

Louisiana Parish Engineers & Supervisors Association Patrick J. Landry, P.E. April 24, 2019

> LOUISIANA **WATERSHED** INITIATIVE

working together for sustainability and resilience



LOUISIANA WATERSHED INITIATIVE

#### WORKING TOGETHER FOR SUSTAINABILITY AND RESILIENCE





LOUISIANA WATERSHED INITIATIVE WORKING TOGETHER FOR SUSTAINABILITY AND RESILIENCE









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### Mississippi River Valley







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### What is a Watershed?

An area or ridge of land that separates waters flowing to different rivers, basins, or seas.

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DIVIDE





### BACKGROUND

# Decision-making

#### Structure

The Council is supported by Technical Advisory Groups who ensure integration of stakeholder input and transparency of process

Executive Order Signed: May 2018





# Strategic Areas of Focus





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# Local & Regional Projects Round 1

Funding Distribution Goals and Objectives Eligible Activities



### Round 1 Funding Opportunity DISTRIBUTION

\$100 Million total
\$40 million set aside for watershed regions
\$60 million statewide
All projects must meet minimum criteria







## Round 1 Funding Opportunity ELIGIBLE ACTIVITIES

Characterized generally as Low Risk, High Reward Projects in absence of statewide modeling, including:

- Floodplain Restoration and Preservation
- Regional Flood Storage
- Critical Facilities and Infrastructure Flood Mitigation
- Stormwater Management Gray Infrastructure

- Stormwater Management Green Infrastructure
- Non-structural mitigation (Residential/Commercial)
- Other innovative and/or replicable flood control activities



#### **F**

### Round 1 Funding Opportunity EVALUATION CRITERIA

- Effectiveness
- Feasibility
- Affordability / Schedule
- Social Benefits
- Natural Functions
- Community Investment



### Framework for Statewide Data &

### Modeling Strategy

Technical Team Overall Approach: Pre-program & Implementation 1/30 Council Decisions



## **Technical Team**

#### Collaborative team from academia and industry



Data & Modeling

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at CHAPEL HILL



### **Overall Approach**

#### STATEWIDE DATA & MODELING

- •Enhanced data inputs: rain and stream gauges, LiDAR, etc.
- •Expert leadership on modeling design, maintenance, and usage/storage
- •Predictive, contiguous modeling framework - models will "talk to each other"





### Status of LiDAR Availability

Data & Modeling



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## Statewide Modeling Framework

#### STRATEGY AND SEQUENCE

- DOTD will facilitate procurement
- Projected advertisement posted to DOTD website
- Regional stakeholders & agencies able to provide input in accordance with DOTD's procurement process
- Models sequenced around watershed boundaries in accordance with data availability









### Stay Engaged



#### Email: <u>watershed@la.gov</u> Website: watershed.la.gov

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### Statewide Flood Control Program Background

- Created by Act 351 of the 1982 Regular Session
- Primary goal is to reduce existing flood damages through an active, innovative approach that considers both structural and non-structural solutions
- Funded by Louisiana Transportation Trust Fund
- Project applications and funding amounts are approved by the Joint Transportation Committee of the Louisiana Legislature in Spring



### Statewide Flood Control Program

Pre-Application – Due May 1; Application – Due October 1

- Non-technical description of the project
  - Documents existing flooding problem (magnitude and frequency)
  - Lists possible solutions
- Sponsor must assume responsibility for its share of project costs
- Request assistance from DOTD to prepare the Application , if so desired. (Applies to Authorities representing less than 50,000 people)
- Request participation in Rural Grant Opportunity Program



#### Statewide Flood Control Program Program Funding

Funds are distributed on a two-tiered system:

- Urban Areas (45%)
  - Shreveport, Bossier City, Monroe, Alexandria, Lake Charles, Lafayette, Baton Rouge, New Orleans, and Jefferson Parish
- Rural Funding Districts (55%)

Rural Funding District	Percentage of Rural Funding	Percentage of District Funds	
		Rural- Undeveloped	Rural- Developed
Northwest	23.1	52	48
Northeast	16.7	73	27
Southwest	15.5	55	45
South Central	22.6	42	58
Southeast	22.1	29	71





### Statewide Flood Control Program Accomplishments

- Approved Projects in 43 of 64 Parishes
- 119 Projects Completed
  - 37 Additional Phases Completed
- 15 Project Phases Under Construction or Awaiting Closeout
- \$268M Expended
- \$2.68B in Flood Damage Reduction Benefits



### Retention Basin & Subsurface Drainage Monroe, Louisiana State share: \$1.5m; Currently in closeout





### **Drainage Canal Improvements**

#### Cloverdale and Grundy Cooper Subdivisions – Alexandria, La. State share: \$589,000; Completed in 2013





### Eastwood Drainage Improvements Bossier Parish

State share: \$887,400; Completed: January 2017





#### Mazoue Ditch Improvements Jefferson Parish (River Ridge/Harahan border) State share: \$10.2m (5 phases); Construction complete: April 2016







### **Point Aux Chenes Floodgate Terrebonne & Lafourche Parishes** State share: \$7.7m; Construction complete: Oct 2017





#### **Bayou Teche Flood Protection St. Mary Parish** State share: \$11 million; Begin Construction - 2019





#### Statewide Flood Control Program Additional Information

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