



Jefferson Parish
National Disaster Resilience Competition
Phase 2 Application

BALANCING WATER
RETROFITTING & RESHAPING



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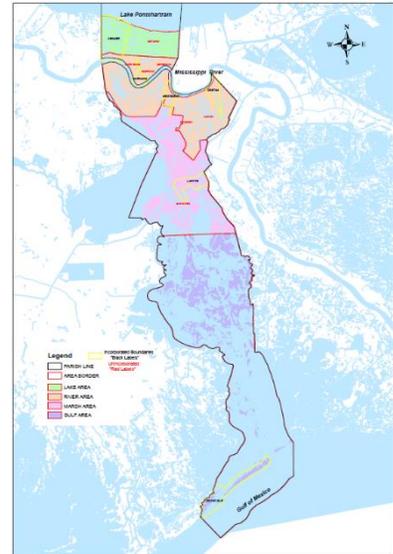
Name of Exhibit: Exhibit A: Executive Summary

Name of Applicant: Jefferson Parish Government (JP)

Name of File that Contains the Exhibit: JeffersonParish_ExhibitA.pdf

Executive Summary

Jefferson Parish, including incorporated and unincorporated municipalities within the boundaries of Jefferson Parish (herein referred to as ‘JP’), serves as a vital connectivity hub for South Louisiana. Whether travelling inland from the coast, or from a surrounding parish to the coast, citizens from all over the region touch JP on a daily basis. With over 640 square miles of diverse geography, the parish portrays a balance of both urban and coastal living. A map, located in [Attachment E-JP Area Map](#) and presented to the right, depicts the expansive geography and noted incorporated municipalities. After impacts from five named hurricanes in ten years and the BP oil spill, JP has strived to recover in a proactive way. Now, in a forward-looking manner, JP is making the critical decision to embrace the future and transform the parish to become a more resilient community. JP has assessed impacts from Hurricane Isaac and remaining unmet needs, and through innovation, outreach, and regional collaboration, is ready to take the necessary steps to be on the forefront of resilience.



Regardless of the area in which a JP citizen resides: lake, river, marsh, or gulf; all residents are touched and affected by one common element – water. To promote resilience within the community and lay a strong path towards the future, JP must embrace the diverse geography surrounding and entwining through the parish. Thus, JP has developed a resilience initiative called Balancing Water, focused on reshaping vacant land in a resilient manner, reshaping marshland where it has vanished, retrofitting impervious areas to retain more water and retrofitting vulnerable infrastructure. The combination of these efforts will provide a model for citizens of JP and a path forward to balancing life with water.

GULF Area: Incorporating a balance with water begins here. Grand Isle, located at the southernmost portion of JP, portrays a coastal paradise and a launch point for commercial and recreational fishing. The island embraces a unique balance with water in that the drinking water supply is housed under the gulf waterways. However, the impacts of sea level rise, marsh degradation, shipping channels, subsidence and the landfall of hurricanes over the years have jeopardized the transportation of fresh water to the island residents. JP proposes to use NDRC funding to retrofit the vulnerable infrastructure by securing the water line below the mud line in the water to ensure that clean water is consistently and dependably transported to the island. This retrofit will ensure that core amenities and livelihood on the island are resilient, protected, and prepared for future environmental impact.

MARSH Area: Moving up the parish into Lafitte and Barataria, coastal marshland provides the heart of JP's sportsman's paradise. The Town of Jean Lafitte is the home of swamp and air boat tours and a close-knit fishing community, both of which exemplify Louisiana culture. Currently, the Lafitte area is taking preventive measures to secure its residents against flooding and sea level rise by updating building codes, retrofitting homes and businesses, and installing tidal levees. JP proposes to protect these retrofits through pursuing the second increment of the Mississippi River Long Distance Sediment Pipeline that transports Mississippi River sediment into the marsh along a natural ridge to complete the reshaping of the inland marsh from the Mississippi River from JP to Lafourche Parish. In addition, the Rosethorne sewer treatment plant, which provides necessary balanced wastewater services to the residents, suffered crippling damages due to Hurricane Isaac. JP is proposing to retrofit this vulnerable piece of critical infrastructure to ensure safe sanitary conditions for the citizens of Jean Lafitte and continue the economic growth and revitalization for the unique tourism and fisheries industries within the area.

