



LOUISIANA
WATERSHED
INITIATIVE

working together for sustainability and resilience

Regional Watershed Management in Louisiana



A GUIDEBOOK TO LOCAL AND
REGIONAL ENTITIES, THEIR
AUTHORITIES AND FUNCTIONS



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Introduction: Louisiana Watershed Initiative

LOUISIANA'S FLOOD RISK IS CHANGING

Flash flooding is on the rise, resulting in rivers spilling over their banks and into our communities more frequently. The widespread disaster of the Great Floods of 2016 demonstrated how susceptible our landscape is to severe flooding. In fact, over the past two decades, Louisiana has experienced 16 declared flood- and hurricane-related disasters. Every parish in the state has been impacted by one or more of these events, costing more than \$16 billion in public assistance.

The Great Floods of 2016 also demonstrated that Louisiana has to take a new approach to managing our flood risk because continuing with business as usual will not address the problem. It is clear that our state's prospects—our safety, our economy and the preservation of our places and culture—depend on managing and reducing our flood risk. It is also widely acknowledged that while Louisiana communities and agencies have already taken steps to address flood risk, our efforts have not been as coordinated and integrated as we need them to be. Our state agencies, programs and policies have not been as aligned as they should be, and local governments have not had enough of a platform to coordinate with neighboring jurisdictions to understand how their actions can impact one another. Furthermore, the information and data needed to make sound decisions have not always been readily available, accessible or communicated to the public, stakeholders or decision-makers.

THE OPPORTUNITY OF REGIONAL WATERSHED MANAGEMENT

To address these challenges, Gov. John Bel Edwards created the Council on Watershed Management and tasked it with developing a framework that aligns state and local agencies to institute best practices in reducing flood risk. The Louisiana Watershed Initiative is the council's programmatic arm through which floodplain management responsibilities are coordinated among federal, state and local agencies. LWI's work is supported by experts who will build a foundation of data, projects, policies, standards and guidance. To successfully implement these efforts, the state is developing processes that facilitate coordination among local, regional and state government agencies. Because water does not follow political boundaries, it is imperative this regional coordination align with watershed boundaries, not political jurisdictions.

LWI developed the Regional Capacity Building Grant program to provide resources that support regional watershed management. The goal is for local and regional stakeholders to work with state agencies to codesign an effective system of regional watershed management and governance. This guidebook is part of the suite of tools and resources that stakeholders can use in the development and deliberation of regional watershed management entities.



Guidebook purpose and background

This guidebook is an educational tool and reference guide for members of the eight regional steering committees and other stakeholders participating in the RCBG program under LWI. It provides background information on the existing entities in each region and the state that perform watershed management functions.

LWI developed the guidebook to serve two primary purposes:

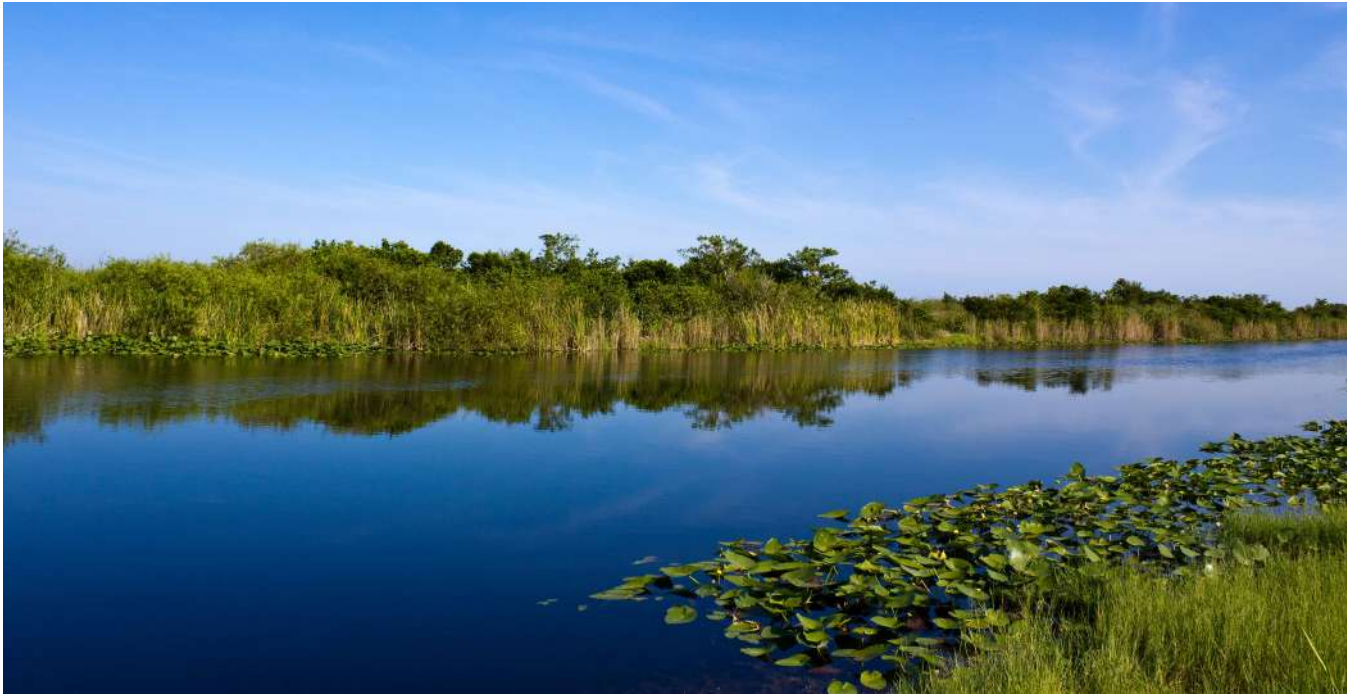
1. A briefing document that provides background to watershed coordinators, regional steering committee members and other stakeholders as they deliberate best approaches to regional watershed-based floodplain management
2. A comprehensive reference document to inform regional steering committees and future regional watershed coalitions of all organizational stakeholders in the region and their statutory powers relative to watershed and floodplain management

Stakeholders in each region can directly reference their regional details, but readers also are encouraged to explore the similarities and differences among regions. A statewide summary of local and regional entities is provided at the end of the document. This guidebook complements a series of exercises the regional steering committee members and other stakeholders will undertake to explore different approaches to regional watershed management.

These exercises have two main objectives:

1. Build a common understanding of what a regional watershed management entity should accomplish and identify the key responsibilities at the local, regional and state levels to help achieve the shared goal of reduced risk through watershed-based floodplain management
2. Identify gaps and opportunities in watershed management in each region and recommend strategies for establishing a regional watershed coalition and policies designed to improve water management at the local, regional and state levels

The feedback and outcomes of these exercises will inform the development of a statewide framework for regional watershed management. That framework may include state and local legislative efforts to better align the functions of watershed management with watershed boundaries. The feedback will also inform the design of state and local policies and funding programs to produce better outcomes in each watershed throughout the state.



The landscape of watershed management in Louisiana

Flood risk involves several interrelated factors—from land use and development to the maintenance of waterways and the design of flood control infrastructure—and many governmental entities and political subdivisions play significant roles in flood risk and floodplain management. Beyond the state and federal agencies that regulate and oversee aspects of flood risk and/or floodplain management, many of Louisiana’s local and regional entities and special purpose organizations also touch water management in some way. In fact, if you consider all the entities that have roles in managing water resources, even for purposes of navigation (e.g., ports) or freshwater and/or groundwater management (e.g., water districts), there are more than 2,000 entities that impact water management on the federal, state and municipal levels in Louisiana. However, this document focuses on entities with the specific authorities and functions most integral to regional watershed management.

Even with this narrower focus, there are still many entities with influence and responsibility, which has resulted in a complex, uncoordinated landscape of watershed management throughout the state. Many entities have overlapping authorities and jurisdictions, and many have presences in more than one watershed region. Meanwhile, some areas of the state lack an entity with specific authority over water management. The following table lists various types of entities with influence over water management and flood risk reduction, their enabling laws and their missions and authorities.



Regional steering committees underwent a significant effort to evaluate best practices and gather feedback from regional stakeholders to identify the potential powers and authorities that a regional watershed coalition may need to support effective watershed-based floodplain management. These functions and authorities are listed below.

DESIRED FUNCTION	REQUIRED AUTHORITY
Flood analysis, mapping and data	None
Floodplain and development codes and enforcement	Develop and enforce codes
Land use planning and development review	Adopt plans and regulate development
Fund and implement flood risk reduction projects	Generate revenue, borrow money, select projects and acquire property
Operation and maintenance of flood risk reduction infrastructure	Generate revenue and acquire property
Public education, engagement and communication	None

Not all of these functions require additional authority. For example, education, engagement and communication are functions a regional coalition can immediately implement without any additional authority.

Also, an entity may already have the authority to serve a desired function but not have the capacity to implement it. This guidebook does not analyze the capacities of existing entities in each region, but this aspect should be considered when regional steering committees form recommendations for regional governance.

The following chapters describe the landscape of entities in each watershed region that possess some authority to impact water management or flood risk. As part of the regional exercises, state agencies and regional stakeholders will compare the types of entities in each region against the desired authorities listed above, thus beginning to identify gaps in governance that may need to be addressed by a regional watershed coalition.



CATEGORY	DESCRIPTION OF ENTITY	ENABLING LAW
Gravity Drainage Districts	Gravity drainage districts facilitate water management by draining district lands through the construction, maintenance and operation of gravity or forced drainage facilities, including drains, drainage canals, ditches, pumps, pumping plants, dikes, levees and other related works. Each parish except Orleans has the statutory authority to create gravity drainage districts and gravity sub-drainage districts, as necessary. Each parish governing authority may determine the number of gravity drainage districts required in the parish. A board of commissioners governs each gravity drainage district, with members appointed by the parish governing authority based on the petition or recommendations of surrounding landowners.	La. R.S. 38:1751 -1904; authorizing parishes to create gravity drainage districts
Levee Districts	Levee districts seek to understand the dynamics of flood protection and tidal surge specific to a prescribed area in order to establish a plan for protection in conjunction with neighboring parishes, determine funding sources and implement the plan. Levee districts are political subdivisions of the state, designated in the Louisiana Constitution and formed by the Legislature. Levee districts have taxation, bonding and expropriation powers within their territories.	La. Constitution Article 6, Sec. 38; La. R.S. 38:291 ; levee districts
Floodplain Administrators	Almost every parish and municipality in Louisiana has adopted a local ordinance to establish a local floodplain administrator within government, such as the chief building official, who will fulfill the associated duties, which include compliance with federal legislation at the local level. However, passing a local ordinance does not mean that the parish or municipality has dedicated staff or resources to perform these functions nor does it mean a local government is in compliance with federal law.	La. R.S. 38:84 , et seq.; power to comply with federal Flood Insurance Act and as dictated by local ordinance
Planning and Development Districts	A planning district is a multiservice entity with state-defined boundaries that delivers a variety of federal, state and local programs and offers services such as technical assistance and professional planning services to its regions. Louisiana's planning and development districts are on the front lines of community-based economic development and resilience, with long-established relationships with the U.S. Economic Development Administration. These entities are created with the statutory purposes of making parishes and municipalities in the districts more economically self-reliant.	La. R.S. 33:9039.101 , et seq.; and as created or recognized by local ordinance
Planning Commissions	Planning commissions are charged with creating a master plan for the physical development of a subject territory to promote the health, safety, convenience, morals and general welfare of the community. The master plan should ensure orderly development of property by establishing adequate standards for the provision of air, light and open spaces; providing for the proper arrangement streets and traffic circulation; and ensuring adequate parking, utilities and zoning to encourage the most appropriate use of land. Importantly, planning commissions often provide instruction to avoid flood risk that results from overburdened storm drainage systems and flood plains.	La. R.S. 33:101 et seq.; and as set forth by local ordinance.

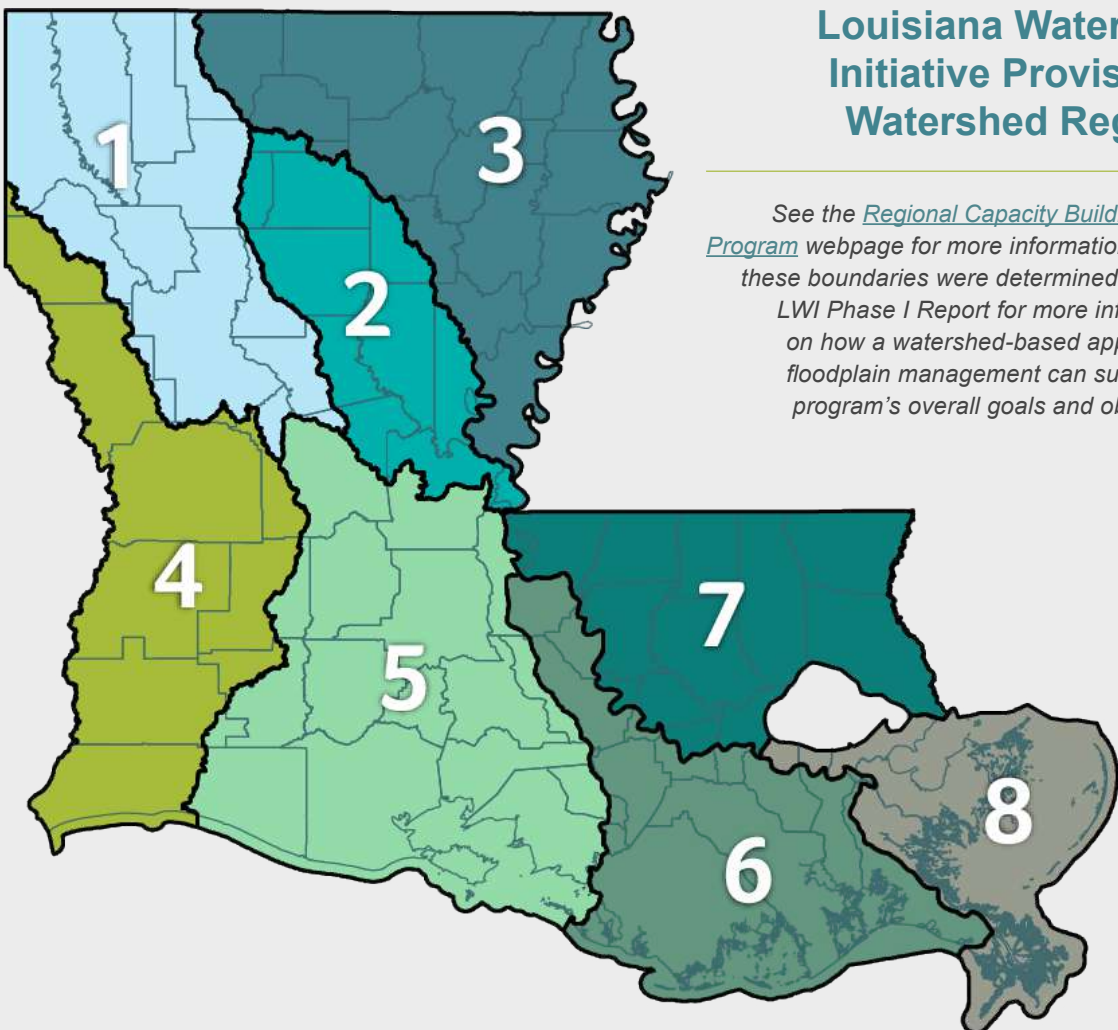


CATEGORY	DESCRIPTION OF ENTITY	ENABLING LAW
Recreation and Water Conservation Districts	Recreation and water conservation districts are political subdivisions of the state, with the purpose to preserve, promote and develop the wealth and natural resources of the district through the conservation of the soil and water for agricultural, recreational, commercial and sanitary purposes and the regulation of aquatic plant growth.	Individually created by Title 38
Reservoir Districts	Reservoir districts are formed for the purpose of the development of the wealth and natural resources of the district by the conservation of soil and water for agricultural, recreational, commercial, industrial and sanitary purposes. This includes, for example, the creation and maintenance of a lake within the district. The Louisiana Department of Transportation and Development manages reservoir districts.	Individually created by Title 38
Soil and Water Conservation Districts	The farm and grazing lands of the state are among its basic assets, and the preservation of these lands is necessary to protect and promote the health, safety and general welfare of its citizens. The state's 44 SWCDs are charged with assisting the state's farmers and ranchers in implementing conservation practices to protect and enhance the soil, water and related resources of the state. The SWCDs work independently but with guidance from the National Resources Conservation Service.	La. R.S. 3:1201 ; Soil and Water Conservation Districts
Watershed Special Districts	Watershed special districts are political subdivisions of the state, with specific enacting legislation and a state budgetary unit. These watershed districts aim to conserve the soil and water within designated areas; develop the natural resources and wealth of the district for sanitary, agricultural or recreational purposes; and provide flood protection and control. The districts have a significant amount of authority to accomplish their purposes.	Individually created by Title 38
Waterway Special Districts	Waterway special districts seek to improve and maintain navigation of waterways in designated areas, usually including repairs, improvements and maintenance required to support navigable waters. The preservation of these navigable waters promotes economic development, proper irrigation, improved water supply, proper drainage, public recreation and hydroelectric power opportunities for Louisiana citizens.	Individually created by Title 34
Coastal Zone Management Programs	The Louisiana Department of Natural Resources funds local coastal zone management programs. DNR, in cooperation with the National Coastal Zone Management Program, has provided grants to Louisiana parishes in the coastal zone. Parishes may apply for funding for the preparation of a Coastal Zone Management Plan, administered by NOAA, which may be used to guide permitting, zoning and other land use management in the coastal sections of the parish. The parish then adopts the plan through a local ordinance.	La. R.S. 49:214.28 et seq.
Parish and Municipal Governing Authorities	Parish and municipal governing authorities manage water through a diverse range of ordinances and entities including parish drainage districts, public works departments, zoning ordinances and environmental and sustainability ordinances. The approach varies by parish and by municipality.	Set forth in published municipal and parish ordinances



Watershed management entities in each region

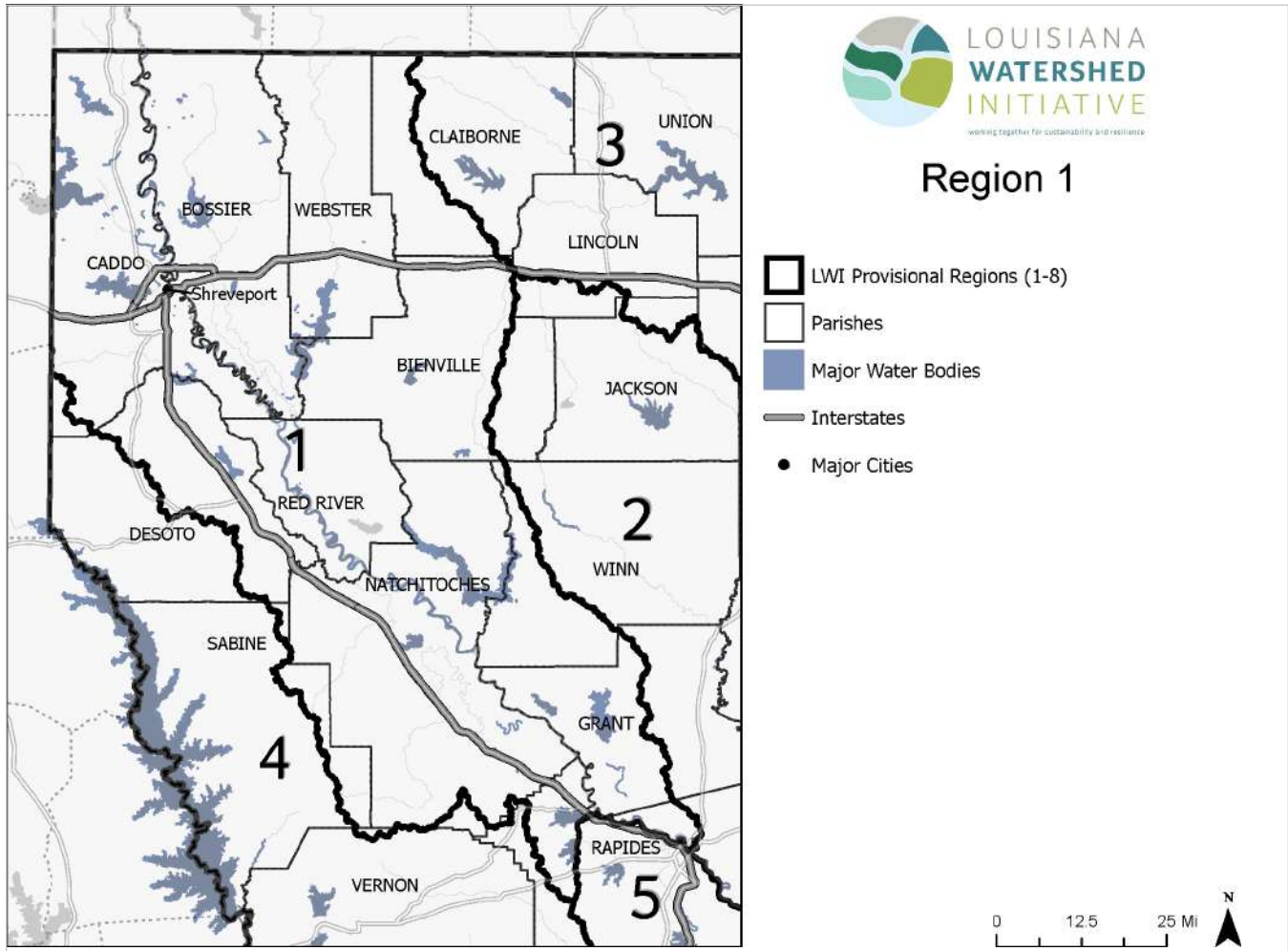
The following chapters include maps and tables of various entities in each watershed region that have the authority and responsibility to manage a wide array of activities impacting water and flood risk management. These entities were selected from a much broader set of entities with authority to perform functions that affect water management in some way. The entities included are responsible for surface water and land use/development decisions that affect community flood risk. Those entities not included have other types of water-related authority, such as water districts that supply fresh water to local communities and ports that have some control over water levels. Federal and state agencies also are not included because their roles, although critical, are generally consistent throughout the state and the focus of this guidebook is on local and regional entities.





