not only on what climate changes occur, but also on how sensitive communities are to those changes and their ability to prepare for, respond to, and recover from their impacts.

Climate Change Stressor

A change in climate (such as hotter days, extreme flooding, rising seas, or stronger storms) that puts pressure on people, nature, and the things we build, making problems more likely or more severe. Some stressors happen suddenly (for example, a heat wave or a hurricane), while others build up over time (such as sea level rise or long-term warming).

Climate Change Impact

The consequences of climate stressors, such as damage to homes from flooding, health effects from extreme heat, or disruptions to transportation and essential services.

Climate Stressor



Higher temperatures

Climate Impact



Increased energy costs

Climate Stressor



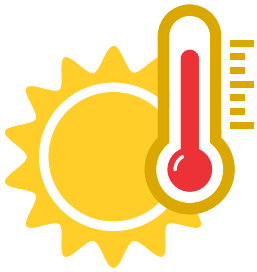
Rising sea levels

Climate Impact



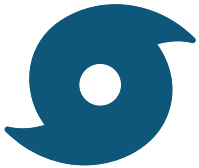
Recreation areas are inaccessible

Climate Change Trends & Projections



Average temperatures are projected to rise about 5°F by mid-century and nearly 8°F by the end of this century.

Extreme heat days above 95°F are projected to increase to about 57 days per year in Orleans Parish by 2050 and 115 days per year by 2100.

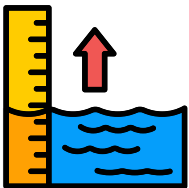


Hurricanes are expected to bring greater rainfall, storm surge, and flood risks as the climate warms.



Annual rainfall may change relatively little, but projections show summers will be drier, and autumns will be wetter.

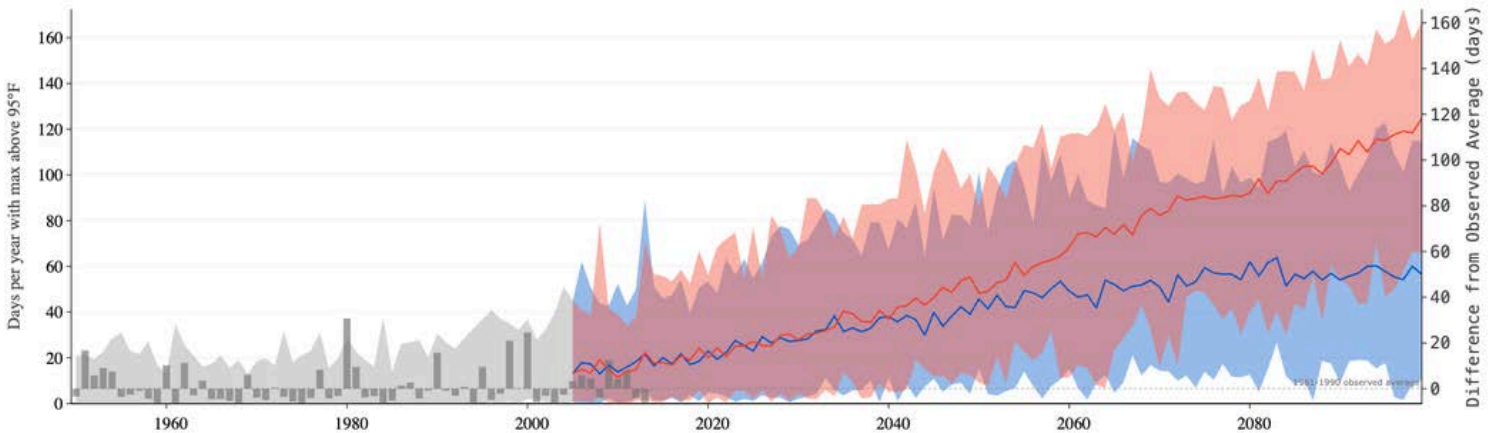
The **heaviest rainfall events** are projected to become more intense, which will increase the risk of flooding in the low-lying New Orleans East. The most extreme rainfall events in southern Louisiana could become about 20 to 30% heavier by 2100.



