

2024

# LAFOURCHE BASIN LEVEE DISTRICT Strategic Master Plan



**LAFOURCHE PARISH  
LOUISIANA**



BASE COMPILED FROM TWO QUADRANGLE MAPS AND  
LAFOURCHE COUNTY GENERAL HIGHWAY MAP, POLYCONIC PROJECTION  
(1:60,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 11)



VICINITY MAP



LAFOURCHE BASIN LEVEE DISTRICT  
**Strategic Master Plan**

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2024

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# Acknowledgments

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## CONSULTANT TEAM:

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# 01 introduction

Managing water and mitigating flood risk is a challenge faced by generations of Louisianians. Ensuring the safety of residents and businesses is of paramount importance to the future of Louisiana. Flood risk management and prevention is a shared responsibility between federal, state, and local agencies. Levee districts are the local agencies charged with protecting residents and property in their jurisdiction.

## LEVEE DISTRICTS

There are 24 levee districts in Louisiana and each district manages flood protection unique to that district's geographic needs. The laws governing levee district boards grant them a range of power and duties including construction of recreational facilities, bicycle, and walking paths along the levees, as well as to buy, hold, sell, transfer, or exchange properties as needed to protect land from flood damage or to provide adequate drainage around levees.

Levee districts, with their crucial and diverse set of responsibilities, are an important political and policy institutions across Louisiana, serving as the front-line of defense for most of southern Louisiana and are necessary to ensure community and economic vitality.

Louisiana's Comprehensive Master Plan for a Sustainable Coast has priorities projects for state investment in reducing flood risk, but the majority of the authority and flood control remains at the local level.

## LAFOURCHE BASIN LEVEE DISTRICT

The Lafourche Basin Levee District (LBLD) has a unique role and responsibility to residents of the five Parishes within its jurisdiction. Its ultimate duty is to provide and maintain flood protection to these residents, while serving as a regional flood protection leader and partner to federal and state agencies, managing complex projects on behalf of its member Parishes. LBLD celebrates the rich history and accomplishments of the past 132 years while planning for and adapting to changing challenges of the future and present.

*This Strategic Master Plan will serve as a guiding document for its future, laying out goals and objectives and identifying priorities to best meet the future.*



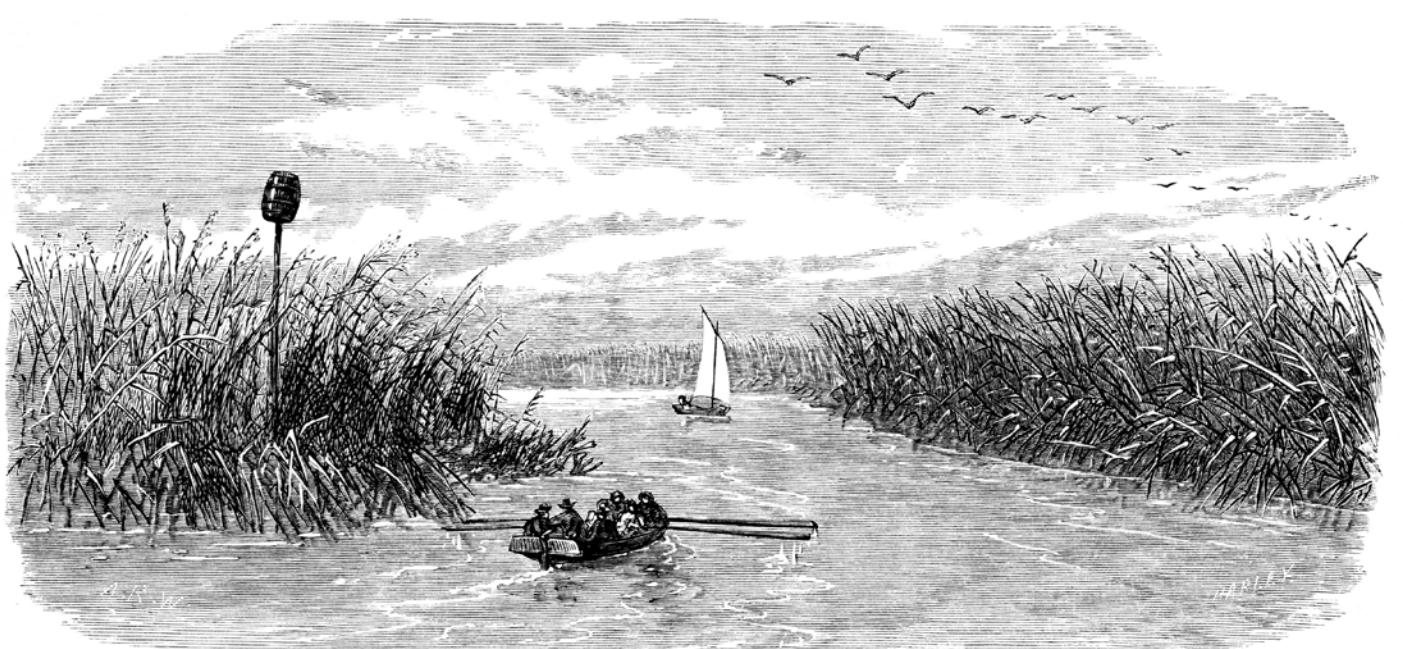
## HISTORY

The Lafourche Basin Levee District (LBD) was established in 1892 with the mission of preventing flooding from the Mississippi River along 63 miles from Donaldsonville to Jefferson Parish. Man made levee systems are crucial to managing the Mississippi River. There is no entity solely responsible for levee construction and maintenance in Louisiana. It is a shared responsibility between Louisiana levee districts, and federal and state partners.

The Mississippi River levees are designed to protect against flooding by confining flow to the leveed channel. The levees are constructed by the federal government and are maintained by local interests, except for government assistance as necessary during major floods.

Periodic inspections of maintenance are made by personnel from the U.S. Army Corps of Engineers and LBD as it is essential that the levees be maintained in good condition for their proper functioning in the flood control plan.