Region 1

REGION 1 CENTERS ON THE RED RIVER WATERSHED



PARISHES AND MUNICIPALITIES IN REGION 1

Alexandria	Cotton Valley	Pineville
Arcadia	DeSoto Parish	Plain Dealing
Ball	Grant Parish	Rapides Parish
Bienville Parish	Greenwood	Sabine Parish
Blanchard	Haughton	Shreveport
Bossier City	Mansfield	Springhill
Bossier Parish	Minden	Vivian
Caddo Parish	Natchitoches	Webster Parish
Claiborne Parish	Natchitoches Parish	Winn Parish



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and to make recommendations to improve regional watershed management.

REGION 1 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 1, the table below contains a comprehensive list of the 33 other local and regional entities with water management functions.

Region 1 entities with water management authority

Gravity drainage districts

Caddo Parish, Gravity Drainage District No. 1
Caddo Parish, Gravity Drainage District No. 2
Caddo Parish, Gravity Drainage District No. 3
Rapides Parish, Gravity Drainage District No. 1
Rapides Parish, Gravity Drainage District No. 2

Levee districts

Bossier Levee District
Nineteenth Louisiana Levee District
Red River, Atchafalaya & Bayou Boeuf Levee District

Planning and development districts

District 6, Coordinating & Development Corporation

Metropolitan Planning Organizations

Northwest Louisiana Council of Governments
Rapides Area Planning Commission

Recreation and water conservation districts

Cypress-Black Bayou Recreation and Water Conservation District
Iatt Lake Water Conservation District
Kepler Creek Recreation and Water Conservation District
Mill Creek Recreation and Water Conservation District

Reservoir districts

Castor Creek Reservoir District
John K. Kelly Grand Bayou Reservoir District

Soil and water conservation districts

Dorcheat Soil and Water Conservation District
Bodcau Soil and Water Conservation District
Caddo Soil and Water Conservation District
D'Arbonne Soil and Water Conservation District
Grant Soil and Water Conservation District
Natchitoches Soil and Water Conservation District
Sabine Soil and Water Conservation District (La. R.S. 3:1204)
Saline Soil and Water Conservation District
Rapides Soil and Water Conservation District
DeSoto Soil and Water Conservation District (La. R.S. 3:1204)
Red River Soil and Water Conservation District (La. R.S. 3:1204)

Watershed special districts

Caddo Lake Watershed District
Webster Parish Watershed District
Claiborne Parish Watershed District

Waterway special districts

Sabine River Authority
Cane River Waterway Commission
Red River Waterway Commission



The table below compares select entities in Region 1 and their authorities and functions.

		Bossier Levee District	Nineteenth Louisiana Levee District	Iatt Lake Water Conservation District	Webster Parish Watershed District	Louisiana Coordinating & Development Corporation	Dorcheat Soil and Water Conservation District	Cane River Waterway Commission	Sabine River Authority	Red River Waterway Commission	Parish/municipal governing authorities
AUTHORITY	FUNCTION										
Standards development and enforcement											
Building and development code											
Local building code amendments	Establish standards beyond statewide code to reduce flood risk										<div></div>
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	<div></div>	<div></div>		<div></div>						<div></div>
Land use regulations											
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	<div></div>	<div></div>				<div></div>				<div></div>
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts						<div></div>				<div></div>
Integrated planning											
Watershed management planning											
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards			<div></div>							<div></div>
	Develop and adopt watershed plans with authority to prioritize projects and project funding			<div></div>		<div></div>	<div></div>				<div></div>
Review of local government plans	Review, revise and approve local plans in accordance with regional or state watershed management standards										
Floodplain mapping and delineation											
Authority to measure and define floodplains	Delineate floodplain boundaries										
	Determine floodplain expansion areas										
	Conduct official watershed hydrologic assessments for planning purposes				<div></div>		<div></div>	<div></div>		<div></div>	<div></div>
Sustainable funding and implementation											
Recurring revenue											
Funding	Taxing authority	<div></div>	<div></div>		<div></div>	<div></div>		<div></div>		<div></div>	<div></div>
Financing	Bonding authority	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>	<div></div>	<div></div>	<div></div>

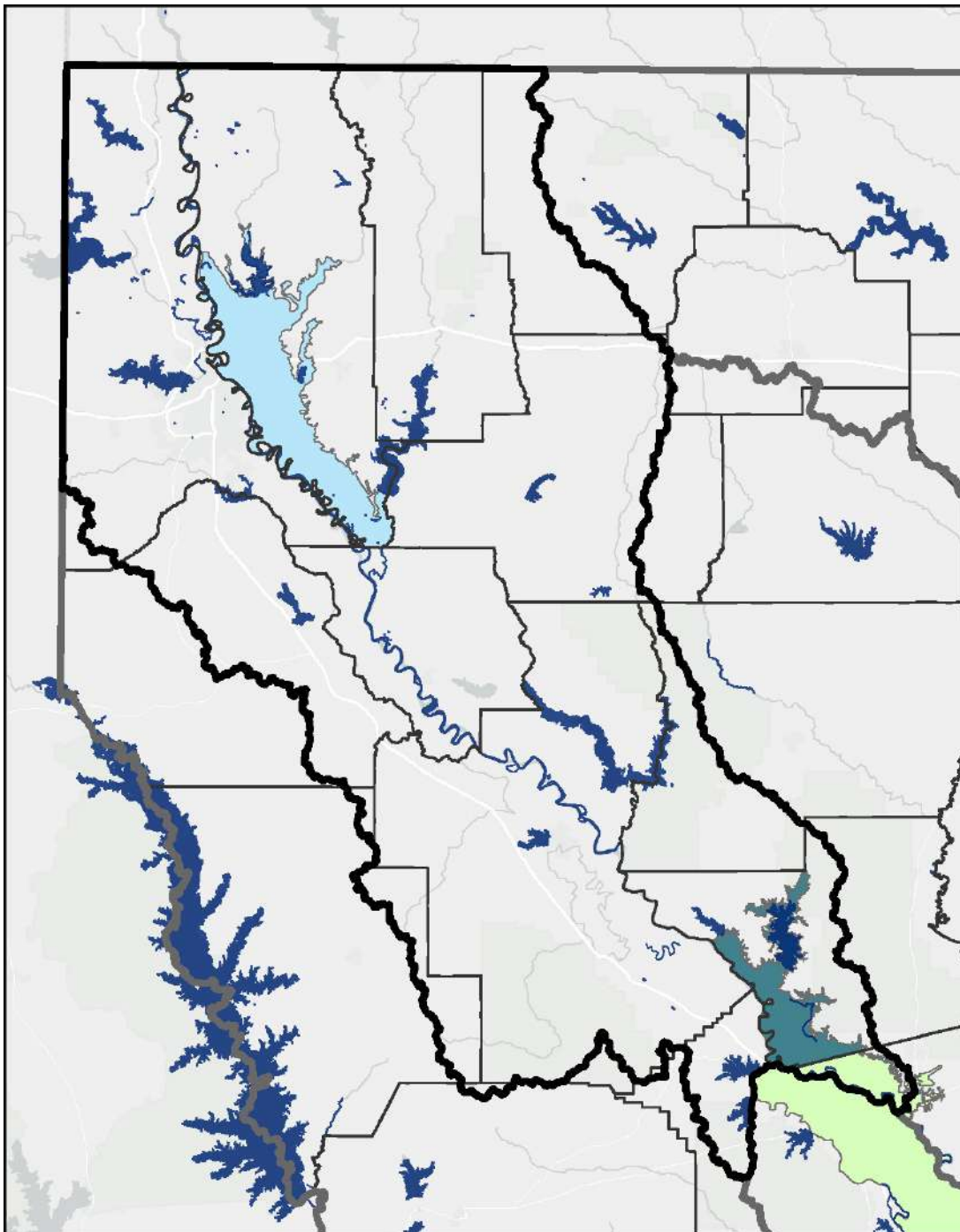
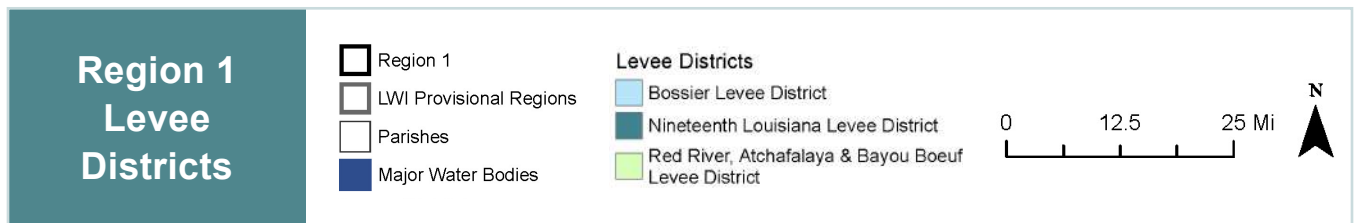


REGIONAL WATERSHED MANAGEMENT IN LOUISIANA
A GUIDEBOOK TO LOCAL AND REGIONAL ENTITIES, THEIR AUTHORITIES AND FUNCTIONS

AUTHORITY	FUNCTION	Bossier Levee District	Nineteenth Louisiana Levee District	Iatt Lake Water Conservation District	Webster Parish Watershed District	Louisiana Coordinating & Development Corporation	Dorcheat Soil and Water Conservation District	Cane River Waterway Commission	Sabine River Authority	Red River Waterway Commission	Parish/municipal governing authorities
Project implementation											
Project design and construction	Design and construct water management projects	■	■	■	■	■	■	■	■	■	■
	Design and construct water management projects throughout the entire region										
Operations and maintenance	Operate and maintain drainage or water management infrastructure	■	■	■	■	■	■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■	■	■	■



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS





Region 1 Navigation Districts

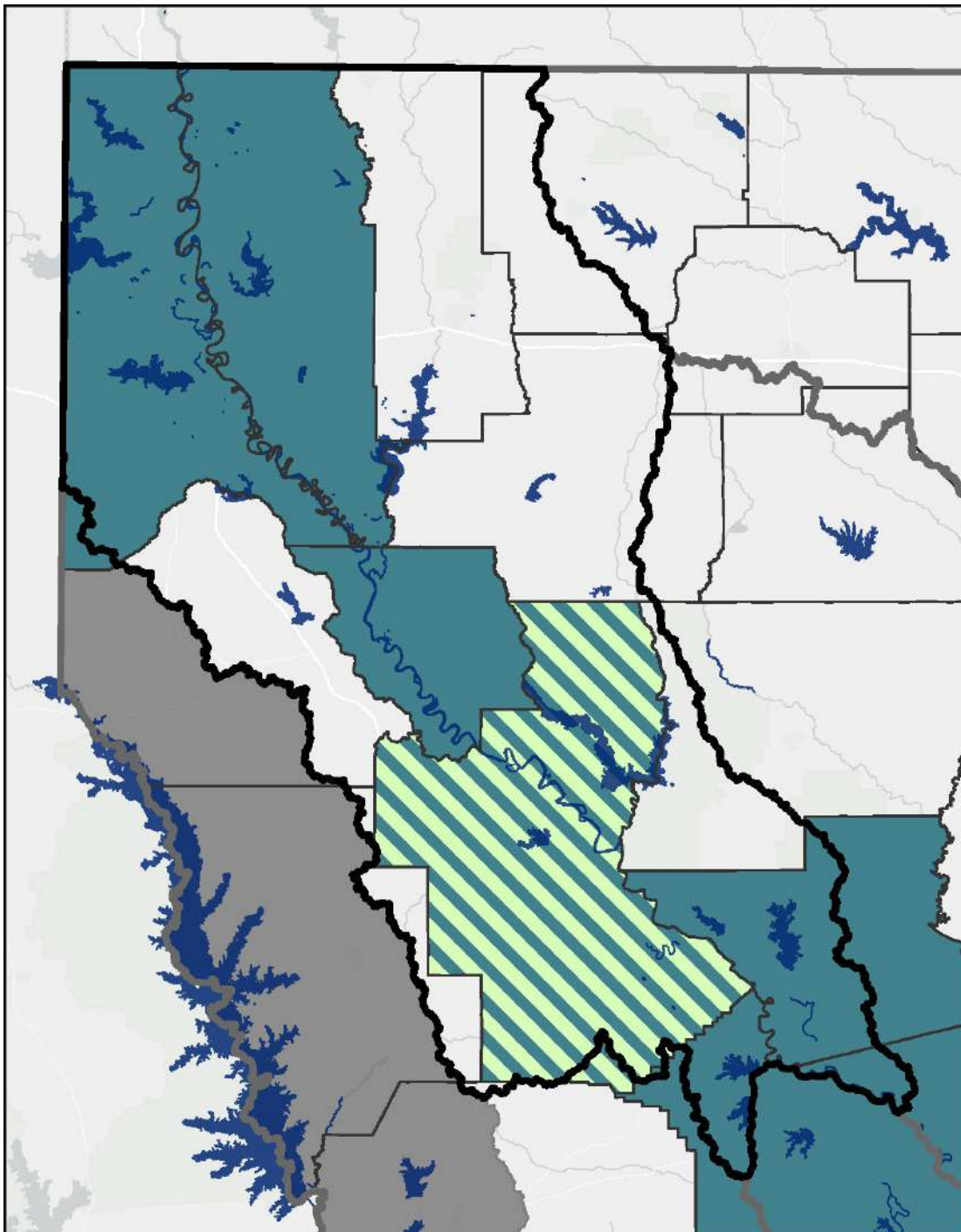
- Region 1
- LWI Provisional Regions
- Parishes
- Navigation Districts Outside Region
- Major Water Bodies

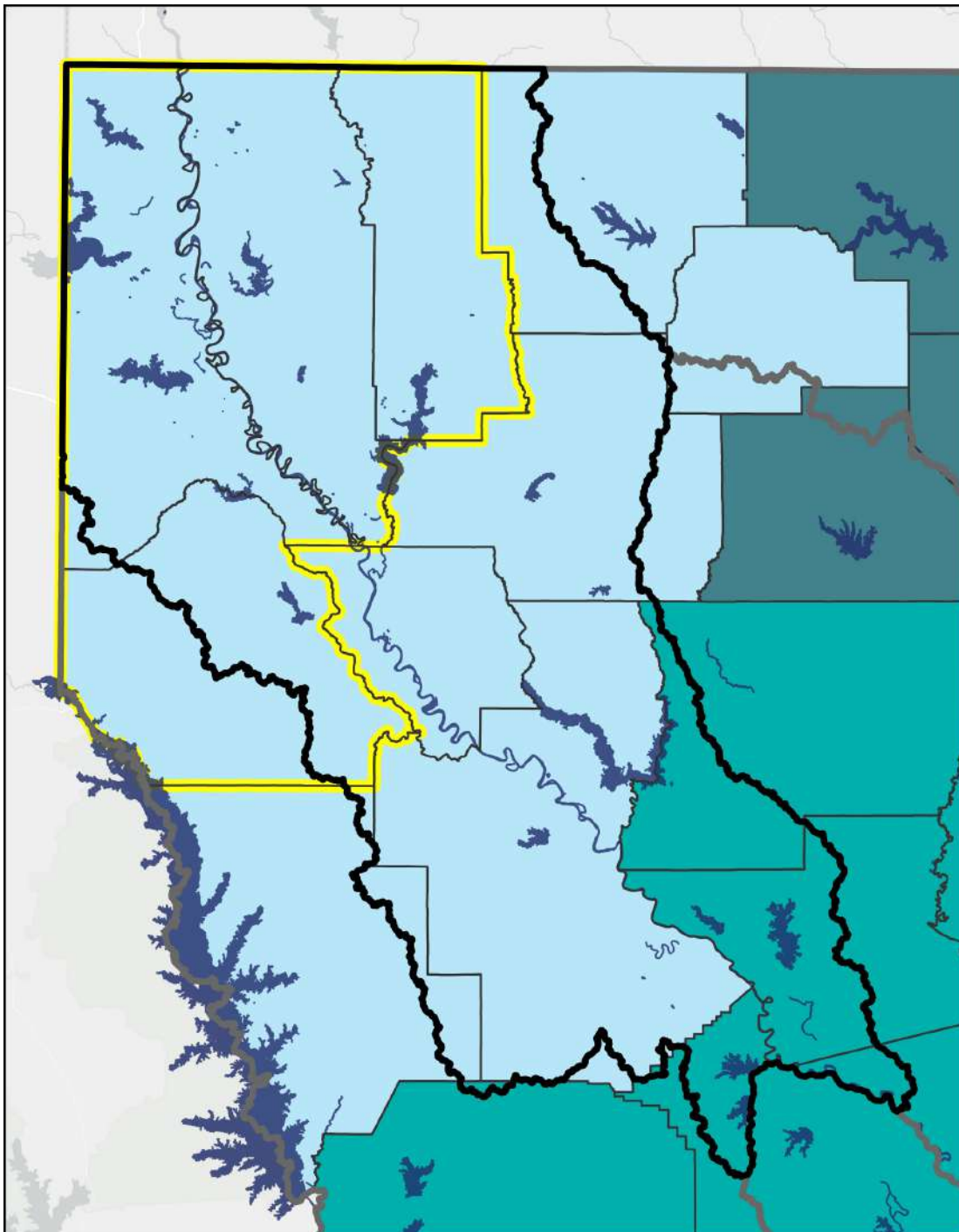
Navigation Districts

- Cane River Waterway Commission
- Red River Waterway Commission

Note: Hatching means overlapping district boundaries.

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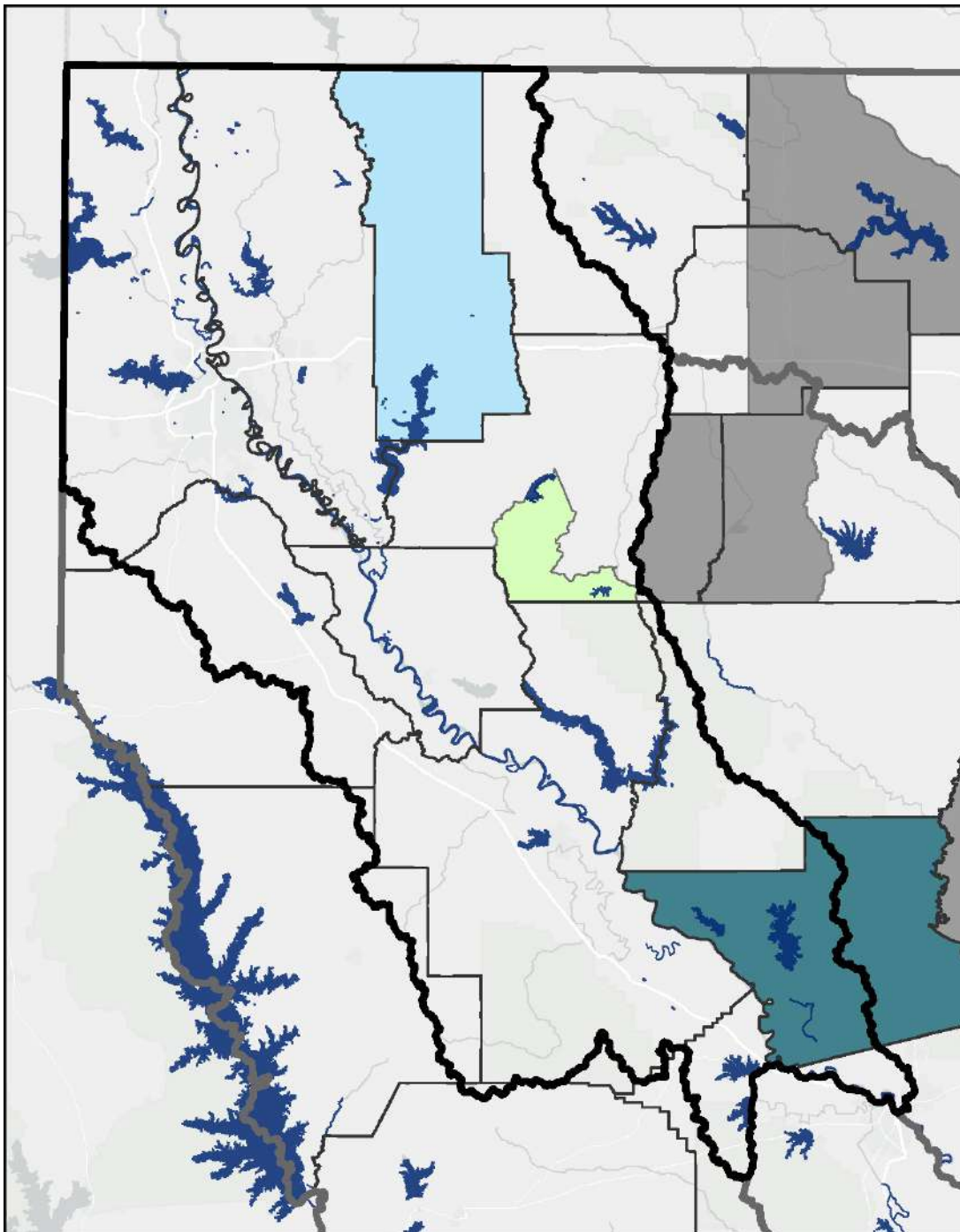
Region 1 Water Districts

- Region 1
- LWI Provisional Regions
- Parishes
- Water Districts Outside Region
- Major Water Bodies

Water Districts

- Dorcheat Soil and Water Conservation District / Webster Parish Watershed District (Inactive)
- Jatt Lake Water Conservation District
- Kepler Creek Lake Conservation District

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Region 1 Governance Analysis

While Region 1 has a number of entities with some authority related to water management, these entities are limited in both authority and jurisdiction, creating gaps in the ability to manage water—specifically flood risk—at the watershed level. Most of the authority to create and execute watershed management plans by enforcing development regulations and implementing projects lies with local governments. By their nature, however, local governments are limited in their authority to develop and execute watershed management plans by their jurisdictional boundaries, such as a city or parish. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Multiple entities have the authority to implement and maintain flood control projects in Region 1, such as levee districts and conservation districts. These districts also are limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For instance, the Red River Waterway Commission boundaries follow the course of the river through Region 1, but its purpose is limited to improving and maintaining navigability of the river.

