



**New Orleans, Louisiana
2023 Hazard Mitigation Annual Report**



Purpose of the Hazard Mitigation Plan and Annual Report

Hazard mitigation planning provides a structure for understanding the risks and vulnerabilities of the city, and identifying actions that can reduce future loss of life and property. The City of New Orleans developed an update to its local multi-hazard mitigation plan in 2020, with formal adoption of the document on September 2021. The 2020 Hazard Mitigation Plan was developed jointly with partners including the Sewerage and Water Board of New Orleans, New Orleans Redevelopment Authority, Housing Authority of New Orleans and Tulane University.

The Disaster Mitigation Act of 2000 includes a requirement that state and local governments have an approved hazard mitigation plan that is updated every five years in order to apply for and receive federal grant funds through any of the hazard mitigation assistance programs. FEMA also requires the community to maintain the plan in between 5-year updates. As part of the ongoing review and documentation process, the Hazard Mitigation (HM) Office prepares annual reports to summarize significant actions and events that affect both current mitigation project execution and future planning efforts.

This annual report serves as the mechanism for plan maintenance, and includes information about major hazard events, changes in capabilities, and mitigation project status updates that occurred during the year.

2023 Summary

The hazard mitigation office works across a number of program areas to develop and implement risk reduction projects and policies. Here we highlight some major accomplishment and new developments of 2023.

- **Grid Resilience planning and project development**
 - Communities LEAP: Hazard Mitigation Office is co-leading this planning effort with Office of Resilience and Sustainability and Office of Economic Development. The project team continued holding biweekly meetings through 2023. In September city staff and NREL engineers conducted site visits at Ag Street Landfill and Carrollton Hollygrove, and are currently working on developing REOPT models for these sites and drafting final reporting on this project. This effort will produce a final report in 2024.
 - The city received award on a BRIC FY 2021 grant for Lower 9th Ward/Sanchez MSC energy resilience project – technical design work began with a site visit in September 2023 and is ongoing.
 - The city participated in the state's successful proposal to DoE's Grid Resilience Innovation Partnership grant program, which will establish the statewide Hubs for Energy Resilient Operations (HERO) program. The HERO program will support grid resilience planning and renewable energy-powered resilience hubs in communities across the state. Hazard Mitigation developed a list of potential city- and community-run resilience hubs for inclusion in the pilot implementation phase of this program.



Orleans Parish, Louisiana – 2023 Hazard Mitigation Annual Report

- **Coastal Restoration and Resilience**
 - The city received grant awards through NCRF and NOAA Underserved Communities programs for planning and design of the Bayou Bienvenue Central Wetlands Unit restoration. Expected to start project meetings and outreach in early 2024.
 - ORS and Hazard Mitigation developed a proposal for the NO East Living Shorelines project and submitted to NOAA Transformational Habitat program.

- **Flood Mitigation**
 - FY21 Flood Mitigation Assistance grant awarded for planning and design of green infrastructure in the Upper Ninth Ward Bunny Friend Neighborhood. This project is being developed collaboratively with the neighborhood association. This design project will be managed by the Capital Projects Administration Sustainable Infrastructure branch. Hazard Mitigation Office will continue to be involved in project scoping and stakeholder coordination as this project develops.
 - The city joined the Smart Surfaces Coalition, which is providing technical assistance to the Office of Resilience and Sustainability to help accelerate deployment of smart surfaces that can help manage stormwater and reduce the urban heat island effect.
 - NOHSEP and ORS collaborated on the city's application to join the C40 Water Safe Cities Accelerator program. This program seeks to outline pathways to flood resilience and water security and track community's progress towards their resilience goals.

- **Mitigation Planning**
 - State of Louisiana is developing an update to the State HMP. HM Office participated in stakeholder meetings and provided comments on draft content prepared by GOHSEP.
 - Zeta and Ida recovery and mitigation planning – Hazard Mitigation Office developed proposals for HMGP projects and is co-leading CDBG-DR recovery planning with Office of Community Development.
 - In light of the record-breaking heat, City Council allocated funding to ORS to develop a Heat Adaptation Plan. Hazard Mitigation, NOHD and ORS and co-leading this planning effort and will release an RFP in early 2024.



Hazard Mitigation Planning Organization

New Orleans Office of Homeland Security and Emergency Preparedness (NOHSEP) is the lead agency charged with developing and implementing the City's Hazard Mitigation Plan. NOHSEP works across City agencies to plan and implement mitigation projects, including:

- Office of Resilience and Sustainability
- Department of Safety and Permits
- Capital Projects Administration
- Department of Public Works
- New Orleans Health Department
- Information Technology and Innovation
- Property Management
- Parks and Parkways
- Mosquito, Termite and Rodent Control Board

NOHSEP also works with numerous other governmental, academic and non-profit partners to support mitigation planning and implementation, including the co-signatories to the 2020 HM Plan:

- Sewerage and Water Board of New Orleans
- New Orleans Redevelopment Authority
- New Orleans Housing Authority
- Tulane University

These city agencies and signatory partners form the core of the city's Hazard Mitigation Planning Committee. The committee is made up of public officials and representatives of non-governmental and community-based organizations and meets quarterly to coordinate implementation and maintenance of the city's risk reduction strategies.



Meetings and Engagement Efforts

The HM Planning Committee held quarterly meetings in Q1, Q2, and Q4 of this year. The Q3 meeting had to be postponed to Q4 due to a scheduling conflict. Committee meetings were used to provide updates on ongoing mitigation planning and project development.

In 2023 the GNO, Inc. hosted the Greater New Orleans Urban Water Plan workshop series to refresh the GNO Urban Water Plan 10 years into implementation efforts. The workshop series resulted in a report and set of recommendations for future action. Multiple city agencies participated in the workshop series and will continue to incorporate the Urban Water Plan's recommendations into city plans and projects.

The Water Institute for the Gulf established the Gulf Center for Equitable Climate Resilience in 2023 and hosted a kickoff workshop with stakeholders from across the Gulf Coast. The Hazard Mitigation Office attended the kickoff workshop and will continue to engage with this group in 2024.

The Hazard Mitigation Director presented on the city's Resilience Hubs, Disaster Recovery Framework, and post-Ida mitigation efforts at the Association of State Floodplain Managers annual meeting, the 2023 State of the Coast conference, the National Hurricane Conference, and the 5th Research In Sustainable Development of Cuba convening in Havana, Cuba in May 2023. In November, the Hazard Mitigation office presented at a Loyola University Environment Program lunch and learn series on saltwater intrusion and drinking water resilience.



2023 Hazard Identification

The following table includes extreme weather events recorded in NOAA's National Climate Data Center (NCDC) database. In 2023 New Orleans received no major disaster declarations. Two heavy rain events occurred in early winter and are not captured in this data.

DATE	EVENT TYPE
4/15/2023	Thunderstorm Wind
4/16/2023	Hail
5/6/2023	Thunderstorm Wind
5/9/2023	Flash Flood
6/4/2023	Thunderstorm Wind
6/19/2023	Thunderstorm Wind
7/16/2023	Excessive Heat
7/22/2023	Thunderstorm Wind
7/22/2023	Flash Flood
7/31/2023	Excessive Heat
8/1/2023	Excessive Heat
8/2/2023	Excessive Heat
8/4/2023	Excessive Heat
8/5/2023	Excessive Heat
8/6/2023	Excessive Heat
8/7/2023	Excessive Heat
8/8/2023	Excessive Heat
8/9/2023	Excessive Heat
8/10/2023	Excessive Heat
8/11/2023	Excessive Heat
8/12/2023	Excessive Heat
8/13/2023	Excessive Heat
8/14/2023	Excessive Heat
8/15/2023	Excessive Heat
8/16/2023	Drought
8/19/2023	Excessive Heat
8/23/2023	Excessive Heat
8/24/2023	Excessive Heat
8/26/2023	Excessive Heat
8/27/2023	Excessive Heat
9/1/2023	Drought
9/4/2023	Flash Flood



Extreme Heat

Extreme heat is a well-known natural hazard in New Orleans, but the summer of 2023 broke records for the severity and duration of extreme heat across the region. The long period of extreme heat led to novel responses from city agencies, and renewed focus on developing mitigation strategies.

Towards the end of July, an expansive and slow-moving ridge sat over the southern portion of the Continental United States. This ridge caused extreme record-breaking temperatures across much of the south, including southeast Louisiana and southern Mississippi. The record-breaking temperatures paired with high humidity values caused the heat to be excessive for multiple days at the end of July across southeast Louisiana and southern Mississippi.