From its inception in **1892**, LBD has met this mission, protecting the residents of Ascension, Assumption, Lafourche, St. James, St. John the Baptist, and St. Charles Parishes by maintaining the Mississippi River levee, preventing catastrophic flooding and drainage disasters. This primary mission of flood protection includes hurricane protection and coastal restoration. Levee districts play a critical role in safeguarding communities from flooding by constructing and maintaining levees and other flood control infrastructure.



A Bayou of the Mississippi.

*The LBD boundaries are shown on the following map.*





**LBLD was created by the Louisiana State Legislature under the provisions of Louisiana Revised Statute (R.S.) 38:291.**

### LOUISIANA REVISED STATUE 38:291 F:

#### LAFOURCHE BASIN LEVEE DISTRICT

1. All the Parishes or parts of Parishes, except the Parishes of Lafourche, Orleans, Jefferson, and Plaquemines, lying in a district between the Bayou Lafourche, the Mississippi River, and the Gulf of Mexico, heretofore known as the Third Levee District, and comprising a portion of the following Parishes: Ascension, St. James, St. John the Baptist, St. Charles, and Assumption shall be embraced in the limits of a levee district to be known as the Lafourche Basin Levee District.
2. In accordance with the provisions of R.S. 38:304, the governor shall appoint eleven persons from each Parish or part of a Parish in the district to serve as levee commissioners as follows:
  - a. One member appointed from Ascension Parish.
  - b. One member appointed from Assumption Parish.
  - c. One member appointed from St. James Parish.
  - d. One member appointed from St. John the Baptist Parish.
  - e. Two members appointed from St. Charles Parish.
  - f. Five members to be appointed from the district at large.
  - g. Repealed by Acts 2006, 1st Ex. Sess., No. 32, §2, eff. Jan. 1, 2007.

In addition to this enabling legislation, there is also a statute outlining the scope of activities levee districts allowed.

### LOUISIANA REVISED STATUTE 38:325:

#### § 325. SCOPE OF ACTIVITIES

A. Levee boards shall engage in any activities related directly to:

1. Flood protection
2. Construction and maintenance of levees
3. Construction of recreational facilities which are located on or immediately adjacent to levees, except the Orleans Levee District shall not be limited to the construction of recreational facilities located on or immediately adjacent to levees.
4. Maintaining, updating, renovating, or modernizing existing

recreational and other facilities owned by the district.

5. Cooperative activities with other public bodies for public purposes.

B. Levee and drainage boards, in addition to those activities provided for levee boards, shall engage in any activities related directly to drainage.

C.

1. The contents of this Chapter notwithstanding, nothing shall preclude the construction of improvements and facilities, public or private, within an airport area to provide activities, businesses, and additionally any other revenue-generating functions which can be dedicated to public use and self-sufficiency of the enterprise as an entity.
2. However, nothing in this Chapter shall be construed to in any way limit, restrict, inhibit, or alter the full and exclusive right, jurisdiction, power, and authority of the Orleans Levee District as granted in R.S. 38:307, 335, and 336 or of the Lafourche Basin Levee District as granted in R.S. 38:334.
3. Nothing contained herein shall be construed to limit, alter, or repeal the requirement that certain lands under the jurisdiction of the Orleans Levee District be utilized for public parks, playgrounds, and beach purposes.
4. Nothing contained in this Chapter shall be construed to limit or prohibit the construction with federal matching funds of recreational facilities which are part of a federally approved flood control program situated south from Donaldsonville to the Gulf of Mexico, within the Lafourche Basin Levee District.

### LBLD COMPOSITION

The Lafourche Basin Levee District is comprised of all or portions of the following Parishes: Ascension, Assumption, Lafourche, St. Charles, St. James, and St. John the Baptist. The levee district primarily provides flood protection for those areas contained in the district. The governing board, consists of 11 members, appointed by the governor, representing each of the parishes in the district's jurisdiction. The governing board administers the operations and responsibilities of the levee district in accordance with the provisions of Louisiana statutes.

The Board selects the Executive Director who oversees the staff of 33 whose primary duties are levee maintenance and administration.



## PURPOSE OF LBLD

### *More than Mississippi River Levee flood protection*

Levees are the backbone of flood control for the Mississippi River and the levee districts in Louisiana are the agencies responsible for the maintenance and upkeep of this system. Southern Louisiana is in vulnerable geography, subjected to heavy rainfall, tidal surges from the Gulf of Mexico, and hurricane-related flooding. These flooding events often result in damage to industrial, commercial, residential agricultural, and environmental facilities.

Louisiana's continuous loss of coastal land, sea level rise, and the increasing number and intensity of storms brings greater urgency to provide additional and increased flood protection through the construction of new projects and implementation of more advanced and sophisticated methods of flood control.

The vision and mission of the LBLD has been updated to reflect the changing landscape of its district. Levee protection along the Mississippi is the backbone, but not the sole method of an expanding method of flood

protection. LBLD wants to support its Parish partners in any flood reduction initiatives within the levee system and be a regional leader in flood protection.

Decreasing the flood risk for the residents and businesses in the district's five Parishes creates stability and predictability for individuals living in these areas. That stability is a necessary condition for population growth and flourishing communities. LBLD strives to be the backbone of flood protection of stability its Parish partners need. In support of this mission, LBLD looks to expand their functions as authorized by state legislation into additional community stability functions such as increasing recreational access and other activities that attract tourism to the area.

Flood Protection has wide ranging economic benefits that outweigh the costs of flood protection projects. Benefits include a reduction in flood claims to properties within the district, improved drainage which improves farmlands for crops and livestock, and a positive impact on highway and road foundations which preserve the network of hurricane evacuation routes. In addition, improved flood protection adds a stimulus for business expansion.

## 02 vision and mission

This Strategic Master Plan is built on the historic mission of the LBLD while acknowledging the additional demands changing needs of the future. The LBLD initiated the Strategic Planning process in the face of increasing demands for regional flood protection. These demands will require new approaches in understanding future risks, utilizing up to date data and analysis, planning and construction of additional flood protection projects, and innovative financing and management.



### VISION

The vision of the Lafourche Basin Levee District is to be the regional authority and leader on storm and flood protection for the residents of its district by maintaining existing levee and flood reduction structures while taking advantage of new opportunities, and planning for emerging challenges.