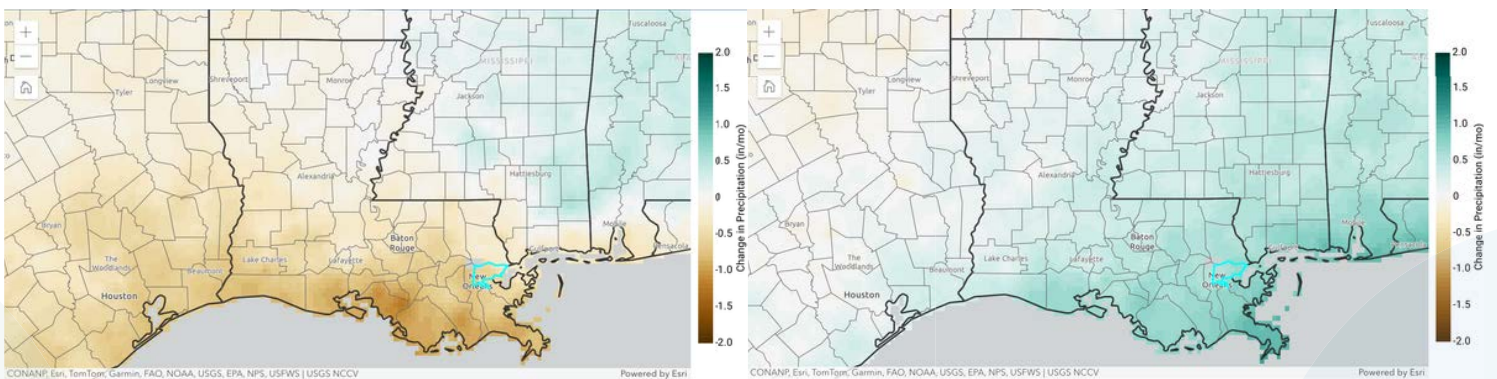
Sea level rise will increase coastal flood risk. Gulf Coast sea levels are projected to rise about 14–18 inches by 2050, with up to 55 inches of sea level rise possible in the New Orleans area by 2100.

Understanding vulnerability is a first step toward reducing climate risk. Because climate conditions, community needs, and available resources can change over time, adaptation is an ongoing process. Assessing vulnerability, implementing actions, monitoring outcomes, and adjusting strategies as new information becomes available can help communities continue to build resilience as the climate changes.

Climate Change Trends & Projections



The number of days in Orleans Parish, Louisiana with a maximum temperature of $>95^{\circ}\text{F}$. The grey band and bars represent modeled historical data and observations. The blue band shows projections for 2006–2100 based on lower emissions scenarios. The darker blue line shows the weighted mean of projections for lower emissions. The red band shows projections for 2006–2100 based on higher emissions scenarios. The darker red line shows the weighted mean of all projections for higher emissions. *U.S. Federal Government. Climate Resilience Toolkit Climate Explorer [Internet]. 2025. Available from: <https://crt-climate-explorer.nemac.org>*



Projected change in summer precipitation (left) and fall precipitation (right) for Orleans Parish, Louisiana, and the surrounding region for 2075–2099 relative to 1981–2010 under the SSP5-8.5 emission scenario. Values show the multi-model mean change in precipitation (inches per month). *The U.S. Geological Survey identifies the National Climate Change Viewer (NCCV) and associated USGS-produced visual materials as public domain. NCCV figures reproduced in this report are therefore used with attribution to USGS. Data sources: CONANP, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS, USGS NCCV.*

