



Council on Watershed Management Meeting

MAY 30, 2019

Meeting No. 8

LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience

Public Comment



Consent Agenda Items



Opening Remarks



Old Business



New Business

RECOMMENDATIONS



01 / Amite River Watershed Pilot Program

LOCAL DEVELOPMENT REVIEW

- Attain local and regional feedback on the establishment of a pilot program to use the Amite River Model for development review and permitting
- Enables state and regional collaboration

02 / Amite River Watershed Pilot Program

STATE AGENCY PROJECT PRIORITIZATION

- Implement the use of watershed modeling within a single state agency for project prioritization and funding processes
- Enables establishment of best practices and guidance for use of watershed models



Updates

PROGRAM DEVELOPMENT





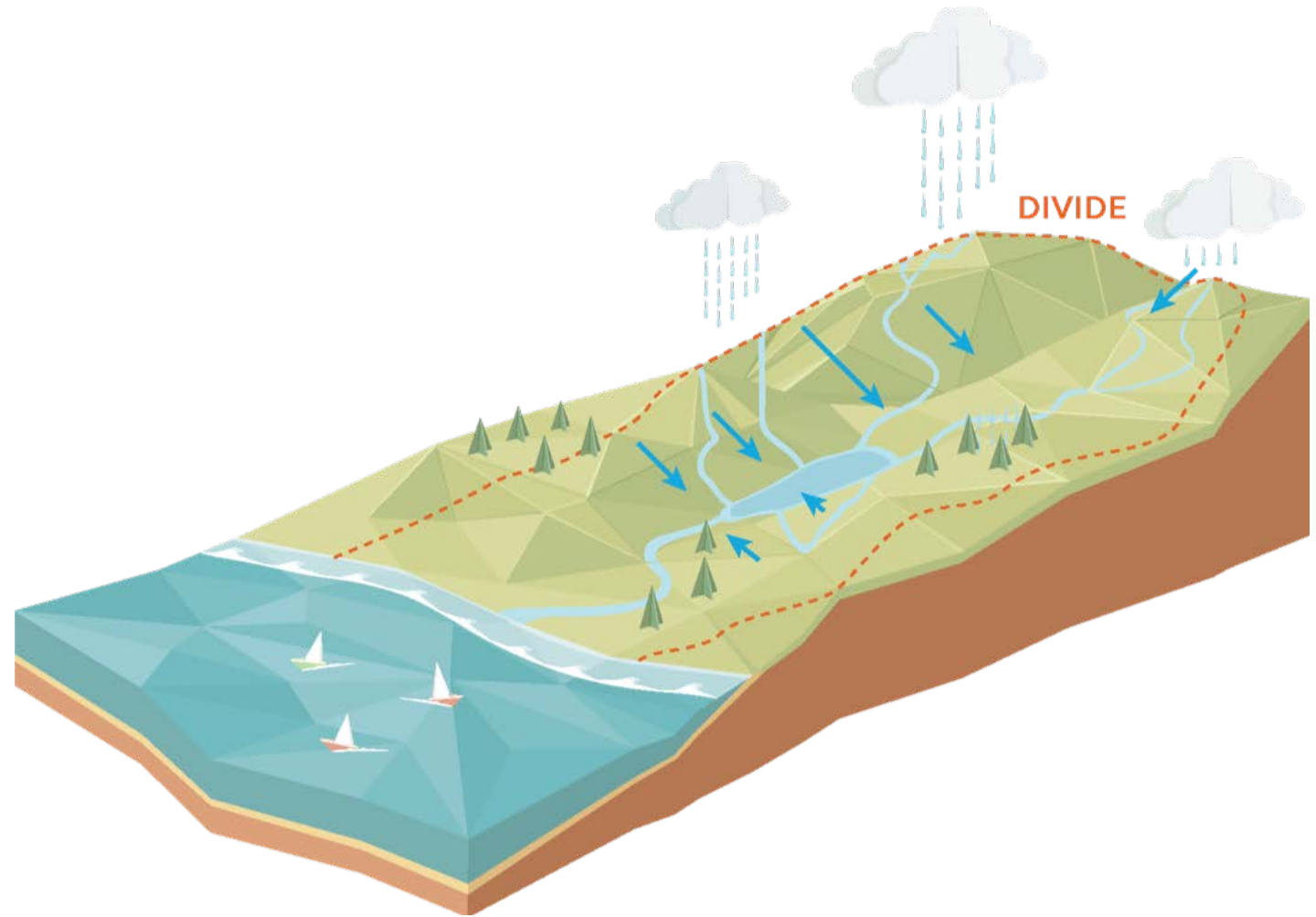
ABOUT

WATERSHEDS



What is a Watershed?

The land area that drains to a single water body - affects water quality and quantity in the water body that it surrounds.



Guiding Principles of a Watershed Management Approach

PARTNERSHIPS: Those most affected by management decisions are involved throughout and shape key decisions.

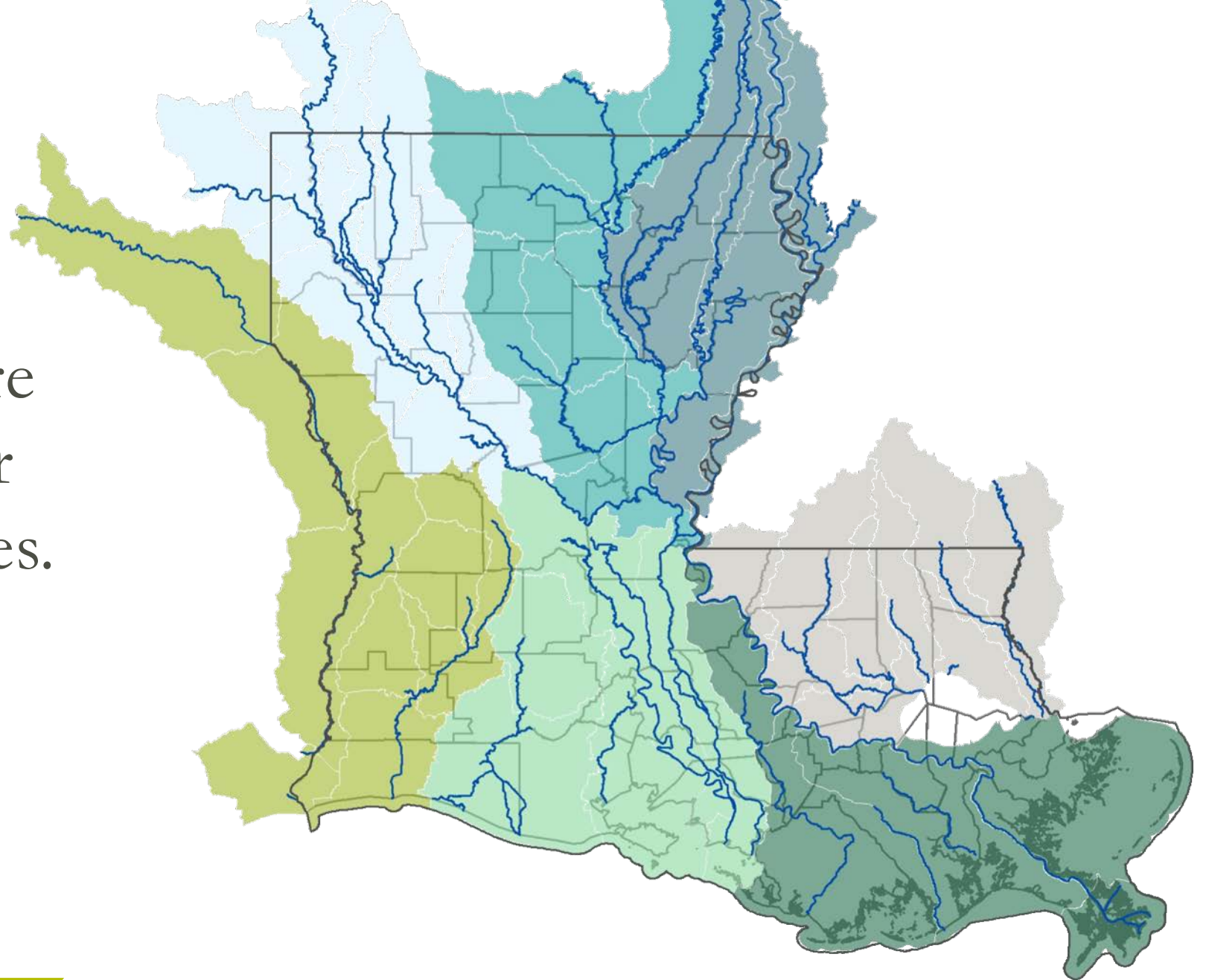
GEOGRAPHIC FOCUS: Activities are directed within specific geographic areas, typically those that drain to surface water bodies or that recharge or overlay ground waters or a combination of both.

SOUND MANAGEMENT TECHNIQUES BASED ON STRONG SCIENCE AND DATA: Collectively, watershed stakeholders employ sound scientific data, tools, and techniques in an iterative decision-making process



Louisiana's Watersheds

Our watersheds are not defined by our political boundaries.





