EAST BATON ROUGE
STORMWATER MASTER PLAN
UNDERSTAND. PLAN. IMPLEMENT.

BACKGROUND/PURPOSE

The East Baton Rouge Stormwater Master Plan (SMP) is the guiding document for the implementation of overall flood risk projects and policies for the city-parish. The plan will implement goals and objectives that are also in alignment with FUTUREBR Plan by developing policies and strategies that reduce the risk of flooding throughout the city-parish, as well as providing a road map on how to fund these improvements. The planning process is broken up into 3 phases:

PHASE 1
Implementation Framework

PHASE 2
Watershed Evaluation & Stormwater Master Plan Recommendations

PHASE 3
Development of 20-Year Stormwater Capital Improvement Plan (CIP)

- The planning process is currently in Phase 2 -

WHAT IS STORMWATER?

Stormwater is water that comes from rainfall. It can either soak into the ground, evaporate, or run off from surfaces into the drainage system. Impervious surfaces, such as roofs and pavements, increase the speed and amount of stormwater that runs off. Flooding, like the kind Baton Rouge experienced in 2016, occurs when the speed or amount of stormwater runoff exceeds the capacity of the downstream drainage channels or pipes, or if the system is clogged or damaged.

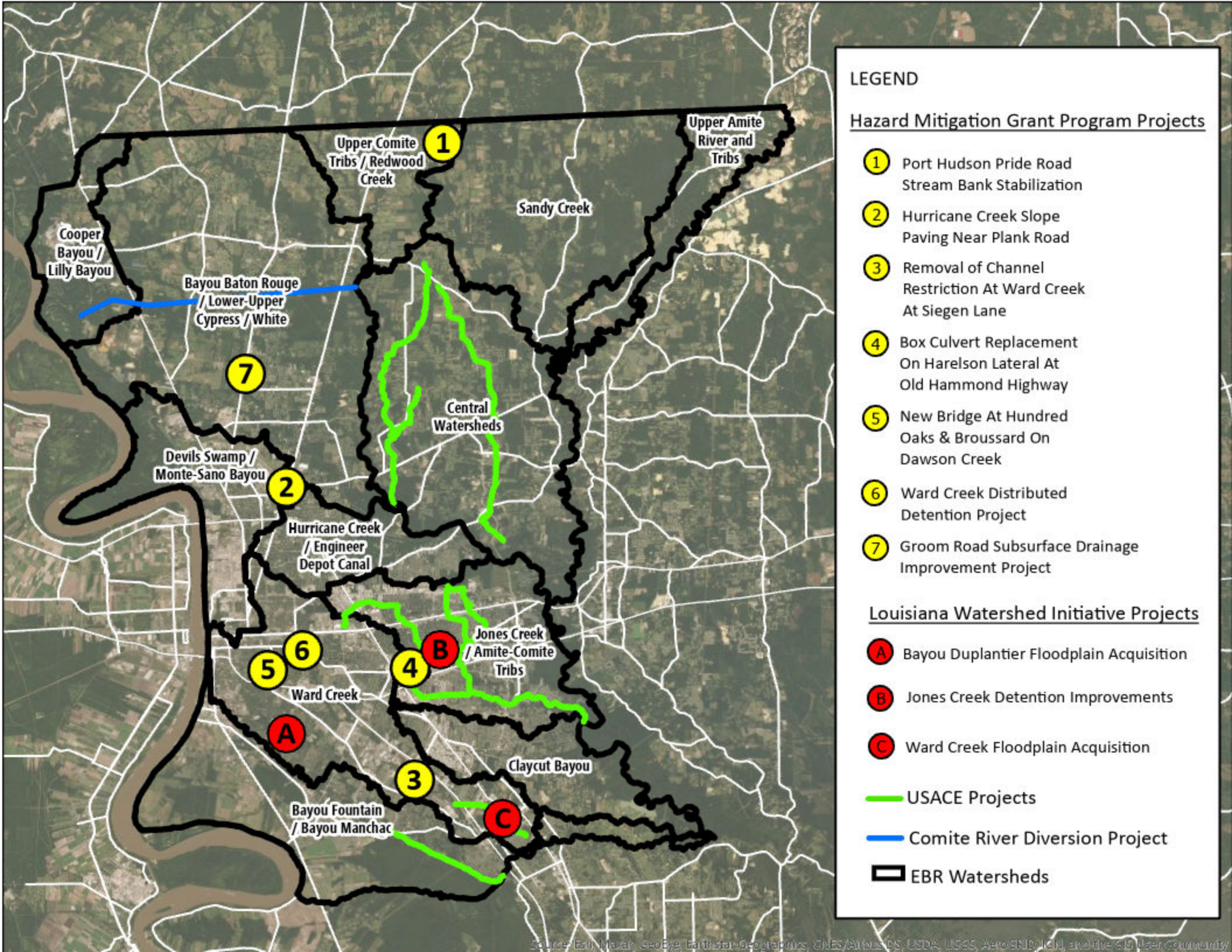
DATA DRIVEN PROCESS

The city-parish is divided into **11 watersheds**, which are areas of land that drain to a common outlet. The make up of the land, including man-made features, determine where and how water flows through a watershed.

Phase 2 of the planning process will

- **Collect and organize data**
- **Develop watershed models**
- **Evaluate each of the watersheds**
- **Determine flood risks and mitigation measures.**

- The data will inform the computerized models to gain a better understand how water flows -


Upper Comite Tribs / Redwood Creek
Upper Amite River and Tribs
Sandy Creek
Cooper Bayou / Lilly Bayou
Bayou Baton Rouge / Lower-Upper Cypress / White
Central Watersheds
Devils Swamp / Monte-Sano Bayou
Hurricane Creek / Engineer Depot Canal
Jones Creek / Amite-Comite Tribs
Ward Creek
Claycut Bayou
Bayou Fountain / Bayou Manchac
LEGEND
Hazard Mitigation Grant Program Projects