Vulnerable Populations & Demographics

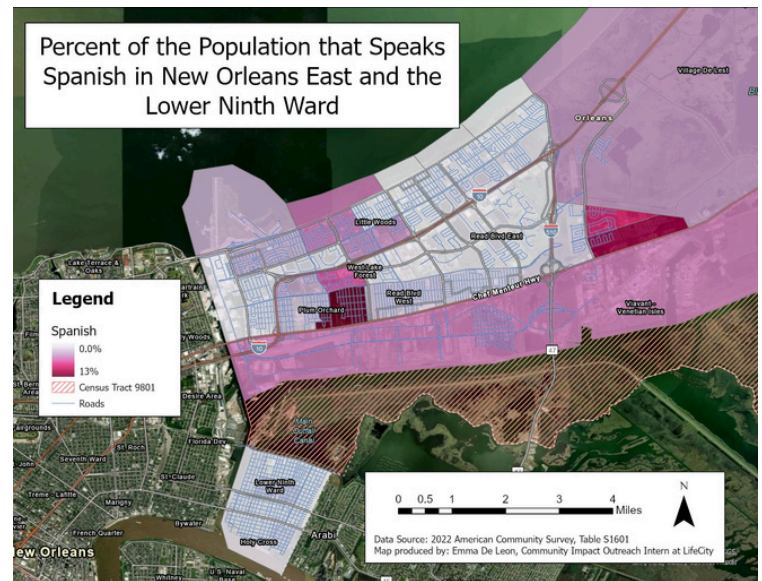
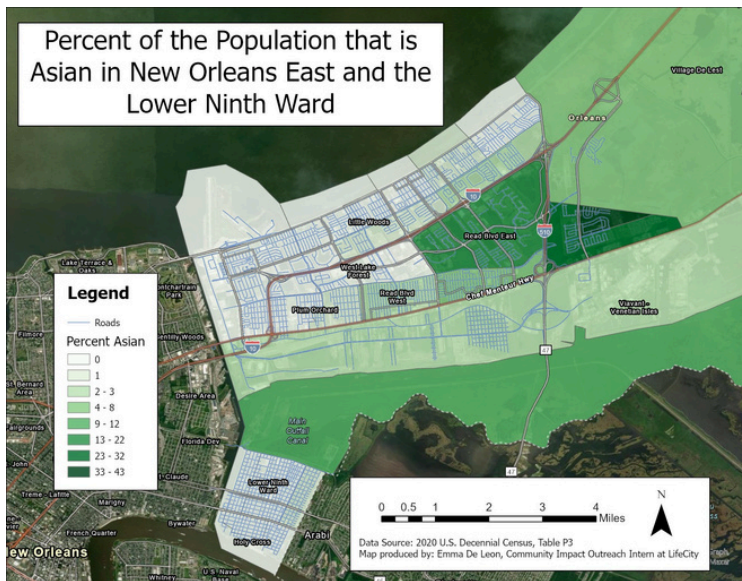
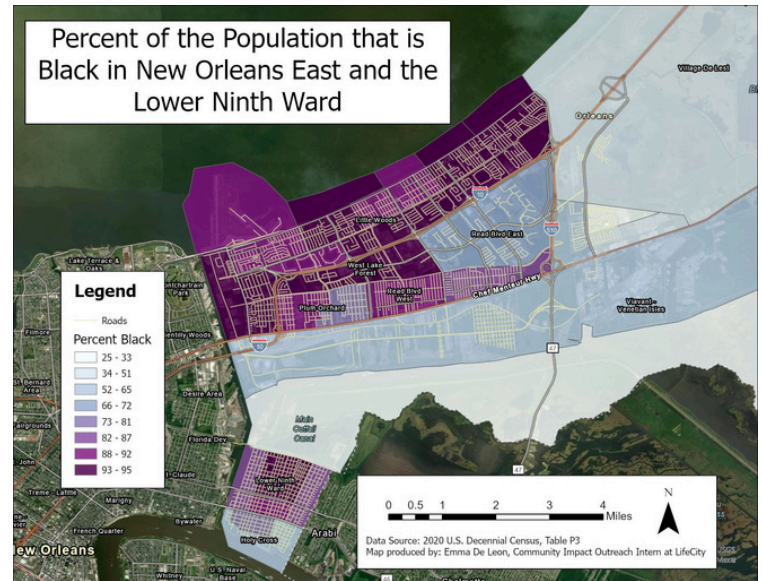
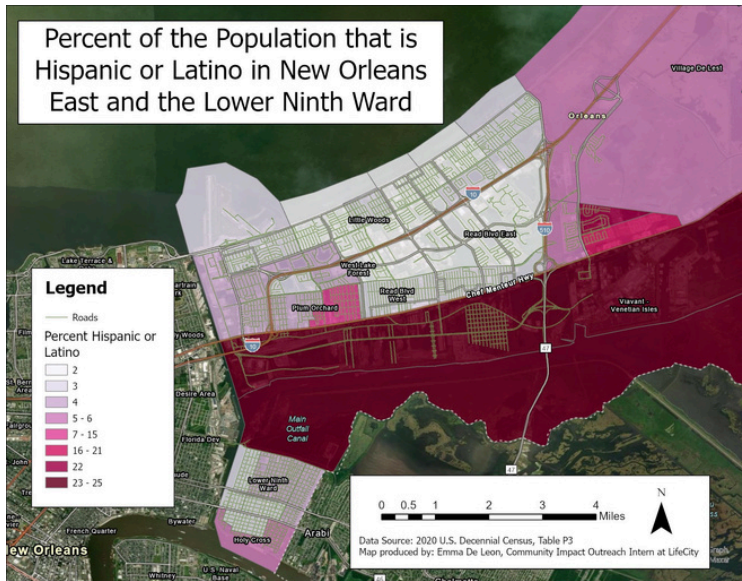
This section outlines the demographics of New Orleans East and identifies populations that may be more vulnerable to climate-related impacts. Although all residents may be affected, vulnerability is not evenly distributed. Existing inequities and disparities in access to resources can heighten exposure to climate hazards, increase sensitivity to their effects, or limit the ability to prepare, respond, and recover.

- **Vulnerability is not evenly distributed across New Orleans East.** Income, age, disability, transportation, language access, occupation, and access to essential services can affect residents' ability to prepare for, respond to, and recover from climate impacts.
- **Income restrictions may limit resources available for adaptation and recovery.** New Orleans East has a lower median household income than the rest of the city.
- **Age and disability can increase sensitivity to climate hazards.** Citywide, 5.4% of residents are under age 5, 17.2% are age 65 or older, and approximately 14.2% have a disability.
- **Language access is an important consideration for preparedness and outreach.** The majority of residents in New Orleans East speak English; however, a portion of residents speak Spanish and Vietnamese.
- **Transportation, occupation, and access to services can create additional vulnerability.** Some residents work in occupations with greater exposure to heat, storms, flooding, and infrastructure disruptions, while limited vehicle or transit access can make evacuation and access to essential services more difficult.