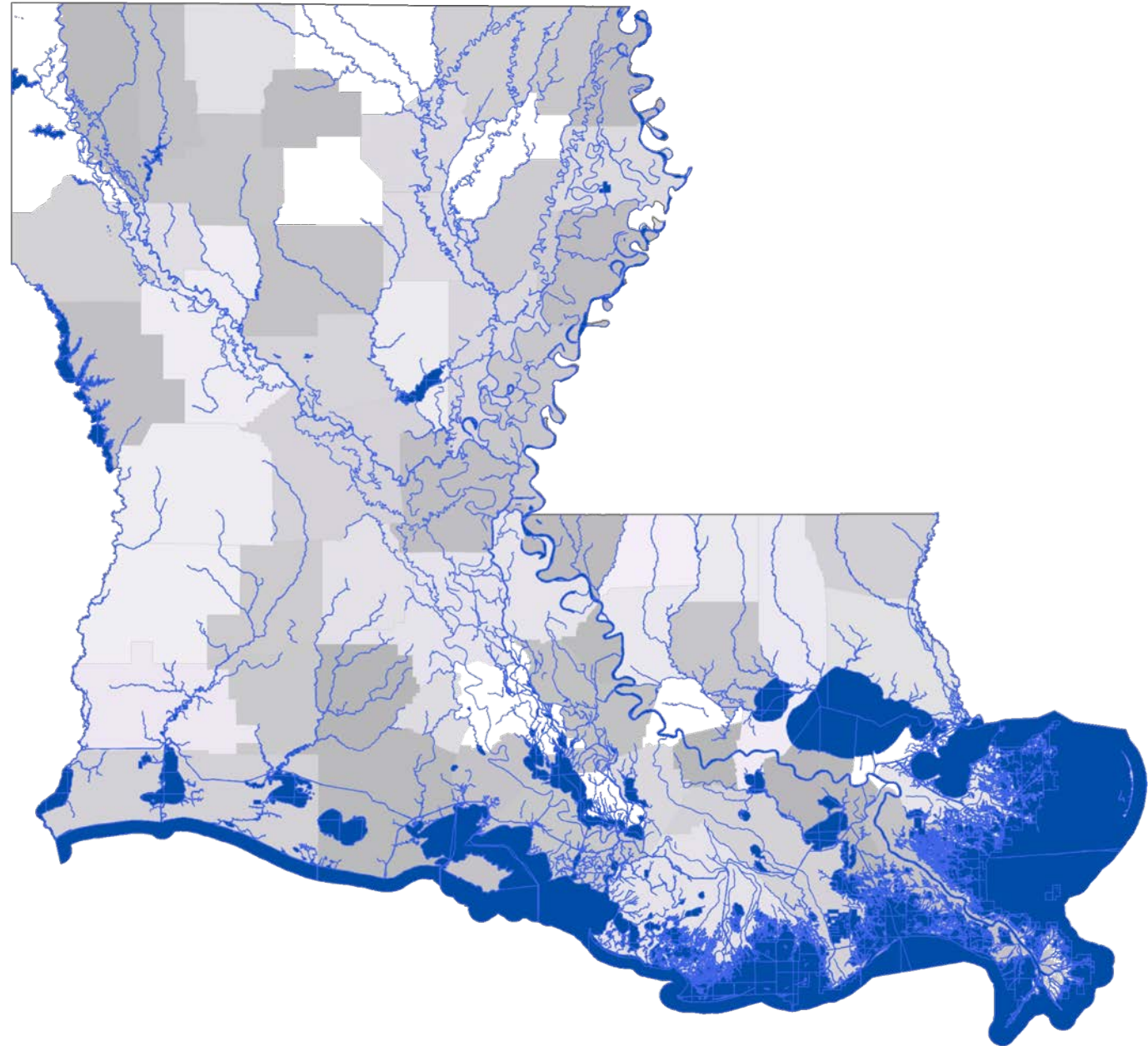
ABOUT LOUISIANA

Louisiana's State Claimed Waterbodies

- 900 named bayous
- 110 named rivers
- 242 named lakes

Actions in one community can impact entire systems.

(SOURCE: LOUISIANA STATE LANDS OFFICE AND LOUISIANA DNR'S SONRIS GEODATABASE)

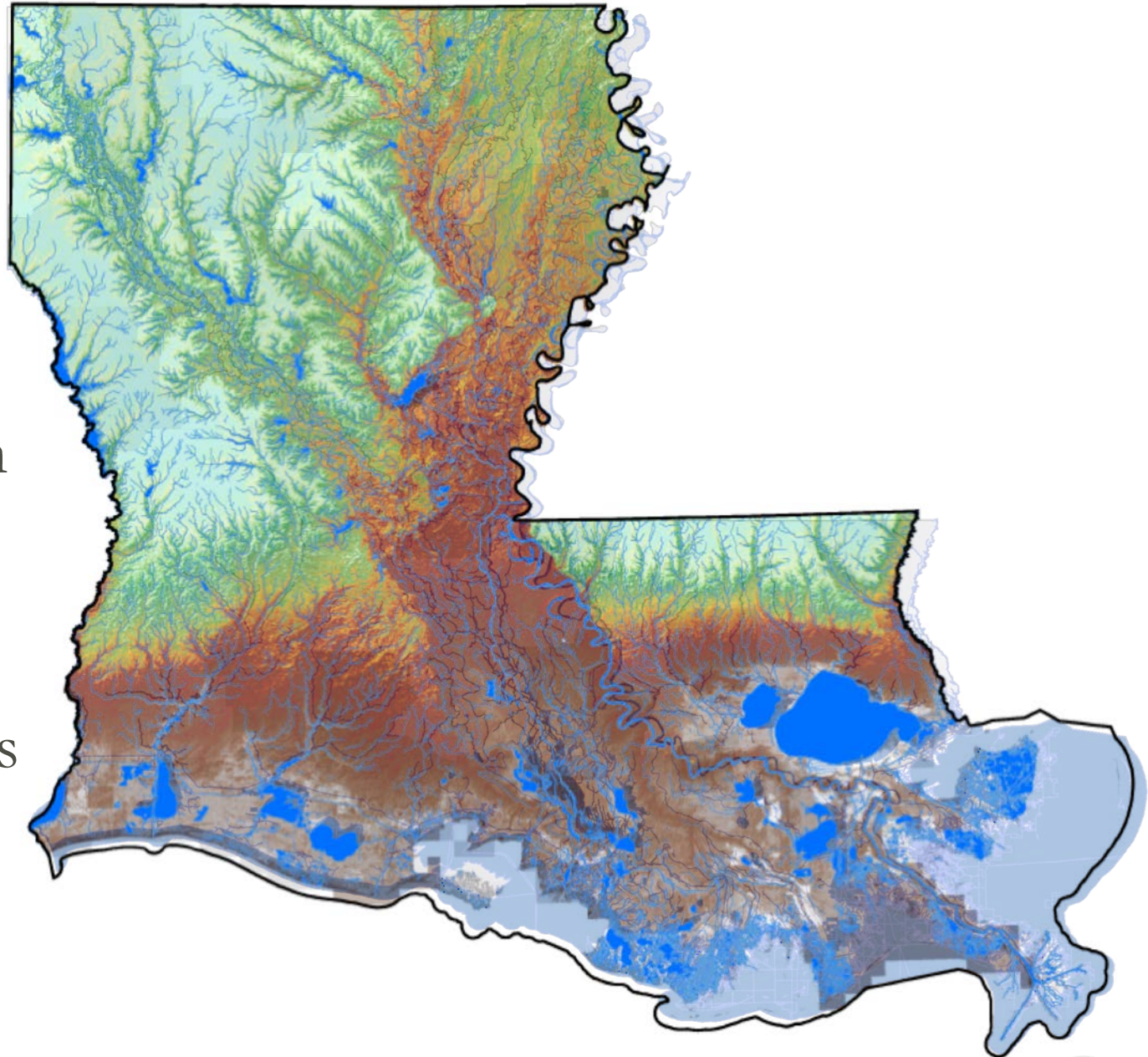


Elevation and Hydrography

Louisiana is very FLAT.

We are the fourth-flattest state in the nation.

Within the flatter (orange, brown, yellow) areas, it becomes more difficult to predict how water will be absorbed.