### UPDATED MISSION

The mission of the Lafourche Basin Levee District is to provide flood protection from potential flooding from the Mississippi River by preserving the integrity of and maintaining the 63 miles of levee from Donaldsonville to Jefferson Parish. In addition, the LBLD works with federal, state, and local partners to advance flood protection projects for communities within its district to ensure their residents' safety.

*Sunrise along Bayou Lafourche*  
SOURCE: John Snell FOX 8

# 03 process

The LBLD Strategic Plan is a result of an extensive outreach and research process. The consultant team worked closely with staff and board members to ensure all stakeholders were engaged.

## PLAN GUIDANCE

### INTERNAL STAKEHOLDER MEETINGS

In late 2021, a series of internal stakeholder meetings were convened with staff and board members to gather input on the goals of the objectives of the LBLD. Small discussion groups elicited frank feedback, guided by consultant questions.

In general, the participants recognized the benefits of long-term planning for projects to prioritize funding and goals.

### COMMENTS:

- + Improvement of communication internally and externally
- + Define the current alignment and responsibility of the levee district, Parish, state, and federal entities.
- + Identify external revenue opportunities.
- + Prepare to manage Upper Barataria Risk Reduction project (UBRR).
- + Explore construction of Boat launches
- + Identify teaming opportunities.
- + Understand district capabilities.
- + Strategic project identification and phased prioritization
- + Identify areas with excessive flood risk.
- + Define coordination with adjacent authorities for operations and maintenance, distinguish between internal drainage and levees.
- + How can LBLD better engage the public?
  - » Website
  - » Recreational amenities
  - » Other strategies



Kayaking on swamplands along Bayou Lafourche  
SOURCE: ExploreLouisiana.com

### COMMENTS (CONTD.):

- + How can LBLD better communicate its priorities to local, state, and federal partners?
- + Develop a website and marketing strategy that clearly articulates LBLD's role within the community and needs relative to external stakeholders.
- + Consider use of LBLD assets to explore creative engagement with the public and possible revenue streams (i.e., recreational amenities)
- + Explore ways to position LBLD priorities in ways that make them competitive across the external funding landscape.
- + Explore existing revenue capacity vs. projected demands on operations and maintenance, especially factoring for UBRR.
- + Build partnerships with public entities and private industry to advocate for UBRR.

## EXTERNAL ENGAGEMENT

An immediate priority that emerged from the external stakeholder engagement was building stronger relationships with Louisiana's federal delegation.

In 2023, LBLD and the consultant team began a series of one-on-one interviews with the Parish Presidents and staff in their jurisdiction.

- » **JULY 26, 2023** | St Charles Parish
- » **SEPTEMBER 13, 2023** | St James Parish
- » **OCTOBER 2, 2023** | St John the Baptist Parish
- » **OCTOBER 2, 2023** | Ascension Parish

The overriding concern expressed in these meetings is the dramatic increase in the cost of flood insurance for homeowners and businesses in their Parish. Every one of the administrations were focused on actions to lower the flood risk calculated by FEMA for their residents. They were supportive of planned projects that would reduce flood risk, in particular the Upper Barataria Flood Risk Reduction Project (UBRR).

### TAKEAWAYS:

- Interested in partnering with the LBLD for projects inside levee boundaries, such as canal dredging.
- Understand how the regional stormwater and drainage functions in the watershed – can LBLD convene and lead process?
- Some Parishes have internal stormwater plans.
- Want to understand how internal drainage projects within Parishes affect neighboring ones.
- Interested in non-structural flood reduction solutions such as detention ponds.
- Identify opportunities for regional or joint funding, possibility of capital outlay.
- Interested in multi- Parish projects.
- Want to encourage tourism in the area – how can the River Parishes Tourist Commission assist?
  - » Amenities to support visitors.
  - » River cruise terminals
- Encourage levee trail connections between Parishes, when possible



## CONCLUSION

The feedback from staff, board members and Parish administrations aligned around many key points: support for planned and future projects to address the increasing flooding threats posed by a changing climate such as the UBRR, maintaining good communication between regional, state, and federal partners, and exploring partnerships and funding opportunities to advance flood protection for residents.

Upper Barataria Basin.

Photo courtesy of Patrick M. Quigley, Gulf Coast Air Photo

# 04 goals and objectives



## GOAL 1

To understand the flood protection needs of the district and plan for a unified, integrated, and comprehensive approach.

### OBJECTIVES:

- Keep up to date with each district's Parish drainage and flood protection capital projects.
- Advocate and manage Regional Stormwater Master Plan



## GOAL 2

Improve communication with Parish administrations and residents.

### OBJECTIVES:

- Develop and keep up to date LBLD website, listing past and present projects and details on how those projects affect and impact residents.
- Create protocol for notification process for Parishes when construction and maintenance will be performed by LBLD staff or United States Army Corps of Engineers staff.



## GOAL 3

Successfully manage and ensure the completion of the UBRR project.

### OBJECTIVES:

- Hold consultant teams accountable for work and deadlines.
- Work with federal delegation to secure necessary estimated budget.
- Maintain clear communication with CRPA and USACE.



## GOAL 4

Work with Parishes to identify and partner on projects that enhance tourism and community connectivity.

### OBJECTIVES:

- Explore possibilities of projects such as connecting levee trails in the LBLD jurisdiction, creating a river boat cruise terminal or other identified projects.
- Work with River Parish Tourist Commission to identify support and funding opportunities.
- Serve as the applicant to federal competitive grant programs to provide funding for such projects.



## GOAL 5

Identify sources of funding for the additional maintenance costs associated with planned projects to enhance the flood protection system in the district.

### OBJECTIVES:

- Determine estimated yearly maintenance costs for new USACE projects, such as UBRR.
- Explore millage structure and explore options for increases with Parish administrations.
- Examine possibilities of fees for service projects, such as river boat cruise docking fees, terminal rentals, etc.

#### 4A. UPPER BARATARIA FLOOD RISK REDUCTION PROJECT (UBRR)

The Upper Barataria Risk Reduction Project (UBRR) is a United States Army Corp Engineer flood risk management project aimed at reducing the risk of flooding in the Upper Barataria Basin in Louisiana. This project involves a combination of measures such as levee construction, floodwalls, pump stations, and ecosystem restoration efforts. The UBRR is one of the last major regional levee alignments to support hurricane protection in Southeast Louisiana. The Coastal Protection and Restoration Authority (CPRA) and the LBLD are the non-federal sponsors.