Frontline Community

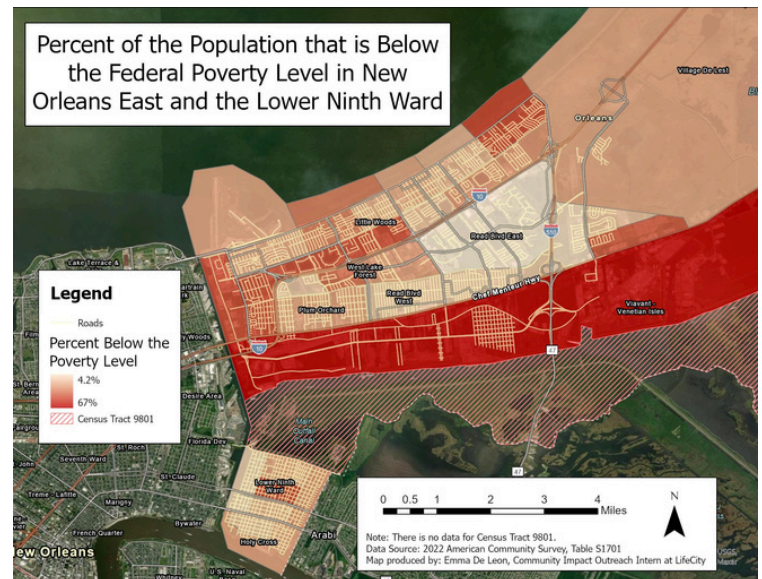
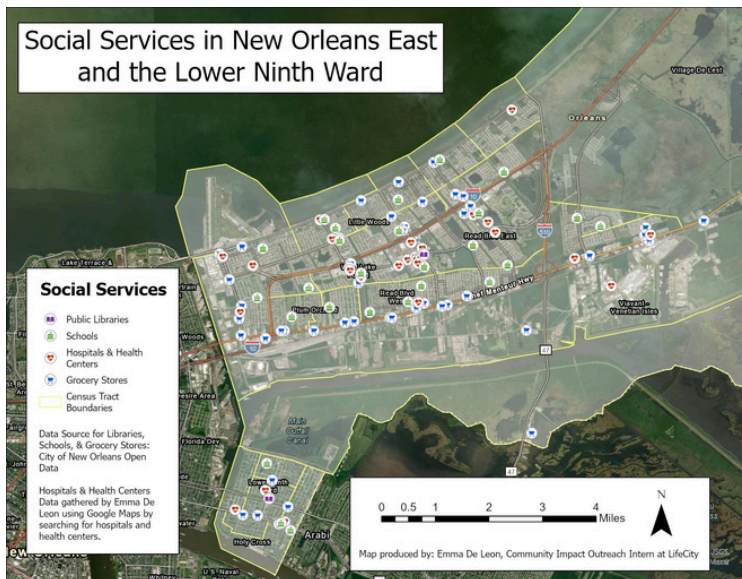
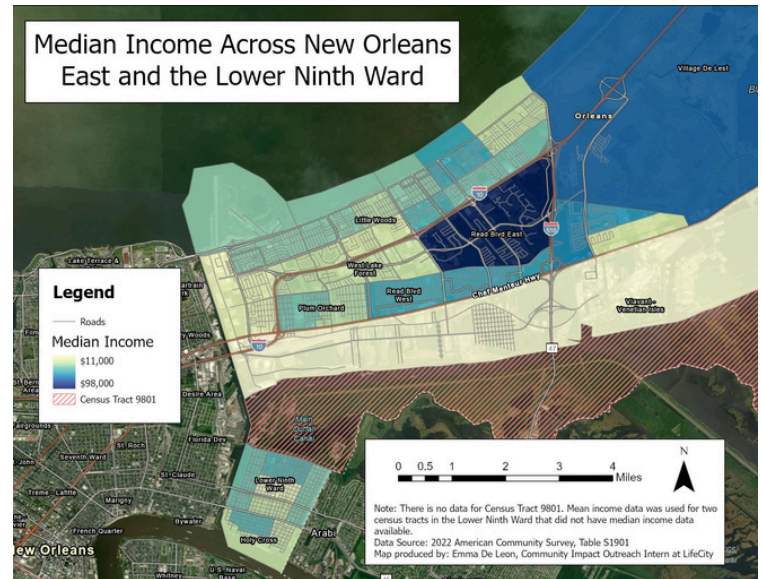
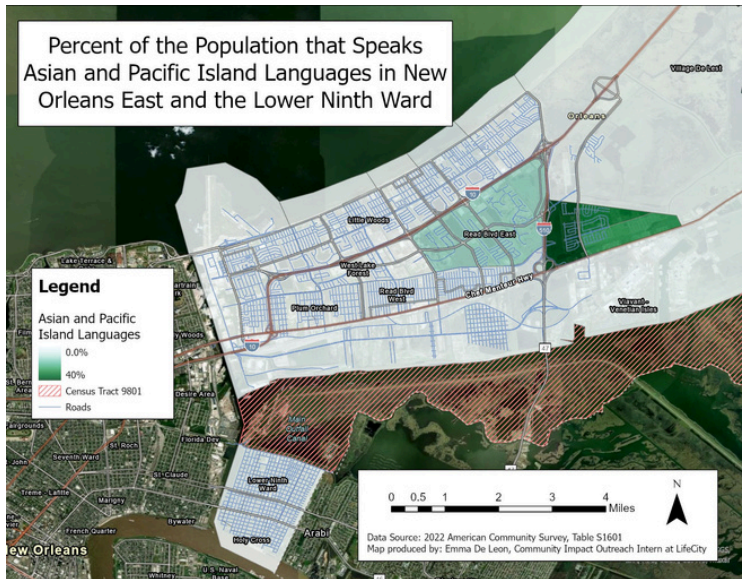
Groups of people who are directly affected by climate change and societal inequity at disproportionately higher rates than other groups with greater access to power and resources