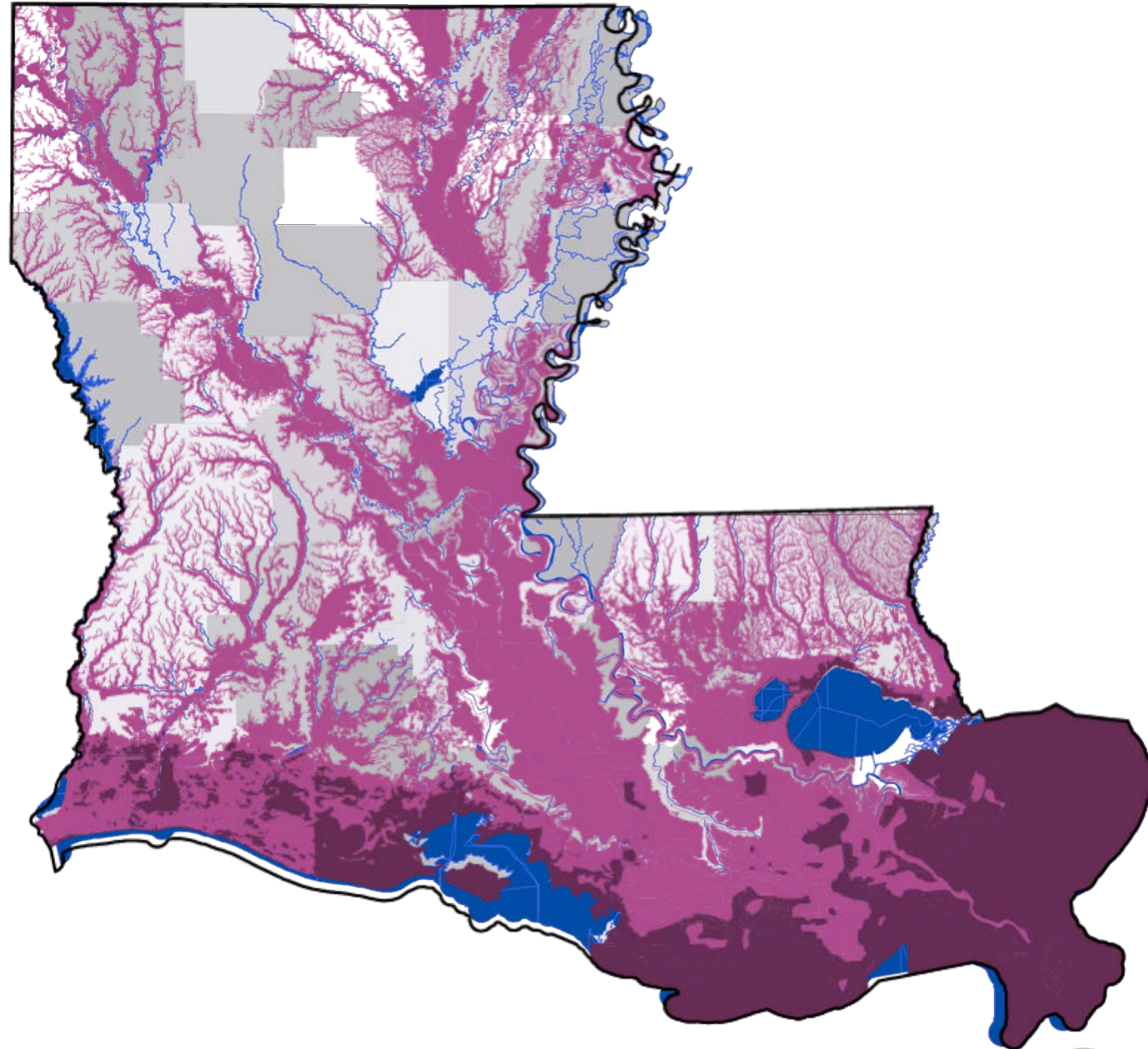


Special Flood Hazard Areas

Regulated by FEMA through the National Flood Insurance Program

- 26,826 square miles in the SFHA
- 51.21% of the State

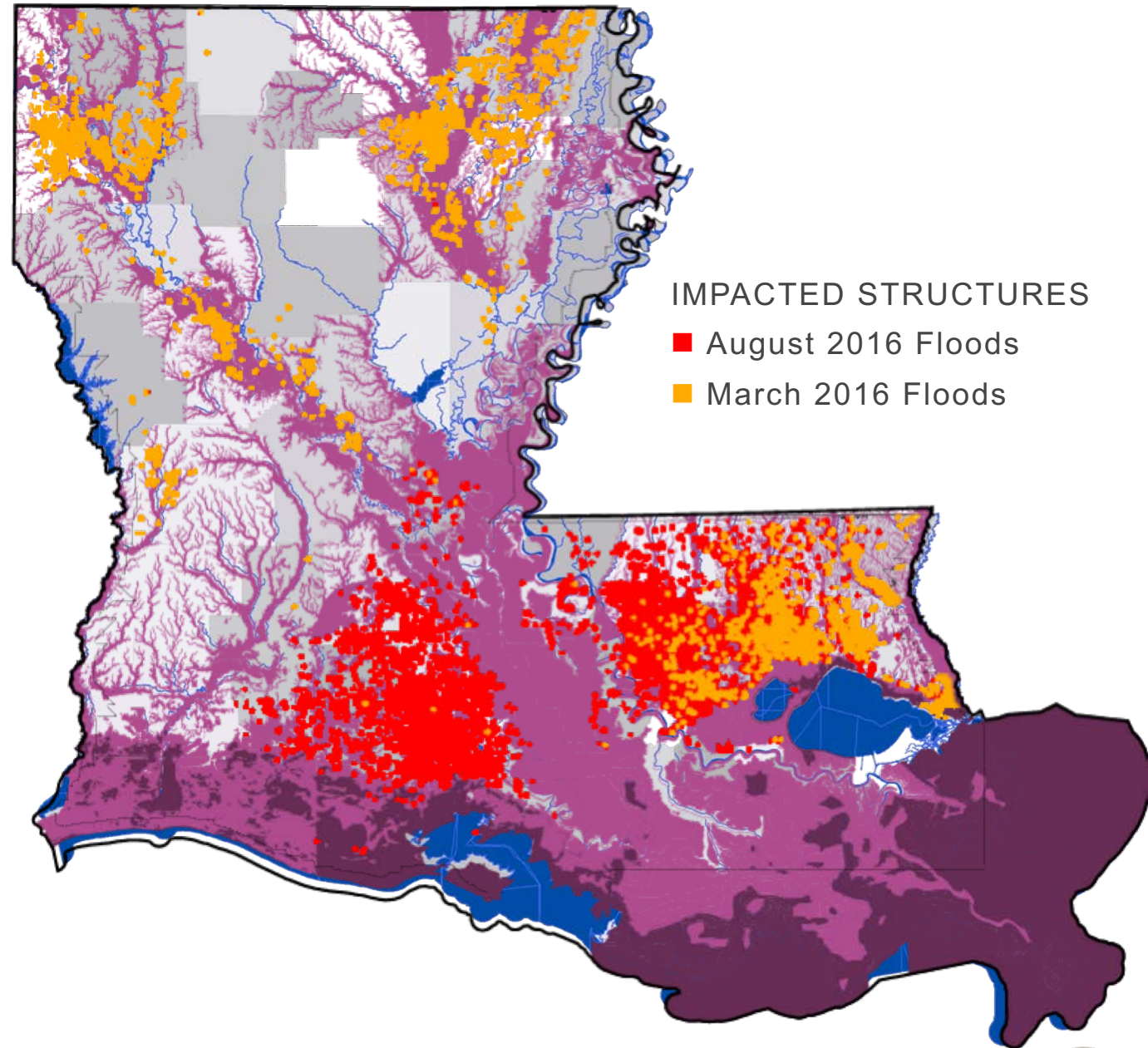
(SOURCE: LOUISIANA WATERSHED RESILIENCY STUDY. MAP 3.5.1. FEMA; DATED UPDATED 20 JULY 2017)



2016 August and March Floods

Combined total of
145,000 structures
impacted.

More than 7.1 trillion
gallons of rain.

