Recovery Proposal *Hurricanes Zeta and Ida* City of New Orleans

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Introduction and Planning Context

On August 29, 2021, Hurricane Ida made landfall near Galliano, Louisiana as a strong Category 4 hurricane. In the City of New Orleans, Ida produced heavy rains and hurricane-force winds. By 11:00 August 29 SWBNO began reporting power loss at various Sewer Pump Stations. By mid-afternoon August 29 Entergy New Orleans reported 114,000 customers without power. The power grid to the entire City eventually failed, resulting in an extended outage that lasted 5-10 days in most areas of the city. In the days immediately following landfall, NWS issued excessive heat advisories as heat index temperatures consistently rose above 100F.

Housing Impacts: Damage assessments identified roughly 150,000 structures with at least minor wind damage. During the initial recovery, FEMA approved \$434 million in assistance through the Individual Assistance program. Damage from Hurricane Ida compounded pre-existing shortages of climate resilient, affordable housing statewide as well as in New Orleans. Household resources for recovery are stretched further by the stressors of the global COVID pandemic, increased construction and materials costs. The State of Louisiana has established several housing recovery programs under the RESTORE Louisiana program.

Wind damage: High winds produced by the hurricanes caused structural damage to public facilities and commercial buildings. Over three hundred (301) public facilities were damaged by wind and resultant water intrusion during Hurricane Ida. Initial damage estimates for public facilities and infrastructure total almost \$133 Million. Widespread damage to traffic and public safety infrastructure, damaged or destroyed historic architecture, loss of power to the EOC during emergency response, and wind and water damage to critical public safety facilities. High winds damaged newly planted and established trees across the city, which is still actively working to recover the canopy cover lost to Hurricane Katrina.

This recovery proposal is intended to address the proposed uses of CDBG-DR funds through the State of Louisiana's Resilient Communities and Infrastructure Program to address the unmet needs for recovery from Hurricanes Zeta and Ida.

The State of Louisiana Office of Community Development has identified the following list of Infrastructure Unmet Needs (State Action Plan Substantial Amendment 1):

- Non-Residential Facility Damages
 - o EOC and other critical facility infrastructure failure
 - Structural Damages
- Power grid
 - Economic Losses/Business Disruption
 - Sewer Pump System
 - Temporary Generators at Emergency Resource Centers
 - Extreme heat: resultant exposure to extreme temperatures and the cascading public health impacts
- Debris and Solid Waste

The State of Louisiana Office of Community Development has identified the following list of Economic Revitalization Unmet Needs (State Action Plan Substantial Amendment 1):

- Business structures
- Business equipment
- Business Interruption

Resilient Communities Infrastructure Project (RCIP)

1. Resilience Hubs Renewable Backup Power

a. Design and install renewable energy backup power systems around the city at designated locations to include solar PV, battery storage, and electrical and efficiency retrofits. Emergency response operations and blue-sky resource benefits will be sought in coordination with educational programing and the city's long-tern grid resilience goals.

2. City Facilities Solar Installations

a. Technical assistance, design, and installation of renewable energy backup power systems on city facilities at designated locations to include solar PV, battery storage, and electrical and efficiency retrofits. Resilience Hubs with emergency response operations and blue sky resource benefits will be sought in coordination with educational programing and the city's long-tern grid resilience goals.

3. Stormwater Master Plan

a. Technical assistance to develop and update the city's comprehensive stormwater management strategy, conducting data collection, modeling, and project scoping for suites of resilient flood risk reduction. Plan to support the city's next Hazard Mitigation Plan, science-driven decision support tools, and position city for future funding opportunities.

4. Comprehensive Reforestation

a. Leaning heavily on the New Orleans Reforestation Plan, concrete removal and greenspacing projects will be piloted to achieve canopy coverage goals of the City's Climate Action Plan with a focus on underserved socially vulnerable neighborhoods to reduce heat exposure risks.

5. Small Business Power Resilience

a. Technical assistance, Solar PV, battery storage, efficiency retrofits, and storm water runoff solutions will be assessed and installed at/on local business. Emergency response operations and blue-sky resource benefits will be sought in coordination with educational programing and the city's long-tern grid resilience goals.

6. Main Street Resilience

a. Technical and design assistance for commercial corridors vulnerable to power and water intrusive disruption causing economic hardship. Resource operations on blue sky scenarios will be sought in coordination with educational programing and the city's long-term CAP and grid resilience goals. Green and blue infrastructure in service of LMI clientele business owners will improve rates of economic recovery when facing disasters and reduce business failure rates following disruptions.

7. Food Business Incubation

a. Planning, design, equipment, facility operations, and technical assistance in support of local food entrepreneurs to start and/or and expand services. New Orleans' diversity of cultural influence has fostered robust and innovative culinary arts. In a city of food industry, having facilities that will allow disaster response food delivery/response addresses economic survivability from inception to consumption and every milestone of nutrition in between.

8. West End Drainage Project

a. The proposed project involves installing an underground Modular Tank System at Fleur De Lis Park. This innovative system will store stormwater, mitigating flood risks in one of New Orleans' most flood-prone areas. The construction includes excavation, site preparation, installation of pre-engineered modular tanks, and connection to the existing drainage system. The tanks will temporarily store stormwater runoff during peak rain events and release it gradually, thereby reducing the strain on Pump Station No. 12. The project aims to lower the water surface elevation (WSE) by up to 1.66 feet in critical areas, with an average reduction of 0.31 feet across the neighborhood.

9. Energy Innovation Incubation

a. This project is designed to support future energy and climate technology economic development opportunities in New Orleans. The spectrum of programming will span entrepreneurial support, workforce training, small business technical assistance, and industry convenings in new energy technologies. Special effort will be made to support workforce training and business technical assistance for low-income individuals. The hub will help establish New Orleans as a destination for energy innovation across growing sectors including battery technology, wind energy, and blue and green hydrogen. The City of New Orleans will procure an operator to develop and lead programming in partnership with the wider city, region, and state entrepreneurial support ecosystem, research centers, and local post-secondary education institutions.

10. Green Infrastructure Workforce and Business Development Hub

a. This project would develop a physical hub to provide space for workforce training, business technical assistance, and industry leader convening in the Green Infrastructure (GI) sector. The benefits of this project include facilities that provide new hands-on training lab space, equipment for shared use among multiple training providers, classroom space, and office and conference space. The new classroom and conference spaces will enable more instructors to teach industry-based credentials and employability skills and also create space for students to meet with employer and community-based partners. The additional office space will allow instructors, case managers, and career specialists to meet one on one with trainees and entrepreneurs and provide greater support and resources for them as they matriculate through the program. It will also provide workspace for program managers and administrators who ensure the success of the programs. Finally, this project will facilitate the buildout of hands-on training lab space which will be set up for students to practice with the latest industry-specific technology and materials.