Locally, the summer heat set multiple records. The New Orleans International Airport recorded its all-time record high temperature of 105F on August 27th. The station at MSY also recorded the greatest total number of days >100F in August at 15 (the previous record was 2 days in August 2011).

NOHD identified 122 Heat-related hospitalizations in the period of July 31-August 23, 2023. LDH recorded 69 heat-related deaths statewide, of which 27% were in the southeast region/metro New Orleans. For both heat-related illnesses and deaths, roughly 80% of those impacted were male. Middle-aged men are most likely to experience an HRI, while those 65 and older are most likely to die as a result of extreme heat.

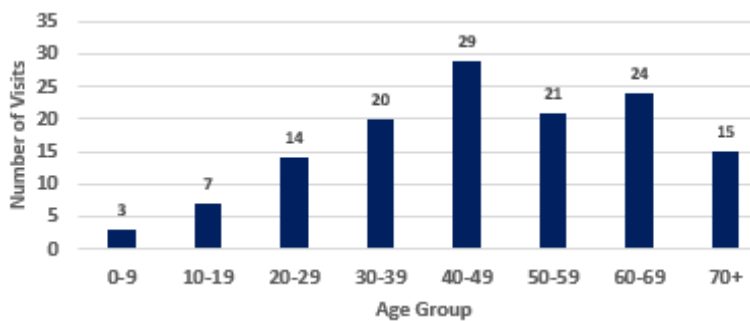


Figure 1: Orleans Parish Heat-Related Illnesses, July 31-August 23, 2023

The extended heat wave led to a first-ever extreme heat emergency declaration by the Mayor. Throughout July and August, City agencies coordinated response and relief operations focused on vulnerable populations. Of note, NOLA Ready led a regional Joint Information Center and developed an effective public information campaign. Throughout the summer, NOHD monitored compliance among nursing homes and independent living facilities, implementing policies enacted in recent years to protect vulnerable residents during extreme weather and other disasters.



Drought

The city, along with the majority of the state, was in extreme drought conditions this year (Figure 2). The primary local impact of drought is damage to infrastructure, including roadways and water systems, due to soil compaction and shallow subsidence. Drought also creates maintenance challenges for urban forestry and green stormwater infrastructure projects, as newly established plants require extra maintenance to survive.

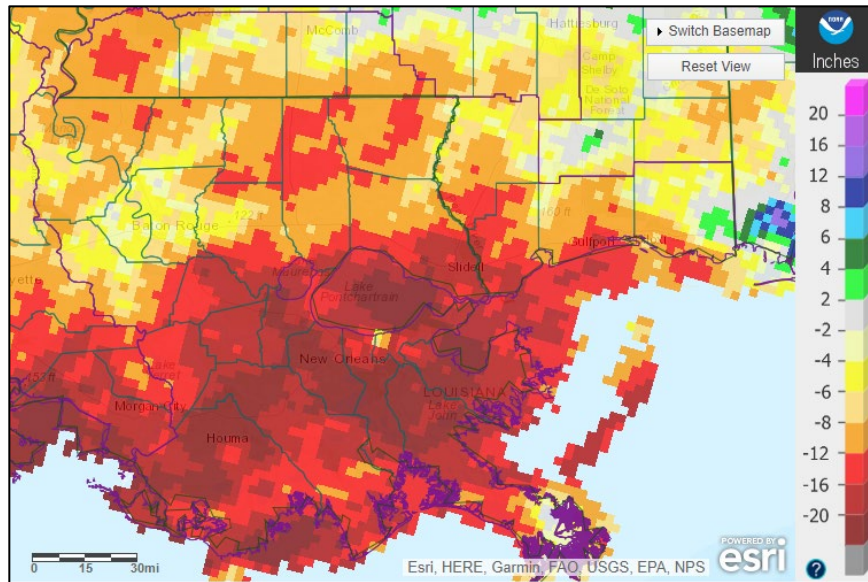


Figure 2: Rainfall departure from normal conditions

The extreme dry conditions led to a marsh fire in an undeveloped area of private property adjacent to the Bayou Sauvage NWR. The fire impaired air quality for residents in New Orleans East, and heavy smoke may be responsible for at least one traffic accident. Fire fighters were challenged to access the remote wetland area and the event highlighted the need for capacity building to fire wetland wildfires.



Saltwater Intrusion

Saltwater intrusion, and the threat it can present to the city’s Mississippi River drinking water intakes, is another natural hazard that occurred in 2023 and is not explicitly addressed in current HMP.

An extended, severe drought in the center of the country, including the Upper MS River and Ohio River basins, resulted in a prolonged period of low flow conditions in the Lower Mississippi River (Fig. 3 US Drought Monitor). For a period of weeks, the combined river discharge and rainfall forecasts indicated that low-flow conditions might persist through the fall or even into the winter. If this had happened, it could have allowed the salt wedge to gradually creep upriver, ultimately reaching the point where some or all the metropolitan area public water intakes could be affected.

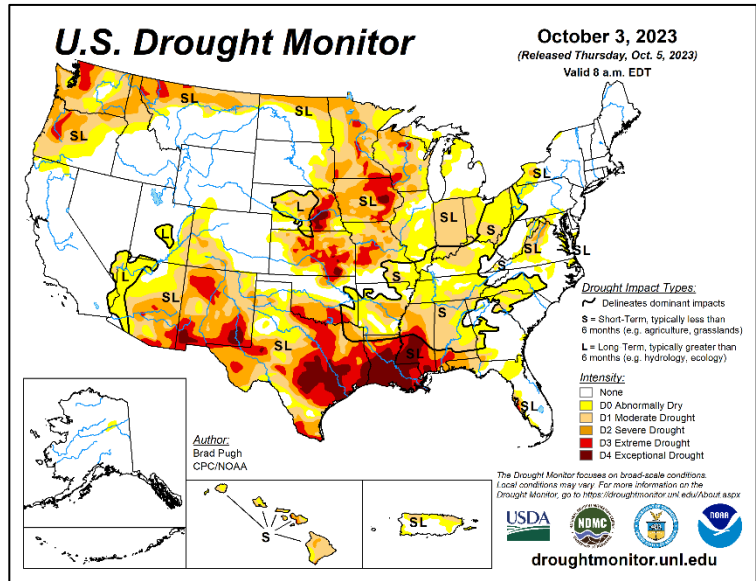


Fig. 3 US Drought Monitor

Planning for Long term solutions to drinking water resilience is ongoing, led by the local water utilities. More details about potential engineering solutions, organizational strategies, and likely funding sources will likely become available during the next few years.

The hazard mitigation office began developing an overview of salt water intrusion hazard and an assessment of the risks and uncertainties surrounding. This initial work highlighted a gap in scientific research and risk assessment related to climate change, river management, and their combined impacts on the salt wedge. HM Office will look to participate as a stakeholder in recently funded research related to the lowermost Mississippi River, which is going to be led by USACE, CPRA, and local universities. HM Office will also look to coordinate with Tulane and LSU researchers working on a recent grant through NASEM to study the lowermost river.



Changes in Vulnerabilities

Homeowners insurance and flood insurance affordability present ongoing challenges.

Changes in Capabilities

State awarded \$6.9 capitalization grant through the STORM Act to establish the Mitigation Revolving Loan Fund. HM submitted an initial list of potential projects that was included in the state's Intended Use Plan for the fund and will continue to work with the State to make the funding available for local infrastructure projects.

Mitigation Actions

Attachment A provides a summary of the current status of the mitigation actions outlined in the 2020 Hazard Mitigation Plan. Updates include addition of several new action items led by SWBNO, and several items noted as completed since the 2020 plan update was drafted.

The Actions are organized around the six Goals of the Plan:

- 1) Reduce Risk and vulnerability to the Human Environment including cultural resources, homeowners, renters, visitors and transient populations;
- 2) Reduce Risk and Vulnerability to the Built Environment including current and future structures; critical facilities; historical structures; and infrastructure including communications;
- 3) Reduce Risk and Vulnerability to the Natural Environment including wetland restoration and recognition of New Orleans as a coastal city;
- 4) Maximize the involvement of Individuals, Businesses, and Groups in Risk Reduction Measures through education/outreach on Hazard Mitigation appropriate to all groups, particularly vulnerable populations;
- 5) Promote coordination locally, regionally, and nationally including all levels of government, private sector entities, as well as nonprofits and community based organizations;
- 6) Ensure continuity of operations for local government and businesses, including protection of critical functions, records and cultural assets.