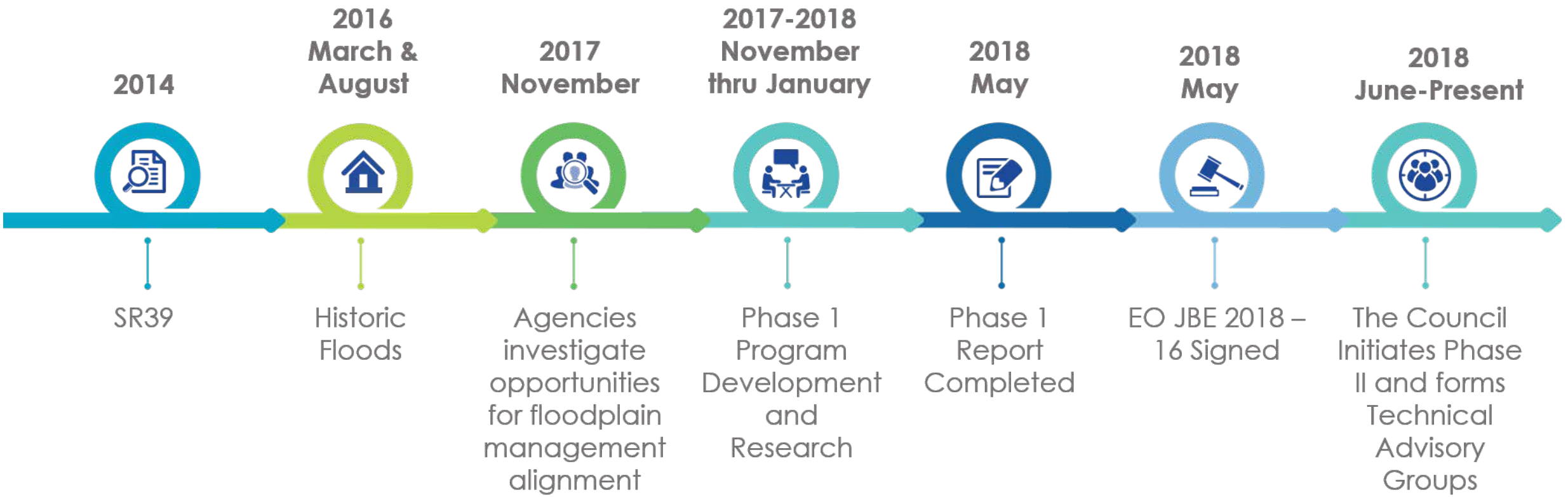


ABOUT

THE LOUISIANA WATERSHED INITIATIVE

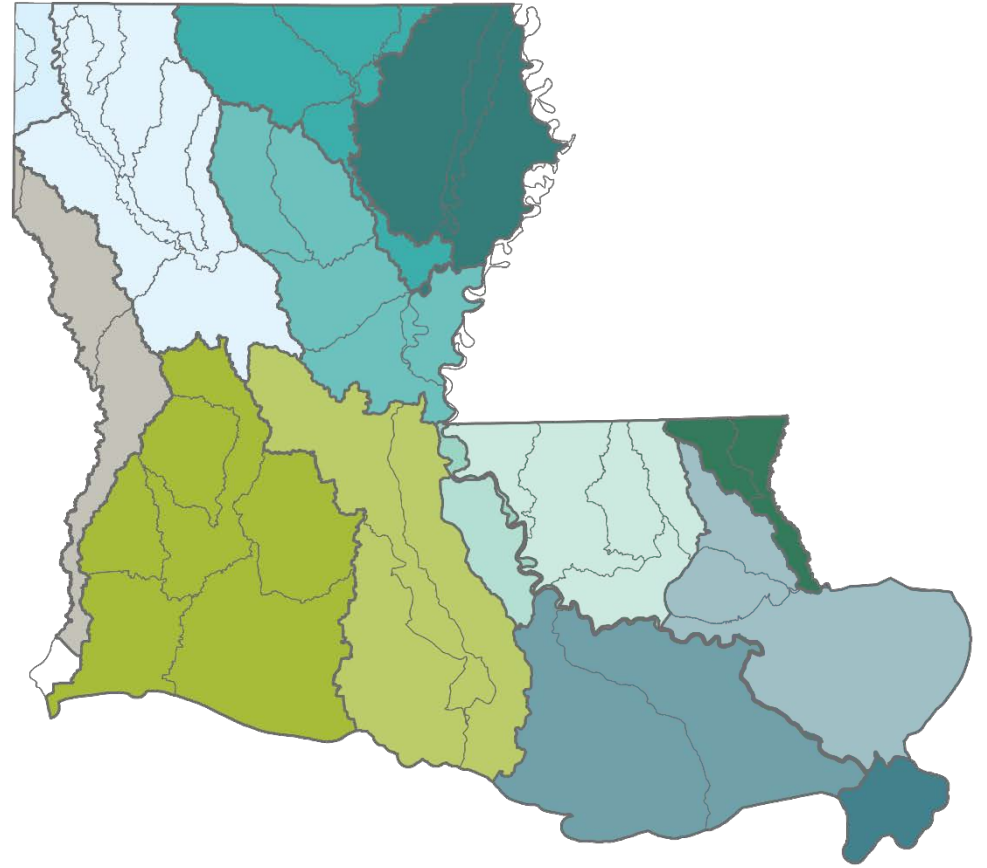


Timeline

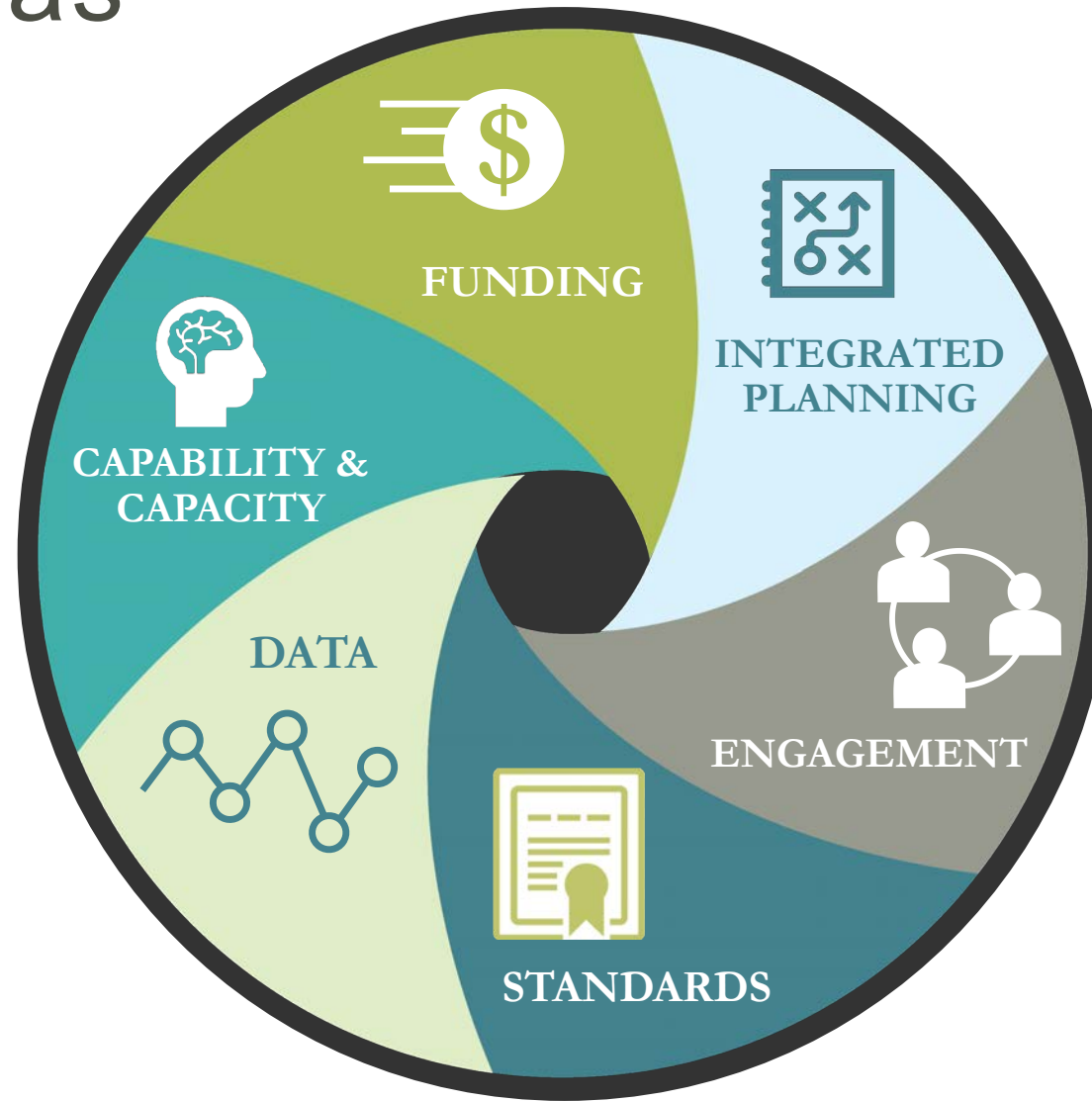


OUR MISSION

Reduce flood risk and improve floodplain management across the state, including through maximizing the natural and beneficial functions of the floodplain



Strategic Areas of Focus

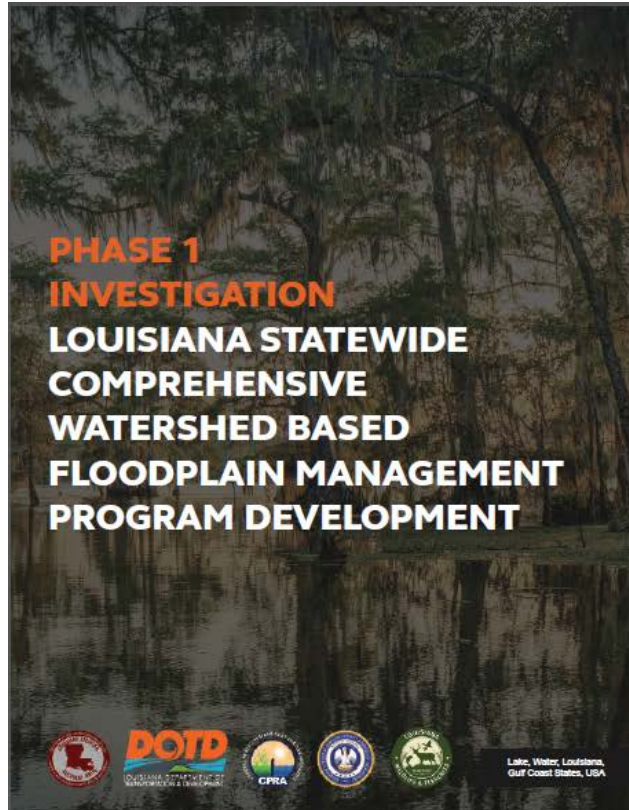


The goal is to improve water management to *proactively* address flood risk and mitigation.



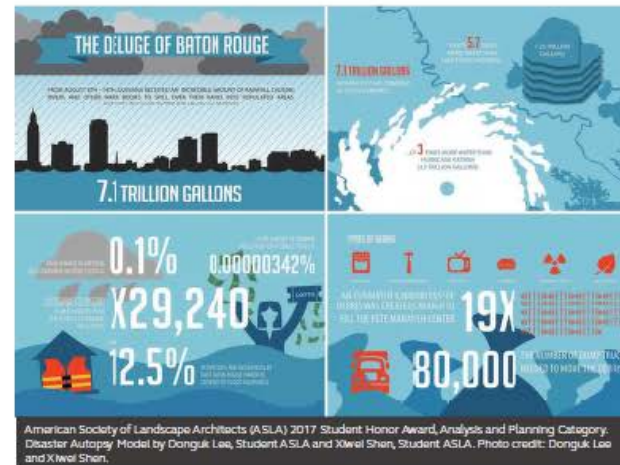
Louisiana Watershed Initiative

Program Development



In 2016, Louisiana experienced two historic rain events that exposed our state's current floodplain management challenges.

In August 2016, more than 7 trillion gallons of rainwater fell on the state, resulting in more than 31 inches of rain in parts of Livingston Parish alone (the area hit hardest by the event) (Di Liberto 2016). Governor John Bel Edwards called the disaster a "historic, unprecedented flooding event" (Phippen 2016); approximately 146,000 homes were damaged due to the flooding (Broach 2016). Economic damages were approximated at more than \$10 billion, and the state has a long road ahead to reach full recovery (The Advocate 2016). Just months prior to this catastrophic event, flash flooding in March 2016 set records with historic rainfall and river crests damaging at least 12,000 homes in the state (Allen 2016; Vagell 2016).



PHASE I INVESTIGATION

Set the stage for state agency coordination - alignment of programs, policies, and practices

\$1.2 BILLION HUD CDBG ALLOCATION

Creates opportunity for long-term governance structures, demonstration projects, adoption of higher development standards, improved policies and approaches



What do we know today about water management and flood risk reduction?