1 Port Hudson Pride Road Stream Bank Stabilization
2 Hurricane Creek Slope Paving Near Plank Road
3 Removal of Channel Restriction At Ward Creek At Siegen Lane
4 Box Culvert Replacement On Harelson Lateral At Old Hammond Highway
5 New Bridge At Hundred Oaks & Broussard On Dawson Creek
6 Ward Creek Distributed Detention Project
7 Groom Road Subsurface Drainage Improvement Project
Louisiana Watershed Initiative Projects
A Bayou Duplantier Floodplain Acquisition
B Jones Creek Detention Improvements
C Ward Creek Floodplain Acquisition
USACE Projects
Comite River Diversion Project
EBR Watersheds

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2021 INTERIM CHANGES: UNIFIED DEVELOPMENT CODE (UDC)

STORMWATER CONVEYANCE CHECK

Requires that Drainage Impact Studies include a measurement of the impact of conveyance change caused by proposed development.

Need for conveyance check determined by the presence of an indexed stream on the property.

Goal is to help protect natural and existing drainage patterns and reduce the risk of new development resulting in increased flooding to other properties.

GREEN INFRASTRUCTURE PRIORITIZATION

Incorporates requirements for the prioritization of green infrastructure solutions in transportation improvements

Lays out a planning methodology for incorporating green infrastructure by identifying "opportunity areas" within proposed projects

Inclusion of MOVEBR street cross sections

Goal is to reduce stormwater flooding by slowing down or storing stormwater using systems that mimic natural features.

UDC CHAPTER 15 CLARIFICATIONS

Technical revisions to *Chapter 15: Floodplains, Floodways, Drainage and Water Quality.*

Goal is to clarify requirements in the UDC to result in the approval of proposed developments that comply with the intent of the requirements.

MINIMUM SLAB/BASE FLOOD ELEVATION

Potential Change: According to FEMA, increasing the minimum slab elevation by one foot can reduce annual flood insurance premiums by 50 percent.

Intended Impact/Benefit: Additional elevation provides extra protection against unpredictable flooding conditions, underestimated base flood elevations, and increases in flood heights.