Ongoing Plan Maintenance

This Annual Report includes profiles of drought and saltwater intrusion hazards, which were not covered in the 2020 HMP. By documenting these hazard events and beginning the process of developing an assessment of future risk and strategy for mitigation, these hazards and emergent strategies are now included in the city's mitigation plan. The 2025 Hazard Mitigation Plan update will include fully developed risk assessment and mitigation strategies for these hazards, meeting all of the requirements of mitigation planning.

In 2024, NOHSEP will continue to hold quarterly meetings of the HM Advisory Committee to coordinate implementation of the 2020 mitigation strategy. The Hazard Mitigation Office will continue to track changes in vulnerabilities, the status of active projects and additional funding opportunities throughout the year and include updates to hazard profiles, vulnerability assessments, and mitigation strategy in the 2024 Annual Report.

The Mitigation Action table included with this report reflects project status updates, including completion of some action items and inclusion of new action items. These new and/or redefined projects are now considered to be part of the 2020 Hazard Mitigation Plan.



Orleans Parish, Louisiana – 2023 Hazard Mitigation Annual Report

Attachment A: Mitigation Action Status Updates

Action No.	Goal	Action Type	Action Item	Description	Hazards	Status	Lead Agency that will Implement Action	Support Agencies that will Implement Action	Preliminary Costs (Including ongoing maintenance costs) To be refined as more data becomes available	Funding Sources (Specify specific entity that could potentially fund this action)	Emergency Support Function	Time Frame for Implementing Action	2020 Priority Ranking	2023 Updates
2020.1.1	Goal 1: Reduce risk and vulnerability to the human environment, including cultural resources, homeowners, renters, visitors, and transient populations.	Prevention	Advocate for state and national policy supporting a Green New Deal for Housing. Along with local policy creation and implementation.	Incorporate recommendations from the national proposed Green New Deal for Public Housing Act into local public housing policies, such as converting buildings to electric energy, adding solar panels, and securing renewable energy sources.	Extreme Heat, Winter Weather	In Progress	HANO	OCD, FANO, NORA, GNOHA, Gulf South for a New Green Deal	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants, Private Financing	ESF 6	1-5 years	Medium	ORS continuing to lead efforts related to energy resilience. 2023 progress includes deployment of EV charging stations, programming EECBG funding, and ongoing efforts to deploy renewable energy at city resilience hubs
2020.1.2	Goal 1: Reduce risk and vulnerability to the human environment, including cultural resources, homeowners, renters, visitors, and transient populations.	Prevention	Actively plan for shifting risks, population movement, and changing development patterns in response to Climate Change	Create local and regional plans for climate change-related threats, including the intensification of weather events, changing development patterns and methods, and population relocation due to environmental risk.	Flooding, Storm Surge, Extreme Heat, Subsidence, Coastal Erosion, Infectious Disease Outbreak	New	NOHD	NOHSEP, ORS	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 14	1-5 years	Medium	
2020.1.4	Goal 1: Reduce risk and vulnerability to the human environment, including cultural resources, homeowners, renters, visitors, and transient populations.	Prevention	Address equity issues within the floodplain management program: provide support for local match requirement	Buildout and implement an equity strategy for the flood plain management program	Flooding, Storm Surge, Tornadoes, Coastal Erosion, Subsidence, Severe Thunderstorms, Extreme Heat, Winter Weather	In Progress	NOHSEP	Water Collaborative of Greater New Orleans	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	Medium	HM Office continues to develop HMA grant applications that maximize the inclusion of properties in areas with high social vulnerability, consistent with the federal Justice 40 priorities.
2020.1.3	Goal 1: Reduce risk and vulnerability to the human environment including cultural resources, homeowners, renters, visitors, and transient populations.	Prevention	Refocus from coastal habitat to coastal communities.	Expand the scope of coastal habitat restoration, protection, and preservation to include the individuals and communities residing in these places. Incorporate the culture of coastal communities into policies surrounding coastal habitat management.	Flooding, Storm Surge, Tornadoes, Tropical Cyclones, Coastal Erosion, Subsidence, Severe Thunderstorms, Extreme Heat, Winter Weather	In Progress	DPW	NOHSEP, CRCL, National Wildlife Federation, Deep South Center for Environmental Justice, Southeast Louisiana VOICE	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 14	1-3 years	Medium	HM Office and ORS secured funding for planning and design of the Bayou Bienvenue Triangle, and engaged with a regional collaborative of organizations working on restoration of the central wetlands unit. Continue to form partnerships with community-based organizations to plan and implement coastal projects in the city limits.
2020.2.1	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Complete BCEGS assessment	Work to address the Building Code Effectiveness Grading Schedule	Flooding, Tropical Cyclones, Severe Thunderstorms, Tornadoes	Complete	City of New Orleans (Safety and Permits)		City Staff Time	CNO General Fund	ESF 14	1-5 years	High	This action was completed in 2022.
2020.2.2	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Duncan Plaza Drainage Improvement	Address Storm Water Retention Needs with Improvements to the stormwater infrastructure in Duncan Plaza.	Flooding	New	DPW	ORS, SWBNO, Downtown Development Authority, Safety, and Permits, SOUL, GNOF, DDD	City Staff Time, Contractor Labor	CNO General Fund, State and Federal Grants	ESF 3	1-5 years	Medium	DDD is working on concept designs for Duncan Plaza and surrounding area.
2020.2.3	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Audubon Golf Course Drainage Improvement	Address Storm Water Retention Needs with Improvements to the stormwater infrastructure in the Audubon Park Golf Course.	Flooding	In Progress	DPW	ORS, SWBNO, Safety and Permits, Audubon Institute, Water Collaborative of Greater New Orleans, Tulane University	City Staff Time, Contractor Labor	Audubon Institute Funds, CNO General Fund, State and Federal Grants	ESF 3	1-5 years	High	Submitted for HMGP funding
2020.2.4	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Parks Master Plan - Drainage Project Scoping	Scope potential drainage projects for inclusion in the Parks Master Plan for implementation. Make sure that there are not duplicate plans for the same area.	Flooding	In Progress	DPW	ORS, NORDC, SWBNO, French Market Corporation, Parks for All, Water Collaborative of Greater New Orleans, City Park, Flood Protection Authority-East	City Staff Time	CNO General Fund	ESF 3	1-5 years	High	This planning process is ongoing, led by Office of Youth and Families.
2020.2.5	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Higher energy efficiency standards for new developments utilizing an incentive rebate and/or building code requirement	Create a higher set of energy efficiency standards for building performance to reduce energy consumption and greenhouse gas emissions in new construction.	Extreme heat, Winter Weather	Complete	DPW	ORS, Safety and Permits, CPC, SWBNO	City Staff Time	CNO General Fund	ESF 12	1-5 years	Medium	State legislation updating building codes to 2021 IBC (effective in 2023), revised process for future updates that should ensure more frequent reassessment. City Council adopted an ordinance (33,744) requiring all public buildings constructed or rehabilitated to meet USGBC's LEED Gold standards.