When complete, UBRR will provide additional flood protection to portions of Ascension, Assumption, Jefferson, Lafourche, St. Charles, St. James, and St. John the Baptist parishes.

UBRR has completed its USACE Chief's Report and received Congressional Authorization and \$8M in Pre-Construction Engineering and Design (PED) funds from recent disaster supplemental appropriations. The UBRR project exceeds \$1 billion.

CPRA is assuming responsibility for 35% of total design and construction costs with an expectation that LBLD will provide a portion of the cost sharing as in-kind services, as follows:

- » Construction and maintenance of interim protection levees and structures to elevation +8.0 feet consistent with the Federal alignment and Chief's report
- » Lands, Easements, Relocation, Rights of Way, and Disposals.
- » Operation, Maintenance, Repair, Replacement and Rehabilitation for the estimated 50-year project life.

Chapter 5, Project Prioritization, breaks down the first two of these LBLD responsibilities into distinct project phases for better planning and budgeting.

LBLD is working closely with its State and Federal delegations to ensure continued funding for these projects that have to be completed before construction of the UBRR begins.



National Oceanic and Atmospheric Administration spearheads restoration of wetlands in Louisiana's Upper Barataria Basin.

Photo courtesy of Patrick M. Quigley, Gulf Coast Air Photo



This map shows the path of the Upper Barataria Flood Risk Reduction (UBRR) levee project. Source: NOLA.com

## 4B. STORMWATER MASTER PLAN

As crucial as the UBRR project is to the safety of the residents in LBLD's five parishes, it primarily addresses risk reduction related to hurricane storm surges and does not resolve localized flooding issues within LBLD's jurisdiction. LBLD has recently submitted applications to FEMA for a cross-jurisdictional stormwater management plan benefiting five South Louisiana parishes.

To date, only St. Charles Parish has completed some local modeling to identify risk reduction projects – none of the other parishes have developed flood risk reduction programs or any requisite modeling analysis in areas on the Westbank of the Mississippi Area (though a few have limited drainage studies responsive to singular issues).

The proposed Stormwater Master Plan will integrate with current modeling and analysis efforts in the region to avoid duplication of effort. LBLD, as a regional leader in flood protection is the ideal entity to lead and manage this effort.

This Stormwater Master Plan is anticipated to contain a range of structural and non-structural (i.e., regulatory elevation standards, property mitigation, heightened pre-post development standards, etc.) and structural projects.

When complete, the final Stormwater Master Plan, will be adopted by the LBLD Board of Commissioners and circulated to parishes and municipalities for formal adoption or as an implementation tool. All modeling conducted through this process will be open and available to the public and governmental stakeholders to help inform local decision-making capacity.

At the conclusion of the LBLD Stormwater Master Plan, LBLD will continue to work with all the parish (and municipal) jurisdictions to advance the implementation of the prioritized projects.

For the five parish governments in the modeling area, the planning process will support advancement of local flood plain management capacity by advancing regulatory measures that improve flood plain management and reduce flood risk and inform regional capital project prioritization.



The small community of Kraemer, in northeast Lafourche Parish, remains flooded on Aug. 30, 2021; a day after Hurricane Ida sent several feet of water from Lake Des Allemands over the top of the area's 9-foot levee.