WE UNDERSTAND

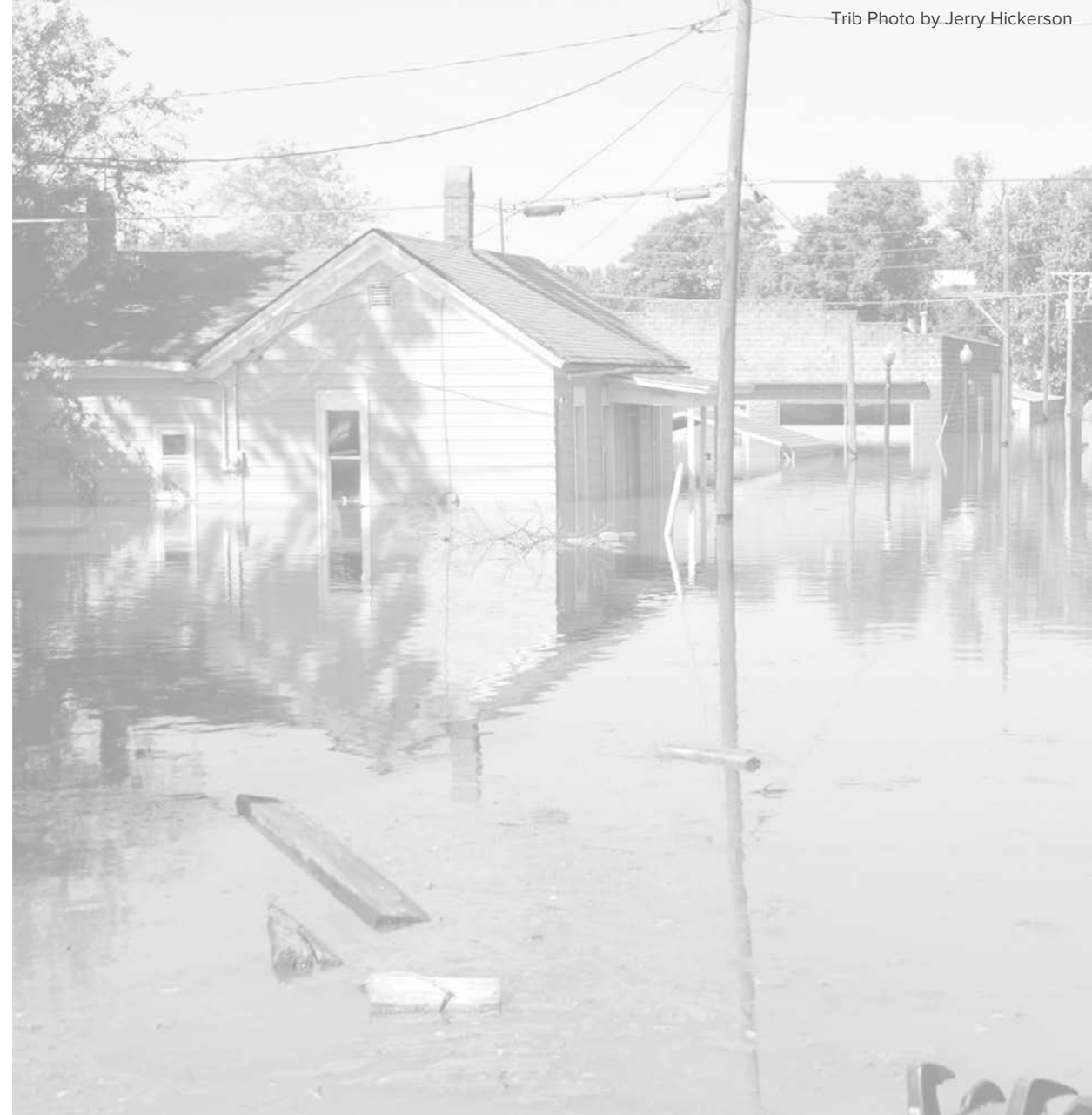
- Water knows no boundaries.
- It requires a new way of thinking.
- It requires a watershed approach.
- We need to address inland and coastal flooding to mitigate future flood loss.



Current efforts tailor best practices to LA

PILOT PROJECTS:

- Amite River Basin Model
- State Agency Resilience Internal Audit
- State Agency H&H Model Use in Project Prioritization
- H&H Model Use in Local Development Review



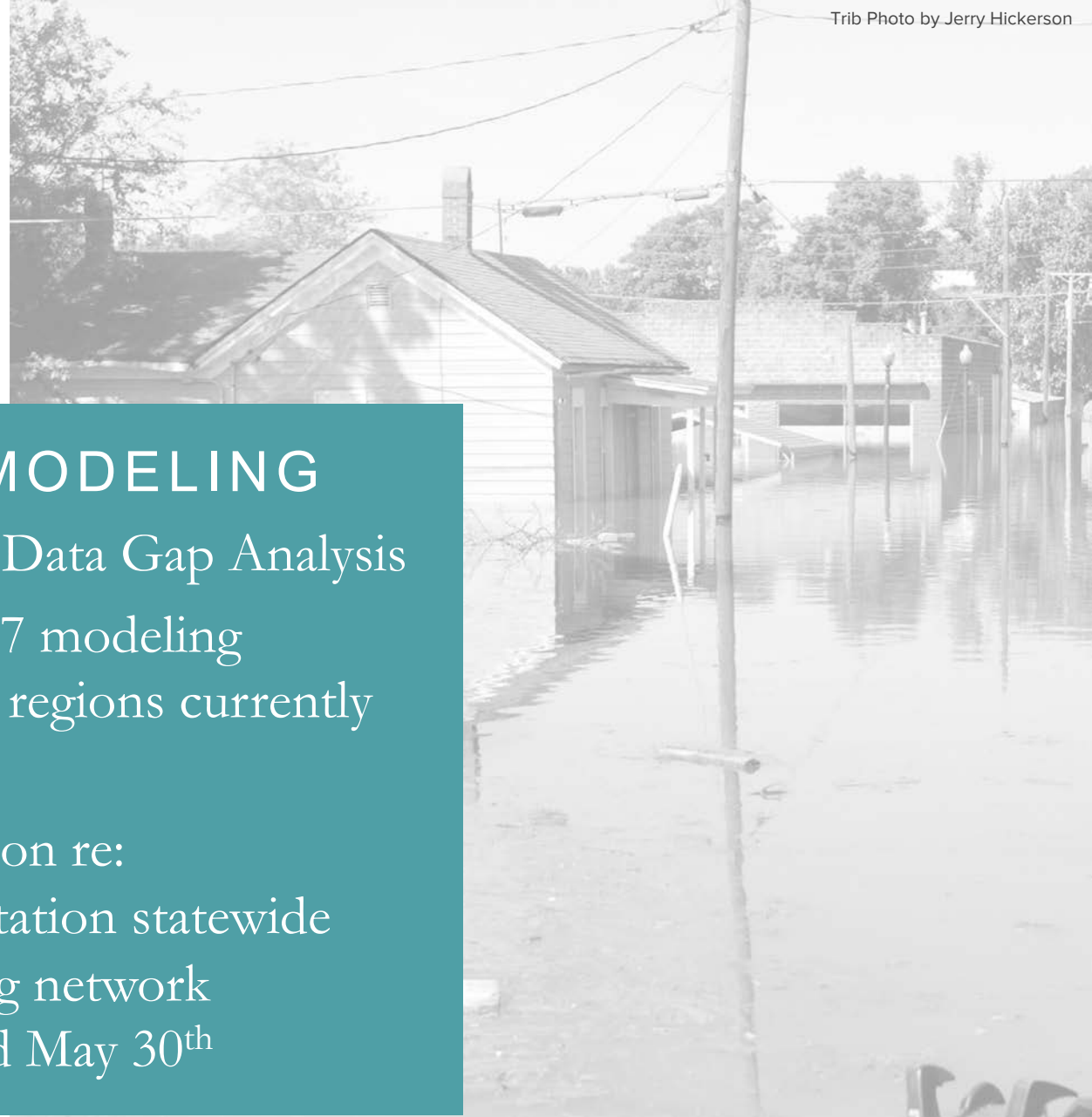
Current efforts tailor best practices to LA

PILOT PROJECTS:

- Amite River Basin Model
- State Agency Resilience Internal Audit
- State Agency H&H Model Use in Project Prioritization
- H&H Model Use in Local Development Review

DATA & MODELING

- Extensive Data Gap Analysis
- RFQs for 7 modeling watershed regions currently advertised
- Investigation re: implementation statewide monitoring network anticipated May 30th



Current efforts tailor best practices to LA



PILOT PROJECTS:

- Amite River Basin Model
- State Agency Resilience Internal Audit
- State Agency H&H Model Use in Project Prioritization
- H&H Model Use in Local Development Review

DATA & MODELING

- Extensive Data Gap Analysis
- RFQs for 7 modeling watershed regions currently advertised
- Investigation re: implementation statewide monitoring network anticipated May 30th

REGIONAL MANAGEMENT

- Consensus building around provisional regional watershed boundaries/steering committee composition



Louisiana Watershed Initiative *Listens*

Transparent & Collaborative Approach to Program Design

FALL 2018

8 REGIONAL CONFERENCES

Locals informing the process

engineers, planners, floodplain managers, public
works staff, emergency responders, code
enforcement staff, elected officials, and more

555



STATEWIDE LISTENING
TOUR



Louisiana Watershed Initiative *Listens*

Transparent & Collaborative Approach to Program Design

Best Practices Summit



WINTER 2019

TWO DAYS IN HARD HIT AREAS

National experts informing the process

150

local, state, and national experts in attendance and another **1,000+** who joined us online