PROTECTING NATURAL FLOODPLAIN FEATURES

Potential Change: FUTUREBR, the comprehensive plan for East Baton Rouge Parish, assessed the streams in the parish and recommended the conservation and restoration of numerous streams, and their respective floodplains.

Intended Impact/Benefit: to reduce flood risk, improve water quality and provide other environmental and quality of life benefits.

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WHAT'S NEXT?
POTENTIAL FUTURE CHANGES TO UDC

- *Added emphasis on incentives and requirements for green infrastructure.*
- *Additional legislative clarifications to the UDC to improve administration of stormwater standards.*

FILL REQUIREMENTS

Potential Change: Requirements for fill (dirt or material dug from another site) to be examined to look at how building-up the elevation of a development can impact how water flows in an area, as well as that area's ability to hold and manage stormwater.

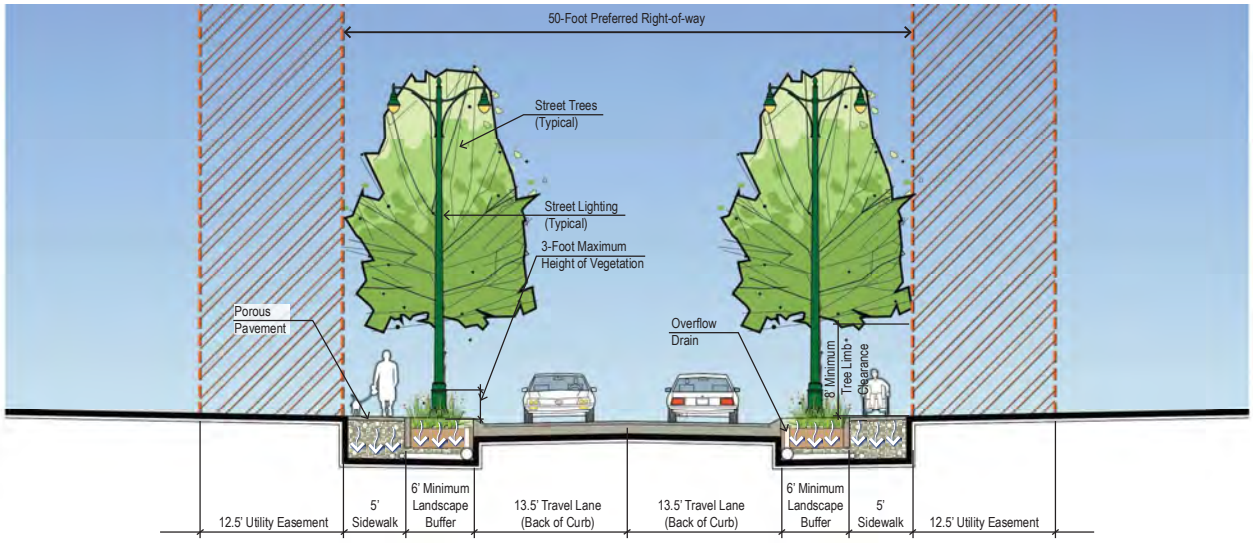
Intended Impact/Benefit: Reduce/avoid flood-risk to neighboring properties.

DRAINAGE REQUIREMENTS FOR NEW DEVELOPMENT

Potential Change: As the scientific models are completed, the master plan team will be able to use them to evaluate current and proposed drainage requirements.