The broadest combination of jurisdiction, authority and purpose belongs to the Coordinating & Development Corporation. Its jurisdiction covers the largest geographic area within the region. The CDC delivers externally funded programs, promotes coordination, offers technical assistance and planning services within its established boundaries and has broad authority to fund and implement projects. However, it cannot develop or enforce higher standards or codes. The Rapides Area Planning Commission also serves as an important resource in floodplain management, planning and permit review.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate the boundaries of floodplains

Determine floodplain expansion areas

Design and construct projects through the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 1 GAP ANALYSIS

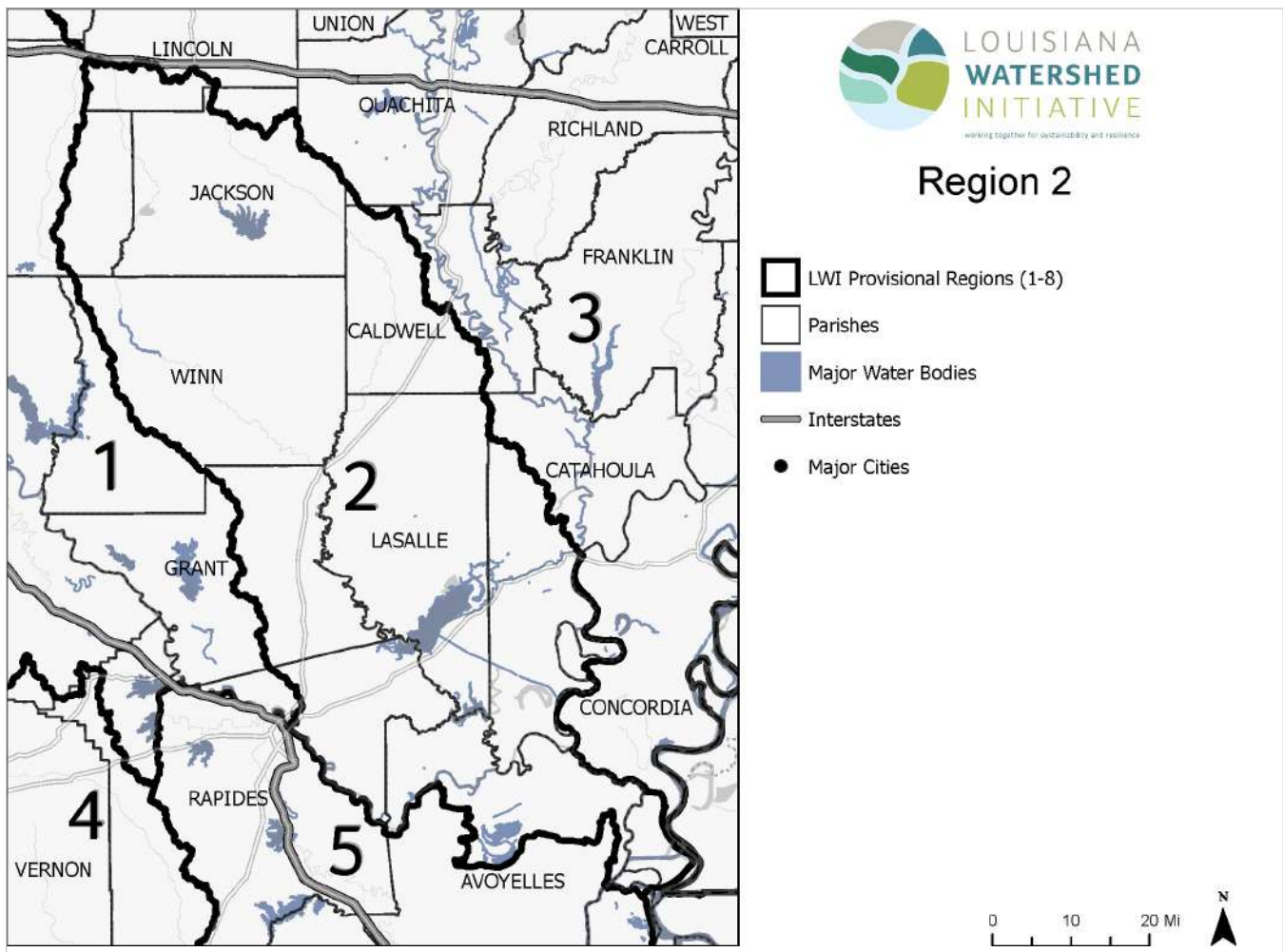
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities					
Planning and development districts					
Levee districts					
Water districts					
Navigation districts					



Region 2

REGION 2 COMPRISES TENSAS, ATCHAFALAYA AND RED RIVER BASINS



PARISHES AND MUNICIPALITIES IN REGION 2

Alexandria
Avoyelles Parish
Bienville Parish
Caldwell Parish
Catahoula Parish
Creola

Grant Parish
Jena
Jonesboro
LaSalle Parish
Lincoln Parish
Marksville

Olla
Pineville
Rapides Parish
Winn Parish
Winnfield



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and to make recommendations to improve regional watershed management.

REGION 2 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 2, the table below contains a comprehensive list of the other 26 local and regional entities with water management functions.

Region 2 entities with water management authority

Gravity drainage districts

Avoyelles Parish, Gravity Drainage District No. 1
Avoyelles Parish, Gravity Drainage District No. 2, Town of Marsville
Rapides Parish, Gravity Drainage District No. 1
Rapides Parish, Gravity Drainage District No. 2

Levee districts

Red River, Atchafalaya & Bayou Boeuf Levee District
Nineteenth Louisiana Levee District
Fifth Louisiana Levee District
Tensas Basin Levee District

Planning and development districts

District 6: Kisatchie-Delta Regional Planning & Development District
District 7: Coordinating & Development Corporation
District 8: North Delta Regional Planning & Development District

Metropolitan Planning Organizations

Rapides Area Planning Commission

Recreation and water conservation districts

Iatt Lake Water Conservation District
Jackson-Bienville Parishes Dugdemona Watershed District
Kepler Creek Recreation and Water Conservation District

Reservoir districts

Castor Creek Reservoir District

Soil and water conservation districts

Avoyelles Soil and Water Conservation District, State Area 3
Boeuf River Soil and Water Conservation District
Catahoula Soil and Water Conservation District (La. R.S. 3:1204)
D'Arbonne Soil and Water Conservation District
Grant Soil and Water Conservation District
LaSalle Soil and Water Conservation District (La. R.S. 3:1204)
Rapides Soil and Water Conservation District

Special districts

Central Louisiana Regional Infrastructure Beltway Commission

Watershed special districts

Jackson Parish Watershed District
Jackson-Bienville Parishes Dugdemona Watershed District

Navigation and waterway special districts

Red River Waterway Commission



The table below compares select entities in Region 2 and their authorities and functions.

AUTHORITY		FUNCTION	Tensas Basin Levee District	Kepler Creek Recreation and Water Conservation District	Iatt Lake Water Conservation District	North Delta Regional Planning & Development District	Red River Waterway Commission	Kisatchie-Delta Regional Planning & Development District	LaSalle Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
Standards development and enforcement											
Building and development code											
Local building code amendments	Establish standards beyond statewide code to reduce flood risk										■
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	■									■
Land use regulations											
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	■							■		■
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts								■		■
Integrated planning											
Watershed management planning											
Develop and adopt watershed management plan	Develop and adopt watershed plans with authority to establish floodplain management standards		■	■					■		■
	Develop and adopt watershed plans with authority to prioritize projects and project funding		■	■	■		■	■	■	■	■
Review local government plans	Review, revise and approve local plans in accordance with regional or state watershed management standards										
Floodplain mapping and delineation											
Authority to measure and define floodplains	Delineate floodplain boundaries										
	Determine floodplain expansion areas										
	Conduct official watershed hydrologic assessments for planning purposes					■		■		■	

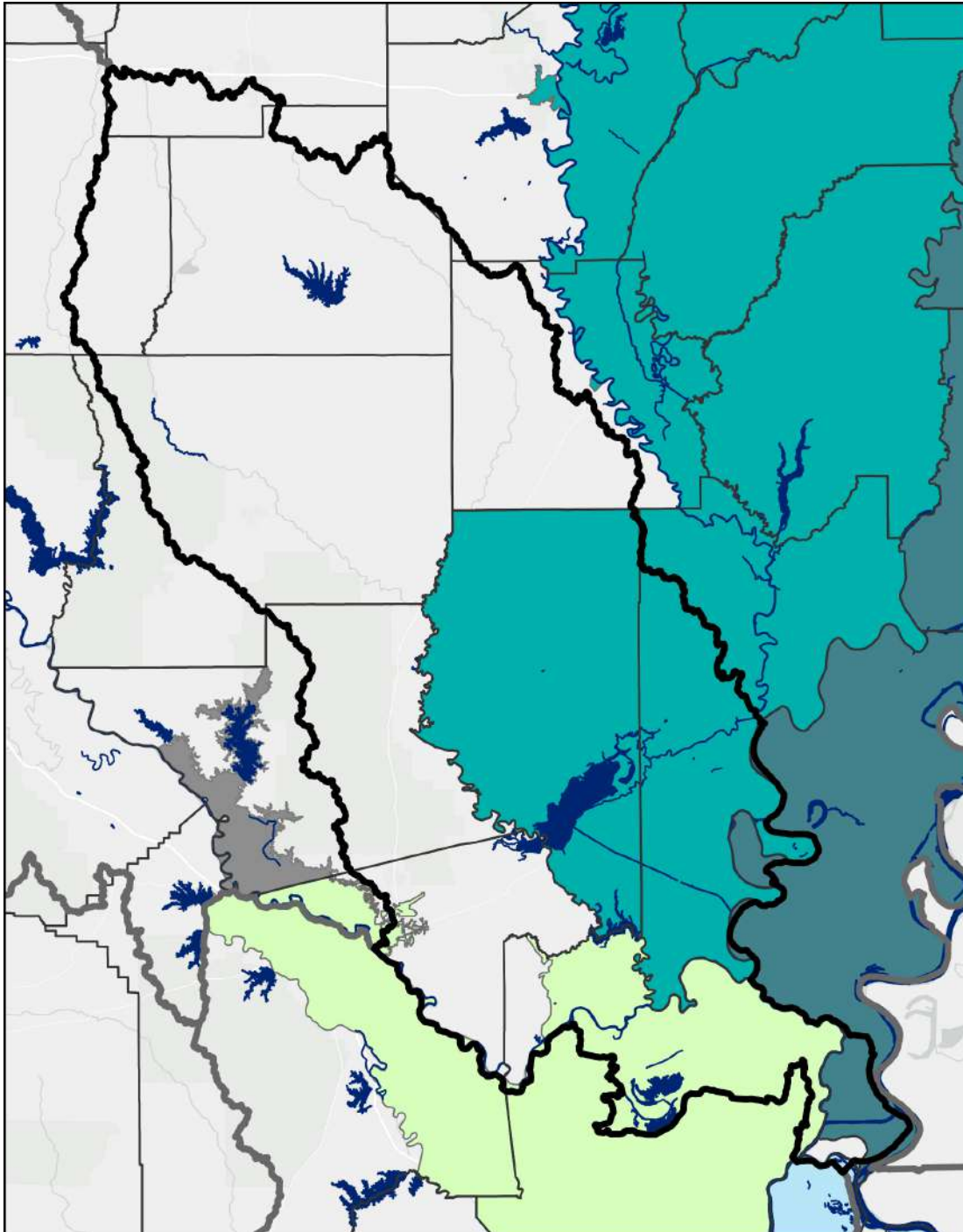


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		Tensas Basin Levee District	Kepler Creek Recreation and Water Conservation District	Iatt Lake Water Conservation District	North Delta Regional Planning & Development District	Red River Waterway Commission	Kisatchie-Delta Regional Planning & Development District	LaSalle Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
AUTHORITY	FUNCTION									
Sustainable funding and implementation										
Recurring revenue										
Funding	Taxing authority	■	■	■	■	■	■		■	■
Financing	Bonding authority	■	■	■	■	■	■		■	■
Project implementation										
Project design and construction	Design and construct water management projects	■	■	■	■	■	■	■	■	■
	Design and construct water management projects throughout the region									
Operations and maintenance	Operate and maintain drainage or water management infrastructure	■	■	■	■	■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■	■	■









MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS

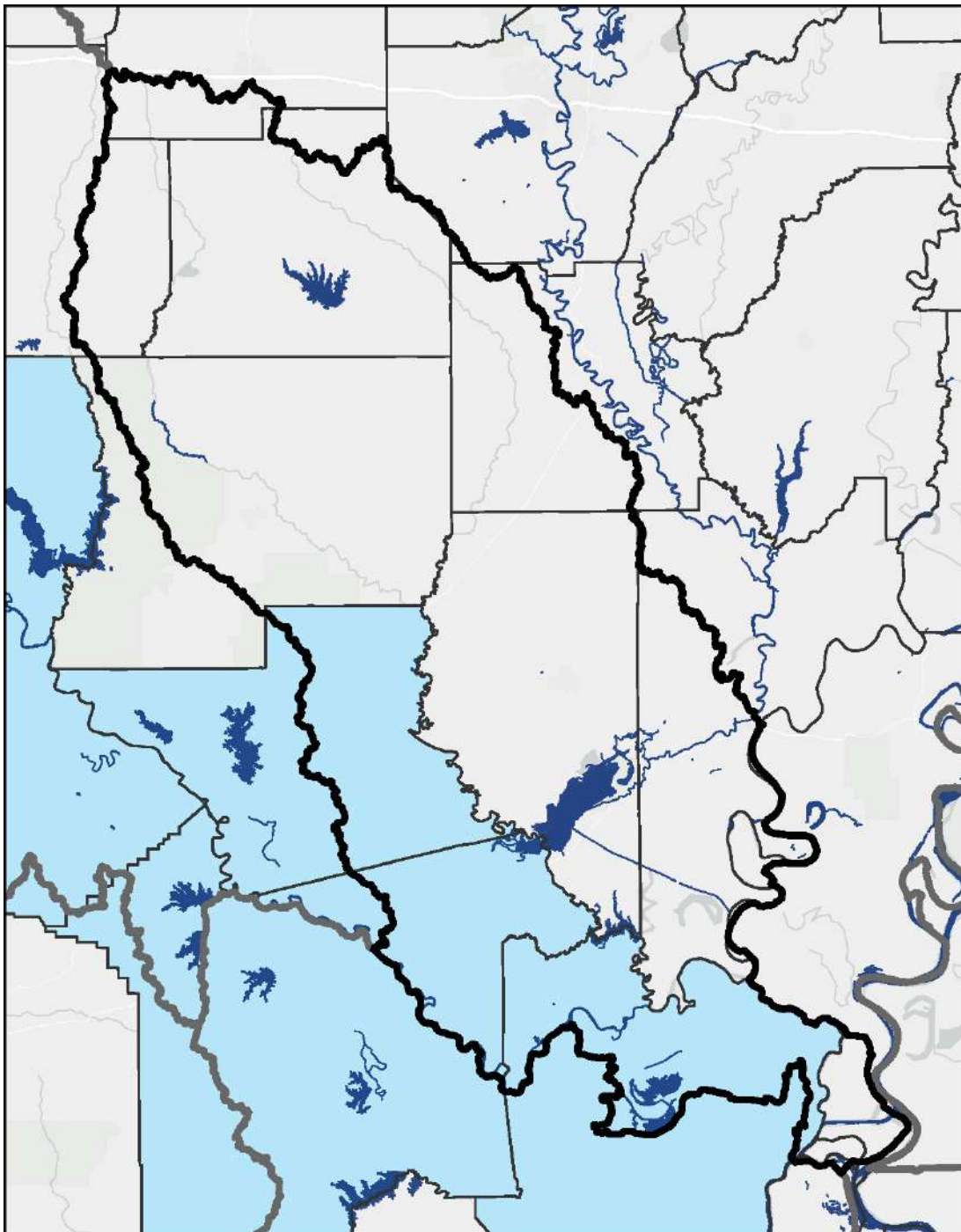


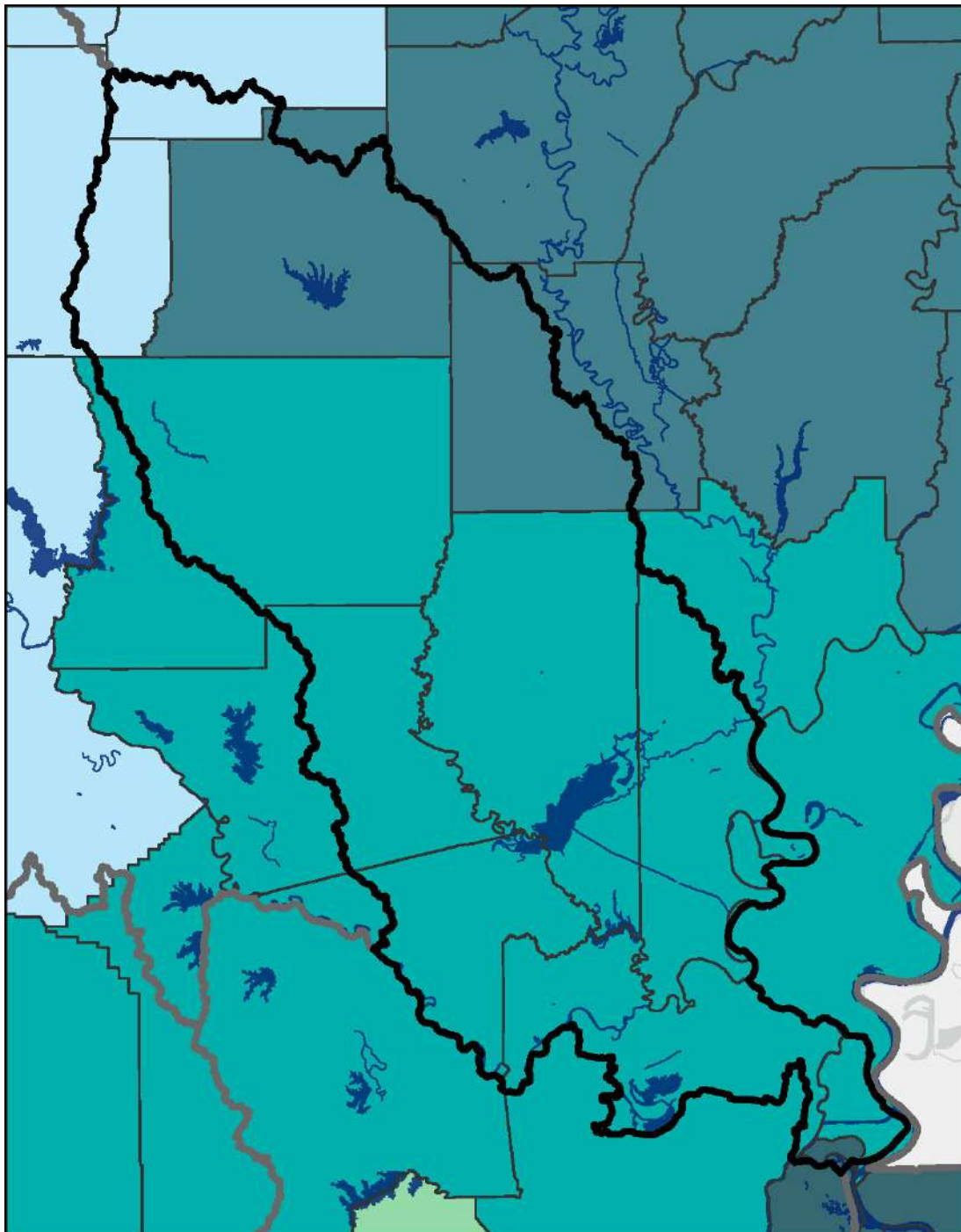


Region 2 Navigation Districts

-  Region 2
 -  LWI Provisional Regions
 -  Parishes
 -  Navigation Districts Outside Region
 -  Major Water Bodies
- Navigation Districts
-  Red River Waterway Commission

