Gretna City Park and the 25th St. Canal are two major components of the Gretna Resilience District, an initiative that aims to address flood risk reduction and provide quality of life enhancements. Improvements to the park include greater stormwater retention, enhanced entryways, pathways, and signage, additional seating and pavilions, and the installation of a tiered dock that will connect visitors to the water. The canal improvements include green infrastructure features to increase capacity and conveyance of stormwater in an area with a high concentration of repetitively flooded homes and businesses. In addition, the canal enhancements include the creation of recreational amenities for biking, walking, and interactive community spaces.

**Key Info**

- **Project Area**: Gretna City Park - approx. 78 acres, 25th Street Canal - approx. 4,800 L.F.
- **LA SAFE Investment**: Up to $6 million
- **Estimated Project Cost**: Total (w/ design & contractor fees) - $11.5M
- **Partners**: FEMA (FMA, PDM); Jefferson Parish; City of Gretna; JPPSS; Tulane Regional Urban Design Center

**Community Benefits**

- Park and canal improvements to increase stormwater retention capacity and reduce flooding risk to streets, houses, schools, & businesses.
- Improves housing stock and property values by reducing flood risk and enhancing the park, encouraging development and neighborhood revitalization.
- Creates greater community connectivity, walkability, bikeability.
- Educational signage and programming about stormwater management will be included in City Park and will support jobs to rent recreational equipment (kayaks, canoes, paddleboards) and manage facilities.
- Provides spaces for many types of recreation, increases community connectivity and access to amenities, and provides aesthetic enhancements improving quality of life.

**25th Street Canal Aerial View**

Improvements include reconstructed roadways, bioswales, pervious crosswalks, and street trees. Canal improvements include a widened channel with stabilized canal edges.
Once called Elmwood Park and now a heavily paved commercial district, Elmwood is the source of much of the flooding from runoff that occurs within its boundaries but also throughout the riverside portions of Jefferson Parish. Re-Green Elmwood is a long-term strategy that peels back pavement where possible and transforms street edges, rights of way, and parking lots into an interconnected network of water storage spaces. The set of proposed pilot project options kicks off this vision with smart retrofits in both public and private land that add value to retail and commercial developments, while limiting flooding within the district and beyond.

**BIO & WATER STORAGE**
- Bioswale, path, bridge, and parking
- Water lane
- Water storage lots
- Temporary infiltration in empty lots
- Infiltration in parking lots

**Future Vision for Elmwood District**
- Green Streets
- Parking Retrofits
- Water Storage

**Elmwood West Drive**
- Green Street and Parking Retrofits
  - Tree-lined bioswale, 12 feet wide
  - Tree-lined bioswale, 7 feet wide
  - Parking lot with pervious pavers
  - Traffic circle at intersection

**Elmwood West Green Streets**
- Tree-lined bioswales, new sidewalks, and pervious parking

**Proposed Project Area Plan**
- Joelyn S. Yenno Building site and Citrus Blvd.
- Tree lined bioswale, 12 feet wide
- Tree lined bioswale, 7 feet wide
- Parking retrofits in pervious spaces
- Water lane in park zone
- Existing tree
- Gutters across roadway
- Sidewalks

**Key Info**
- Project Area: 46 acres
- LA SAFE Investment: $1.5 - $6 million
- Estimated Project Cost: Public Parking Retrofits - $2.4M
  - Elmwood W. Green Street - $1.0M
  - Private Parking Retrofits - $4.6M
  - Traffic Improvements - $1.4M
- Partners: Jefferson Parish; Tax Incentive Financing; Private Developer
- Location: Elmwood Business District

**Community Benefits**
- Pervious paving, green space, vegetation, and underground detention components drain and filter stormwater and reduce flooding. The tree canopy and greenspaces reduce heat island effect.
- Increases demand for private redevelopment in Elmwood, including adjacent mixed-use renovation of old Kmart site with 280 residential units.
- Sidewalks and green space increase pedestrian walkability, safety and connectivity. Signalized intersections and traffic calming improve circulation and decrease delays.
- Improvements will enhance neighboring businesses and promote new investment; signage will educate residents about the value of green infrastructure.
- Re-introduction of natural green features such as bioswales and tree canopy will promote walkability and begin the transition to a mixed use area with cultural and recreational amenities.
The Master Plan:

Phase I: Create a Multipurpose Resource Facility (complete)

Phase II: Construction of a Wetlands Education Center and Replica of a Fishing Village

Phase III: Expansion of Amenities and Cultural Activities at the Fishing Village

Left: Phase II: Wetlands Education Center

1. Wetlands Education Center will include:
   - Combination classroom and film theater with seating for approximately 80 students.
   - Small meeting rooms for private research.
   - Multiple restoration, preservation, and adaptation displays with emphasis on wetland ecosystems.
   - Several interactive and static galleries and exhibits, including turtles, spiders, baby alligators, etc.
   - Large observation windows, an outdoor observation deck and an observation tower.
   - Gift shop and first aid station.