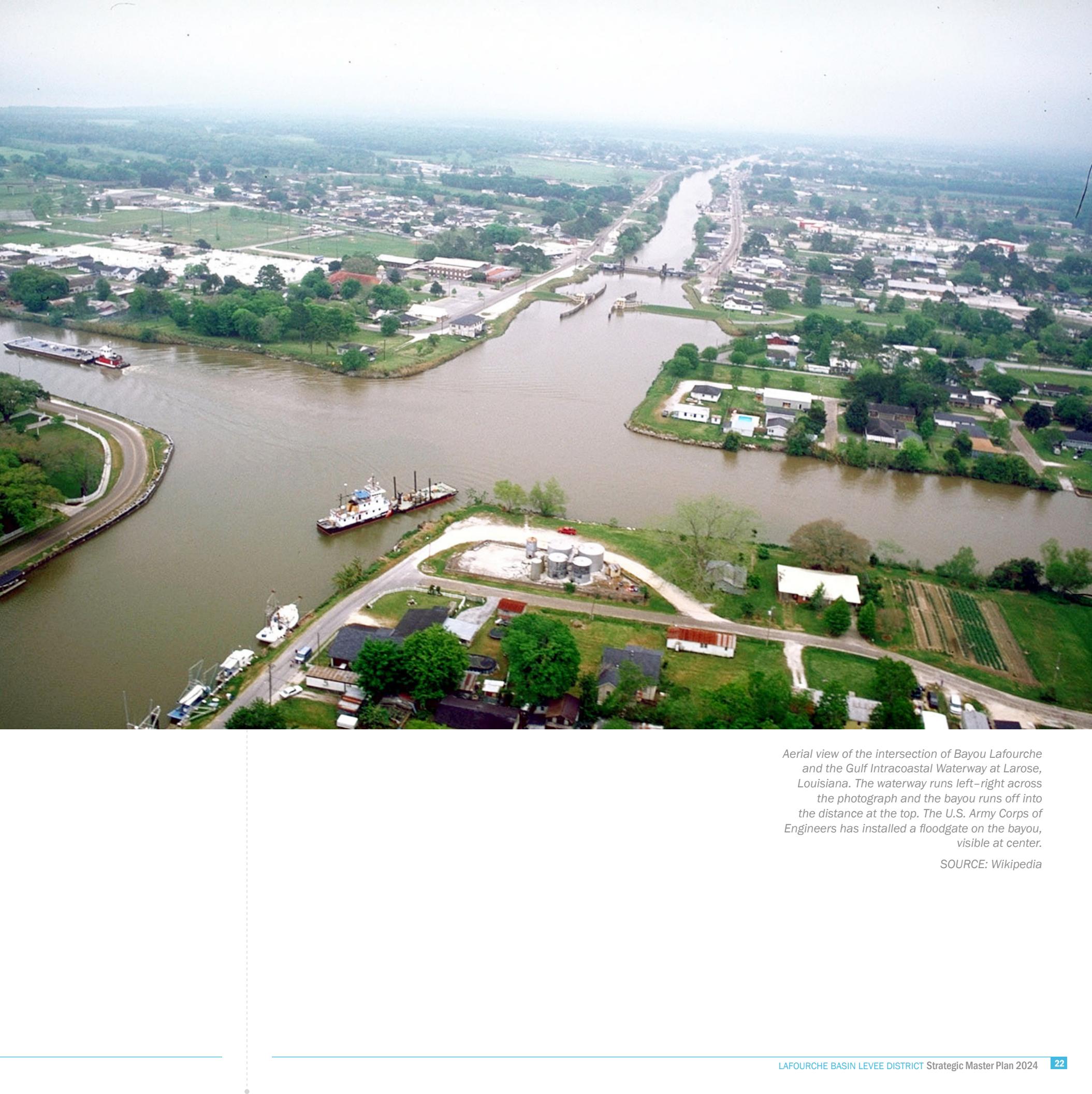
SOURCE: Statesman.com



## 05 Non Flood Risk Reduction Investments

LBLD, as a regional leader, recognizes the potential of additional strategic investments that will complement the significant investments in risk reduction being made in LBLD's jurisdiction. These risk reduction projects will secure the safety of personal property and businesses in the area as well as offer the stability necessary for population growth and investment. Economic development and recreational amenity investments will aid in growth and investments sought by member parishes.

Completion of the Levee Recreational Trail, a Cruise Terminal & Cultural Center, and a Riverside Park, are possibilities of such strategic investments for the region.



Aerial view of the intersection of Bayou Lafourche and the Gulf Intracoastal Waterway at Larose, Louisiana. The waterway runs left-right across the photograph and the bayou runs off into the distance at the top. The U.S. Army Corps of Engineers has installed a floodgate on the bayou, visible at center.

SOURCE: Wikipedia

# The Levee Trail

The Mississippi River trail is a tremendous opportunity to create connectivity from Parish to Parish while increasing the health and wellbeing of all visitors. While the trail currently exists in many parts of Southern Louisiana along the Mississippi River, there are many sections of the levee that are still missing or devoid. Initial priorities include completing these missing links for improved and continuous connections and exploring unique ecosystems and existing wetlands that could be accessed via secondary trail-ways. These connections could lead to overlooks or soft surface trails that celebrate the indigenous flora and fauna of Southern Louisiana. Other recommendations include the addition of environmental graphics along the levee trail which could communicate distances, points of interest, educational aspects, or geographical location. Additional enhancements along the trail might also include seating opportunities, lighting for safety, vehicular drop offs at key locations and towns, enhanced plantings that would identify key trail heads, and opportunities for local artists to be celebrated in the community.





# Riverside Park



Adding parks and open spaces along the River not only reinforces animal habitat and strengthen the environmental ecosystems but also bolsters physical /mental health benefits to its users. These parks and open spaces may incorporate secondary trails and flexible lawn spaces that can be programmed as sports courts, play environments, gathering areas and shade pavilions. It is also recommended to strategically place these parks in under-served or deficient areas which would create a better quality of life overall.

## 06 project prioritization

LBLD is at a unique time in its history, required to expand on its original mission from Mississippi River flood protection to meet increasing and changing flood risks, as well as poised to assume the mantle of the regional authority in non- storm surge flood management and other strategic investments.

To address these needs and opportunities, prioritization of projects is required. Table 1 lays out the LBLD required components of the UBRR, the regional Stormwater Master Plan, and strategic investments and details sequencing and scope.



TABLE 1: PROJECT PRIORITIZATION

## Advancement of UBRF

Project/Activity	Priority	Cost (Estimated)	Notes
Sunset Levee - Phase II - Final Design and Permitting	● ● ●	\$1.0M	Completion of items that were excluded from Phase I due to cost
Segment A Interim Protection - Design and Engineering	● ● ●	\$5.0M	Universal lift to 8.5'
Badeaux Lane - Design and Engineering	● ● ●	\$2.0M	Completion of floodgate and floodwall
Segment 3 Interim Protection - Design and Engineering	● ● ●	\$9.0M	Universal lift to 8.5'
Segment 4 Interim Protection - Design and Engineering	● ● ●	\$5.0M	Universal lift to 8.5'
Segment A-F LERRDS - Feasibility	● ● ●	\$0.5M	Project wide pipeline relocation and utility crossings
Sunset Levee - Phase II - Construction	● ● ●	\$5.0M	
Des Allemends Floodgate - Construction	● ● ●	\$90.0M	
Badeaux Lane - Construction	○ ● ●	\$10.0M	
Segment A-F LERRDS - Design and Engineering	○ ● ●	\$4.0M	
Segment A-F LERRDS - Construction	○ ● ●	\$33.0M	
Segment 3 Interim Protection - Construction	○ ● ●	\$90.0M	
Segment 4 Interim Protection - Construction	○ ● ●	\$47.0M	

**TABLE 1: PROJECT PRIORITIZATION**

## Advancement of UBRR

ACTION ITEMS	PRIMARY FUNDING SOURCES
<ul style="list-style-type: none"> <li>Coordinate with CPRA and USACE to ensure design criteria are met;</li> <li>Track expenditures for future USACE cost share crediting</li> </ul>	LBLD Revenues, State Capital Outlay, CPRA
<ul style="list-style-type: none"> <li>Coordinate with CPRA and USACE to ensure design criteria are met;</li> <li>Track expenditures for future USACE cost share crediting</li> </ul>	LBLD Revenues, State Capital Outlay, CPRA
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<ul style="list-style-type: none"> <li>Coordinate with CPRA and USACE to ensure design criteria are met;</li> <li>Track expenditures for future USACE cost share crediting</li> </ul>	LBLD Revenues, State Capital Outlay, CPRA
<ul style="list-style-type: none"> <li>Coordinate with CPRA and USACE to ensure design criteria are met;</li> <li>Track expenditures for future USACE cost share crediting; 3. Coordinate with North Lafourche Levee District to ensure synchronization and cost share for Segment G and H</li> </ul>	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA
	LBLD Revenues, State Capital Outlay, CPRA

TABLE 1: PROJECT PRIORITIZATION (CONTD.)