2020.2.6	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	N Claiborne Corridor Green Infrastructure	Implement recommended green infrastructure improvements along the North Claiborne corridor that could include tree planting, bioswales, stormwater parks, and pervious pavement on public and private property.	Flooding, Extreme Heat	In Progress	PPW	DPW, ORS, CID, SOUL, Claiborne Avenue Alliance, local Neighborhood Associations, Merchants and Business Association, GNDF	City Staff Time, Contract Labor, Community Partner Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11 and 14	1-5 years	High	Phase 1 construction underway on the Claiborne Cultural Innovation District market, which includes green stormwater infrastructure features.
2020.2.7	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	2043-47 Felicity Green Infrastructure	Implement recommended green infrastructure improvements along 2043-47 Felicity Street.	Flooding, Extreme Heat	New	ORS	DPW, PPW, SOUL	City Staff Time, Contract Labor, Community Partner Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11 and 14	1-5 years	Low	
2020.2.8	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	Lafitte Blue Way	Implement recommended green infrastructure improvements along the Lafitte Greenway.	Flooding, Extreme Heat	New	ORS	DPW, PPW, Friends of the Lafitte Greenway, NORDC, SWBNO, SOUL	City Staff Time, Contract Labor, Community Partner Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11 and 14	1-5 years	Medium	HM Office collaborated with ORS and Friends of Lafitte Greenway to develop a Project Scoping application for the FY 2023 BRIC program.
2020.2.9	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Public Education & Awareness	Provide shade structures, and seating at all RTA stops and evacuation pick-up sites	Work with the RTA to protect riders from the elements at RTA stops and evacuation sites	Extreme Heat	New	Safety and Permits	RTA, City Council, Mayor's Office of Transportation, DPW, RIDE New Orleans, RTA Rider's Advisory Committee	City Staff Time, Partner Agency Time, Contract Labor	CNO General Fund, State and Federal Grants	ESF 1	1-5 years	High	In 2022 RTA undertook major revisions to its service routes. Get update from RTA
2020.2.10	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	Solar for All	Make solar power a realistic and viable option for residential and commercial property owners and city-owned properties in Orleans Parish to increase energy security, reduce energy costs, and reduce dependence on fossil fuels.	Extreme Heat, Winter Weather, Infrastructure Failure	In Progress	ORS	Community Development, Finance New Orleans, NORA, GNOHA	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants, Private Financing	ESF 12	1-5 years	High	C-LEAP planning process is ongoing and nearing completion. Developing CDBG-DR proposal for residential/commercial funding programs to accelerate adoption and lower cost barriers.
2020.2.11	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Property Protection	Integrate design solutions into community stormwater behaviors (e.g., designate parking areas in neutral grounds to avoid damage to trees and underground infrastructure)	Implement citywide urban design standards intended to guide the community's response to stormwater management. Ensure the design guidelines and solutions consider the location of utilities and green infrastructure to prevent accidental and unintended damage to City facilities and improve safety and mobility.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Winter Weather, Active Threats, Infrastructure Failure	New	ORS	DPW, SWBNO	City Staff Time, Contract Labor	Homeland Security, FEMA, Health and Human Services	ESF 2, 4, 6, 8, 10	1-5 years	Medium	NOLA Ready/Parkways joint messaging campaign on caring for neutral grounds.... Continue to implement Complete Streets
2020.2.12	Goal 2: Reduce risk and vulnerability to the built environment, including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	Encourage voluntary installation of residential sprinkler systems. Create an incentive program for the voluntary installation of residential sprinklers in key areas	Consider incentives for residential sprinklers for existing structures, renovated structures, and new construction.	Winter Weather, Infrastructure Failure	Complete	New Orleans Fire Department	CPC			ESF 5		Low	City code currently mandates sprinklers for residential structures over 5 stories for new construction or SI. NOFD is continuing its free smoke alarm installation program.
2020.3.1	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Complete a Methane Capture Feasibility Study at SWBNO WWTP	Explore opportunities to capture and reuse methane as an energy source rather than allowing it to be released as a harmful pollutant.	Tornadoes, Tropical Cyclones, Severe Thunderstorms	New	SWBNO			CNO General Fund, State and Federal Grants	ESF 12	1-5 years	Medium	Not Started

2020.3.2	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Sankofa Wetlands Enhancement		Coastal Erosion	In Progress	Sankofa	Wetland Resources, Comite Resources, SWB, CNO, Earth Economics, Engineers without Borders, Batture Engineering, USDA NRCS, Asakura Robinson, Southern University Agricultural Research and Extension Center, Deep South Center for Environmental Justice, National Park Service Rivers Trails and Conservation Program	City Staff Time, Community Partner Time	Components of the project have been funded by Environmental Justice Small Grant from the US EPA, Coastal Resilience grant from CPRA, Kresge American Cities, Entergy Services Llc Environmental Initiatives Fund, WK Kellogg Foundation, FEMA and DSCEJ	ESF 11	1-5 years	Medium	Sankofa made substantial progress towards completion of the wetland park and nature trail. Progress is ongoing.
2020.3.3	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	NO East Landbridge Restoration: Advocate for NRDA funding	Advocate for NRDA Funding of the NOE Land Bridge Project at State and Federal Levels.	Coastal Erosion, Storm Surge	In Progress	ORS	NOHSEP, DPW, Orleans Land Bridge, Pontchartrain Conservancy, MRGO Coalition, Mississippi Restore Coalition, St. Bernard Parish, Regional Planning Commission, Flood Protection Authority	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11	1-5 years	Medium	Completed preliminary E&D in 2022, and CPRA has continued design with NRDA funding. CPRA is coordinating with USACE around implementation of priority MRGO restoration projects, including shoreline protection for large sections of the
2020.3.4	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Restore the Mississippi River Delta	Advocate for Funding of the continued restoration of the MRGO at State and Federal Levels.	Coastal Erosion, Storm Surge	In Progress	ORS	DPW, NOHSEP, Restore the Delta Gulf Program for National Wildlife Federation, Pontchartrain Conservancy, Food Protection Authority-East	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11	1-5 years	Medium	Now that federal legislation has clarified 100% federal funding for MRGO restoration projects, the state is leading coordination efforts to advocate for implementing priority shoreline protection projects.
2020.3.5	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Bayou Bienvenue/Central Wetlands Restoration	Advocate for Funding of the restoration of Bayou Bienvenue at State and Federal Levels.	Coastal Erosion, Storm Surge	In Progress	ORS	Sankofa Community Development Corporation, Center for Sustainable Engagement, MRGO Must Go, Flood Protection Authority-East, St. Bernard Parish	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11	1-5 years	Medium	HM and ORS have secured planning and design funding and are beginning the planning process in 2024.
2020.3.6	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Scale-up tree planting to the neighborhood level, opt-out approach, contiguous planting grids	Promote tree clustering strategy, which will allow plantings to have a more impactful scale. It is a proven strategy that produces numerous environmental benefits, which has been implemented in numerous major cities, including Atlanta. Explore an opt-out planting strategy where the community pre-selects streets to ensure the former Recovery 1 urban site located adjacent to Bayou Sauvage, a National Wildlife Refuge, is properly and safely maintained over time to prevent recontamination of Bayou Sauvage.	Flooding, Extreme Heat	In Progress	NOHSEP	CPC Parks and Parkways, Sustaining Our Urban Landscape (SOUL), NOLA Tree Project, Water Wise Gulf South, Audubon Delta, Groundwork NOLA, Thrive New Orleans, GNOF	City Staff Time	CNO General Fund	ESF 11 and 14	1-5 years	High	In August 2023 Parks and Parkways advertised availability of \$225,000 funding in small grants for local nonprofits to plant trees on public property. In September the city was awarded \$8 million from the Urban and Community Forestry program of the USDA.
2020.3.7	Goal 3: Reduce risk and vulnerability to the natural environment, including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Former Recovery 1 Landfill maintenance and environmental protection of Bayou Sauvage	Work with the Metropolitan Realtors Association and Louisiana Realtors Association to understand this issue from their point of view. Also, hold meetings for public comment on this issue to fully inform the policy. Develop and	Infrastructure Failure	In Progress	Sanitation	DPW, ORS	City Staff Time, Contract Labor	CNO General Fund, EPA Grants, other State, and Federal Grants	ESF 3 and 11	1-5 years	High	DPW preparing a new scope of work for an engineering firm to advise on the annual testing and reporting and a second bid for maintenance
2020.4.1	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Complete a job study to institutionalize floodplain management training as a requirement for key positions.	Work with the Civil Service Commission to require building officials employed at the city to become Certified Floodplain Managers (CFM) through ASFFM. Work with SHMO to schedule trainings in Orleans Parish. Explore adding CFM as a requirement for resilience officers, others.	Flooding, Tropical Cyclones, Coastal Erosion, Subsidence, Infrastructure Failure	New	Civil Service	Safety and Permits, Water Collaborative of Greater New Orleans	City Staff Time	CNO General Fund, State and Federal Grants	ESF 5	1-5 years	Low	Not Started
2020.4.2	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Realtor education on flood risk and a city/state policy on real estate disclosures about flood risk.	Work with the Metropolitan Realtors Association and Louisiana Realtors Association to understand this issue from their point of view. Also, hold meetings for public comment on this issue to fully inform the policy. Develop and	Flooding, Storm Surge	New	Orleans Parish Civil Clerk of Court	Urban Conservancy, Water Collaborative of Greater New Orleans	City Staff Time	CNO General Fund	ESF 6	1-5 years	Medium	
2020.4.3	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Leverage Resilience work to create workforce development opportunities	Work with the WIB and JOB1 to build out a strategy for workforce development in the field of resiliency. Leverage local resilience and mitigation efforts as Make sure all angles of workforce development are being addressed.	Flooding, Storm Surge, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat,	In Progress	Job1	, Workforce Investment Board, ORS, DPW, GNOF, Schools and Universities, Job1, CCC OCD, Sankofa Community Development Corporation, LA Green Jobs Corps	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 15	1-5 years	High	
2020.4.4	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Expand the residential lot-scale green infrastructure model piloted in the Gentilly Resilience District Community Adaptation Program.	Develop program criteria and identify a funding stream to allow for expansion of the Community Adaptation Program to additional neighborhoods.	Flooding, Extreme Heat	In Progress	NORA	CNO (Community Development and Public Works), NOHSEP, Water Wise Gulf South	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-2 years	High	City and NORA renewed CEA, increased NDR CAP funding, initial bond allocation
2020.4.5	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Update and Maintain the Climate Adaptation decision support tool and encourage the use of the tool	Update and Maintain the Climate Adaptation decision support tool and encourage the use of the tool	Flooding, Storm Surge, Tropical Cyclones, Coastal Erosion, Subsidence	In Progress	ORS	SWBNO, NOHSEP, CPC, Trust for Public Land	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	Medium	Trust for Public Land released updates to the Decision Support Tool that incorporate a recently completed study on GSI economic benefits in New Orleans.
2020.4.6	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Increase water literacy curriculum development, teacher training, the goal of all students receiving 1 hour/year of qualified instruction	Work with Orleans Parish School Board and other charter schools in the Parish to develop a curriculum for water ecology, rain gardens, best management practices for stormwater management, water conservation, and water quality.	Flooding, Storm Surge, Coastal Erosion, Tropical Cyclones, Subsidence	New	New Orleans Public School Board	DPW, ORS, Ripple Effect, Flood Protection Authority-East, Green Light New Orleans, Water Collaborative of Greater New Orleans, Pontchartrain Conservancy, Water Institute	City Staff Time	Philanthropy, School Board	ESF 15	1-5 years	Medium	
2020.4.7	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Louisiana Watershed Initiative - City engagement in Region 6 and Region 8 planning and policy	Continue collaboration with Regional Planning Commission (RPC) and other parishes in Region 6 and Region 8 to implement the planning and policy development for watershed management in the region. Evaluation of flood risks and identification of projects in the region to minimize the flood risk in accordance with Louisiana Water Initiative launched by the State of Louisiana in 2018 based on the following principles: 1) Using scientific tools and data; 2) Enabling transparent, objective decision-making; 3) Maximizing	Flooding	In Progress	CPC	RPC, ORS,	City Staff Time	CNO General Fund	ESF 15	1-5 years	High	Shared city rainfall data with LWI team working on rainfall frequency estimate updates (Atlas 14).