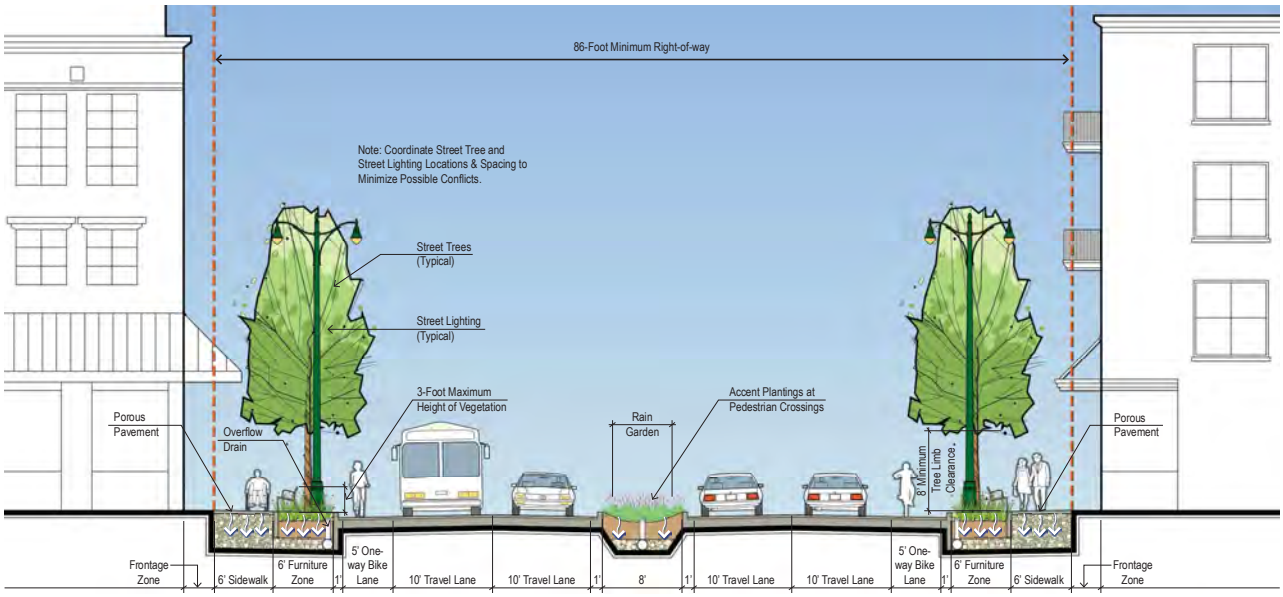
Intended Impact/Benefit: To determine what changes may need to be made to better manage current and future flood risk.

TYPICAL STREET SECTIONS



RESIDENTIAL LOCAL (WIDE): 2 LANES WITHOUT PARKING

SCALE: 1/8" = 1'-0"



SCALE: 1/8" = 1'-0"

MOBILITY	ACCESS	DESIGN VEHICLE	DESIGN SPEED	LANE WIDTH	SHOULDERS	FURNITURE ZONE	BIKE FACILITY	PEDESTRIAN	CROSS SLOPE	MEDIAN WIDTH	MEDIAN OPENING SPACING
Medium	Medium	SU	30-MPH	10-Feet	1-Foot (Edge of Travel Lane to BOC; Curb and Gutter)	6-Foot; Rain Gardens Preferred; 1.5-Foot Minimum Lateral offset for Fixed Objects	5-Foot Wide On-Street Bike Lanes with Bike Boxes at Intersections; Buffer Preferred	6-Foot Wide Sidewalk	2.0%	8-Foot Minimum	At Signalized Intersections (Urban Blocks)

URBAN WALKABLE 4-LANE

SCALE: 1/8" = 1'-0"

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LEGISLATIVE AND ADMINISTRATIVE CHANGES TO UDC SINCE 2016

2017

- Reduced allowable development density in the Rural zoning classification

2018

- Require developments to design for 25-year storm event vs. the prior 10-year standard
- Reduced the amount of fill that can be placed in special hazard areas
- Established tighter regulations for off-site fill mitigation credits
- Prohibited new point and non-point source discharges onto adjacent properties without drainage servitudes
- Require maintenance and regular inspection of drainage facilities on private property by a professional engineer to ensure that they are continuing to function as designed at the time of approval
- Require drainage facilities on the perimeter of a site are constructed and functional before other facilities or improvements

2019

- Established requirements for the preservation of open space in residential developments
- Created an incentive for providing stormwater controls providing more detention than required
- Amended the requirement that the elevation of streets and parking lots be based on the record inundation, creating additional storage capacity and reduce potential impoundments to better protect structures

2021

- Added requirements for stormwater conveyance checks to better verify up/downstream capacity and help protect the natural and existing drainage patterns
- Added new street cross sections to incorporate green infrastructure and Complete Streets elements
- Prioritized green infrastructure solutions for transportation improvements in Stormwater Management Plans.