## Other Regional Stormwater Management

PROJECT/ACTIVITY	PRIORITY	COST (ESTIMATED)	NOTES
Westbank and Vicinity to Ama Levee Protection - Design and Engineering	● ● ●	\$3.5M	Raise current 11' height to 15'
Westbank and Vicinity to Ama Levee Protection - Construction	○ ● ●	\$30.0M	
Regional Stormwater Master Plan	● ● ●	\$2.0M	There is currently limited data and analysis to inform risk reduction planning on the Westbank of Assumption, Ascension, St. James, and St. John the Baptist parishes. Development of a regional stormwater model would help inform solution development and prioritization of regional stormwater projects that account for the implementation of UBRR.
Regional Stormwater Master Plan Implementation	○ ● ●	TBD	

TABLE 1: PROJECT PRIORITIZATION (CONTD.)

## Other Regional Stormwater Management

ACTION ITEMS	PRIMARY FUNDING SOURCES
	LBD Revenues, State Capital Outlay, CPRA
	LBD Revenues, State Capital Outlay, CPRA
<ul style="list-style-type: none"> <li>• Continue FEMA Hazard Mitigation Request pursuits;</li> <li>• Coordinate with parishes to maximize participation and subsequent implementation of structural and non-structural solutions during planning process</li> </ul>	FEMA Non-Disaster Hazard Mitigation Programs, LBD revenues
	FEMA Non-Disaster Hazard Mitigation Programs, LBD revenues

TABLE 1: PROJECT PRIORITIZATION (CONTD.)

## Strategic Investments

PROJECT/ACTIVITY	PRIORITY	COST (ESTIMATED)	NOTES
River Cruise Facility - Feasibility	●●●	\$250k	There is currently limited river cruise infrastructure along the Mississippi River between New Orleans and Baton Rouge, though both Viking and American Cruise lines currently stop regularly in this area. Facility could serve dual purpose as event space.
Levee Trail Completion - Feasibility	●●●	\$250k	There is strong interest among parish administrations and residents to connect existing Levee Trail paths to each other, providing safe recreational opportunities.
Other Regional Recreational Assets - Feasibility	●●●	\$250k	This could be a community gathering place and an active recreational facility, taking advantage of the unique location of the region's levee, benefiting residents and visitors alike.
River Cruise Facility - Design and Engineering	○●●	TBD	
Levee Trail Completion - Design and Engineering	○●●	TBD	
Other Regional Recreational Assets - Design and Engineering	○●●	TBD	
River Cruise Facility - Construction	○○●	TBD	
Levee Trail Completion - Construction	○○●	TBD	
Other Regional Recreational Assets - Construction	○○●	TBD	

TABLE 1: PROJECT PRIORITIZATION (CONTD.)

## Strategic Investments

ACTION ITEMS	PRIMARY FUNDING SOURCES
<ul style="list-style-type: none"> <li>LBLD to coordinate with inland river cruise operators, tourism destinations and municipalities to determine viability and necessity of river cruise landing infrastructure</li> </ul>	LBLD Revenues, Other Municipal Funds, River Cruise Operators
<ul style="list-style-type: none"> <li>LBLD to coordinate with parishes, MPO and DOTD to determine viability and scope of desired levee path</li> </ul>	FHWA Formula Funds
<ul style="list-style-type: none"> <li>LBLD to coordinate with parishes to determine recreational deficits and strategies for improving existing assets and developing new facilities</li> </ul>	LBLD Revenues, Other Municipal Funds

# 07 gap analysis

Throughout the latter half of the 19<sup>th</sup> century and into the 20<sup>th</sup> century, many levee districts in the state were established by the legislature. These districts have been responsible for constructing and up keeping levees, often following parish borders or geographical jurisdictions like river basin districts. These districts may encompass multiple parishes or only a section of one. As environmental understanding and risk awareness have progressed, Louisiana's levee district map has evolved, leading to the creation of several new districts. Each levee district has a unique jurisdiction, mission and duties, and budgets, as shown in Table 2.