RIVER and LAKE Areas: As the parish moves inland, the strategy of Balancing Water continues with a focus on areas that touch the Mississippi River and Lake Pontchartrain. The winding river and expansive lake define the northern geography of JP. Both sides of the parish are shaped by a system of levees built to reduce risk from these powerful bodies of water. The parish is proposing green infrastructure activities and upgrades to traditional drainage methods in a two-prong approach: reshaping existing vacant lands into stronger, revitalized areas primed for development and retrofitting areas of high imperviousness to create pervious areas. This approach will pilot the multiple projects which portray the Balancing Water initiative allowing for increased infiltration, storage, and drainage of stormwater.

On the West Bank of the Mississippi River, JP will focus on reshaping vacant areas. JP will undergo a planning process to determine the revitalization of one of the remaining undeveloped subdivisions in Harvey, and based on this revitalization plan, will focus on implementing permeable streets, wastewater management systems that operate without traditional energy sources, and creation of parklands that connect the community and retain stormwater, institutionalizing green methods. Next, JP will reshape vacant parcels of land through the transformation of property into a parkland that retains stormwater and connects visitors to the Mississippi River bike path and historic Westwego. Additionally, JP will implement green infrastructure components into an area in Gretna which will provide resilient retrofits to impervious land, increasing stormwater retention and reductions to localized flooding. Just as the bike path proposed in Westwego provides connectivity, so will the proposed green infrastructure retrofits in Gretna.

Moving to the East Bank of the Mississippi River, JP is focusing on retrofitting areas of greatest imperviousness: the Elmwood Business Park, the Fat City neighborhood, and green

upgrades to current canals in the parish. Elmwood Business Park serves as a highly dense economic backbone of the region and suffers from flooding during tropical events and regular storm events, making it a target area to implement resilient measures outlined in the Greater New Orleans Urban Water Plan. Retrofitting the impervious areas surrounding the thriving shops and restaurants will lead to a transformed drainage system that balances the storage and pumping of stormwater, which can be replicated throughout other retail areas in the parish, sparking a chain reaction of resilient activities. By creating a green lush walkable retail area, the retail center will be a more reliant and resilient source of jobs and resources for the residents of JP and surrounding parishes.

For the areas touching the lake on the East Bank of the river, the parish is focusing on Fat City and the Metairie Central Business District by implementing drainage improvements which look at retrofitting the infrastructure around the canals to embrace green infrastructure including walking trails and bike paths. This area is not only prime for economic revitalization, but retrofitting drainage and sewer infrastructure to balance water will reshape this impervious community so it is prepared to balance water into the future.

Summary

JP is committed to champion innovative multi-purpose approaches to water management from the gulf to the lake to transform the future of the parish. Residents of JP have rebuilt homes, businesses and lives from five hurricanes in the last ten years. It is now evident that recovery alone will not sustain the community; however, embracing the future in a resilient manner will allow JP and its residents to thrive for generations to come. The parish is taking the Balancing Water initiative as an effort to strengthen vulnerable areas and embrace new resilient retrofits. The combination of these efforts will lead to a long-term transformation in the approach the parish uses to address recovery in the future. JP is requesting NDRC funding to implement resilient initiatives

throughout the parish. By creating a culture that embraces water, JP seeks to shift fears and perceptions to create a resilience legacy for future generations, to ensure the continuity of our communities, and to drive economic development of our region into an environmentally-friendly and culturally-unique home.

BALANCING WATER - Resilient Jefferson Parish

DRAINAGE IMPROVEMENT & CANAL SAFETY

ELMWOOD FIELDS WATER LANES

STRENGTHENING SEWERS

- Upgrade to sewer pumps
- Resilient energy efficient retrofits throughout parish projects

FLOATING STREETS

PARKLANDS

MISSISSIPPI RIVER LONG DISTANCE SEDIMENT PIPELINE (PHASE II)

- Continue the Sediment Pipeline from Barataria Bay to Lafourche Parish
- The pipeline creates the a "Land Bridge" to further resilient marsh restoration

WATER DISTRIBUTION

- Water Line connecting Grand Isle to Lafitte
- Implementing resilient measure to assure clean water transported to Grand Isle
- Lowering and securing 10 miles of water lines from Fall Island to Grand Isle

BALANCING WATER
ESTABLISHING A RESILIENT FUTURE