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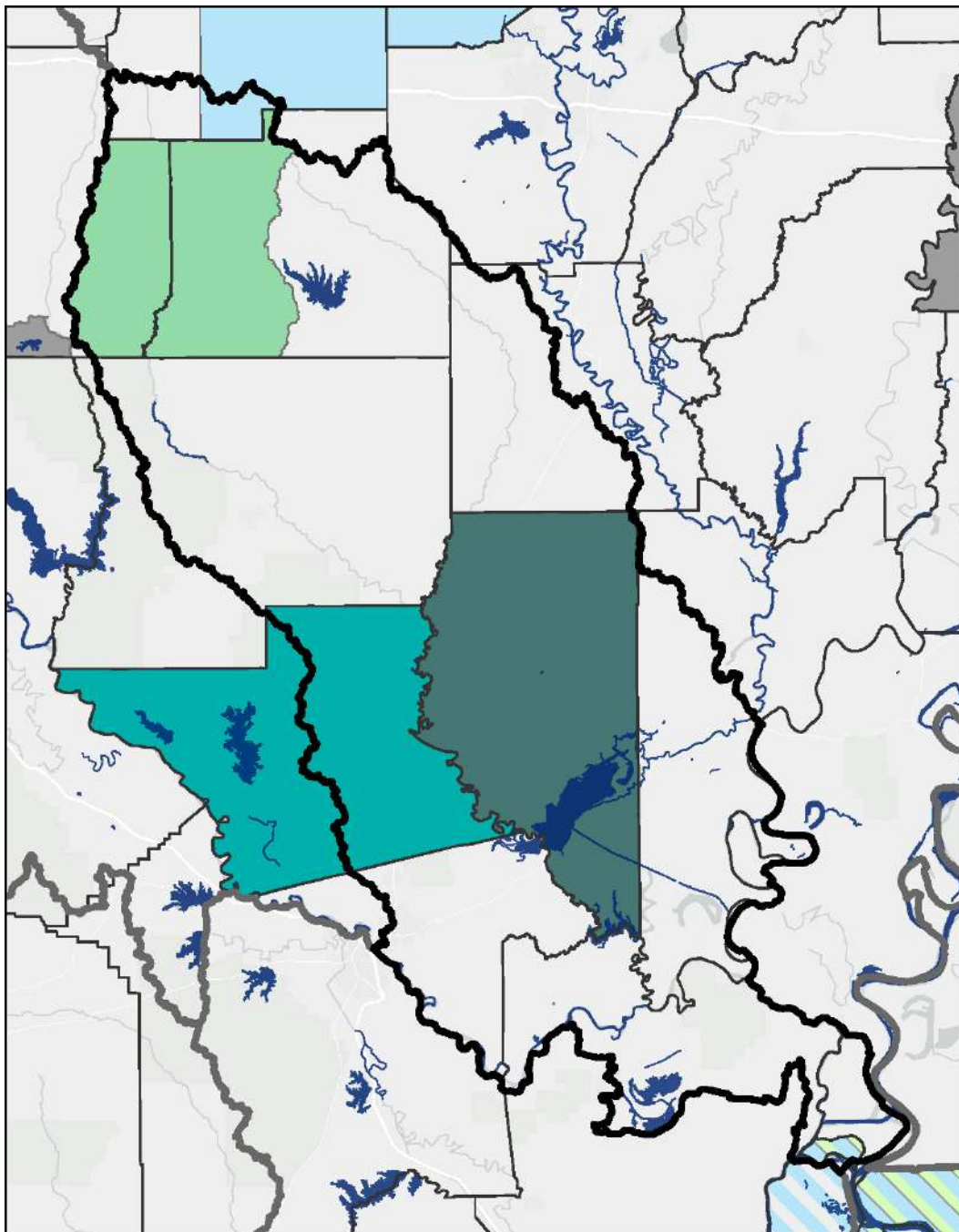
Region 2 Water Districts

- Region 2
- LWI Provisional Regions
- Parishes
- Water Districts Outside Region
- Major Water Bodies

Water Districts

- Bayou D'Arbonne Lake Watershed District
- Capital Area Ground Water Conservation Commission
- Feliciana Soil and Water Conservation District
- Jatt Lake Water Conservation District
- Jackson-Bienville Parishes Dugdemona Watershed District
- LaSalle Soil and Water Conservation District

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Region 2 Governance Analysis

Parish and municipal governing authorities have the most authority related to the development and execution of watershed management plans and projects in Region 2. However, these governing authorities are limited in authority to their jurisdictional boundaries, such as a city, gravity drainage district or parish. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Other political subdivisions, namely special districts, also have broad authority to implement and maintain watershed management projects. Water conservation districts can also develop and adopt watershed plans, but these plans are related to specific water bodies, such as Iatt Lake. Special districts are limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address.

Region 2 includes three planning and development districts: Coordinating & Development Corporation, North Delta Regional Planning & Development District and Kisatchie-Delta Regional Planning & Development District. Of these, the Kisatchie-Delta Regional PDD covers the largest geographic area within Region 2. All three districts deliver externally funded programs, promote coordination, offer technical assistance and planning services within their established district boundaries and have broad authority to fund and implement projects. However, they cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects through the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 2 GAP ANALYSIS

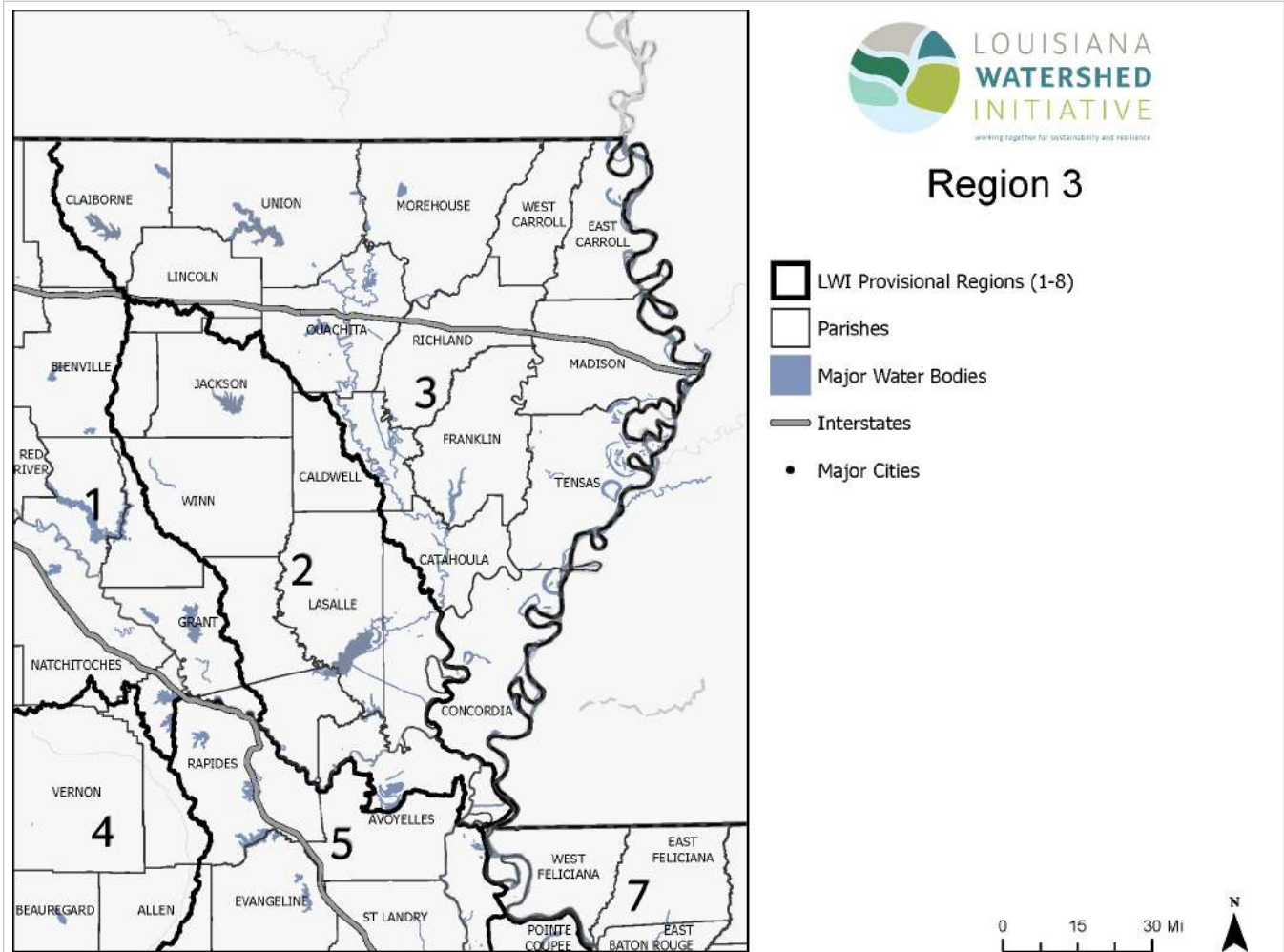
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plan	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities					
Planning and development districts					
Levee districts					
Water districts					
Navigation districts					



Region 3

REGION 3 COMPRISES THE TENSAS AND MISSISSIPPI RIVERS



PARISHES AND MUNICIPALITIES IN REGION 3

Bastrop
Caldwell Parish
Catahoula Parish
Claiborne Parish
Concordia Parish
Delhi
East Carroll Parish

Farmerville
Franklin Parish
Lincoln Parish
Monroe
Morehouse Parish
Ouachita Parish
Ruston

Tensas Parish
Union Parish
Vidalia
West Monroe
Winnsboro



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and to make recommendations to improve regional watershed management.

REGION 3 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 3, the table below contains a comprehensive list of 28 other local and regional entities with water management functions.

Region 3 entities with water management authority

Levee districts

Fifth Louisiana Levee District
Tensas Basin Levee District

Planning and development districts

District 7: Coordinating & Development Corporation
District 8: North Delta Regional Planning & Development District

Recreation and water conservation districts

Black River Lake Recreation and Water Conservation District
Jackson-Bienville Parishes Dugdemona Watershed District
Lake Bruin Recreation and Water Conservation District
Lake St. John Recreation and Water Conservation District
Lake St. Joseph Recreation and Water Conservation District (La. R.S. 38:3087.227)
Morehouse Parish Lake Commission

Reservoir districts

Castor Creek Reservoir District
Poverty Point Reservoir District
Turkey Creek Reservoir District

Soil and water conservation districts

Boeuf River Soil and Water Conservation District
Catahoula Soil and Water Conservation District (La. R.S. 3:1204)
D'Arbonne Soil and Water Conservation District
Madison Soil and Water Conservation District
Morehouse Soil and Water Conservation District
Northeast Soil and Water Conservation District (La. R.S. 3:1204)
East Carroll Soil and Water Conservation District
Tensas-Concordia Soil and Water Conservation District
West Carroll Soil and Water Conservation District
LaSalle Soil and Water Conservation District

Watershed special districts

Jackson-Bienville Parishes Dugdemona Watershed District
Bayou D'Arbonne Lake Watershed District
Claiborne Parish Watershed District
Franklin Parish Watershed District

Navigation and waterway special districts

Bunches Bend Protection District



The table below compares select entities in Region 3 and their authorities and functions.

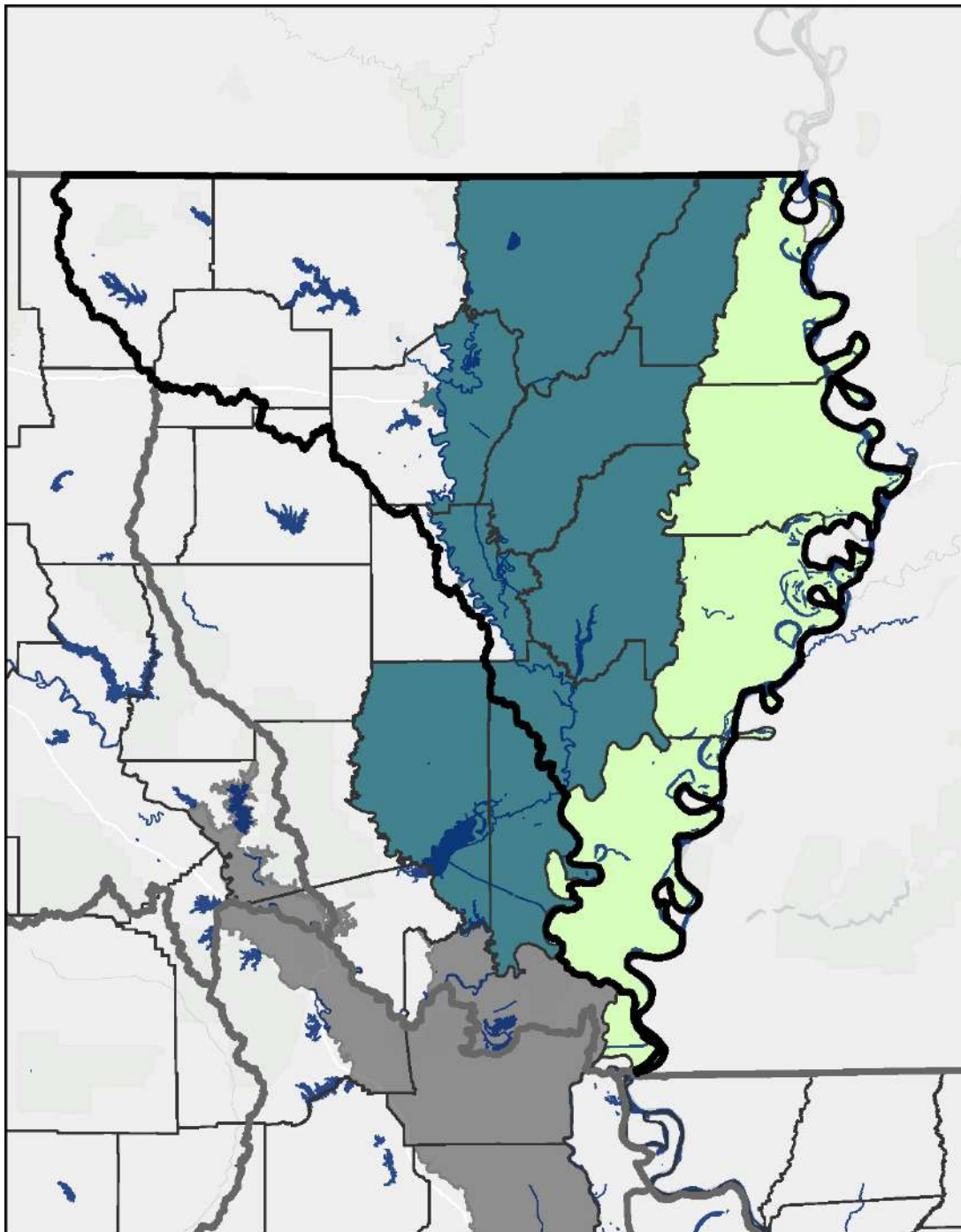
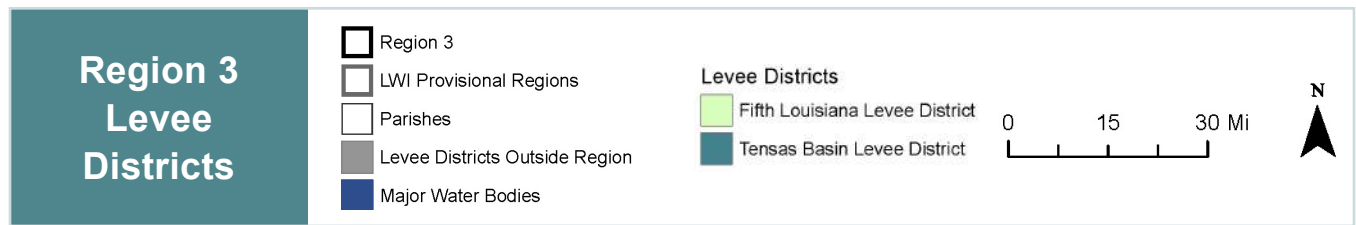
		Fifth Louisiana and Tensas Basin Levee Districts	Lake Bruin Recreation and Water Conservation District	Bayou D'Arbonne Lake Watershed District	Jackson-Bienville Parishes Dugdemona Watershed District	North Delta Regional Planning & Development District	Madison Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Standards development and enforcement									
Building and development code									
Local building code amendments	Establish standards beyond statewide code to reduce flood risk						<div></div>		<div></div>
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	<div></div>							<div></div>
Land use regulations									
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	<div></div>					<div></div>		<div></div>
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts						<div></div>		<div></div>
Integrated planning									
Watershed management planning									
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards		<div></div>						<div></div>
	Develop and adopt watershed plans with authority to prioritize projects and project funding		<div></div>			<div></div>	<div></div>	<div></div>	<div></div>
Local plan review	Review, revise and approve local plans in accordance with regional or state watershed management standards							<div></div>	
Floodplain mapping and delineation									
Authority to measure and define floodplain	Delineate floodplain boundaries								
	Determine floodplain expansion areas								
	Conduct official watershed hydrologic assessments for planning purposes			<div></div>	<div></div>		<div></div>		



		Fifth Louisiana and Tensas Basin Levee Districts	Lake Bruin Recreation and Water Conservation District	Bayou D'Arbonne Lake Watershed District	Jackson-Bienville Parishes Dugdemona Watershed District	North Delta Regional Planning & Development District	Madison Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Sustainable funding and implementation									
Recurring revenue									
Funding	Taxing authority	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>	<div></div>
Financing	Bonding authority	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>		<div></div>	<div></div>
Project implementation									
Project design and construction	Design and construct water management projects	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
	Design and construct water management projects throughout the region								
Operations and maintenance	Operate and maintain drainage or water management infrastructure	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
Land acquisition	Acquire, hold and steward real property	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS





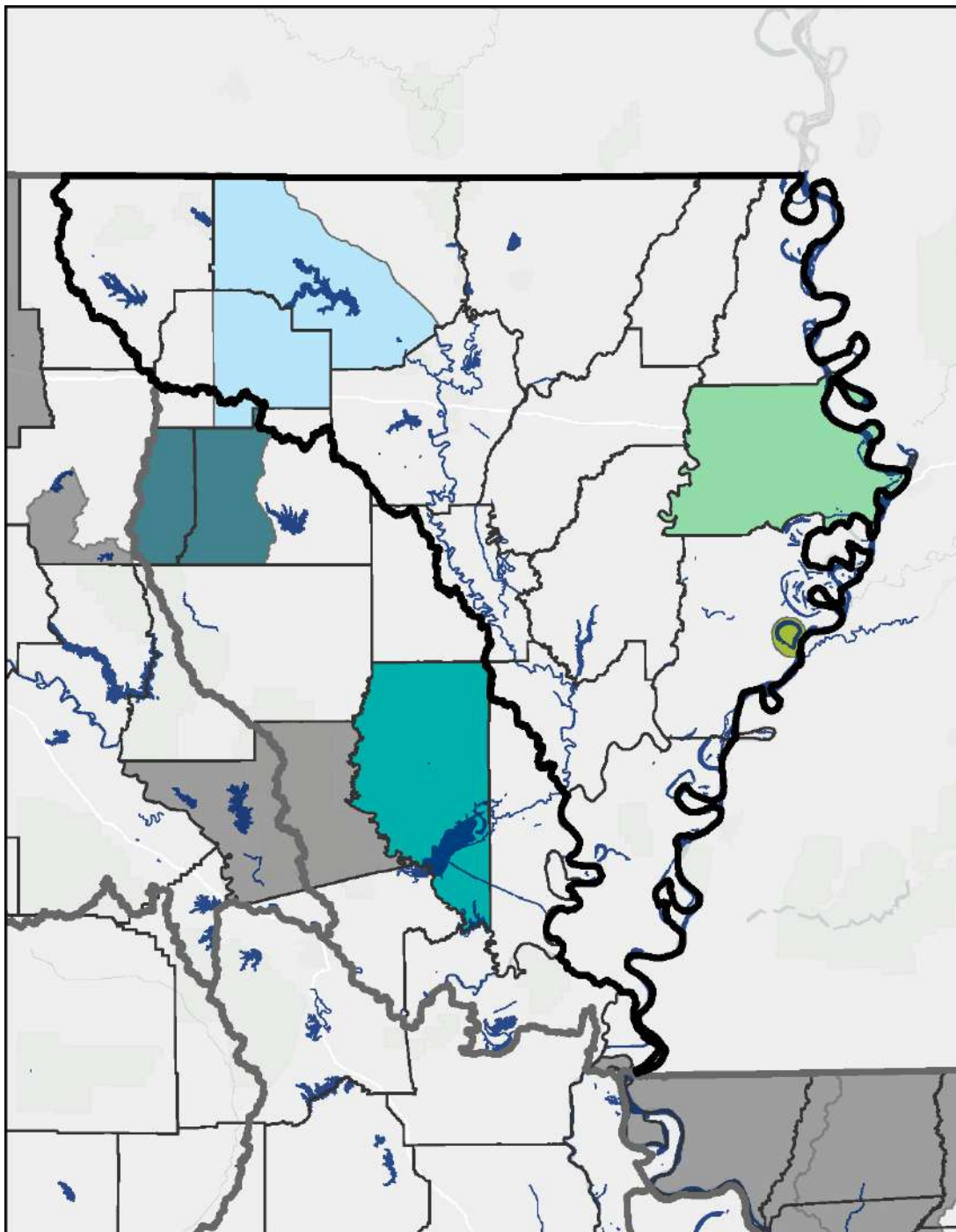
Region 3 Water Districts

- Region 3
- LWI Provisional Regions
- Parishes
- Water Districts Outside Region
- Major Water Bodies