Vulnerable Populations & Demographics



Map images were produced by Emma De Leon, and the images were taken from the Thriving Communities Louisiana website (thrivingcommunitiesla.org), a Project of LifeCity (mylifecity.com)

Vulnerable Populations & Demographics



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Climate Vulnerability & Community Priorities

Community input was collected through an in-person workshop and related survey, as well as a follow-up feedback form shared at a second community engagement event. Together, these activities help identify the climate stressors and impacts residents are most concerned about, priorities for adaptation actions, existing community resources and strengths, and areas where additional support may be needed.

Community-Wide Findings

Extreme heat, flooding, and severe storms are among the climate concerns residents most often identified. Community members linked these hazards to higher household costs, health and safety risks, damage to homes and businesses, transportation problems, and disruptions to essential services such as power, water, healthcare, and food access.

New Orleans East has important strengths to build on. Residents identified neighborhood networks, churches, community organizations, public services, assistance programs, and local environmental groups as resources that can support preparedness and recovery.

Residents strongly support solutions that can address more than one climate challenge. Increasing tree cover and shade was a leading priority, along with rain gardens, bioswales, drainage improvements, and other projects that can help reduce both heat and flooding.



Climate Vulnerability & Community Priorities

Climate impacts are shaped by existing conditions within the community. Considering how climate stressors interact with other existing stressors helps identify where impacts may be more severe and where additional support may be needed.

The information included in this section was developed by first using feedback and perspectives shared by community members during project engagement activities, then adding to that information with additional research. The impacts presented focus on the concerns most often identified by New Orleans East residents who participated in the project and are not intended to represent all possible impacts.

Findings by Sector



Buildings & Energy: Hotter temperatures are expected to increase cooling needs and energy costs, while storms and flooding can damage buildings and cause power outages.



Water & Wastewater: Heavy rainfall can overwhelm drainage and sewer systems, contributing to street flooding, backups, and water-quality concerns. New Orleans East has an extensive network of pumps and canals, but drainage capacity can still be exceeded during intense rainfall.



Transportation & Mobility: Heat, flooding, and severe storms can damage roads and bridges, making walking, biking, public transit, and evacuation more difficult.



Greenspace & Tree Canopy: New Orleans East has less tree canopy than other parts of the city. Heat, storms, erosion, and sea level rise can further damage trees, wetlands, and other natural areas.

Climate Vulnerability & Community Priorities

Findings by Sector



Public Health & Safety: Extreme heat can worsen existing health conditions, while flooding and storms can interfere with access to healthcare, medications, and emergency services.



Housing: Heat, flooding, and storms can damage homes, increase cooling and repair costs, and make it harder for residents to maintain safe and stable housing. These impacts can be especially difficult for households with limited financial resources.



Economy: Climate impacts can raise business operating costs, reduce worker productivity, interrupt transportation and customer access, damage property, and cause lost income.



Community, Culture, & Historical Resources: Climate impacts can disrupt community gatherings, damage culturally significant places, and contribute to displacement, weakening neighborhood relationships.



Local Food & Agriculture: Extreme heat can reduce the productivity of community and household gardens, while flooding and severe weather can interrupt food deliveries and make grocery stores and food assistance harder to access.

Community Workshop & Survey

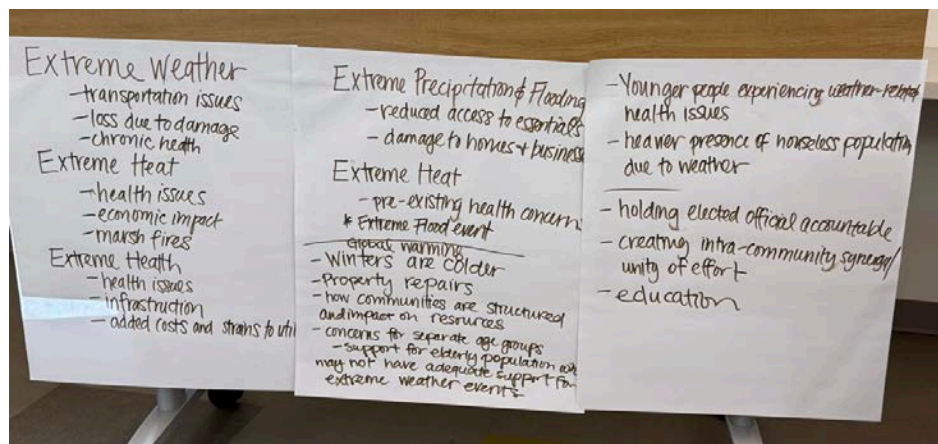
The community workshop and survey findings show that New Orleans East residents are already facing climate-related challenges that affect their homes, health, finances, mobility, and access to essential services. The workshop and survey results identified priority locations for adaptation interventions based on the climate stressors residents experience as well as identified resources that can support community resilience.