2. Extension of the existing elevated wooden Walking Trail through the cypress swamp, including various docks, observation platforms and picnic areas.

3. Construction of the Fishing Village, including rental cabins, outdoor classrooms, tour boat and water taxi dock.

PROPOSAL

LA SAFE has emphasized the value of educating our coastal population about current and future environmental conditions and the effects of flood risk. The Louisiana Wetlands Education Center will be an educational asset serving students and families in the region, with programming for all ages, including a research outpost and meeting location for agencies and institutions. The Center will promote preservation, conservation, and adaptation related to wetland ecosystems, using its location in the Lafitte area as an outdoor classroom. Future phases would include an expanded fishing village to learn about coastal community traditions, a treetop ropes course, water taxis to Grand Isle, kayak and canoe rental and overnight cabins. The Center is complementary to the existing Lafitte Fisheries Market, and adjacent to the Auditorium, Nature Trail and Multi-Purpose Facility and Museum. Under this proposal, LA SAFE will potentially provide funding toward the Center’s construction.

Community Benefits

Building designed to model development suitable to high risk areas.

Master plan includes water taxis, tour boats, and trips to destinations like Grand Isle. Boardwalks and trails provide access to wetland ecosystems.

Provides educational opportunities for all ages, focusing on the ecology and culture of wetland areas. The center will provide jobs for science educators and local craftspeople to demonstrate traditional techniques.

Provides a recreational destination connected to nature, including boardwalks, trails and outlook decks. Cultural programming includes traditional boatmaking, netmaking, duck calling, storytelling and other interactive exhibits.

Key Info

| LA SAFE Investment | Up to $6.5 million |
| Up to $12.1 million |
| Partners | Town of Jean Lafitte |
| Location | Jean Lafitte |

Architectural design and renderings by WHLC Architecture
Envisioning a future with heightened flood risk, it will be important to implement large-scale stormwater strategies within urban and suburban environments. The Green Block strategy complements redevelopment efforts in Fat City at 18th and Hessmer, contributing to neighborhood revitalization efforts and mitigating localized flooding. Development plans call for a phased approach that includes public amenities and green space designed to manage stormwater and create recreation space. Driven by investments in public services and as part of a larger redevelopment strategy throughout Fat City, the green block strategy provides a framework that can be replicated and scaled up or down throughout the parish.

**Community Benefits**

- Reduce risk of street flooding in Fat City, protecting local businesses and housing; Use green infrastructure to manage stormwater, mitigating additional subsidence.
- Develop a public service hub, including a sheriff substation, library and stormwater management park.
- Create safe, comfortable walking, bicycling, and public transportation corridors.
- Support Fat City neighborhood revitalization, increasing property values and tax revenue; Invest in stormwater management, making area more attractive for commercial and retail development.
- Expand access to greenspace in an urban neighborhood. Create a sense of place by investing in a public service hub.

**Plan View**

Planned development includes a library, police station with first floor retail, and additional retail buildings. LA SAFE proposes to add green infrastructure. Buildings should be elevated, allowing planted bioswales and retention ponds across the block to fill with water during a rain event. Boardwalks and pervious pavers allow complete accessibility as the ponds fill with water.

**Long-Term Vision**

As a result of the green block strategy, efforts to keep street flooding within the district and adjacent flooding in surrounding neighborhoods currently approximately 45% of the total surface area in Fat City is impervious.