Water Districts






- Bayou D'Arbonne Lake Watershed District
- Jackson-Bienville Parishes Dugdemona Watershed District
- Lake Bruin Recreation and Water Conservation District
- LaSalle Soil and Water Conservation District
- Madison Soil and Water Conservation District

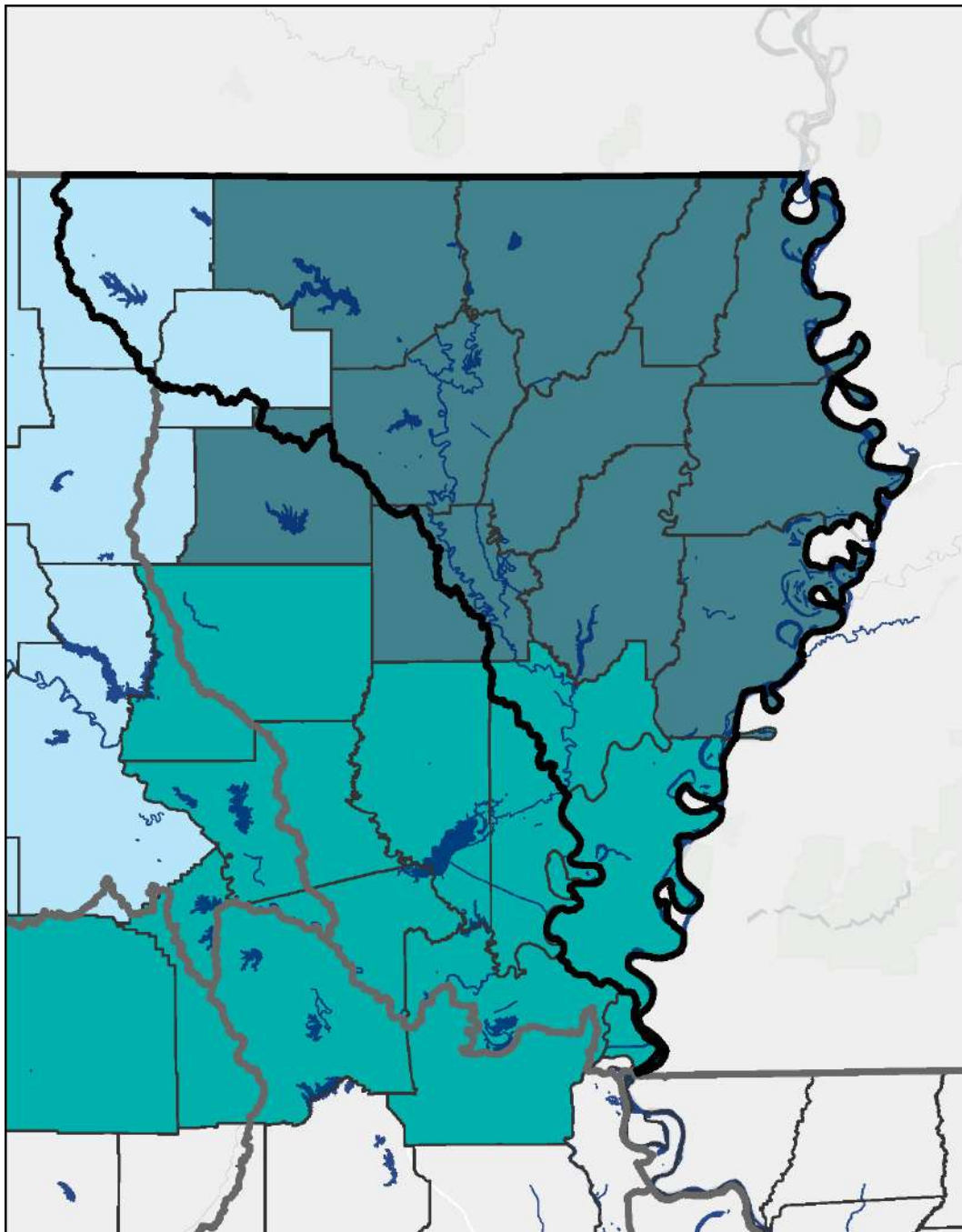
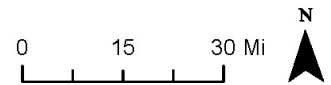
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Region 3 Planning and Development Districts

-  Region 3
 -  LWI Provisional Regions
 -  Parishes
 -  Major Water Bodies
- Planning and Development Districts**
-  Coordinating & Development Corporation
 -  Kisatchie-Delta Regional Planning & Development District
 -  North Delta Regional Planning & Development District





Region 3 Governance Analysis

While Region 3 has a number of entities with some authority related to water management, they are limited in both authority and jurisdiction, creating gaps in the ability to manage water—specifically flood risk—at the watershed level. Parish and municipal governing authorities have the broadest authority to create and execute watershed management plans through the enforcement of development regulations and implementation of projects. By their nature, however, these governing authorities are limited to their jurisdictional boundaries, such as a city or parish, in terms of their authority to develop and execute watershed management plans. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Multiple special districts also have the authority to implement and maintain flood control projects in Region 3, such as levee districts and conservation districts. These districts are also limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For instance, the Fifth Louisiana Levee District and Tensas Basin Levee District collectively cover most of Region 3's geography but are limited in purpose to the protection and maintenance of their respective levee systems.

In terms of geographic coverage, the North Delta Regional Planning & Development District jurisdiction covers the largest geographic area within Region 3. The district delivers externally funded programs, promotes coordination, offers technical assistance and planning services within its established district boundaries and has broad authority to fund and implement projects. However, it cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 3 GAP ANALYSIS

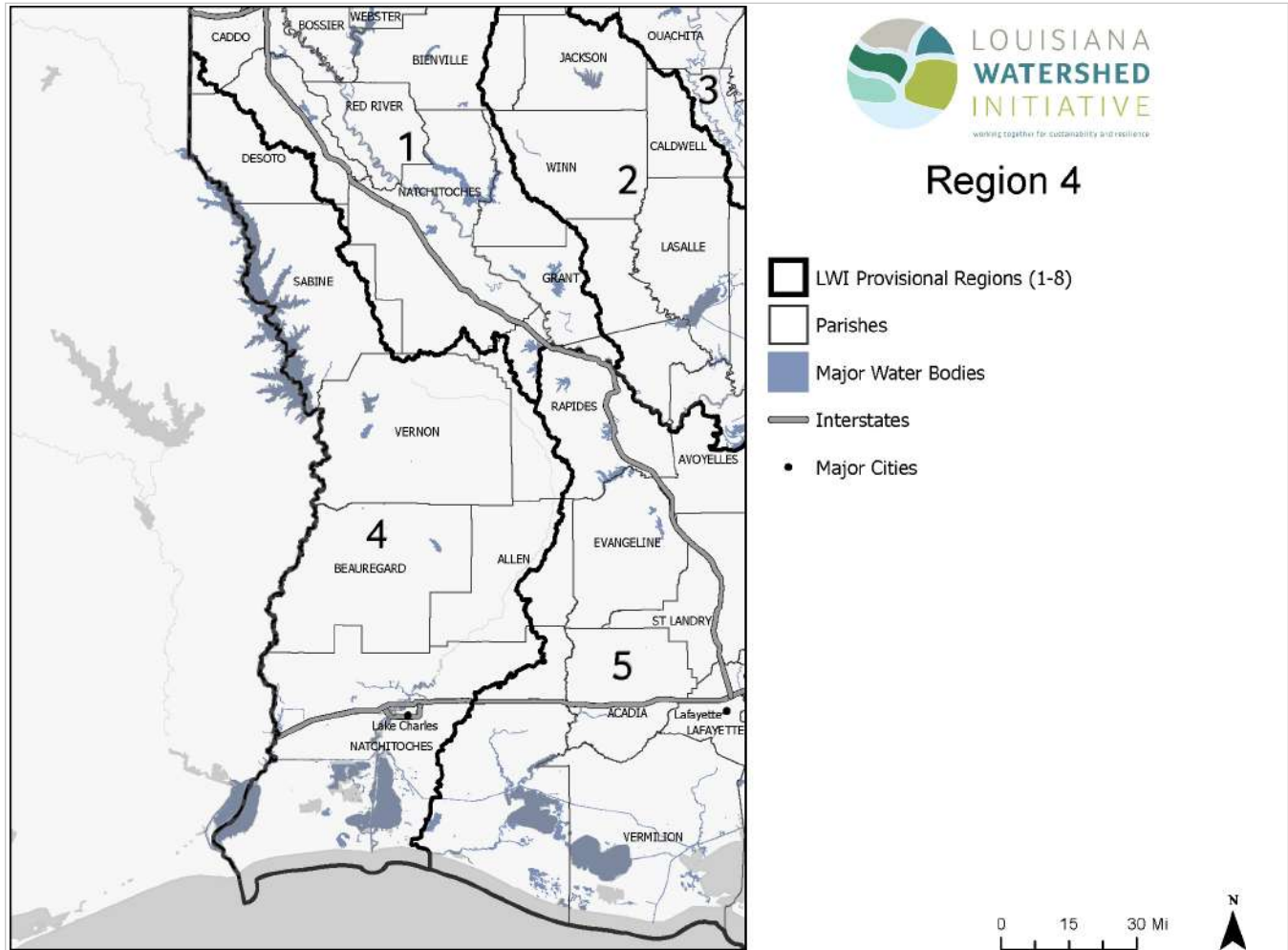
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plan	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities	●	●	●	●	●
Planning and development districts	●			●	●
Levee districts		●		●	●
Water districts	●	●		●	●
Navigation districts	●			●	●



Region 4

REGION 4 COMPRISES THE SABINE RIVER, RED RIVER AND THE COAST



PARISHES AND MUNICIPALITIES IN REGION 4

Allen Parish	Grand Cane	Reeves
Beauregard Parish	Iowa	Rosepine
Calcasieu Parish	Jefferson Davis Parish	Sabine Parish
Cameron Parish	Kinder	Sulphur
DeQuincy	Lake Charles	Vernon Parish
DeRidder	Leesville	Vinton
DeSoto Parish	Rapides Parish	Westlake



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and to make recommendations to improve regional watershed management.

**This information updated based on feedback from regional stakeholders*

REGION 4 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 4, the table below contains a comprehensive list of the 23 other local and regional entities with water management functions.

Region 4 entities with water management authority

Coastal zone managements

Calcasieu Parish Coastal Zone Management Program
Cameron Parish Coastal Zone Management Program

Gravity drainage districts

Allen Parish, Gravity Drainage District No.2
Allen Parish, Gravity Drainage District, Blue Bayou District No. 1
Beauregard Parish, Gravity Drainage District No. 6
Calcasieu Parish, Gravity Drainage District No. 1
Calcasieu Parish, Gravity Drainage District No. 2
Cameron Parish, Gravity Drainage District No. 3
Cameron Parish, Gravity Drainage District No. 4
Cameron Parish, Gravity Drainage District No. 5
Cameron Parish, Gravity Drainage District No. 7
Cameron Parish, Gravity Drainage District No. 8
Cameron Parish, Gravity Drainage District No. 9
Jefferson Davis Parish, Gravity Drainage District No. 5
Jefferson Davis Parish, Gravity Drainage District No. 6
Jefferson Davis Parish, Gravity Drainage District No. 7
Jefferson Davis Parish, Gravity Drainage District No. 9
Jefferson Davis Parish, Consolidated Gravity Drainage District No. 1
Jefferson Davis Parish, Gravity Drainage District, No. 1
Jefferson Davis Parish, Gravity Drainage District No. 1, Sub-Drainage District A
Jefferson Davis Parish, Gravity Drainage District, Welsh Gravity Drainage District No. 1

Levee districts

Chenier Plain Coastal Restoration & Protection Authority
Red River, Atchafalaya & Bayou Boeuf Levee District



Planning and development districts

District 5: Imperial Calcasieu Regional Planning & Development Commission

District 7: Coordinating & Development Corporation

Soil and water conservation districts

Allen Soil and Water Conservation District

Calcasieu Soil and Water Conservation District

Gulf Coast Soil and Water Conservation District

Jefferson Davis Soil and Water Conservation District

Sabine Soil and Water Conservation District (La. R.S. 3:1204)

Rapides Soil and Water Conservation District

DeSoto Soil and Water Conservation District (La. R.S. 3:1204)

Navigation and waterway special districts

Sabine River Authority

Calcasieu-Cameron Navigation District

Red River Waterway Commission



The table below compares selected entities in Region 4 and their authorities and functions.

		Chenier Plain Coastal Restoration & Protection Authority	Sabine River Authority	Red River Waterway Commission	Calcasieu-Cameron Navigation District	Imperial Calcasieu Regional Planning & Development Commission	Gulf Coast Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Standards development and enforcement									
Building and development code									
Local building code amendments	Establish standards beyond statewide code to reduce flood risk								■
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	■							■
Land use regulations									
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	■					■		■
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts						■		■
Integrated planning									
Watershed management planning									
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards								■
	Develop and adopt watershed plans with authority to prioritize projects and project funding					■	■	■	■
Local plan review	Review, revise and approve local plans in accordance with regional or state watershed management standards								
Floodplain mapping and delineation									
Authority to measure and define floodplains	Delineate floodplain boundaries								
	Determine floodplain expansion areas								
	Conduct official watershed hydrologic assessments for planning purposes			■			■		■

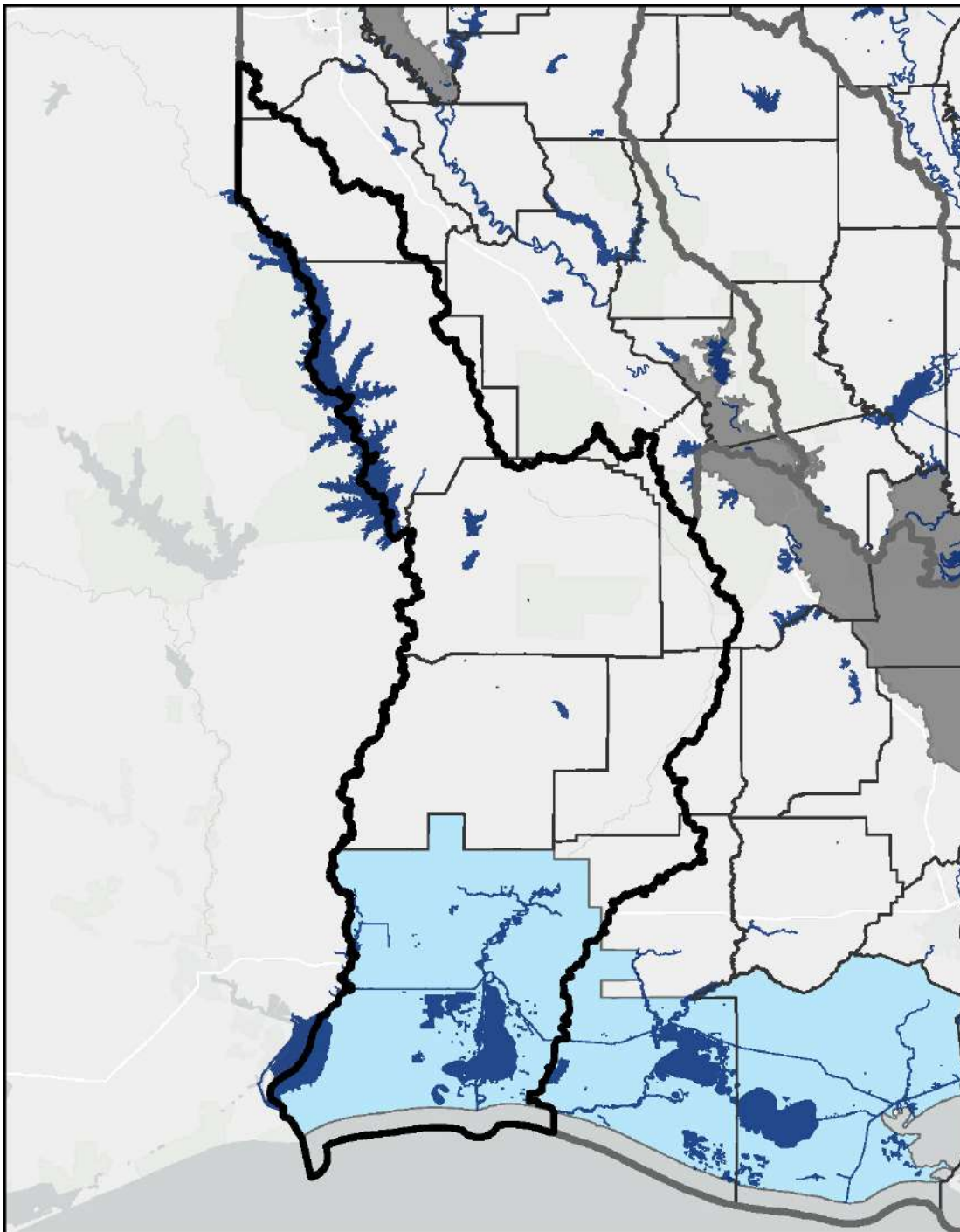
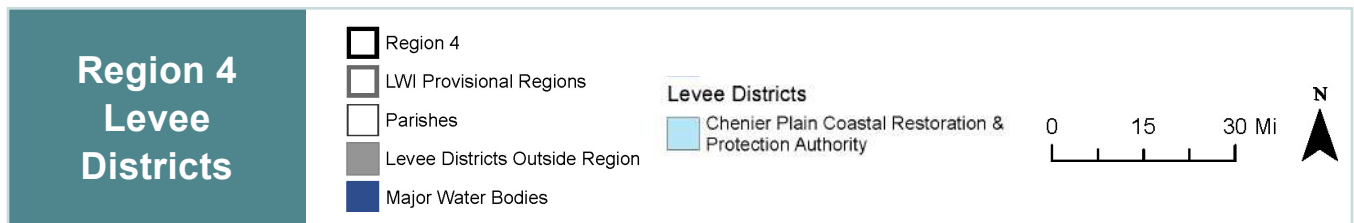


REGIONAL WATERSHED MANAGEMENT IN LOUISIANA
A GUIDEBOOK TO LOCAL AND REGIONAL ENTITIES, THEIR AUTHORITIES AND FUNCTIONS

AUTHORITY	FUNCTION	Chenier Plain Coastal Restoration & Protection Authority	Sabine River Authority	Red River Waterway Commission	Calcasieu-Cameron Navigation District	Imperial Calcasieu Regional Planning & Development Commission	Gulf Coast Soil and Water Conservation District	Coordinating & Development Corporation	Parish/municipal governing authorities
Sustainable funding and implementation									
Recurring revenue									
Funding	Taxing authority	■		■	■	■	■	■	■
Financing	Bonding authority	■	■	■	■	■	■	■	■
Project implementation									
Project design and construction	Design and construct water management projects	■	■	■	■	■	■	■	■
	Design and construct water management projects throughout the entire region								
Operation and maintenance	Operate and maintain drainage or water management infrastructure	■	■	■	■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■	■



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS





Region 4 Navigation Districts

-  Region 4
-  LWI Provisional Regions
-  Parishes
-  Navigation Districts Outside Region
-  Major Water Bodies

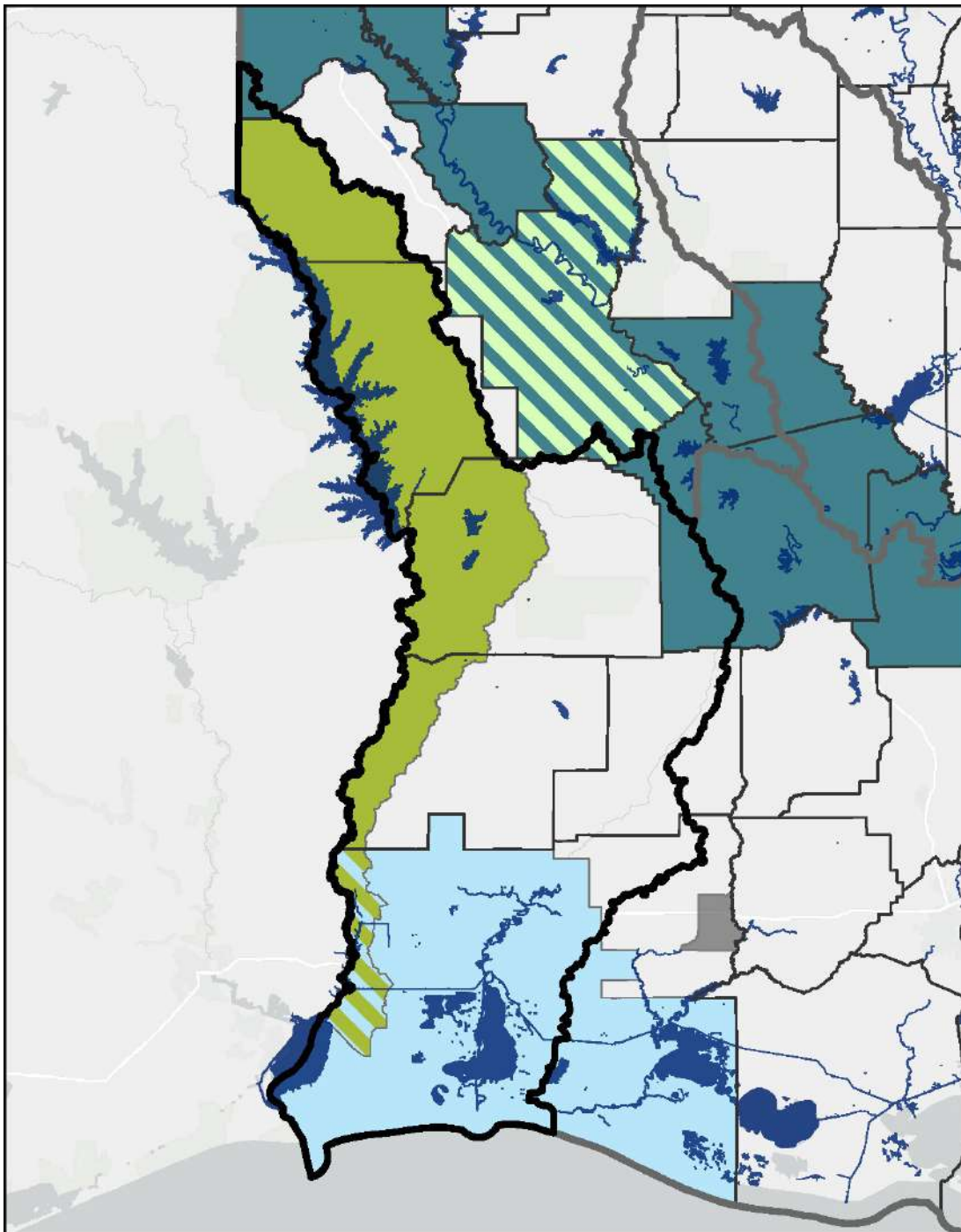
Navigation Districts

-  Calcasieu-Cameron Navigation District
-  Cane River Waterway Commission
-  Red River Waterway Commission
-  Sabine River Authority

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Note: Hatching means overlapping district boundaries.