Key Findings Overall

The results are grounded in long-term local experience. Two-thirds of survey respondents had lived or worked in New Orleans East for more than 10 years, and workshop participants came from across the community.

New Orleans East must prepare for both climate stressors that will affect everyday life and major disasters. The workshop's focus on heat and the survey's focus on extreme weather show that residents are concerned about recurring extreme conditions as well as hurricanes and severe storms.

Climate change can create increased financial pressures. Participants raised concerns about energy bills, insurance costs, home and vehicle repairs, and the possibility of displacement when residents cannot afford to recover from impacts.



Community Workshop & Survey

Key Findings Overall

Some locations face several overlapping concerns. Crowder Boulevard, Plum Orchard, Chef Menteur Highway, Read Boulevard, Morrison Road, and Hayne Boulevard were identified as hotspots for flooding, extreme heat, and tree plantings. These areas may offer opportunities for projects that address multiple concerns.

Climate risks and impacts are not experienced equally. Older adults, children, lower-income residents, those with health conditions, individuals living alone, and residents without reliable transportation or air conditioning could be disproportionately impacted and need additional support.

Participants identified priority local actions. Suggested actions included maintaining drains and catch basins, adding trees and shade, creating rain gardens and other stormwater projects, expanding cooling options, improving emergency communication, and helping residents prepare their homes and businesses.

New Orleans East has resources to support capacity to mitigate climate impacts. Neighborhood associations, environmental groups, public agencies, and assistance programs were identified as resources that could provide a foundation for action. However, additional funding, coordination, and infrastructure investments are needed.



These findings reflect the perspectives of the people who participated in the workshop and survey. They provide valuable community input but are not intended to represent every New Orleans East resident or every location experiencing climate impacts.

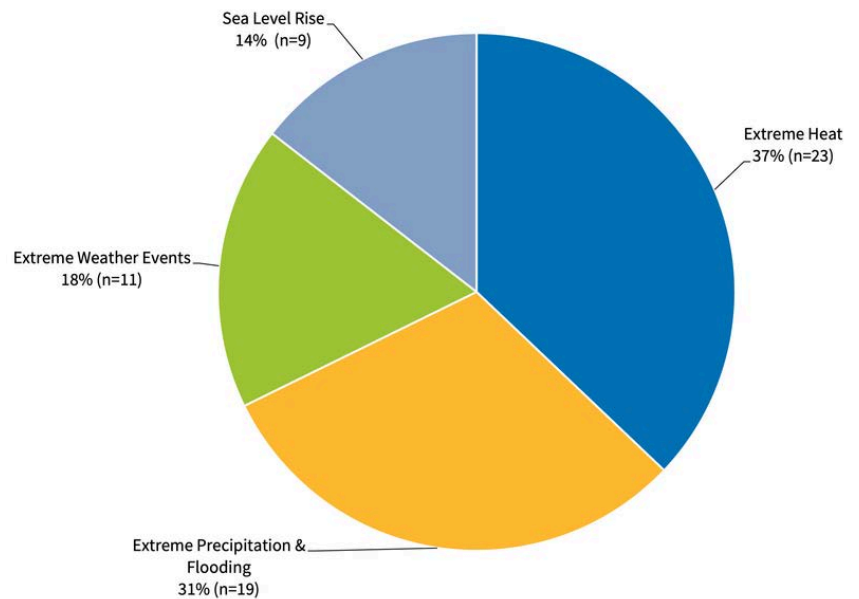
Community Workshop & Survey

Workshop-Specific Findings

Extreme heat emerged as the leading climate concern, accounting for 37% of all stressor selections, followed closely by extreme precipitation and flooding at 31%.

Rising energy costs and strain on utilities were the most frequently identified impacts of extreme heat. Participants also emphasized heat-related illness, inadequate access to cooling, and unsafe conditions in areas with extensive pavement and limited shade.

Flooding is associated with impacts on property, infrastructure, and mobility. Participants described damage to homes, businesses, vehicles, roads, drainage systems, and utilities, as well as reduced access to employment, essential services, evacuation routes, and emergency assistance.



The distribution of top climate change stressors selected by workshop participants for extreme heat, extreme precipitation and flooding, extreme weather events, and sea level rise. A total of 62 selections were made as some participants selected more than one top concern



Community Workshop & Survey

Workshop-Specific Findings

Participants emphasized a combination of physical improvements and community capacity building actions to address climate impacts in New Orleans East.