Louisiana Watershed Initiative *Listens*

Transparent & Collaborative
Approach to Program Design

SPRING 2019

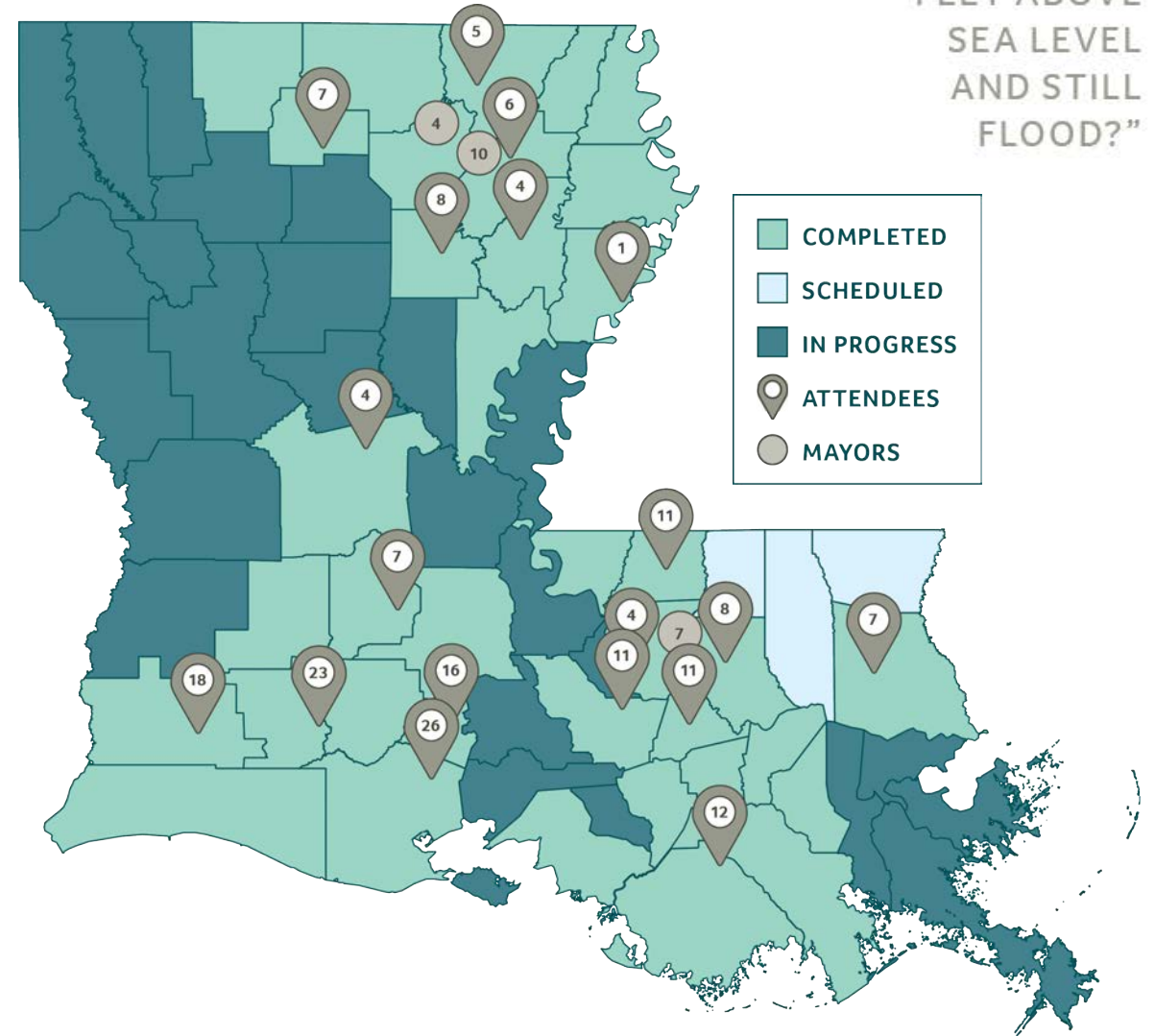
36 PARISHES – PART 1

*Local leaders inform
the process*

To date, we've engaged nearly **190** attendees

Representative of **36** parishes located in the state's
most impacted watersheds

"HOW CAN
YOU BE 65
FEET ABOVE
SEA LEVEL
AND STILL
FLOOD?"



Parish Leadership Meetings Recap

LOCAL VOICES

“How can you be 65 feet above sea level and still flood?”

“Streets we’ve never seen go under water, are going under water, because everything is full.”

“With the expected snow melt, and June peak river heights, we are—again—preparing for the worst.”



International Best Practices Workshop with Henk Ovink

MAY 24, 2019

Center for Coastal and Deltaic Solutions, Baton Rouge

Ovink shared his experiences addressing flood risk in The Netherlands and around the world (e.g., overlapping jurisdictions and long-term governance around flood risk issues)

LWI Council and technical advisory group members were able to share their most pressing challenges, ask questions and seek guidance to guide ongoing program and planning efforts



International Best Practices Workshop with Henk Ovink

MAY 24, 2019

“Data without THE PROCESS is worthless.”

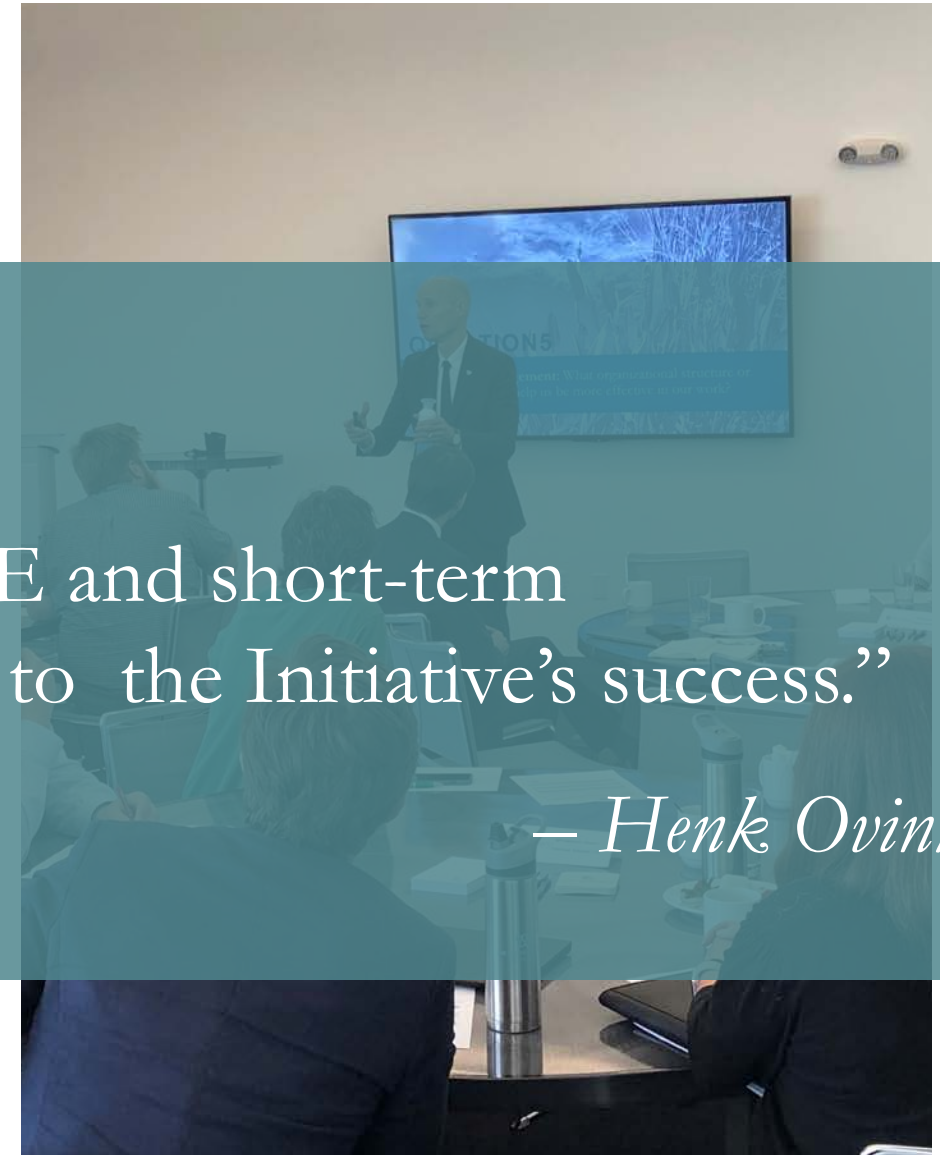
Center for Coastal and Deltaic Solutions / Baton Rouge, LA

“Focusing on both long-term GOVERNANCE and short-term DEMONSTRATION PROJECTS will be key to the Initiative’s success.”

Ovink shared his experiences addressing flood risk in The Netherlands and around the world (e.g., overlapping jurisdictions and long-term governance around flood risk issues)

LWI Council and technical advisory group members were able to share their most pressing challenges, ask questions and seek guidance to guide ongoing program and planning efforts

— Henk Ovink



Provisional Regional Steering Committees

SHARING RESPONSIBILITY FOR RESILIENT DECISION-MAKING AND IMPLEMENTATION



Parish Leadership Meetings Recap

FEEDBACK AND FINDINGS

- Input provided on two priority topics:
 - **Provisional Watershed Boundaries**
 - **Proposed Regional Steering Committees**
- Provided a better understanding of impacts, a sense of urgency and engagement in the Initiative's mission
- Feedback captured through **exit surveys** and **LWI staff reports/parish feedback form**