2020.4.8	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Reforestation community outreach plan	Develop a public outreach and education plan to involve residents, businesses, and public officials to promote an equitable and healthy tree canopy. This public outreach program will facilitate the ongoing city's reforestation initiative to restore and expand the urban forest to a 50 percent tree canopy coverage by 2030 as specified in the city master plan—link reforestation to complete streets	Flooding	In Progress	Parks and Parkways	CPC, Sustaining Our Urban Landscape (SOUL), NOLA Tree Project, Water Wise Gulf South, Audubon Delta, Groundwork NOLA, Thrive New Orleans, GNOF	City Staff Time	CNO General Fund	ESF 15	1-5 years	Medium	
2020.4.9	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Provide financial incentives to make mitigation accessible to all	Provide financial incentives at the City, Parish, or State level to make hazard mitigation improvements to private property accessible to all residents. Examples of incentives include offering low loan insurance rates for renovations, insurance discounts, home interest rate reductions, and SBA loan guarantee programs.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Subsidence, Winter Weather, Coastal Erosion, Infectious Disease Outbreak, Active Threats, Infrastructure	In Progress	NOHSEP	OCD, ORS	City Staff Time	State and Federal Grants	ESF 5 and 7	1-5 years	Medium	ORS and NOHSEP working to identify funding streams to support fortified roof programs and other retrofits.
2020.4.10	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Develop a tool with City monitoring data (AFWS) similar to the education/data monitoring tools that federal agencies use	Create an online, interactive tool utilizing City monitoring data around hazard mitigation initiatives for public use and education. This tool can be modeled after federal agency data monitoring tools. Ensure the tool is accessible to all, including K-12 audiences.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Subsidence, Winter Weather, Coastal Erosion, Infectious Disease Outbreak, Active Threats, Infrastructure	In Progress	NOHSEP	DPW, PPW, ITI	City Staff Time, Contract Labor	City capital bond funds, GOMESA, CDBG, CDBG-NDR, Sewerage and Water Board, State capital outlay, FHWA, FEMA-HMGP, US Army/Corps of Engineers, FEMA	ESF 1 and 3	1-5 years	Medium	Researching heat monitoring strategies with ORS and NOHD, with support from external partners. NOHSEP created a Heat Relief dashboard during the summer heat wave.
2020.4.11	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable	Public Education & Awareness	Improve access to green jobs from a young age as a means to greater social equity	Integrate green jobs education and skill-building into K-12 school and after school curriculums. Coordinate with education-focused organizations in the greater New Orleans area to offer additional educational opportunities pertaining to green jobs as a means to high-paying	Flooding, Storm Surge, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Winter Weather,	New	WIB	Job1, ORS, DPW, Louisiana Department of Education, CCC, Thrive NOLA, City Council, New Orleans School Board, Charter schools, Delgado Horticultural Tech, Edible Schoolyards, STEM Nola	City Staff Time, Contract Labor	GOMESA, CPRA, CWPPRA, Sewerage and Water Board	ESF 1 and 3	1-5 years	Medium	
2020.4.12	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable	Public Education & Awareness	Household Hazard Waste drop-off days: involve volunteers, scale-up material recovery, and landfill diversion	Advocate and coordinate household hazardous waste drop-off days with local jurisdictions. Recruit volunteers to assist with expanding City efforts to scale up material recovery and landfill diversion. Improve public education to Orleans Parish residents about household	Hazardous Materials	New	New Orleans Department of Sanitation	Keep New Orleans Beautiful	City Staff Time and Disposal	CNO General Fund, State and Federal Grants	ESF 10 and 8.1	1-5 years	Medium	
2020.4.13	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Green infrastructure maintenance manual	Create a comprehensive green infrastructure maintenance manual for Orleans Parish that details procedures such as who is the party responsible for maintenance, what are the steps and needed equipment and materials to maintain the green infrastructure, plans for biological risk monitoring, how these efforts can be sustainably funded over	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Winter Weather, Coastal Erosion, Subsidence	In Progress	ORS	DPW, NOHSEP, PPW, SWBNO, Water Wise Gulf South	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 3 and 5	1-5 years	High	DPW and Parkways are working together to develop standard maintenance procedures. Project-specific maintenance plans have been developed for recent GI installations and we're in a period of monitoring and learning.
2020.5.1	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life.	Prevention	Create and Maintain Databases to aid in Flood Plain Management	Create an Elevation Certificate database and FFE estimation tool to augment the RLAA findings and aid floodplain management planning. Train building officials to enter data from new ECs in	Flooding	New	City of New Orleans (Safety and Permits, ITI)	GNO Inc.	City Staff Time	CNO General Fund	ESF 5	1-5 years	High	
2020.5.2	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life.	Prevention	Stormwater Fee	Draft a citywide policy to levy and administer a stormwater fee to fund stormwater mitigation projects across the city. Study how this would impact and interact with other fees (e.g. how this	Flooding	In Progress	ORS	NOHSEP, SWBNO, Urban Conservancy, DPW, Safety and Permits, Green Light New Orleans, Water Collaborative of Greater New Orleans, Housing	City Staff Time	CNO General Fund	ESF 5	1-5 years	High	Water Collaborative completed the Water Justice Fund workshop series and released a findings report.
2020.5.3	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Property Protection	Insurance credit for fortified roofs to incentivize builders to use resilient materials and methods	Create a state-level insurance credit to incentivize the installation of roofs adhering to fortified building methods, which are designed to strengthen residential and commercial buildings against high winds and hurricanes. Promote community education	Tropical Cyclones, Severe Thunderstorms, Tornadoes	In Progress	OCD	IGA, Finance New Orleans	City Staff Time	State Revenue	ESF 5	1-5 years	Medium	Fortified insurance incentive was created in 2022 (LIC was the lead on this legislation). Relates to Item 2020.4.1 as well. Continuing to seek funding to provide assistance to local property owners.
2020.5.4	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and	Prevention	"Green" Specifications to promote the use of resilient building materials in City projects	Develop a set of standards aimed at promoting the use of resilient building materials in government-owned, commercial, and residential projects.	Flooding, Extreme Heat, Winter Weather	New	City of New Orleans (PDU-SI)	DPW, Safety and Permits	City Staff Time	CNO General Fund	ESF 5	1-5 years	Low	
2020.5.5	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and	Prevention	Develop "Green" Specifications to promote use of resilient building materials in City projects.	Develop and implement a set of standards aimed at promoting the use of resilient building materials in government-owned, commercial, and residential projects.	Flooding, Extreme Heat, Winter Weather	New	HANO		Staff Time	TBD	ESF 5	1-3 years	Low	
2020.5.6	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and	Prevention	Urban Heat Island Study	Conduct an Urban Heat Island study that addresses extreme heat threats on a neighborhood-by-neighborhood level. Identify areas most in need of	Extreme Heat	In Progress	NOHD	NOHSEP, ORS	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants, Philanthropic	ESF 5	1-5 years	Medium	HM, ORS and NOHD developed an RFP for a Heat Adaptation Plan, which will be released for bid in