Frequently proposed actions included expanding tree canopy and green infrastructure, maintaining drainage systems, improving access to cooling and backup power, strengthening neighborhood communication, pursuing grants, and increasing government accountability.

Participants identified 134 priority locations for future tree planting, including:

Chef Menteur Highway

Wilson Avenue

I-10 Service Road

Crowder Boulevard

Hayne Boulevard

Downman Road

The mapping activity identified distinct heat and flooding hotspots, including:

Extreme Heat

Chef Menteur Highway

Plum Orchard

Read Boulevard West

Flooding

Plum Orchard

Crowder Boulevard

Lake Forest Boulevard

East of Read Boulevard

Community Workshop & Survey

Survey-Specific Findings

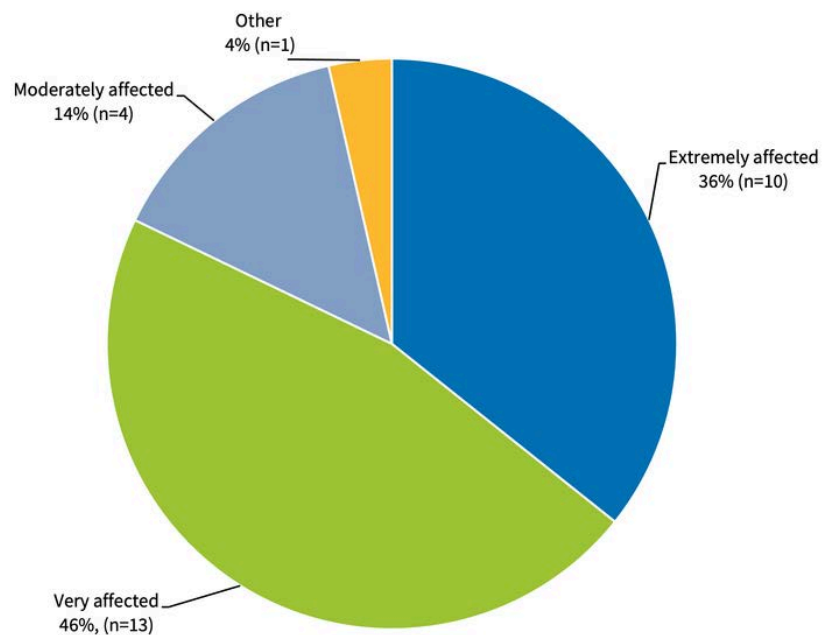
Extreme weather events were the leading climate concern (61%, n=14 of 23), differing from the workshop, where extreme heat ranked highest.

Climate impacts were viewed as substantial and recurring:

82% rated New Orleans East as very or extremely affected, and 78% reported experiencing their priority stressor at least several times annually.

Essential services were considered particularly vulnerable,

especially power and water supplies, transportation and communication, medical and emergency services, and food access.



Distribution of respondents' ratings of how strongly their priority climate stressor currently affects New Orleans East, aggregated across all stressors (n=28).

Flood-prone locations included Crowder Boulevard, the I-10 Service Road, Morrison Road, and Kenilworth.

Heat-affected areas included Chef Menteur Highway, Seabrook, and Plum Orchard.

Community Workshop & Survey

What is one thing you appreciate or love most about living in New Orleans East?

"The community and culture"

"The vast amount of land and the possibilities of what could be. Also, within neighborhoods, most people have resided here for decades."

"My neighborhood! It is so friendly and clean."

"The people who love and fight to create a healthier, cleaner environment."

"The natural ecosystem, the beautiful community and the family atmosphere"

"Great homes with landscaping and spacious parks and walking trails"

"The library, great parks and playgrounds, Bayou Sauvage, Audubon Nature Center, our churches and schools. And some of the lovely neighborhoods and community space."