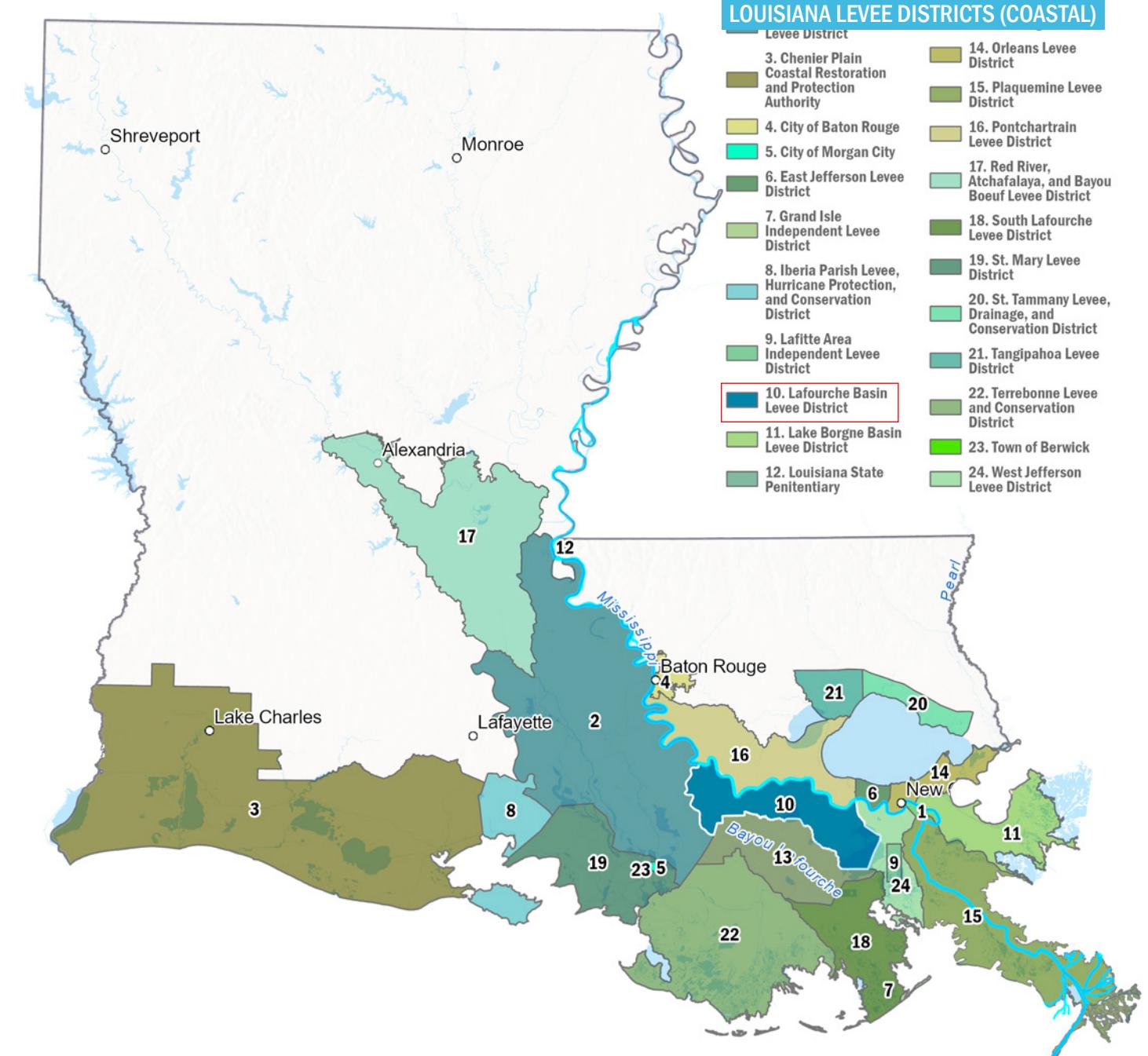


Table 2: Millage Rates, Jurisdictions, and Activities Beyond Levee Maintenance For Each District

Name	Jurisdiction	Miles of Levee	Additional Scope
Amite River Basin Drainage and Water Conservation District *	Ascension, East Baton Rouge, East Feliciana, Iberville, Livingston, St. Helena, and St. James parishes	n/a	Floodplain Management- special projects such as Comite Diversion Canal Project
Algiers Levee District	Jefferson, Orleans, Plaquemines, and St. Charles parishes	56.0	Part of Southeast Louisiana Flood Protection Authority - West
Atchafalaya Basin Levee District	Pointe Coupee and West Baton Rouge and part of the parishes of Iberville, Ascension, Assumption, St. Martin, Iberia, and St. Landry parishes	326.3	Borrow pit drainage, and oil, gas, mineral, campsite, hunting and other leases.
Bossier Levee District	Bossier Parish and Red River Parish	70.0	
Caddo Levee District	Caddo Parish	119.35	Sources of revenue for Caddo Levee District include oil and gas leases and royalties, timber, interest in Certificates of Deposit and surface leases. This funding is self-generated utilizing Caddo Levee District's land resources and interest income within Caddo Parish. Caddo Levee District has a full-time forester to manage 10,000 acres of timber.
East Jefferson Levee District	Jefferson Parish, Part of Southeast Louisiana Flood Protection Authority - East	125.0	EJ Levee District has the responsibility to police its levees, provide security along its system, monitor construction and/or business operations for permitting violations, and to prevent encroachments on the system by adjacent landowners and utilities. In partnership with Jefferson Parish and municipalities, the district has public recreation facilities associated with the levee system.
Fifth Louisiana District Grand Isle Independent Levee	East Carroll, Madison, Tensas, and Concordia Parishes	355.0	Additional funds from surface and mineral leases, and sale of timber.
Grand Isle Independent Levee District	Jefferson Parish	6.0	Part of Southeast Louisiana Flood Protection Authority - West
Iberia Parish Levee, Hurricane & Conservation District	Iberia Parish	0.0	
Lafitte Area Independent Levee District	Jefferson Parish	29.0	
Lafourche Basin Levee District	Ascension, Assumption, St. James, St. John the Baptist, and St. Charles Parishes	63.0	Floodplain Management- special projects such as Comite Diversion Canal Project
Lake Borgne Basin Levee	St Bernard Parish, Part of Southeast Louisiana Flood Protection Authority - East	62.0	It is also responsible for the operation and maintenance of all major internal drainage canals and pumping stations for St. Bernard Parish
Natchitoches Levee and Drainage District	Natchitoches Parish	82.0	

Name	Constitutional Millage (as of 2020)	Voter approved millage	Total Millage	Actual Millage Revenues (2019)
Amite River Basin Drainage and Water Conservation District *	2.65 (for local cost share of USACE projects)			\$5,466
Algiers Levee District	5.46	7.10	12.56	\$ 2,627,855
Atchafalaya Basin Levee District	4.04		4.04	\$ 7,067,681
Bossier Levee District	4.30		4.30	\$ 2,771,475
Caddo Levee District	0			
East Jefferson Levee District			4.01	4.01 \$ 9,901,365
Fifth Louisiana District Grand Isle Independent Levee	3.86		3.86	\$ 1,298,081
Grand Isle Independent Levee District	4.66		4.66	\$ 1,298,081
Iberia Parish Levee, Hurricane & Conservation District				
Lafitte Area Independent Levee District	5.54		5.54	\$ 243,550
Lafourche Basin Levee District	3.88		3.88	\$ 4,786,672
Lake Borgne Basin Levee	3.91	7.42	11.33	\$ 3,522,278
Natchitoches Levee and Drainage District	4.22		4.22	\$ 860,117

Table 2 (contd.)