	manage risks to human life, the environment, and property.			interventions to prevent extreme heat threats and prioritize project implementation in those places.					Contract Labor	Grants					2024.
2020.5.7	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Advocate for NFIP reforms	Advocate for National Flood Insurance Program (NFIP) reforms, including increasing the cap on Increased Cost of Compliance (ICC) coverage and freeing premiums for properties enrolled in Hazard Mitigation Assistance (HMA)	Flooding	In Progress	NOHSEP	Mayors Office, City Council, Regional Planning Commission, Housing Nola, Urban Conservancy, Flood Protection Authority-East and West	City Staff Time	CNO General Fund	ESF 14	1-5 years	High		Hazard Mitigation Office gave multiple presentations on NFIP reform, and submitted related comments on the draft HMA guidance update.
2020.5.8	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Explore incorporating repetitive damage provision in the City's floodplain ordinance	Including a Repetitive Loss provision would increase access to ICC funds for repetitive loss property owners. This would help fund residential mitigation projects. CPC to investigate adding a repetitive loss mechanism to the CZO that would enable ICC to be triggered for repetitive loss of residential properties. This would help some homeowners meet their non-federal match for mitigation grant projects. IGA to advocate at the federal level with support from Hazard Mitigation Office and ORS to raise the ICC funding cap.	Flooding, Storm Surge, Tropical Cyclones, Tornadoes	New	NOHSEP	Safety and Permits, ORS, Housing Nola, Urban Conservancy, Flood Protection Authority-East and West, Water Collaborative of Greater New Orleans	City Staff Time	CNO General Fund	ESF 5	1-5 years	Medium		Not Started
2020.5.9	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Public Education & Awareness	Develop in-house custom HAZUS model for risk assessment and decision support	Create an in-house HAZUS model, a nationally standardized methodology from FEMA for estimating potential losses from natural disasters, designed to support risk-informed decision-making efforts specific to Orleans Parish.	Flooding, Storm Surge, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Winter Weather	New	NOHSEP		City Staff Time	CNO General Fund, State and Federal Grants	ESF 5	1-5 years	Medium		
2020.5.10	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Complete update to Climate Action Plan Update	Perform an update of the Climate Action Plan and incorporate relevant actions into the HM plan	Flooding, Storm Surge, Coastal Erosion, Tropical Cyclones	Complete	ORS	NOHSEP, Climate Action Equity Advisory Group, C40	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	High		ORS released the Climate Action Plan update in 2022.
2020.5.11	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Financing for State and Local adaptation	Examine the financing mechanism from other states and municipalities for funding adaptation beyond FEMA recovery dollars. Advocate for federal authorization and ACE implementation for levees that can protect up to the 500-year level.	Flooding, Storm Surge, Coastal Erosion, Tropical Cyclones	In Progress	NOHSEP	Economic Development, Finance Authority, Regional Planning Commission, Sankofa Community Development Corporation, Urban Conservancy	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 11	1-5 years	High		ORS has been leading renewed efforts with Finance New Orleans to establish a local green bank to scale up private sector adaptation and reduce financial barriers to mitigation.
2020.5.12	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	HSDRRS authorized level of protection, MP goal of 500-year protection: assign City team. This is a Congressional Authorization of the levee system that could include a higher level of protection than the ACE have approved.	Utilize City Team to address 500-year flood protection.	Flooding, Storm Surge, Coastal Erosion, Tropical Cyclones	New	ORS	Tulane Center for Environmental Law, Flood Protection Authority-East	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 3	1-5 years	High		
2020.5.13	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Conduct a study to evaluate the potential impacts of a catastrophic rain event	Conduct a study to better understand and evaluate the potential impacts of catastrophic rain events. Incorporate the outcomes of this study into recommendations for regional emergency preparedness planning.	Flooding	In Progress	NOHSEP	NOHD, DPW, SWBNO	City Staff Time, Contract Labor, Imagine Water Works, Urban Conservancy, IC Change	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	Medium		In October 2023, TWIG presented initial results from a modeling study that speaks to extreme rain events and may provide a starting point for model refinement. ORS and Hazmit are collaborating on a scope of work for a citywide H+H study that will be at least partially funded through Ida HMGP.
2020.5.14	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Investigate HSDRRS authorization to make a case for nonstructural investment	Study how non-structural investments could be implemented from the HSDRRS authorization.	Flooding	New	DPW	ORS, Tulane Center for Environmental Law, New Orleans City Council Governmental Affairs Committee, Flood Protection Authority-East	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	Medium		
2020.5.15	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Develop a policy for the adaptive re-use and recycling of demolition materials.	Develop a city-wide policy regarding re-use of materials from structure demolitions, other ways to reduce the greenhouse gas footprint of new construction or retrofits.	Hazardous Materials	New	Sanitation	ORS, CPC	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5 and 11	1-5 years	Medium		
2020.5.16	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Explore code/policy models related to canopy preservation on private property	Look at Houston Tree Ordinance as a potential guide for such a policy.	Flooding, Extreme Heat	In Progress	CPC	Hazmit, Parks and Parkways, ORS, SOUL	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 5	1-5 years	Medium		Investigating model policies and case studies together with the Smart Surfaces Coalition
2020.5.17	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Coordinate with USACE on recertification on HSDRRS at the 100-year level of protection	Work with USACE to update the HSDRRS risk assessment (conducted in 2013) to obtain NFIP recertification (due in 2023)	Flooding, Storm Surge	Complete	SLFPA-E, SLFPA-W	ORS, CPRA	City Staff Time	CNO General Fund	ESF 5 and 14	1-5 years	High		USACE reauthorization study is complete and final reports were released in 2022.