Provisional Regional Steering Committees

SHARING RESPONSIBILITY FOR RESILIENT DECISION-MAKING
AND IMPLEMENTATION

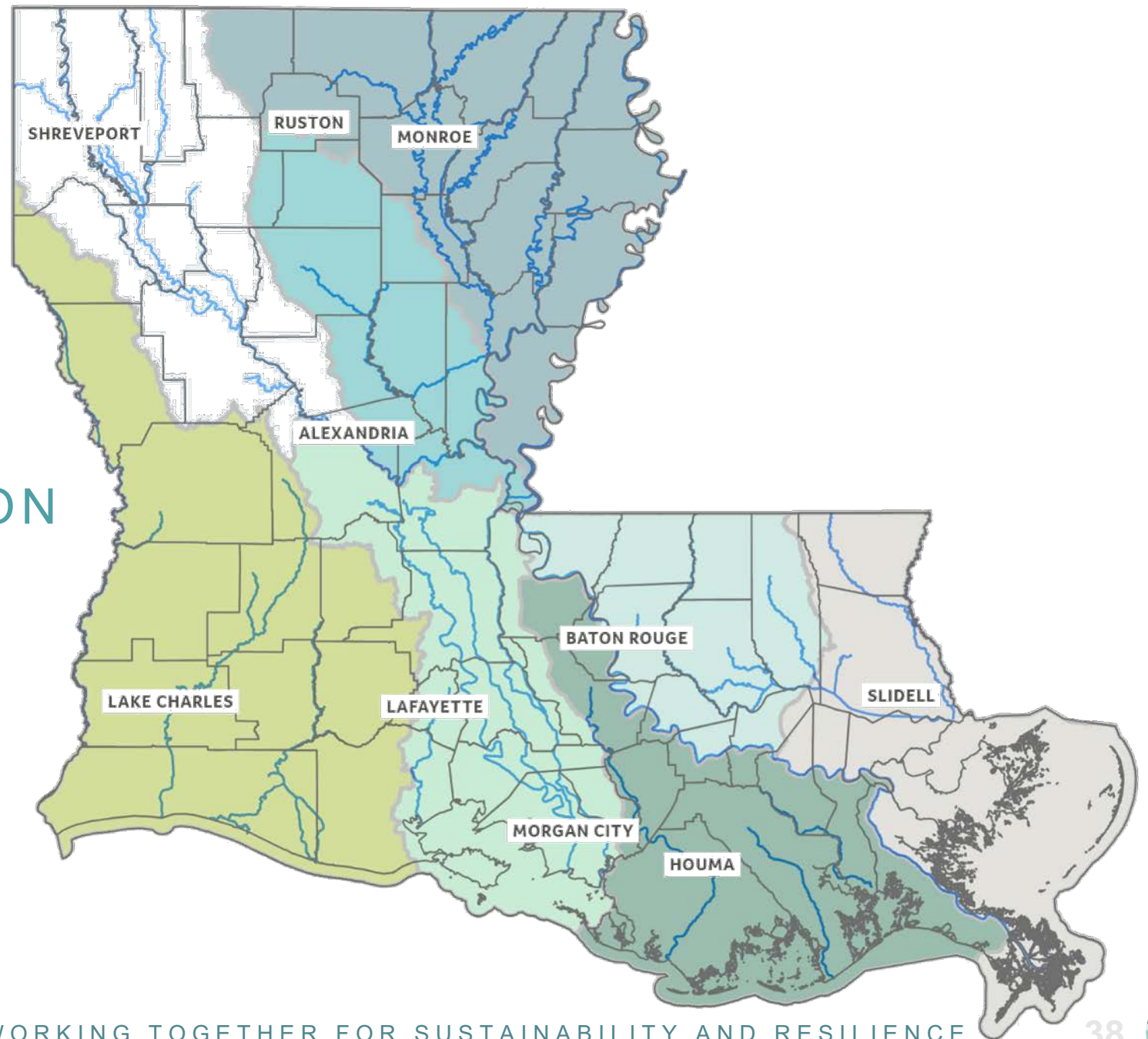
Regional Steering Committees

- Organized within watershed-based boundaries
- Minimum 11-13 residents with diverse areas of expertise in watershed issues



Provisional Regional Geographic Boundaries

DRAFT: FOR DISCUSSION



Parish Leadership Meetings Recap

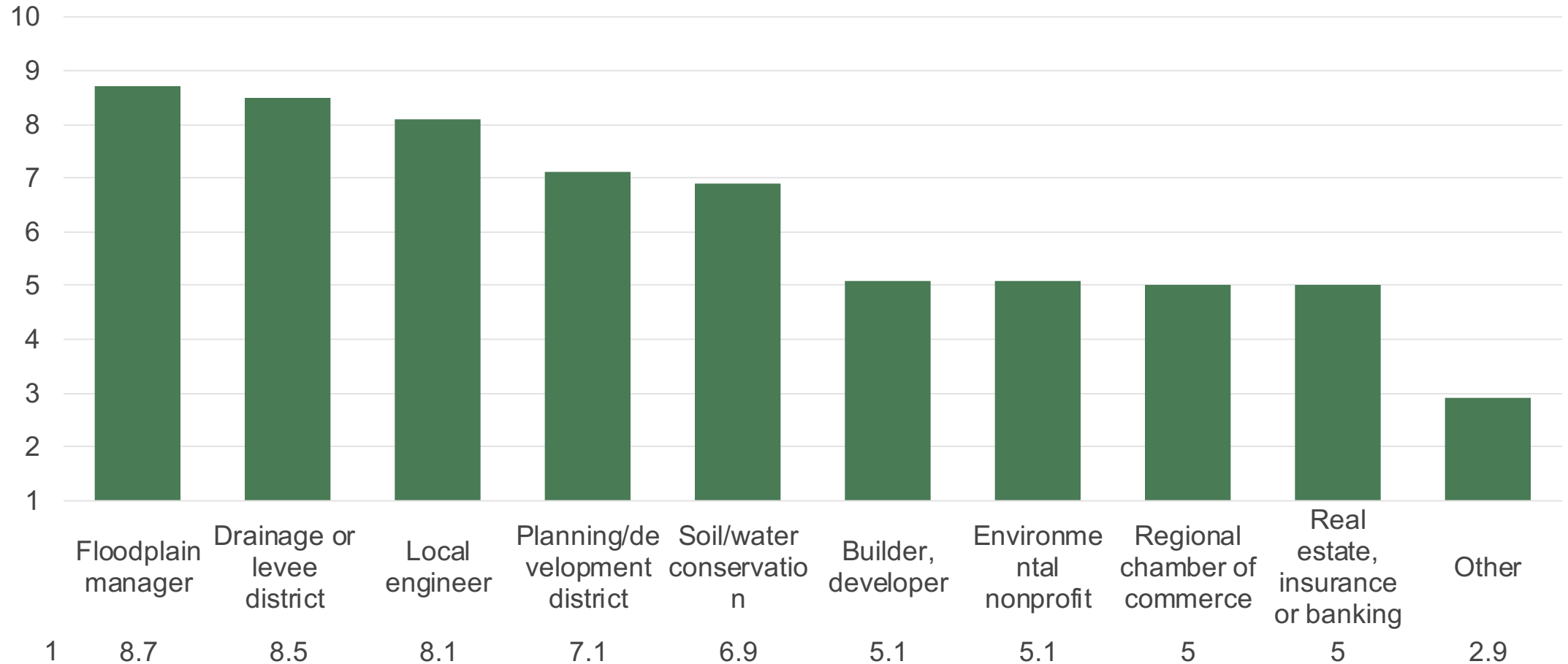
SURVEY FINDINGS

- **Provisional Watershed Boundary Delineation**
 - Overwhelming support in favor of delineating
- **Regional Steering Committee Composition**
 - Highest-priority membership recommendations included:
 - Floodplain managers
 - Local drainage or levee district representatives
 - Local engineers



Parish Leadership Meetings Recap

REGIONAL STEERING COMMITTEE RECOMMENDATIONS



Parish Leadership Meetings Recap

ADDITIONAL KEYS AREAS OF FEEDBACK

- Need for increased collaboration across multiple parish boundaries and larger regions
- Planning that remains proactive versus reactive
- Refining provisional watershed regions and boundaries where feasible



Parish Leadership Meetings

PARISH LEADERSHIP SURVEY: SHARE YOUR FEEDBACK

- Seeking feedback from parish leaders and staff on provisional watershed boundaries, regional steering committee composition, and more
- Visit the link below to take a quick survey and share your feedback:

[WATERSHED.LA.GOV/REGIONALSURVEY](https://watershed.la.gov/regional-survey)



Updates

ENGAGEMENT ACTIVITIES



2019 Legislative Update

MAY 29-JUNE 6 2019

Louisiana State Capitol
Baton Rouge, LA

Includes an overview of progress to-date

Information packets with key program information, parish leadership meeting updates, and LWI staff contact information to be distributed

THE FUTURE OF FLOOD PROTECTION

ORIGIN

After the devastating floods of 2016, state leaders realized Louisiana's approach to flood mitigation had to change. Our strategy must enhance, support and improve existing proactive flood protection measures, while creating mechanisms that depoliticize decision-making around flood risk statewide.

In 2018, Gov. John Bel Edwards created the Council on Watershed Management tasked with developing a flood mitigation system organized along the state's regional watersheds and the natural flow of water within them. Under this approach, all communities in each watershed work together on decisions and policies.

The Council established the Louisiana Watershed Initiative to coordinate this new statewide effort and to serve as a hub for communication, coordination and access to reliable scientific data.

The Louisiana Watershed Initiative's goals are:

- Improve the way residents and governments understand, address and respond to flood risk.
- Organize a structure for making changes and improvements on a regional scale.
- Develop the modeling, planning and data tools that inform and support watershed decisions.

A NEW APPROACH

The watershed approach represents a new mindset when it comes to Louisiana's flood mitigation strategy and a new benchmark for helping communities leverage resources to become stronger and more resilient. Through this system, public and private sector stakeholders work together within each watershed to establish an environmental framework, regardless of political boundaries. Decisions and policies for improvements are nonpartisan, driven by scientific data to improve flood mitigation and to focus on the watershed's highest-priority needs.

The watershed strategy has become increasingly popular since its introduction in the early 1990s, when it earned endorsement from the U.S. Environmental Protection Agency. Louisiana is one of the first states to adopt the watershed approach supported by data collection and modeling at this scale and on a statewide level.

WHAT IS A WATERSHED?

It is the area of land that water naturally flows over when traveling to the lowest point of the landscape. The nation's watershed systems are cataloged by the U.S. Geological Survey.

2019 LEGISLATIVE UPDATE: WHAT WE'RE HEARING FROM PARISH PARTNERS

BACKGROUND

In April and May, the Louisiana Watershed Initiative hosted 22 meetings throughout three of the watersheds most impacted by the Great Floods of 2016. More than 180 parish presidents, mayors, police jurors, council members and administrative staff from 36 parishes took part, gaining crucial updates on the Louisiana Watershed Initiative's progress and discussing next steps in the work toward regional watershed management. Additional parish-level meetings will continue throughout 2019.

The resulting discussions generated a significant amount of feedback documented through an exit survey that parish leaders were asked to complete. LWI staff then organized and consolidated the responses, in addition to capturing meeting comments through a parish feedback form. To date, 52 exit survey responses have been recorded, along with more than 70 individual comments from meeting participants.