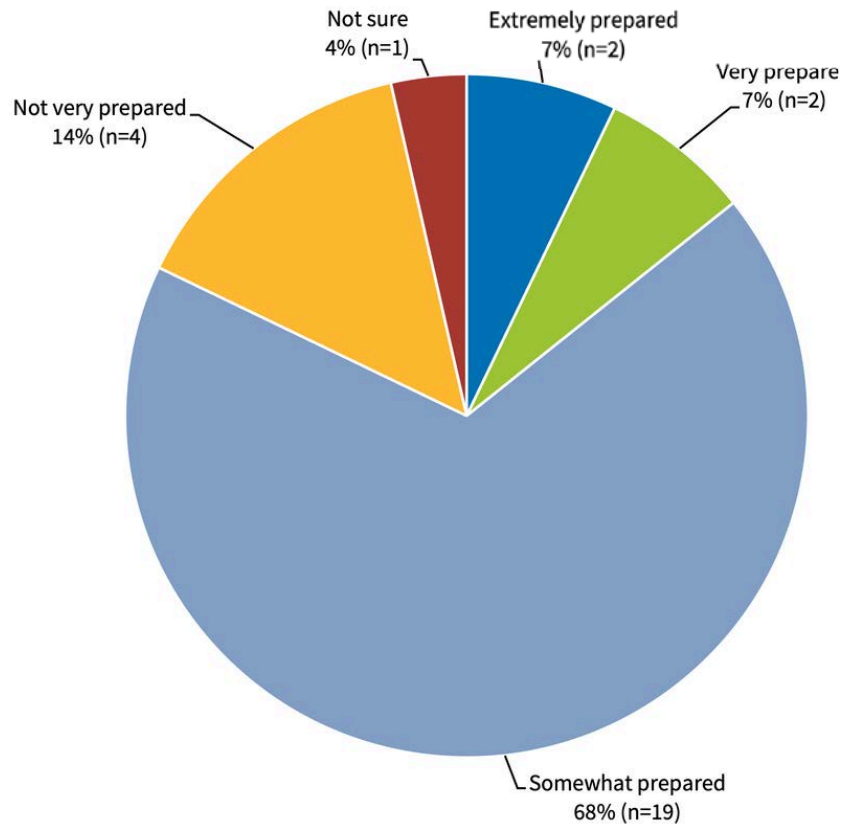


Community Workshop & Survey

Most respondents considered New Orleans East somewhat prepared to respond to climate change impacts (68%), while funding for locally led adaptation projects and infrastructure improvements were the most frequently identified additional needs.

Overwhelmed stormwater systems and higher energy costs and cooling demand were the most frequently selected impacts, consistent with workshop concerns about drainage, utilities, and energy costs.

Existing resilience assets included community and environmental organizations, neighborhood networks, churches, public services, and assistance programs.



Distribution of respondents' perceptions of how well New Orleans East is prepared for their priority climate stressor, aggregated across all stressors (n=28).



Community Workshop & Survey

Forty-one percent of respondents indicated that New Orleans East has somewhat fewer trees, shade, and green spaces than needed.

Planting priorities included Read Boulevard, Morrison Road, Chef Menteur Highway, Crowder Boulevard, Bullard Avenue, Downman Road, Hayne Boulevard, the I-10 Service Road, the Paris Road median, Joe W. Brown and other NORD parks, North Kenilworth, and Plum Orchard.



What is your hope for the future of your community as it adapts to climate change?

"My hope is that those who are most vulnerable will get the help and accommodation needed."

"That any updates made are soon enough to slow down the rapid change."

"My hope for the future of this community is for there to be a sufficient reduction of excessive heat and flooding through the implementation of several stormwater management projects throughout the area"

"That there be more funding, infrastructure improvements, services, government support, community programs, or information."

"My hope is that the local, federal, and state officials do their job...and allocate funds fairly by distributing funds and resources to the East as well as other popular areas in Orleans Parish"

New Orleans East Spring 2026 Tree Planting Event

In spring 2026, the New Orleans East Green Infrastructure Collective, Water Wise Gulf South, the New Orleans Recreation Department Commission, and the City of New Orleans Department of Parks and Parkways collaborated on a tree planting initiative.

The trees were planted at three New Orleans Recreation Development Commission sites, Peace Park, Pradat Park, and Werner Park, all located in the Plum Orchard neighborhood of New Orleans East. The locations were identified by the New Orleans East Green Infrastructure Collective using community input gathered through pre-planting canvassing. The chosen locations closely mirror those identified by workshop participants as priority locations for green infrastructure interventions. New Orleans East residents also helped select the tree species planted.

Location	Trees Planted	Species Selected
Peace Park	10 trees	5 sweet bay magnolia 5 American holly
Pradat Park	5 trees	3 sweet bay magnolia 2 American holly
Werner Park	29 trees	17 sweet bay magnolia 7 American holly 5 red oak



New Orleans East Spring 2026 Tree Planting Event

In July 2026, the New Orleans East Green Infrastructure Collective hosted a tree planting celebration event at Werner Park. The event introduced residents of New Orleans East, including participants from the November 2025 workshop, to the locations where trees were planted through this project and discussed the project's purpose and goals. A total of 40 people attended the celebration.

Event participants were invited to complete a feedback form covering the November 2025 workshop, climate change concerns in New Orleans East, the spring 2026 tree plantings, and priorities for future green infrastructure projects and community events. A total of 26 feedback forms were completed.

- **Extreme heat remains a clear priority.** Nearly all respondents to the feedback form selected it as a concern, consistent with the workshop results.
- **Funding and infrastructure are consistent needs.** These ranked highest in both the tree celebration event feedback form and community survey.
- **Residents strongly support more trees and shade,** and many of the same planting locations were identified across the community workshop, survey, and tree celebration event feedback form.
- **Green infrastructure should address both heat and flooding.** Respondents identified tree plantings, rain gardens, drainage improvements, and other flood-reduction projects as green infrastructure projects they would like to see in New Orleans East.
- **Respondents want continued community outreach and engagement.** Feedback emphasized hands-on events, recurring workshops, and follow-through on community-identified priorities.