2020.5.18	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Complete study on the economic impact of Green Infrastructure investments and implement policy recommendations	Work with GNOF and partners to implement the recommendations of the 2020 Green Infrastructure economic impact study.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms	New	GNOF	OCD, Water Collaborative of Greater New Orleans, Healthy Community Services, Nola BA, GNO Inc., Finance Authority, Upper Alliance Energy	City Staff Time	CNO General Fund	ESF 5	1-5 years	High	
2020.5.19	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Explore new ordinance for new construction to include native tree planting, protection of existing canopy including on private property	Evaluate the options for amending the building code and zoning ordinance to require/promote the preservation of existing native trees and planting of new native trees in the development of new construction.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms	New	CPC	Parks and Parkways	City Staff Time	CNO General Fund	ESF 5 and 14	1-5 years	Low	
2020.5.20	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	List the permitting process for tree planting and some types of concrete removal as Green Infrastructure rather than a Construction project	Reclassify the tree planting activities under green infrastructure projects instead of construction projects.	Flooding, Extreme Heat	In Progress	CPC	DPW, Safety and Permits, SOUL, Nola Tree Project	City Staff Time	CNO General Fund	ESF 11	1-5 years	Low	Safety and Permits is continuing to exam ways to streamline permitting for GSI.
2020.5.21	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Create a citywide data platform for all green infrastructure projects	Coordinate between the City of New Orleans, local jurisdictions, Orleans Parish, neighboring Parishes, regional planning organizations, environmental organizations, and any other relevant stakeholder groups to compile a user-friendly, interactive data platform displaying green infrastructure projects and initiatives.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Winter Weather, Coastal Erosion, Subsidence	In Progress	ORS	UNO, NOHSEP, DPW	City Staff Time, Contract Labor	EPA, US Army Corps of Engineers, FEMA-HMGP	ESF 8	1-5 years	Medium	ORS provided UNO with a draft data structure and information on city projects; UNO is working on combining this with project data from NGO partners to produce a consolidated database.
2020.5.22	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Link cross-parish projects to LWI and DOTD priorities, including Claiborne Ave, N Broad St, and Tulane Ave	Coordinate Orleans Parish mitigation initiatives with neighboring parishes to meet regional goals around safety and mobility, including those outlined by the Louisiana Watershed Initiative and the Louisiana Department of Transportation and Development. Cross-jurisdictional project examples focused on major thoroughfares include Claiborne Avenue	Flooding	New	Regional Planning Commission	NOHSEP, DPW, Jefferson Parish, St. Bernard Parish, RIDE New Orleans	City Staff Time, Contract Labor	EPA, Health and Human Services, Port of New Orleans	ESF 10 and 8	1-5 years	Medium	Ongoing coordination with State on N Claiborne plans
2020.5.23	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Create a citywide data platform of all green infrastructure projects.	Coordinate with the City of New Orleans to compile a user-friendly, interactive data platform displaying green infrastructure projects and initiatives.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Flooding	New	SWBNO	CNO (Information Technology & Innovation)	Staff Time, Contract Labor	EPA, US Army Corps of Engineers, FEMA-HMGP	ESF 8	4-5 years	Medium	See update for 2020.5.22
2020.5.24	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Implement system to monitor green infrastructure projects and/or other resilience measures on NORA properties.	Utilize resilience metrics and/or technology provided by the City of New Orleans to track the impact of green infrastructure projects and other resilience initiatives.	Tornadoes, Tropical Cyclones, Severe Thunderstorms, Flooding	New	NORA	CNO (Information Technology & Innovation)	Staff Time, Contract Labor	CNO General Fund, EPA, US Army Corps of Engineers, FEMA-HMGP	ESF 8	4-5 years	Medium	
2020.5.25	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Create a citywide data platform of all green infrastructure projects.	Coordinate with the City of New Orleans to compile a user-friendly, interactive data platform displaying green infrastructure projects and initiatives.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms	New	HANO	/CNO (Information Technology & Innovation)	Staff Time, Contract Labor	EPA, US Army Corps of Engineers, FEMA-HMGP	ESF 8	4-5 years	Medium	
2020.5.26	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Create a citywide data platform of all green infrastructure projects.	Coordinate with the City of New Orleans to compile a user-friendly, interactive data platform displaying green infrastructure projects and initiatives.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms	New	Tulane University	/CNO (Information Technology & Innovation)	Staff Time, Contract Labor	EPA, US Army Corps of Engineers, FEMA-HMGP	ESF 8	4-5 years	Medium	
2020.5.27	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Link cross-parish projects to LWI and DOTD priorities, including Claiborne Ave, N Broad St, and Tulane Ave.	Coordinate Orleans Parish mitigation initiatives with neighboring parishes to meet regional goals around safety and mobility, including those outlined by the Louisiana Watershed Initiative and the Louisiana Department of Transportation and Development. Cross-jurisdictional project examples focused on major thoroughfares include Claiborne Avenue	Flooding	New	CNO (Homeland Security & Emergency Preparedness)	/Regional Planning Commission, DPW, Jefferson Parish, St. Bernard Parish, RIDE New Orleans	City Staff Time, Contract Labor	EPA, Health and Human Services, Port of New Orleans	ESF 10, ESF 8	1 year	Medium	Ongoing coordination with State on N Claiborne plans
2020.5.28	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Define common metrics to measure resilience progress.	Develop a set of metrics that can be used to track and measure the progress of various resiliency projects and initiatives in Orleans Parish. Ensure these data-informed metrics can be measured consistently over time to clearly communicate the impact of projects and initiatives.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Winter Weather	In Progress	CNO (Office of Resilience & Sustainability)	Universities, Love Your City	City Staff Time, Contract Labor	Health and Human Services, CDC, EPA	ESF 8, ESF 6	1-2 years	Medium	
2020.5.29	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Create a digital database of City infrastructure plans, surveys, and other spatial data to inform project design, stormwater modeling, and other uses.	Digitize hard copies of historic plans and create a standard operation procedure for new projects. Create a comprehensive citywide digital database of existing City infrastructure plans, utility plans, surveys, GIS, and other spatial data to inform project design, stormwater modeling, and other uses.	Flooding	In Progress	CNO (Department of Public Works)	ITI	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 1	1-3 years	High	
2020.5.30	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Integrate hazard mitigation strategies with MS4 permit activities.	Integrate hazard mitigation projects that can be included in the Municipal Separate Storm Sewer Systems (MS4) permitting process in order to promote a comprehensive and innovative urban water management approach throughout the city.	Flooding	New	ORS	DPW	City Staff Time, Contract Labor	CNO General Fund, State and Federal Grants	ESF 3	1-2 years	Medium	
2020.5.31	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Implement a comprehensive program of drainage improvements and other flood mitigation measures via GNO Urban Water Plan.	Use the Urban Water Plan to provide a roadmap for better management of flood and subsidence threats, while creating economic value and enhancing quality of life. This plan seeks to work in tandem and create multiple lines of defense with the region's levee system and Louisiana's 2012 Coastal Master Plan (ref: GNO Urban Water Plan). Implement projects	Flooding, Subsidence	In Progress	CNO (Homeland Security & Emergency Preparedness)	DPW, GNO, Inc., Water Collaborative of Greater New Orleans, Flood Protection Authority East, Green Light New Orleans, GNOF	City Staff Time	CNO General Fund, HMGP	ESF 5, ESF 14	1 to 3 years	High	City teams are reviewing the findings and recommendations from the Urban Water Plan at 10 workshop series, and developing scope of work for a citywide modeling and stormwater project scoping exercise. ORS kicked off planning studies in 3 areas of midcity and lakeview to identify new

	property.			from the Urban Water Strategy, including but not limited to, the Monticello Canal, 40 Arpent Canal, I-610 Corridor/Desire/Florida Canal, expanding													drainage improvement projects.
2020.5.32	Goal 4: Maximize the involvement of individuals, businesses, and groups in risk reduction measures through education/outreach on hazard mitigation appropriate to all groups, particularly vulnerable populations.	Public Education & Awareness	Educate the public about building methods which are hazard resistant and built above the current building code standards. Provide information on hazards and mitigation resources and publicize success stories.	Coordinate public information and education with City of New Orleans. Provide stakeholders with information about building standards, incentive programs and financing options for homeowners and builders Publicize success stories.	Flooding, Tropical Cyclones, Coastal Erosion, Subsidence, Infrastructure Failure, Tornadoes, Storm Surge	New	NORA	CNO (Homeland Security & Emergency Preparedness), Office of Resilience & Sustainability), FANO	Staff time	TBD	ESF 5	1-5 years	Medium				
2020.6.1	Goal 6: To protect Orleans Parish and the surrounding region from the effects of natural and manmade hazards, ensuring community continuity in the event of such hazards.	Prevention	Establish Neighborhood Resilience Hubs Provide to provide hazard mitigation information and resources	Create neighborhood resilience hubs that are focused on community-serving initiatives. Resilience hubs provide an opportunity to build local community power and leadership, can support neighborhood residents before, during, or after a natural or manmade hazard event, and can ensure timely resource and service distribution during disasters. Include information on types of disasters, family disaster plans, business continuity	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Extreme Heat, Subsidence, Winter Weather, Coastal Erosion, Infectious Disease Outbreak, Active Threats,	In Progress	Neighborhood Engagement Office	Office of Resilience and Sustainability// New Orleans Health Department, Homeland Security and Emergency Preparedness	City Staff Time	CNO General Fund, State and Federal Grants, Philanthropic Grants	ESF 7 and 14	1-5 years	Medium				Continuing planning of city-run and community-based resilience hubs. Coordinating with Together New Orleans and other partners to provide training, coordination and resources for community initiatives. Funding in pipelines through Bil grants for renewable energy installations at existing city resilience hubs.
2020.SWBNO.1	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including	Structural Projects	Generators and Transfer Switches at SPS	See 6.8 Sewage & Water Board Master Plan	Flooding, Tropical Cyclone, Infrastructure Failure	New	S&WB Operations		25,000,000	PDM/S&WB	ESF 12	1-5 years	High				
2020.SWBNO.2	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications	Emergency Services Measures	Safe House and Resiliency center	See 6.5.2 Sewage & Water Board Master Plan.	All	New	SWBNO Emergency Mgmt		21000000	PDM/SWBNO	ESF 6	TBD	Medium				
2020.SWBNO.3	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	Water Hammer Mitigation	See 6.6.1 Sewage & Water Board Master Plan.	Flooding, Tropical Cyclone, Severe Thunderstorms	In Progress	SWBNO Operations		90000000	PW	ESF 3	45290	Medium				<ul style="list-style-type: none"> •Phase 1 – Contract 1395 - Construction of Two Elevated Storage Tanks •Two 2-million gallon storage tanks, including all site work and piping. Final Acceptance amount \$40,709,771.42, October 2019. •Phase 2 – Contract 1377 - Upgrades to Claiborne Pumping Station •Upgrades of the Claiborne Pumping Station including rehabilitation of four distribution pumps, installation of new motors, variable frequency drives, slow-closing valves, and all associated piping, earthwork, and street work required during construction. Also includes the addition of a bladder tank site in Hollygrove to assist with transient surges in the area. Final Contract Amount - \$38,265,655.47. Final acceptance date - June 2023. •Phase 3 – Contract 1376 - Upgrades to Panola and High Lift Pumping Stations •Upgrades to Panola and High Lift Pumping Stations including rehabilitation of four distribution pumps, slow-closing valves, and all associated piping, earthwork, and street work required during construction. Current Contract Amount - \$20,566,386.46. Anticipated completion date – August 2024.
2020.SWBNO.4	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including	Structural Projects	Power House	See 6.7 Sewage & Water Board Master Plan.	Flooding, Tropical Cyclone, Infrastructure Failure	SWBNO Actions	SWBNO Operations		213000000	HMG/P/SWBNO	ESF 12	44560	High				
2020.SWBNO.5	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure	Prevention	Soil Sampling/ Analysis	See 6.63 Sewage & Water Board Master Plan.	Flooding	SWBNO Actions	SWBNO	CNO (Office of Resilience & Sustainability)/Eustis Engineering, EPA ORD	97795.25	SWBNO	ESF 11	43830	Low				
2020.SWBNO.6	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including	Prevention	Flood Risk Analysis	See 6.6.4 Sewage & Water Board Master Plan.	Flooding	SWBNO Actions	CNO (Homeland Security & Emergency Preparedness)	SWBNO, UNO		UNO Grant	ESF 5	TBD	Medium				
2020.SWBNO.7	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including	Structural Projects	Upgrade and improve the SWBNO Drainage System, including Canals Upgrades, Pump Station Rehabilitation, Pump Upgrades, and Power Controls.	See 6.6.6 Sewage & Water Board Master Plan.	Flooding, Tropical Cyclone, Infrastructure Failure	SWBNO Actions	SWBNO /USACE		1000000000	USACE	ESF 3	On Going	High				