22 PARISH LEADERSHIP MEETINGS FROM APRIL TO MAY 2019
16 PARISHES / 184 TOTAL ATTENDEES / 73 TOTAL COMMENTS

EMES

ED-BASED DECISION MAKING

Parish representatives were asked for recommendations on in of their watersheds' regional steering cluding their rankings for types of who should serve on these committees. immittees would work with the state on el planning, provide support for early data efforts, participate in shared decision- are. This chart shows parish representatives' clusion of floodplain managers, s from local drainage or levee districts and s. To a lesser extent, they also prioritize s from the soil and water conservation nd planning and development districts.

Category	Ranking
Floodplain manager	8.7
Drainage or levee district	8.5
Local engineer	8.1
Planning/development district	7.1
Soil/water conservation	6.9
Builder, developer	5.1
Environmental nonprofit	5.1
Regional chamber of commerce	5.0
Real estate, insurance or banking	5.0
Other	2.9

Interstate Summit

JUNE 12, 2019

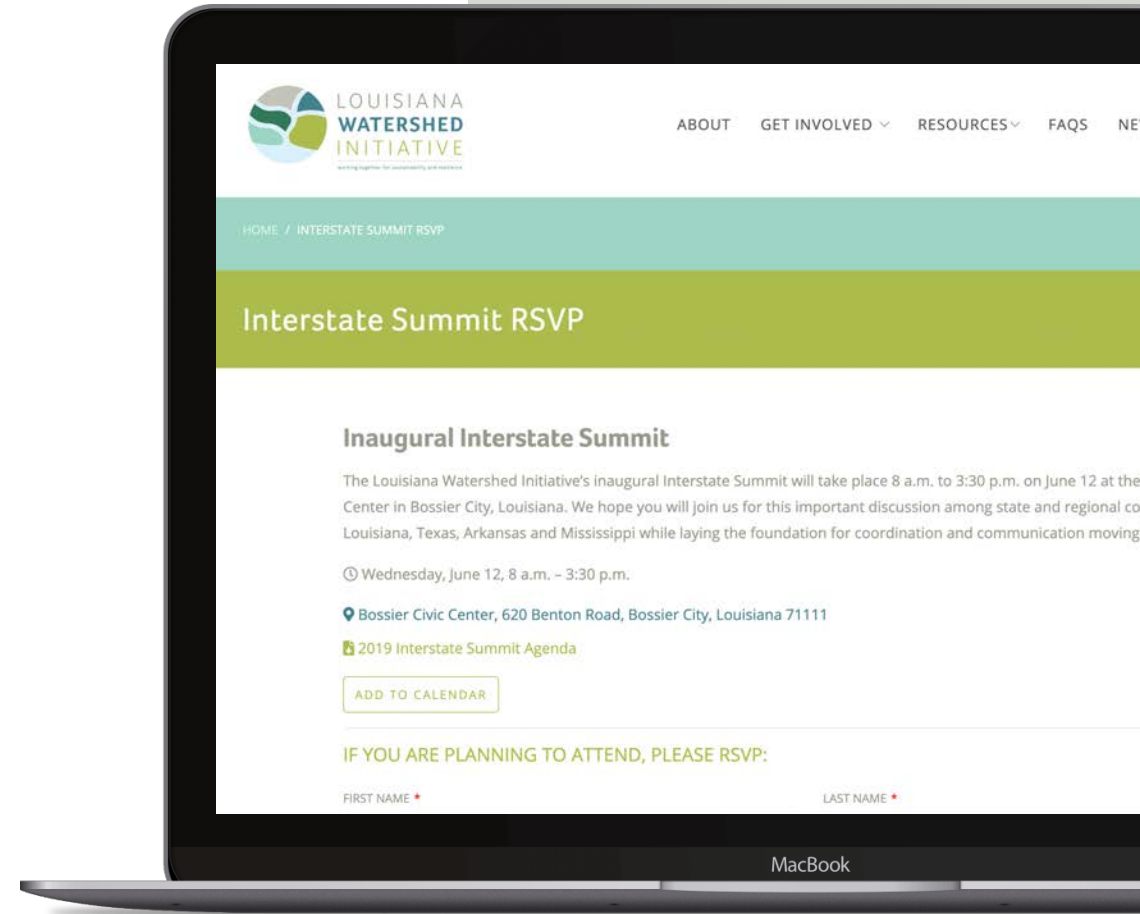
Bossier Civic Center, Bossier City

Focus on bringing together state and regional counterparts in **Louisiana, Texas, Arkansas and Mississippi** to build partnerships and enhance coordination of water management issues across state lines

Free and open to the public – attendees will include state, regional and local leadership working on flood risk reduction programs or initiatives near state lines in Louisiana, Texas, Arkansas and Mississippi

RSVP today at:

[WATERSHED.LA.GOV/INTERSTATE-SUMMIT-RSVP](https://watershed.la.gov/interstate-summit-rsvp)



Next Steps

REGIONAL CAPACITY BUILDING GRANT PROGRAM:
SUMMER 2019



Capacity Building Grant Program



OBJECTIVE

Enhance the capacity of local floodplain management and mitigation efforts, watershed coalitions, and other regional entities

ELIGIBLE ACTIVITIES

- Coalition-building
- Policy development/evaluation
- Grant application support
- Program development
- Planning/ plan alignment efforts
- Outreach, education, and training
- Other non-structural activities that support floodplain management and risk reduction



Program Description

ELIGIBLE
APPLICANTS

- Planning and Development Districts (PDDs)
- Metropolitan Planning Organizations (MPOs)
- Watershed-Based Regional Entities (Groups of parishes and other local/regional governments that convene within a defined watershed-based region)

ANTICIPATED
TIMELINE



Next Steps

STATEWIDE RIVER AND
RAIN GAUGE MONITORING NETWORK



Building the Network

A COLLABORATIVE APPROACH

- Public meeting with industries
- Development of backbone network in collaboration with USGS and other agencies
- Collection of stakeholder feedback on preliminary network design
- Assessment of costs circulated within LWI
- Issuance of a statewide RFP, pending guidelines in the Federal Register Notice



Next Steps

CDBG-MIT FUNDING ACTION PLAN
APPROVAL PROCESS



\$1.2B CDBG-MIT Funding

REQUIRED NEXT STEPS ARE TIME CONSUMING

1. Updated Action Plan (*in development*) in response to FRN
2. LWI Council Meeting to review/approve summary & budget
3. Proposed Action Plan published, including a minimum 30-day period for citizen review and comment (*pre-submittal*)
4. HUD review and approval of the Action Plan takes up to 45 days; more to address comments, revisions, or plan denial
5. Before disbursing funds to any organization that is carrying out CDBG activities, a written agreement must be executed



Public Comment



Closing Remarks

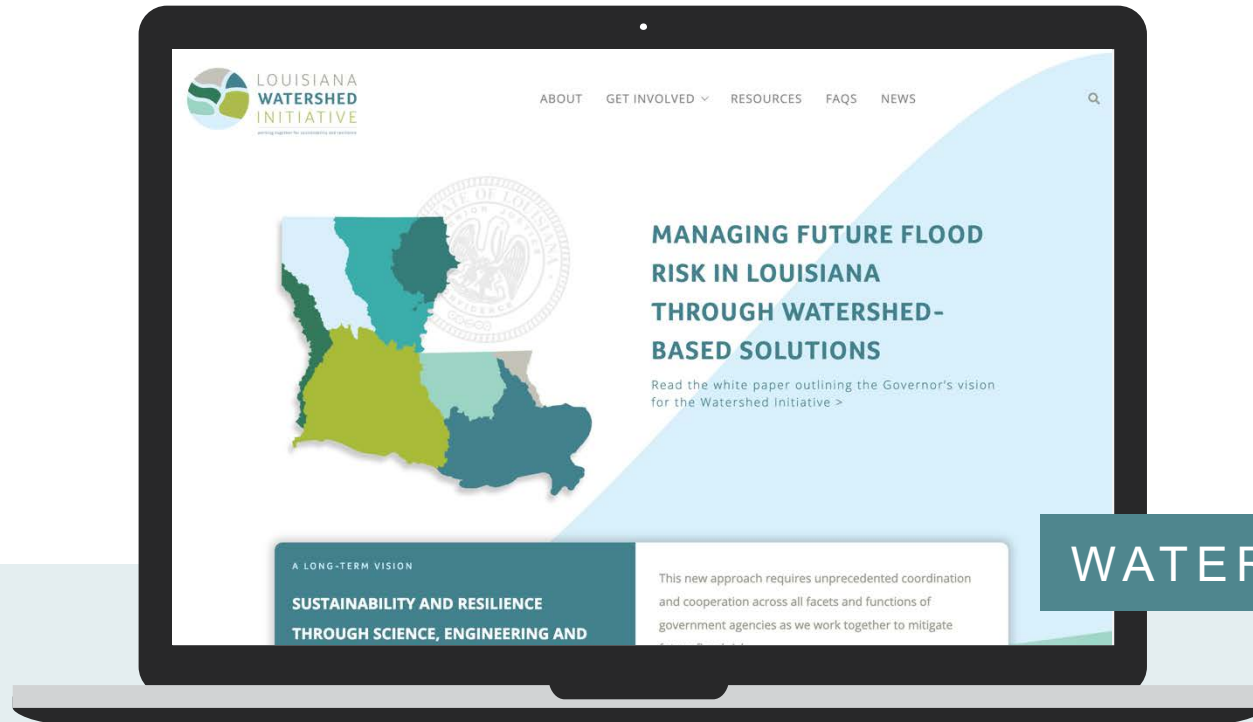


 @LAWATERSHEDINITIATIVE

 @LAWATERSHED

 WATERSHED@LA.GOV

Thank You



WATERSHED.LA.GOV