**Key Info**

- **Project Area**: 4 acres (Green Block)
- **Estimated Project Cost**: $3.7 million (Development); $1.9 million (Pathways)
- **Partners**: Jefferson Parish, Jefferson Parish Sheriff’s Office, Jefferson Parish Library
- **Location**: Fat City, Metairie

**COMMENTS**
PROPOSAL

Low flood risk areas are well positioned to receive population and economic growth. Higher density, affordable, residential and mixed-use developments should be prioritized. LA SAFE has identified historic downtown Westwego for this type of development. This project will incorporate ground-floor commercial space for neighborhood amenities like restaurants or cafes as well as approximately 30 housing units. Landscaping and shared green space will manage stormwater while adding beauty to the surrounding neighborhood. As people move from high-risk to low-risk areas, high quality mixed-use development is a key strategy to maintain housing affordability, revitalize neighborhoods and preserve green space.

Approx. 30 units
Approx. 10,000 sf
$4-6 million
Private Developer
Historic Westwego

Community Benefits
- Manage all stormwater on site using bioswales, trees, green-space, and permeable materials.
- Create approximately 30 affordable housing units and neighborhood businesses.
- Provide safe sidewalks, bike access, and bus stop seating (if applicable).
- Create local jobs at restaurants, cafes, or retail shops.
- Provide outdoor community space and pavilion for markets, concerts, and other community events.

Key Info
- Stormwater is absorbed into the ground and vegetation. A mature bald cypress can absorb 8,000 gallons per year.
- Wind mitigation protects from hurricanes and reduces insurance costs. Pier and beam foundations raised above Base Flood Elevation reduce flood risk and insurance costs. They also make future home elevation less expensive than slab-on-grade construction.
- Elevated housing in moderate-risk areas protects from flooding and provides space underneath for parking and gathering. In this model, homes share a single elevated platform, reducing construction costs while preserving a single-family housing typology.
- Pier and Beam Foundations raised above Base Flood Elevation reduces flood risk and insurance costs.
- Stormwater Park
- Street Bump-outs
- Bioswales
- Wind Resistant Design
- Solar Power
- Community Space
- Permeable Paving

Pier and Beam Foundations
Wind Resistant Design
Solar Power
Community Space
Permeable Paving
Stormwater Park
Street Bump-outs
Bioswales

Low Risk Example
Historic Westwego
Existing Housing Density: 3.4 units per acre
Shown Density: 12.5 units per acre (excluding park)
Increasing density promotes businesses and preserves green space.

Moderate Risk Example
Central Lafourche Parish
Existing Housing Density: 3.1 units per acre
Shown Density: 8 units per acre
Increasing density preserves more land for stormwater management.

Elevated housing in moderate-risk areas protects from flooding and provides space underneath for parking and gathering. In this model, homes share a single elevated platform, reducing construction costs while preserving a single-family housing typology.

Denser, mixed-use buildings in low-risk areas attract local businesses like coffee shops, restaurants and retail shops to neighborhoods. Multistory buildings accommodate more people while preserving green space for stormwater management. In turn, more residents are likely to patronize businesses within walking distance.
Envisioning a future with heightened flood risk, it will be important to implement large-scale stormwater strategies within urban and suburban environments. Situated in an area ripe for redevelopment and adjacent to a major roadway (and evacuation route), the Airline Water Park introduces an elongated community space adjacent to Airline Hwy. between the Soniat Canal and Roosevelt Blvd. The park provides stormwater management features, offers recreational opportunities, and supports complementary community revitalization efforts for an area of Jefferson Parish adjacent to concentrations of underserved residents.

**Key Info**

- **Project Area**: Airline Hwy - 8,000 L.F., Roosevelt Blvd - 3,500 L.F.
- **LA SAFE Investment**: $6 million
- **Estimated Project Cost**: Airline Hwy - $9.0M, Roosevelt Blvd - $3.9M
- **Partners**: Jefferson Parish
- **Location**: Airline Drive between Soniat Canal and Roosevelt Blvd.

**Community Benefits**

- Incorporates green infrastructure components into recreational areas to elevate street flooding, slow and detain runoff from Airline Hwy. Key elements include bioswales, rain gardens, and increased tree canopy.
- Supports holistic community revitalization efforts in surrounding neighborhoods and for businesses along Airline Highway.
- Provides neighborhood access points to increase community connectivity, promote walkability.
- Supports economic development revitalization efforts along Airline Hwy. by providing a community space; provides educational opportunities through signage at the park.
- Creates a new public amenity enhancing quality of life in the surrounding area and provides park space within a heavily-developed area.

**Vision: A Regional Park**

These improvements to Roosevelt Boulevard and the Airline Highway canal could be the first step in a long-term vision of a regional park stretching from Louis Armstrong Airport to downtown New Orleans.