2021.SWBNO.8	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	Storm Water Fee	Draft a city policy on stormwater fees/ Budget/Finance/GSO	Flooding	New	SWBNO, ORS								
2021.SWBNO.9	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Prevention	SWBNO Water, Sewer, and Drainage Facilities	Intrusion Decton, Fiber Upgrade, Security Camer Upgrades	Active Threats	New	SWBNO	NOHSEP	\$ 10,500,000.00	SWBNO	ESF 3	3-5 years	High	Fiber Study	
2021.SWBNO.10	Goal 2: Reduce risk and vulnerability to the built environment including current and future structures; critical facilities; historic structures; and infrastructure, including communications infrastructure.	Structural Projects	Drainage Pumping Station anti-siphon projects	Upgrade drainage facilities to help prevent pump backflow in the event of a power outage or pump trip	Flooding	New	SWBNO		10,000,000	SWBNO	ESF 3	5-7 years	High	Construction completed on DPS 1 and DPS 4. Construction on DPS 12 is starting in Spring 2022. All the lther stations that need the upgrades are in pre-design.	
2020.Tulane.1 (4.A.1)	GOAL 4: Pursue Opportunities to Mitigate risks/hazards to campus facilities and other appropriate hazard mitigation projects, programs and activities	Structural Projects	Harden/retrofit infrastructure and critical facilities to reduce impacts of multiple hazards.	Implement mitigation projects and programs intended to reduce risk to people; critical facilities; critical infrastructure; and the University mission. Facilitate project development and timely submittal of project applications.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Storm Surge, Extreme Heat, Winter Weather	Tulane Actions	Tulane University (Office of Risk Management) /CNO (Homeland Security & Emergency Preparedness)		Cost will be project specific	GOHSEP; FEMA	ESF 3	On Going	High		
2020.Tulane.2 (2.B.1)	GOAL 2: Enhance Data Collection, Use, and Sharing to reduce the impact of hazards	Prevention	Acquire and maintain detailed critical facility data such that these sites can be prioritized and risk assessed for possible mitigation actions	Develop and/or enhance repository for storage and access of hazard, risk and vulnerability data for all University assets, including specific data regarding University assets and infrastructure.	Flooding, Tornadoes, Tropical Cyclones, Severe Thunderstorms, Winter Weather, Extreme Heat,	Tulane Actions	Tulane University (Office of Capital Projects and Real Estate)		Staff Time and Data Costs	TBD		1 year	High		
2020.Tulane.3 (1.A.5)	GOAL 1: Enhance Education and Outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.	Prevention	Enhance emergency and evacuation procedure signage and capabilities.	Improve emergency and evacuation procedures and signage for the downtown campus	Active Threats, Infrastructure Failure (levee failure)	Tulane Actions	Tulane Office of Emergency Preparedness and Response/OHE S		Staff Time and Materials	GOHSEP; FEMA		1-2 years	Moderate		
2020.Tulane.4	Goal 1: Reduce risk and vulnerability to the human environment including cultural resources, homeowners, renters, visitors, and transient populations.	Prevention	Provide power resilience in key facilities by installing backup generators and incorporating energy efficient designs into new or substantially improved facilities.	Develop and implement a power resilience strategy to mitigate impacts of extreme heat and power outages. This strategy may include such actions as installing backup generators, co-generation, and energy efficient building	Extreme Heat, Infrastructure Failure (power outages)	New	Tulane University Office of Planning and Office of Capital		Unknown	TBD		2-5 years	High		
2020.Tulane.5	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Prevention	Improve Hurricane Storm Damage Risk Reduction System (HSDRRS) system to achieve at least 500-year flood protection.	Environmental Law will develop policy analysis to assist the City in implementing the Greater New Orleans HSDRRS authorized level of protection, as stated in the Louisiana Master Plan for a Sustainable Coast as the goal for 500-year protection	Flooding, Storm Surge, Coastal Erosion, Tropical Cyclones	New	Tulane Center for Environmental Law	CNO (Office of Resilience & Sustainability) and Flood Protection Authority East and West	Unknown	TBD	ESF 3	1-3 years	High		
2020.Tulane.6	Goal 3: Reduce risk and vulnerability to the natural environment including wetland restoration and recognition of New Orleans as a coastal city.	Natural Resource Protection	Engage with regional and statewide efforts for the protection of coastal wetlands – including coordination regarding wetlands policy.	Provide policy and programmatic support to regional efforts as a partner in the Louisiana Watershed Initiative (LWI), coordinate with CPRA.	Flooding, Storm Surge, Tropical Cyclones, Coastal Erosion, Subsidence, Infrastructure	New	Tulane University Center for Environmental Law	CNO (Office of Resilience & Sustainability)	Unknown	TBD	ESF 5	1-5 years	High		
2020.Tulane.7	Goal 5: To promote, implement, and sustain mitigation measures in Orleans Parish in order to reduce and manage risks to human life, the environment, and property.	Property Protection	Mitigate at-risk structures by physically elevating buildings 10 or above the Base Flood Elevation (BFE), wet flood proofing, and/or dry floodproofing where appropriate.	Continue programs to mitigate at-risk university structures by physically elevating buildings to be compliant with the Floodplain Ordinance, wet flood proofing, and/or dry floodproofing where appropriate.	Flooding, Storm Surge, Tropical Cyclones, Coastal Erosion, Subsidence, Levee Failure	New	Tulane University (Office of Capital Projects and Real Estate)	CNO (Homeland Security & Emergency Preparedness)	Unknown	TBD	ESF 5, ESF 7	3-5 years	High		
2020.Tulane.8	Goal 5: To promote, implement, and sustain mitigation measures in Orleans	Property Protection	Incorporate green stormwater management infrastructure to	Maximize onsite retention of stormwater runoff to reduce flooding and soil	Flooding, Subsidence	New	Tulane University Office of		Unknown	TBD	ESF 5, ESF 7	1-5 years	High		

Parish in order to reduce and manage union issues. contracts. Capital