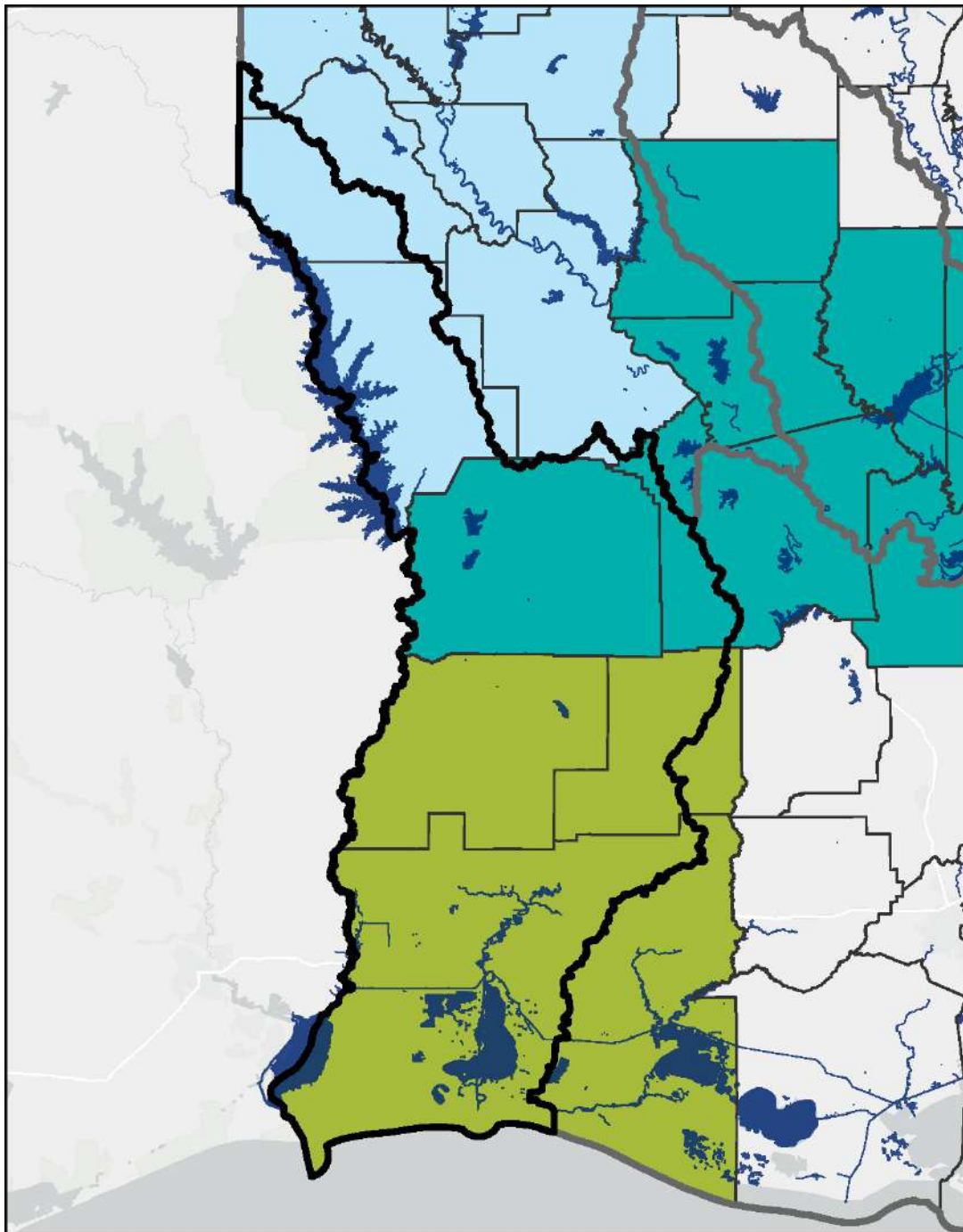




Region 4 Planning and Development Districts

-  Region 4
 -  LWI Provisional Regions
 -  Parishes
 -  Major Water Bodies
- Planning and Development Districts**
-  Coordinating & Development Corporation
 -  Kisatchie-Delta Regional Planning & Development District
 -  Imperial Calcasieu Regional Planning & Development District

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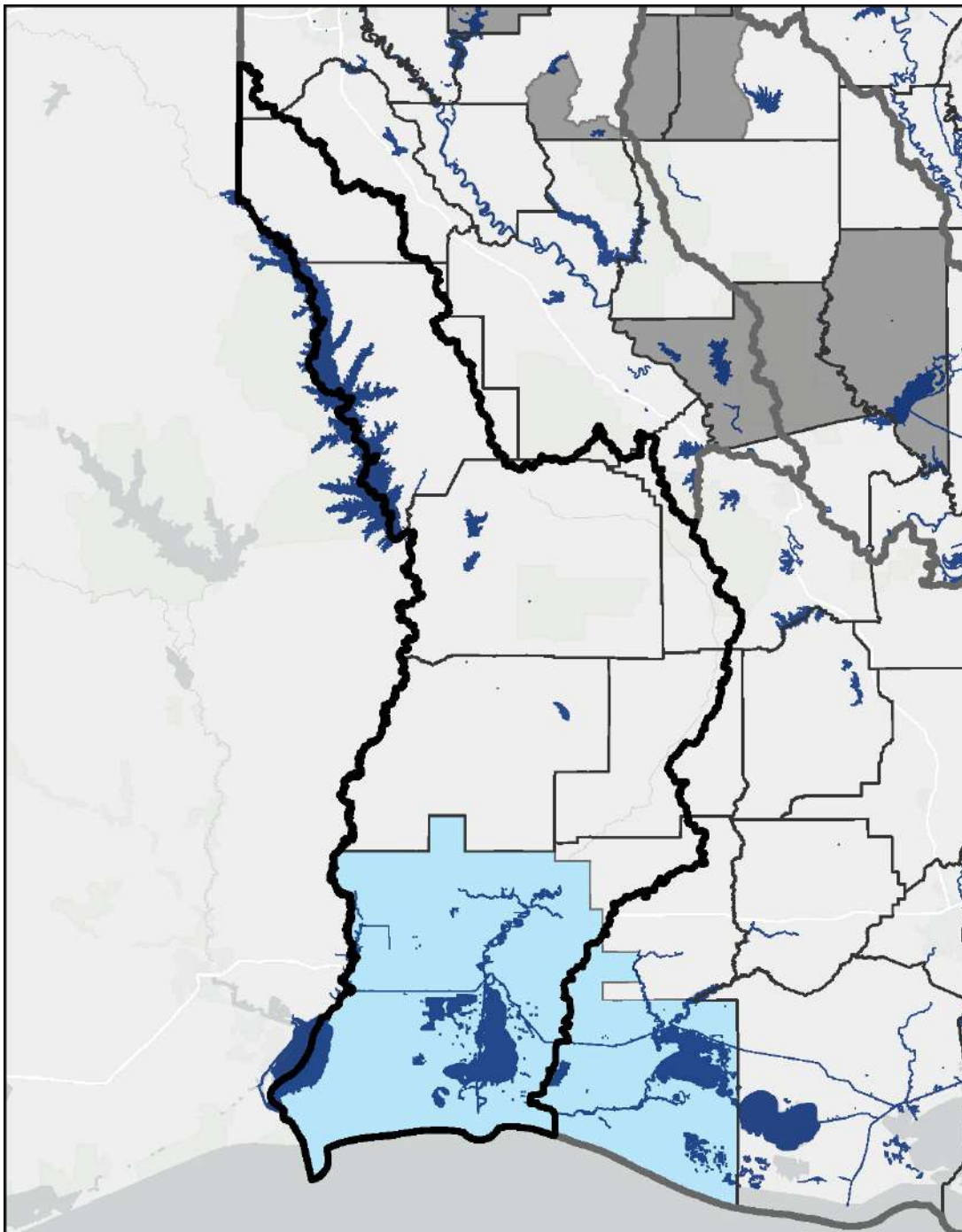
Region 4 Water Districts

- Region 4
- LWI Provisional Regions
- Parishes
- Water Districts Outside Region
- Major Water Bodies

Water Districts

- Gulf Coast Soil and Water Conservation District

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Region 4 Governance Analysis

Parish and municipal governing authorities have the most authority related to the development and execution of watershed management plans and projects in Region 4. However, these governing authorities are limited in their use of that authority to their jurisdictional boundaries, such as a city, drainage district or parish. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Other political subdivisions, namely special districts, also have broad authority to implement and maintain watershed management projects. Special districts are limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For example, the Sabine River Authority is a special waterway district that roughly parallels the Sabine River throughout multiple parishes in Region 4, but it is limited in authority to its district boundaries and in purpose to the preservation of the Sabine River and its tributaries.

Region 4 includes three planning and development districts: the Coordinating & Development Corporation, Kisatchie-Delta Regional Planning & Development District and Imperial Calcasieu Regional Planning & Development Commission. Of these, the Imperial Calcasieu covers the largest geographic area within Region 4. All three deliver externally funded programs, promote coordination, offer technical assistance and planning services within their established district boundaries and have broad authority to implement projects. However, they cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 4 GAP ANALYSIS

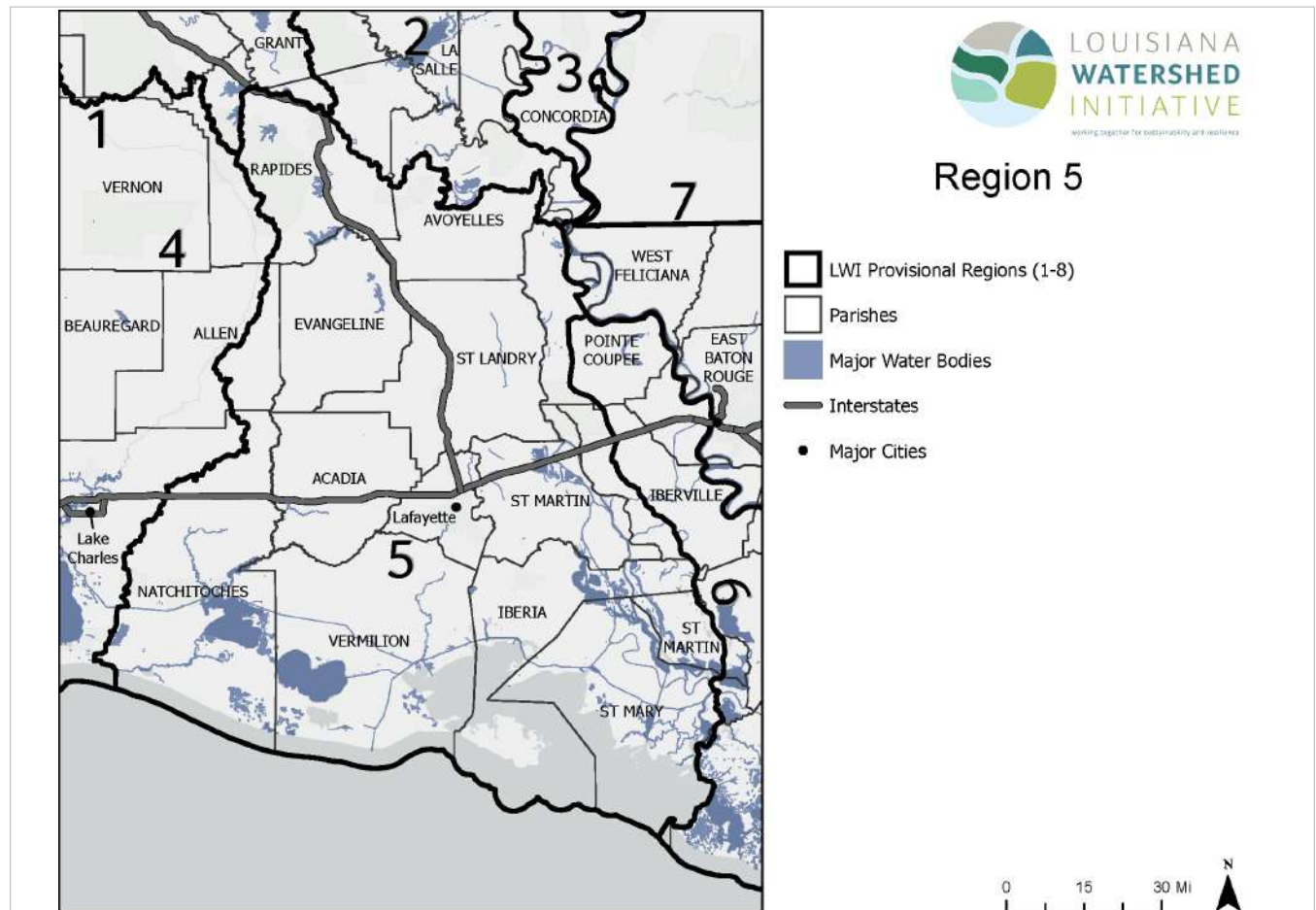
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities					
Planning and development districts					
Levee districts					
Water districts					
Navigation districts					



Region 5

REGION 5 COMPRISES THE ATCHAFALAYA AND RED RIVER BASINS, BAYOUS AND THE COAST



PARISHES AND MUNICIPALITIES IN REGION 5

Abbeville	Cameron Parish	Iberville Parish	Rapides Parish
Acadia Parish	Carencro	Jefferson Davis Parish	Rayne
Alexandria	Cottonport	Kaplan	Scott
Allen Parish	Crowley	Lafayette	St. Landry Parish
Avoyelles Parish	Eunice	Lafayette Parish	St. Martin Parish
Berwick	Evangeline Parish	Livonia	St. Mary Parish
Breaux Bridge	Franklin	Mamou	Vermilion Parish
Broussard	Glenmora	New Iberia	Ville Platte
Bunkie	Gueydan	Patterson	Welsh
Calcasieu Parish	Iberia Parish	Pointe Coupee Parish	Youngsville



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and to make recommendations to improve regional watershed management.

**This information has been updated based on feedback from regional stakeholders*

REGION 5 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 5, the table below contains a comprehensive list of the 83 other local and regional entities with water management functions.

Region 5 entities with water management authority

Coastal zone management

Calcasieu Parish Coastal Zone Management Program
Cameron Parish Coastal Zone Management Program

Fresh water districts

Teche-Vermilion Fresh Water District

Gravity drainage districts

Acadia Parish, Gravity Drainage District, Bayou des Cannes-Nezpique
Acadia Parish, Gravity Drainage District, Bayou Mallet
Acadia Parish, Consolidated Gravity Drainage District No. 1
Acadia Parish, Gravity Drainage District, Iota Long Point
Acadia Parish, Gravity Drainage District, Second Ward No. 1
Acadia Parish, Gravity Drainage District, Second Ward No. 2
Acadia Parish, Gravity Drainage District, First Ward
Acadia Parish, Gravity Drainage District, Fourth Ward
Acadia Parish, Gravity Drainage District, Sixth Ward & Crowley
Acadia Parish, Gravity Drainage District, Bayou Plaquemine & Wikoff
Acadia Parish, Gravity Drainage District, Egan Drainage District No. 1
Allen Parish, Gravity Drainage District No.2
Allen Parish, Gravity Drainage District, Blue Bayou District No. 1
Avoyelles Parish, Gravity Drainage District No. 1
Calcasieu Parish, Gravity Drainage District No. 2 of Ward 7
Calcasieu Parish, Gravity Drainage District No. 4 of Ward 3
Calcasieu Parish, Gravity Drainage District No. 4, Gravity Sub-Drainage District No. 2 of Ward 3
Calcasieu Parish, Gravity Drainage District No. 4, Gravity Sub-Drainage District No. 1 of Ward 3
Calcasieu Parish, Gravity Drainage District No. 5 of Ward 4
Calcasieu Parish, Gravity Drainage District No. 6 of Wards 5 and 6
Calcasieu Parish, Gravity Drainage District No. 7 of Ward 8
Calcasieu Parish, Gravity Drainage District No. 8 of Ward 1
Calcasieu Parish, Gravity Drainage District No. 9 of Ward 2
Cameron Parish, Gravity Drainage District No. 3
Cameron Parish, Gravity Drainage District No. 4
Cameron Parish, Gravity Drainage District No. 5
Cameron Parish, Gravity Drainage District No. 7
Cameron Parish, Gravity Drainage District No. 8
Cameron Parish, Gravity Drainage District No. 9
Evangeline Parish, Gravity Drainage District, Dunald No. 4



Evangeline Parish, Gravity Drainage District, Eunice No. 9
Evangeline Parish, Gravity Drainage District, Mamou No. 5
Evangeline Parish, Gravity Drainage District, Prairie Mamou No. 8
Evangeline Parish, Gravity Drainage District, Vidrine No. 7
Jefferson Davis Parish, Gravity Drainage District No. 5
Jefferson Davis Parish, Gravity Drainage District No. 6
Jefferson Davis Parish, Gravity Drainage District No. 7
Jefferson Davis Parish, Gravity Drainage District No. 9
Jefferson Davis Parish, Consolidated Gravity Drainage District No. 1
Jefferson Davis Parish, Gravity Drainage District No. 1
Jefferson Davis Parish, Gravity Drainage District No. 1, Gravity
 Sub-Drainage District A
Jefferson Davis Parish, Welsh Gravity Drainage District No. 1
Rapides Parish, Gravity Drainage District No. 1
Rapides Parish, Rapides Parish Gravity Drainage District No. 2
St. Mary Parish, Bayou Cypremort Gravity Drainage District No. 1
St. Mary Parish, Consolidated Gravity Drainage District No. 1
St. Mary Parish, Consolidated Gravity Drainage District No. 2
St. Mary Parish, Gravity Drainage District No. 2, Gravity Sub-Drainage
 District No. 1
St. Mary Parish, Gravity Drainage District No. 3
St. Mary Parish, Gravity Drainage District No. 5
St. Mary Parish, Gravity Drainage District No. 6
St. Mary Parish, Gravity Drainage District No. 2

Levee districts

Atchafalaya Basin Levee District
Chenier Plain Coastal Restoration & Protection Authority
Iberia Parish Levee, Hurricane and Conservation District
Red River, Atchafalaya & Bayou Boeuf Levee District
Squirrel Run Levee and Drainage District
St. Mary Levee District

Planning and development districts

District 4: Acadiana Planning Commission

Metropolitan Planning Organizations

Rapides Area Planning Commission

Soil and water conservation districts

Acadia Soil and Water Conservation District
Avoyelles Soil and Water Conservation District
Iberia Soil and Water Conservation District
Lower Delta Soil and Water Conservation District
St. Landry Soil and Water Conservation District
St. Mary Soil and Water Conservation District
Upper Delta Soil and Water Conservation District
Vermilion Soil and Water Conservation District



Allen Soil and Water Conservation District
Capital Soil and Water Conservation District
Gulf Coast Soil and Water Conservation District
Jefferson Davis Soil and Water Conservation District
Rapides Soil and Water Conservation District
Evangeline Soil and Water Conservation District
Lafayette and St. Martin Parish Soil and Water Conservation District

Navigation and waterway special districts

Jennings Navigation District
Sabine River Authority
Acadiana Gulf of Mexico Access Channel Deepening Project
Calcasieu-Cameron Navigation District
Red River Waterway Commission



The table below compares selected entities in Region 5 and their authorities and functions.