Name	Jurisdiction	Miles of Levee	Additional Scope
Nineteenth Louisiana Levee	Grant Parish	26.0	
North Lafourche Conservation, Levee & Drainage District	Lafourche Parish	200.0	
Orleans Levee District	Orleans Parish, Part of Southeast Louisiana Flood Protection Authority - East	105.0	Orleans Levee District Division of Non-flood Assets manages New Orleans Lakefront Airport, marinas, parks, and rental properties.
Pontchartrain Levee District	East Baton Rouge, Iberville, Ascension, St. James, St. John the Baptist, and St. Charles Parishes	125.0	
Red River, Atchafalaya, & Bayou Boeuf Levee District	Rapides, Avoyelles, and St. Landry Parishes	252.0	
St. Charles Parish	St. Charles Parish	125.0	
St. Mary Levee District	St. Mary Parish	130.0	
St. Tammany Levee, Drainage, & Conservation District	St. Tammany Parish, Part of Southeast Louisiana Flood Protection Authority - East	0.0	
South Lafourche Levee District	Lafourche Parish	48.0	
Squirrel Run Levee District	Iberia Parish		
Tensas Basin Levee District	Caldwell, Catahoula, Franklin, LaSalle, Morehouse, Ouachita, Richland, and West Carroll Parishes	414.0	
Terrebonne Levee and Conservation District	Terrebonne Parish	106.0	

Name	Constitutional Millage (as of 2020)	Voter approved millage	Total Millage	Actual Millage Revenues (2019)
Nineteenth Louisiana Levee	6.16		6.16	\$73,161
North Lafourche Conservation, Levee & Drainage District	5.00	6.00	11.00	\$4,157,345
Orleans Levee District	5.46	6.82	12.28	\$42,563,791
Pontchartrain Levee District	3.53		3.53	\$11,275,285
Red River, Atchafalaya, & Bayou Boeuf Levee District	3.71		3.71	\$2,727,646
St. Charles Parish	3.53		3.53	\$5,064,478
St. Mary Levee District		5.00	5.00	\$2,902,829
St. Tammany Levee, Drainage, & Conservation District	0	0	0	0
South Lafourche Levee District	4.86	5.00	9.86	\$5,456,609
Squirrel Run Levee District		17.00	17.00	\$65,351 (2022 Annual financial report)
Tensas Basin Levee District	3.00		3.00	\$3,572,471
Terrebonne Levee and Conservation District		4.89	4.89	\$4,636,033 District also collects a 1/4% sales tax

## FINANCING

Article 6, Section 39 of the Louisiana Constitution of 1974 provides that for the purpose of constructing and maintaining levees, levee drainage, flood protection, hurricane flood protection, and all other purposes incidental thereto, the District may levy annually a tax. Ad valorem taxes are assessed on a calendar year basis and become due November 1st and are billed in December 31st.

The LBLD's millage rate is 3.88, 1.12 below the constitutionally allowed 5.



The Constitution gives authority to political subdivisions to impose property taxes up to a base amount of 5 mills without voter approval.

Some levee districts have voter approved millage rates in addition to the state constitutional millage rate. These rates combined can range from 12.56 for the Algiers Levee District to 9.86 for the South Lafourche Levee District

In planning for future needs and required maintenance on USACE projects, such as UBRR, it is possible for the LBLD to raise its millage to 5 without the approval of the voters in their district, as the state constitution allows. Another option is to keep the constitutional millage at 3.88 and seek an additional voter approved millage for the specific purpose of maintaining federal non-levee assets, such as UBRR.

This limited purpose millage might be more palatable to voters, opposed to a request for an increase for general flood protection. Because of the unique needs of each levee district, there is a range of activities and budgets set forth for each district.





# 08 implementation strategies

## FUNDING

### SECURED/ANTICIPATED FUNDING SOURCES

- » Capital Outlay (State of Louisiana)
- » Louisiana Watershed Initiative (Louisiana Department of Community Development)
- » Coastal Protection and Restoration Authority

### COMPETITIVE FUNDING SOURCES

The following are competitive funding sources that LBLD may pursue in the next fiscal year and/or upcoming years. Additionally, LBLD may assist local jurisdictions in applying for these funds.

### BUILDING RESILIENCE INFRASTRUCTURE AND COMMUNITIES (FEMA)

BRIC is an annual competitive grant program to support communities as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The \$2.3 billion program is focused on large, cost-effective infrastructure projects that reduce or eliminate risk from natural hazards.

- » \$50M federal share for capital projects,
- » 25% local match required

### FLOOD MITIGATION ASSISTANCE (FEMA)

The FMA grant program makes federal funds available to reduce or eliminate the risk of repetitive flood damage to buildings and structures insured under the National Flood Insurance Program (NFIP). \$800 million is available nationwide for the 2023 cycle.

- » \$50 million federal share for capital projects,
- » \$900,000 for project scoping,
- » \$300,000 for additional capacity and capability building activities,
- » 25% local match required (waived for severe repetitive loss property mitigation)

### PROMOTING RESILIENT OPERATIONS FOR TRANSFORMATIVE, EFFICIENT, AND COST-SAVING TRANSPORTATION (PROTECT) DISCRETIONARY GRANT PROGRAM (FHWA)

The PROTECT program, established through the Bipartisan Infrastructure Law, awards funding for projects that help make surface transportation more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure. The program includes four different grant categories with varying cost share and grant caps and will provide \$1.4 billion in funding over 5 years.

### THE TRANSPORTATION ALTERNATIVES PROGRAM (TA OR TAP) (FHWA)

The TA program is the nation's largest dedicated source of funding for trail and active transportation projects. The U.S. Department of Transportation Federal Highway Administration (FHWA) allocates funding to states where state departments of transportation and metropolitan planning organizations administer their own competitive process and deal directly with applicants.

### LAND AND WATER CONSERVATION FUND (LOUISIANA OFFICE OF STATE PARKS)

The LWCF program promotes broad-scope outdoor recreation, ranging from land acquisition to development of park facilities such as spray parks, ball fields, picnic pavilions and restrooms. The federally-funded program provides 50% matching funds assistance, through grants to state governments and local municipalities.

### POTENTIAL FUNDING SOURCES FOR FUTURE PROJECTS

PROJECT	SOURCE	STATUS
Levee Trails	» LADOTD – Transportation Alternatives » DOT - PROTECT	
Cruise Ship Terminal	» TBD	
Regional Stormwater Master Plan	» TBD	Application submitted 2024
Recreational Amenity/ Park	» Land and Water Conservation Fund, FEMA	





LAFOURCHE BASIN  
LEVEE DISTRICT

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