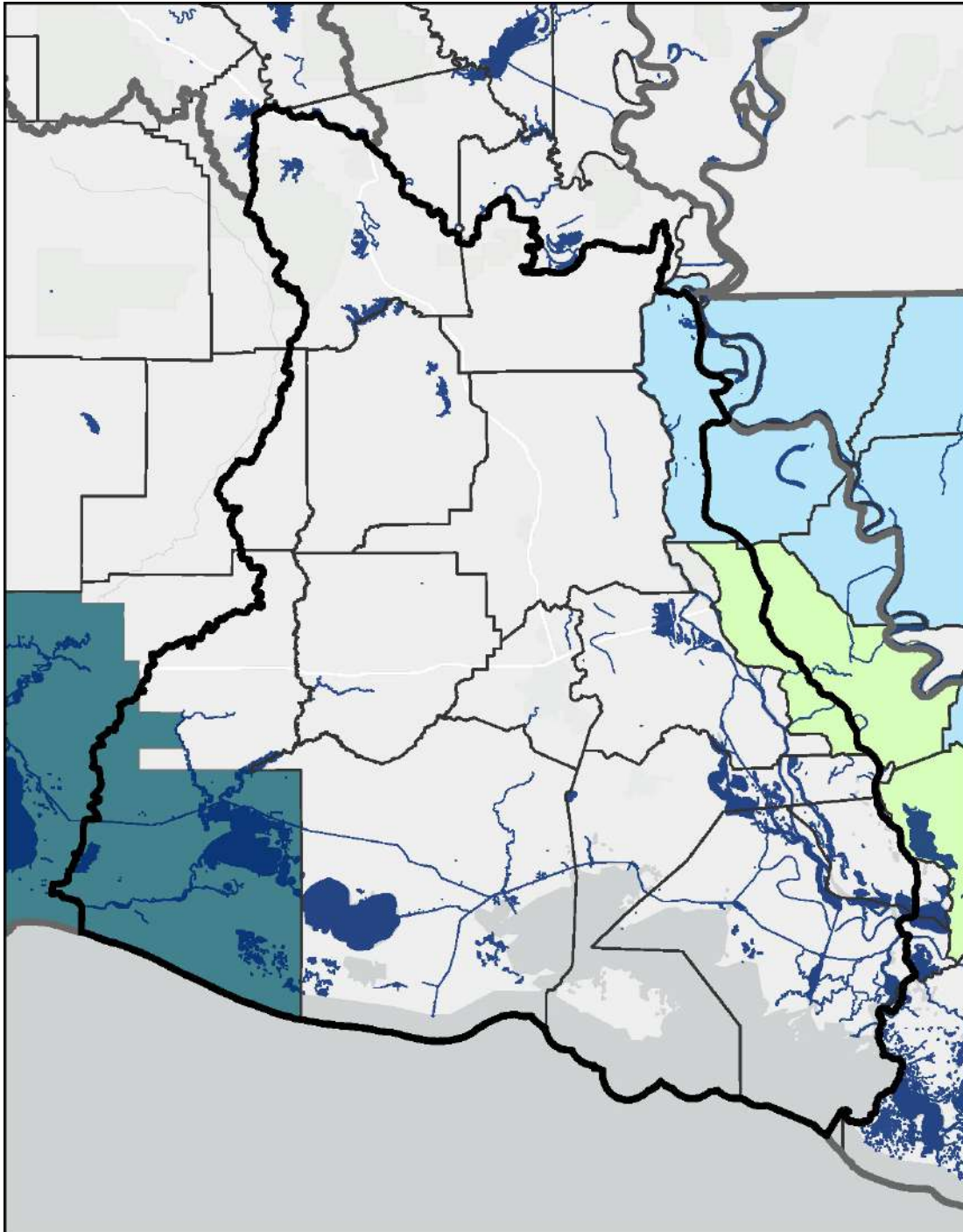
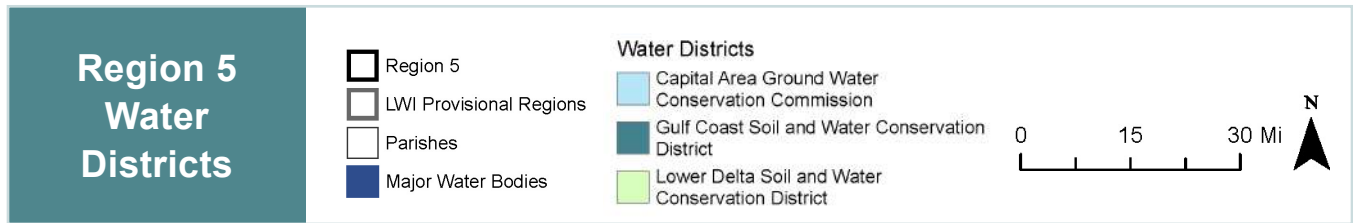
		Red River, Atchafalaya & Bayou Boeuf Levee District	Sabine River Authority	Red River Waterway Commission	Calcasieu-Cameron Navigation District	Chenier Plain Coastal Restoration & Protection Authority	Gulf Coast Soil and Water Conservation District	Acadiana Planning Commission	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Standards development and enforcement									
Building and development code									
Local building code amendments	Establish standards beyond statewide code to reduce flood risk								
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts								
Land use regulations									
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions								
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts								
Integrated planning									
Watershed management planning									
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards								
	Develop and adopt watershed plans with authority to prioritize projects and project funding								
Local plan review	Review, revise and approve local plans in accordance with watershed management standards								
Floodplain mapping and delineation									
Authority to measure and define floodplains	Delineate floodplain boundaries								
	Determine floodplain expansion areas								
	Conduct official watershed hydrologic assessments for planning purposes								



		Red River, Atchafalaya & Bayou Boeuf Levee District	Sabine River Authority	Red River Waterway Commission	Calcasieu-Cameron Navigation District	Chenier Plain Coastal Restoration & Protection Authority	Gulf Coast Soil and Water Conservation District	Acadiana Planning Commission	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Sustainable funding and implementation									
Recurring revenue									
Funding	Taxing authority	■		■	■	■		■	■
Financing	Bonding authority	■	■	■	■	■		■	■
Project implementation									
Project design and construction	Design and construct water management projects	■	■	■	■	■	■	■	■
	Design and construct water management projects throughout the entire region								
Operation and maintenance	Operate and maintain drainage or water management infrastructure	■	■	■	■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■	■



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS

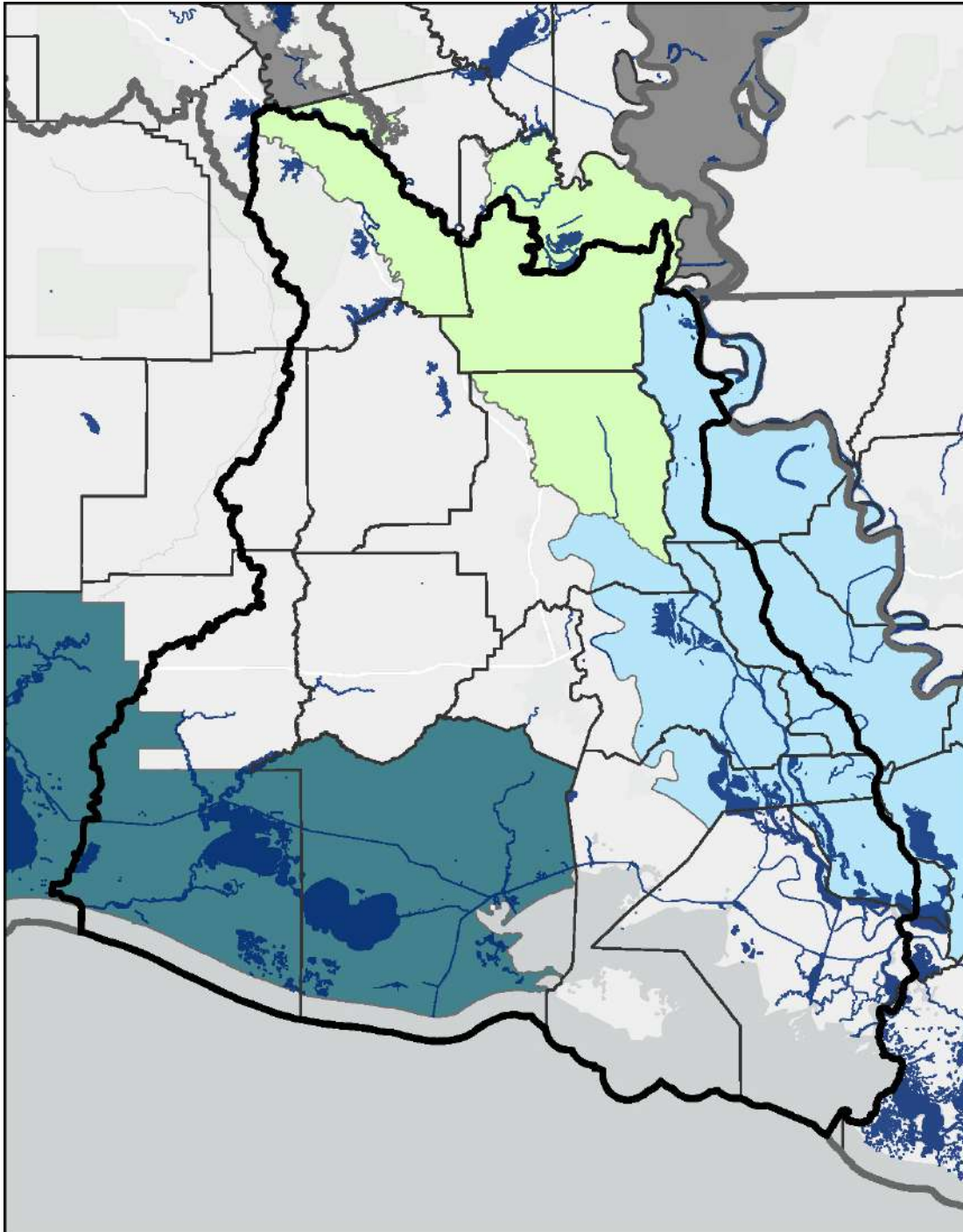




Region 5 Levee Districts

- Region 5
 - LWI Provisional Regions
 - Parishes
 - Levee Districts Outside Region
 - Major Water Bodies
- Levee Districts**
- Atchafalaya Basin Levee District
 - Chenier Plain Coastal Restoration & Protection Authority
 - Red River, Atchafalaya & Bayou Boeuf Levee District

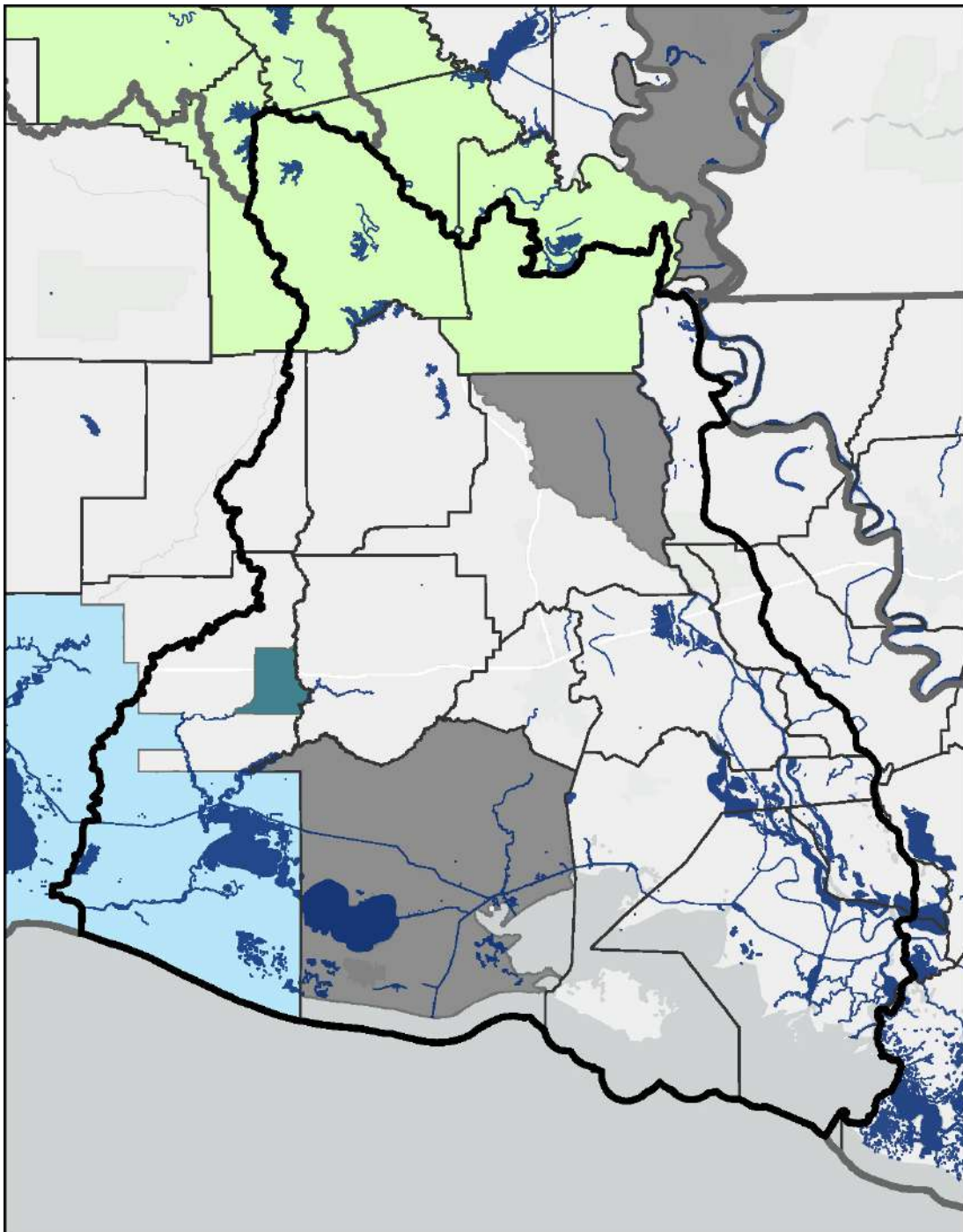
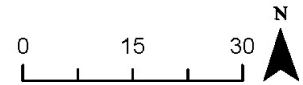
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Region 5 Navigation Districts

- Region 5
 - LWI Provisional Regions
 - Parishes
 - Levee Districts Outside Region
 - Major Water Bodies
- Navigation Districts**
- Calcasieu-Cameron Navigation District
 - Jennings Navigation District
 - Red River Waterway Commission





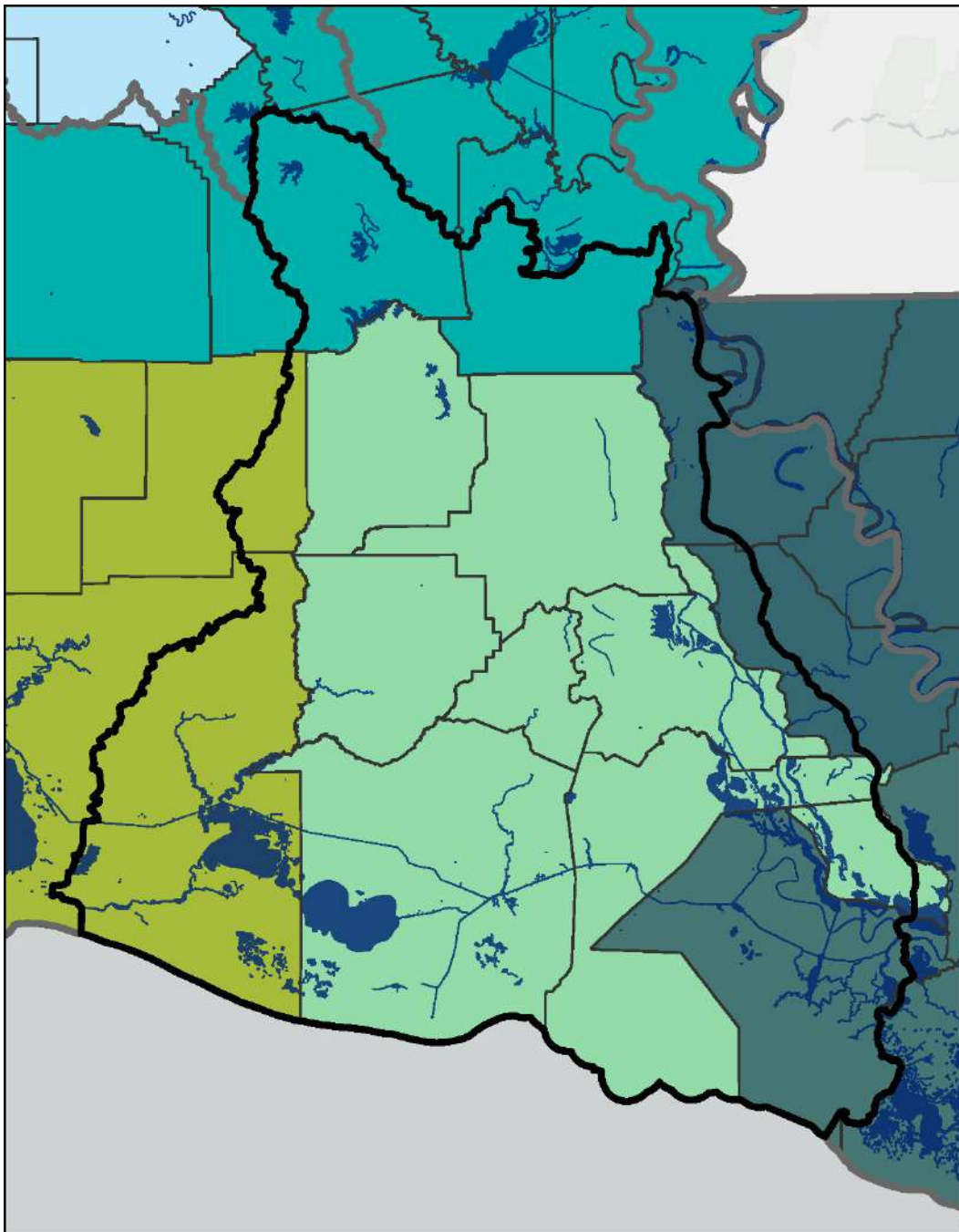
Region 5 Planning and Development Districts

-  Region 5
-  LWI Provisional Regions
-  Parishes
-  Major Water Bodies

Planning and Development Districts

-  Coordinating & Development Corporation
-  Kisatchie-Delta Regional Planning & Development District
-  Imperial Calcasieu Regional Planning & Development District
-  Acadiana Planning Commission
-  South Central Planning & Development Commission
-  Capital Region Planning Commission

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Region 5 Governance Analysis

Region 5 is home to multiple entities with some authority related to water management, but these entities are limited in both authority and jurisdiction, creating gaps in the ability to manage flood risk across political boundaries. Parish and municipal governing authorities have the broadest authority to create and execute watershed management plans by enforcing development regulations and implementing projects. By their nature, however, these governing authorities are limited in their authority to develop and execute watershed management plans by their jurisdictional boundaries, such as a city, parish or drainage district. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Multiple entities have the authority to implement and maintain flood risk reduction projects in Region 5, such as levee districts and conservation districts. These districts are also limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For instance, the three levee districts in Region 5 are limited in purpose to the protection and maintenance of their respective levee systems and in geographically smaller districts that include their respective levee systems.

While Region 5 includes five planning and development districts, the Acadiana Planning Commission covers the largest geographic area in the region. The APC delivers externally funded programs, promotes coordination, offers technical assistance and planning services within its established district boundaries and has broad authority to implement projects. However, it cannot develop or enforce higher standards or codes. The Rapides Area Planning Commission also serves as an important resource in floodplain management, planning and permit review.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 5 GAP ANALYSIS

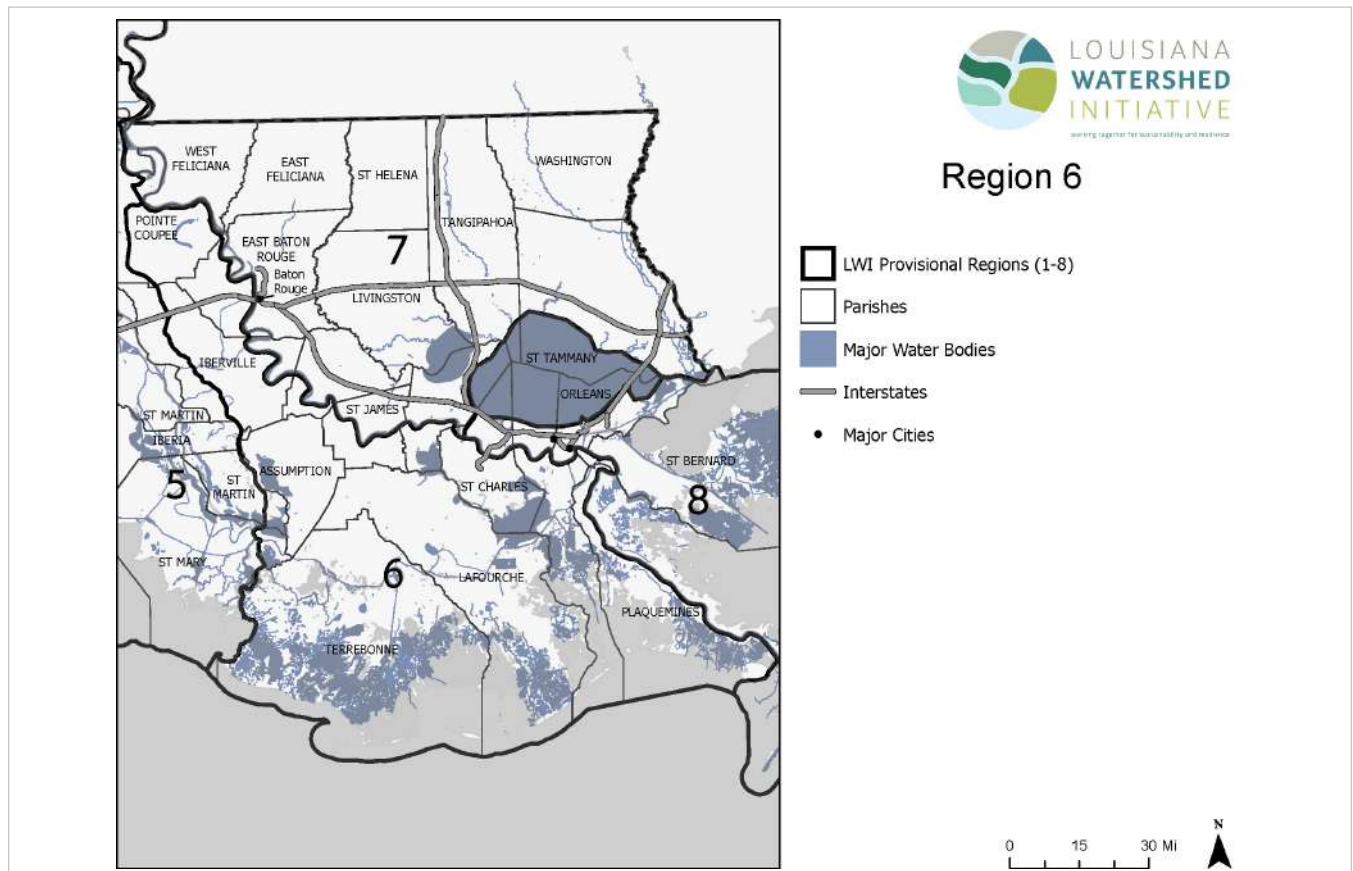
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities					
Planning and development districts					
Levee districts					
Water districts					
Navigation districts					



Region 6

REGION 6 IS LOCATED BETWEEN THE LOWER ATCHAFALAYA AND MISSISSIPPI RIVERS, CONNECTING BAYOUS AND THE COAST



PARISHES AND MUNICIPALITIES IN REGION 6

Addis	Jean Lafitte	Sorrento
Ascension Parish	Jefferson Parish	St. Charles Parish
Assumption Parish	Lafourche Parish	St. James Parish
Brusly	Lockport	St. John the Baptist Parish
Donaldsonville	Morgan City	St. Martin Parish
Fordoche	Orleans Parish	St. Mary Parish
Golden Meadow	New Orleans	Terrebonne Parish
Grand Isle	New Roads	Thibodaux
Gretna	Plaquemine	West Baton Rouge Parish
Grosse Tete	Plaquemines Parish	Westwego
Iberia Parish	Pointe Coupee Parish	White Castle
Iberville Parish	Port Allen	



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and make recommendations to improve regional watershed management.

REGION 6 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 6, the table below contains a comprehensive list of the 56 other local and regional entities with water management functions.

Region 6 entities with water management authority

Coastal zone management

Lafourche Parish Coastal Zone Management Program
Terrebonne Parish Coastal Zone Management Program
Jefferson Parish Coastal Zone Management Program
St. James Parish Coastal Zone Management Program

Fresh water districts

Bayou Lafourche Fresh Water District
Teche-Vermilion Fresh Water District

Gravity drainage districts

Ascension Parish, East Ascension Gravity Drainage District No. 1
Assumption Parish, Assumption Gravity Drainage District No. 2
Assumption Parish, Bayou Drive East and Derrick Street Gravity Drainage District
Assumption Parish, Bayou L'Ourse Gravity Drainage District No. 1
Assumption Parish, Bayou Pierre Part North Gravity Drainage District
Assumption Parish, Brusly-St. Martin Gravity Drainage District No. 5
Assumption Parish, Georgette Street Gravity Drainage District No. 16
Assumption Parish, Grand Bayou Gravity Drainage District No. 10
Assumption Parish, Gravity Drainage District No. 4
Assumption Parish, La. 70/Lee Drive Gravity Drainage District No. 14
Assumption Parish, Landry Subdivision Gravity Drainage District No. 7
Assumption Parish, Lower Belle River Gravity Drainage District No. 12
Assumption Parish, Lower Texas Gravity Drainage District No. 15
Assumption Parish, Marais Gravity Drainage District
Assumption Parish, Northwest Highway 70 Gravity Drainage District No. 13
Assumption Parish, Northwest Highway 70 Gravity Drainage District No. 9
Assumption Parish, Oakridge Gravity Drainage District No. 8
Assumption Parish, Pierre Part Settlement Drainage District
Lafourche Parish, Fifth Ward Gravity Drainage District No. 5
St. Charles Parish, Gravity Drainage District No. 2
St. Mary Parish, Bayou Cypremort Gravity Drainage District No. 1
St. Mary Parish, Consolidated Gravity Drainage District No. 1
St. Mary Parish, Consolidated Gravity Drainage District No. 2
St. Mary Parish, Gravity Drainage District No. 2
St. Mary Parish, Gravity Drainage District No. 2, Gravity Sub-Drainage District No. 1
St. Mary Parish, Gravity Drainage District No. 3
St. Mary Parish, Gravity Drainage District No. 5



St. Mary Parish, Gravity Drainage District No. 6

Levee districts

Atchafalaya Basin Levee District
Grand Isle Independent Levee District
Iberia Parish Levee, Hurricane and Conservation District
Lafitte Area Independent Levee District
Lafourche Basin Levee District
North Lafourche Conservation, Levee and Drainage District
Pontchartrain Levee District
South Lafourche Levee District
Southeast Louisiana Flood Protection Authority-West
St. Mary Levee District
Terrebonne Levee & Conservation District

Planning and development districts

District 1: New Orleans Regional Planning Commission
District 3: South Central Planning & Development Commission

Recreation and water conservation districts

Capital Area Ground Water Conservation Commission

Soil and water conservation districts

Lafourche-Terrebonne Soil and Water Conservation District
Lower Delta Soil and Water Conservation District
New River Soil and Water Conservation District
Plaquemines Soil and Water Conservation District
Upper Delta Soil and Water Conservation District
Capital Soil and Water Conservation District

Watershed special districts

False River Watershed Council

Navigation and waterway special districts

Mississippi River Deepening Project



The table below compares selected entities in Region 6 and their authorities and functions.

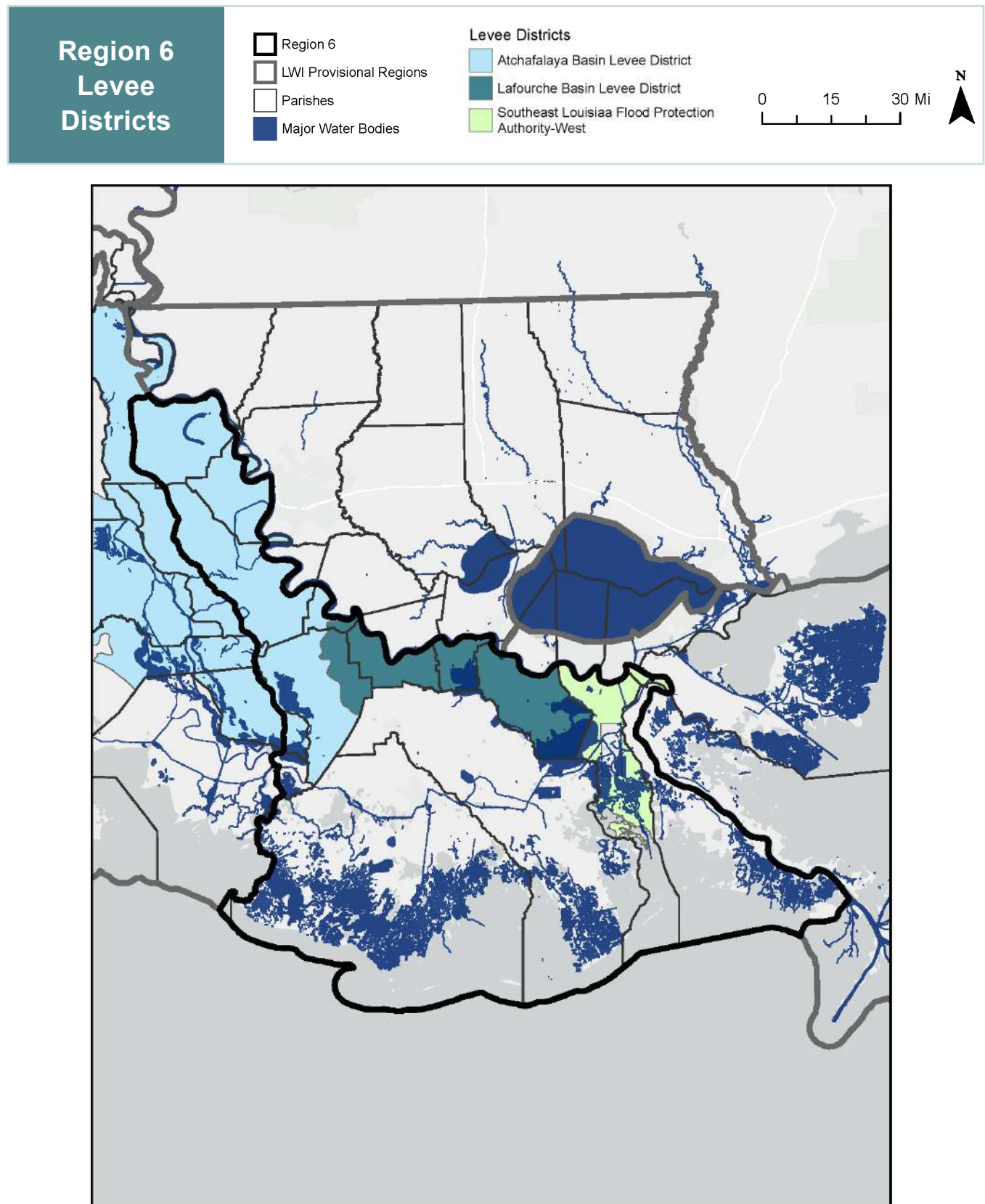
		Atchafalaya Basin Levee District	Southeast Louisiana Flood Protection Authority-West	Capital Area Ground Water Conservation Commission	South Central Planning & Development Commission	New Orleans Regional Planning Commission	Plaquemines Soil and Water Conservation District	Lower Delta Soil and Water Conservation District	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Standards development and enforcement									
Building and development code									
Local building code amendments	Establish standards beyond statewide code to reduce flood risk								■
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	■	■						■
Land use regulations									
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	■	■	■			■	■	■
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts			■			■	■	■
Integrated planning									
Watershed management planning									
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards								■
	Develop and adopt watershed plans with authority to prioritize projects and project funding			■	■	■	■	■	■
Local plan review	Review, revise and approve local plans in accordance with regional or state watershed management standards								
Floodplain mapping and delineation									
Authority to measure and define floodplains	Delineate floodplain boundaries								
	Determine floodplain expansion areas								
	Conduct official watershed hydrologic assessments for planning purposes			■			■	■	■



		Atchafalaya Basin Levee District	Southeast Louisiana Flood Protection Authority-West	Capital Area Ground Water Conservation Commission	South Central Planning & Development Commission	New Orleans Regional Planning Commission	Plaquemines Soil and Water Conservation District	Lower Delta Soil and Water Conservation District	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Sustainable funding and implementation									
Recurring revenue									
Funding	Taxing authority	■	■	■	■	■			■
Financing	Bonding authority	■	■	■	■	■			■
Project implementation									
Project design and construction	Design and construct water management projects	■	■		■	■	■	■	■
	Design and construct water management projects throughout the entire region								
Operation and maintenance	Operate and maintain drainage or water management infrastructure	■	■		■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■	■



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS



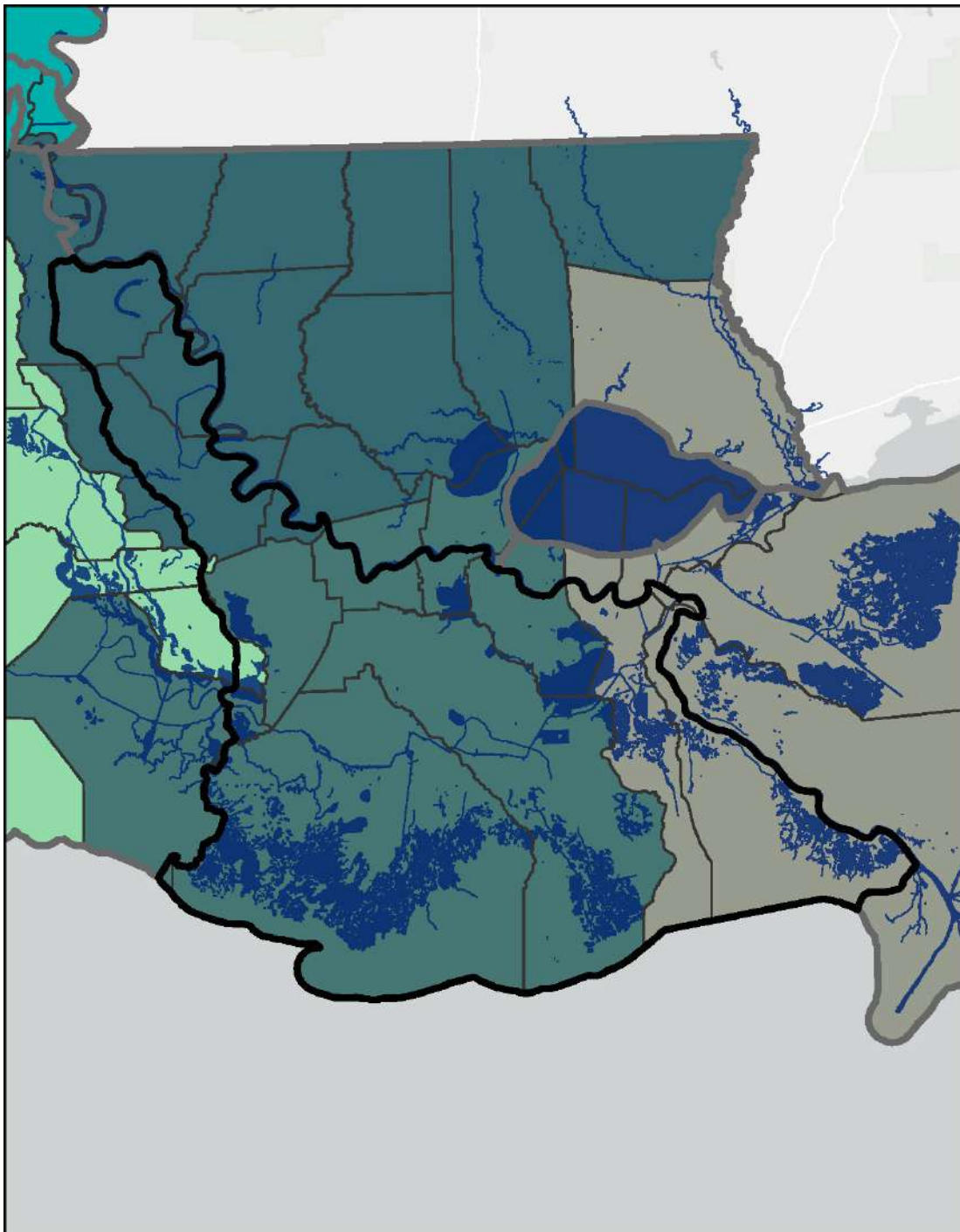
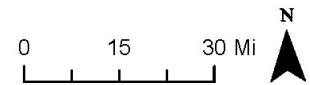


Region 6 Planning and Development Districts

-  Region 6
-  LWI Provisional Regions
-  Parishes
-  Major Water Bodies

Planning and Development Districts

-  Kisatchie-Delta Regional Planning & Development District
-  Acadiana Planning Commission
-  South Central Planning & Development Commission
-  Capital Region Planning Commission
-  Regional Planning Commission





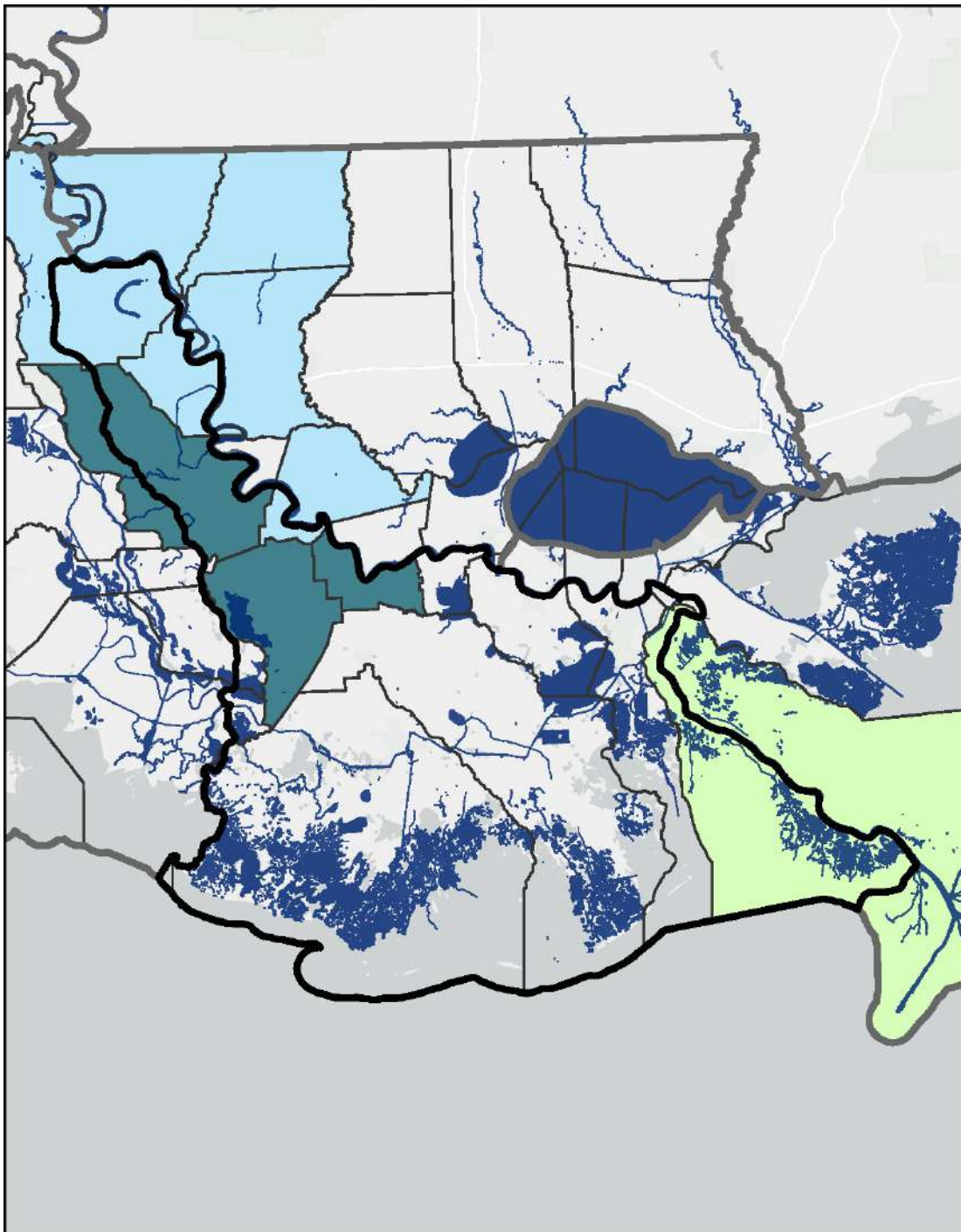
Region 6 Water Districts

-  Region 6
-  LWI Provisional Regions
-  Parishes
-  Major Water Bodies

Water Districts

-  Capital Area Ground Water Conservation Commission
-  Lower Delta Soil and Water Conservation District
-  Plaquemines Soil and Water Conservation District

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Region 6 Governance Analysis

While Region 6 houses multiple entities with some authority related to water management, these entities are limited in both authority and jurisdiction, creating gaps in the ability to manage flood risk at the watershed level. Parish and municipal governing authorities have broad authority to create and execute watershed management plans by enforcing development regulations and implementing projects. By their nature, however, these governing authorities are limited in their authority to develop and execute watershed management plans by their jurisdictional boundaries, such as a city, parish or drainage district. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Special districts, such as levee districts and conservation districts, have the authority to fund, implement and maintain flood risk reduction projects. These districts are limited to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For instance, Region 6 has three water conservation districts with authority to implement projects, but their authority is limited to their district boundaries.

In terms of geography, the South Central Planning & Development Commission's jurisdiction covers the largest area within the region. The SCPDC delivers externally funded programs, promotes coordination, offers technical assistance and planning services within its established district boundaries and has broad authority to implement projects. However, it cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 6 GAP ANALYSIS

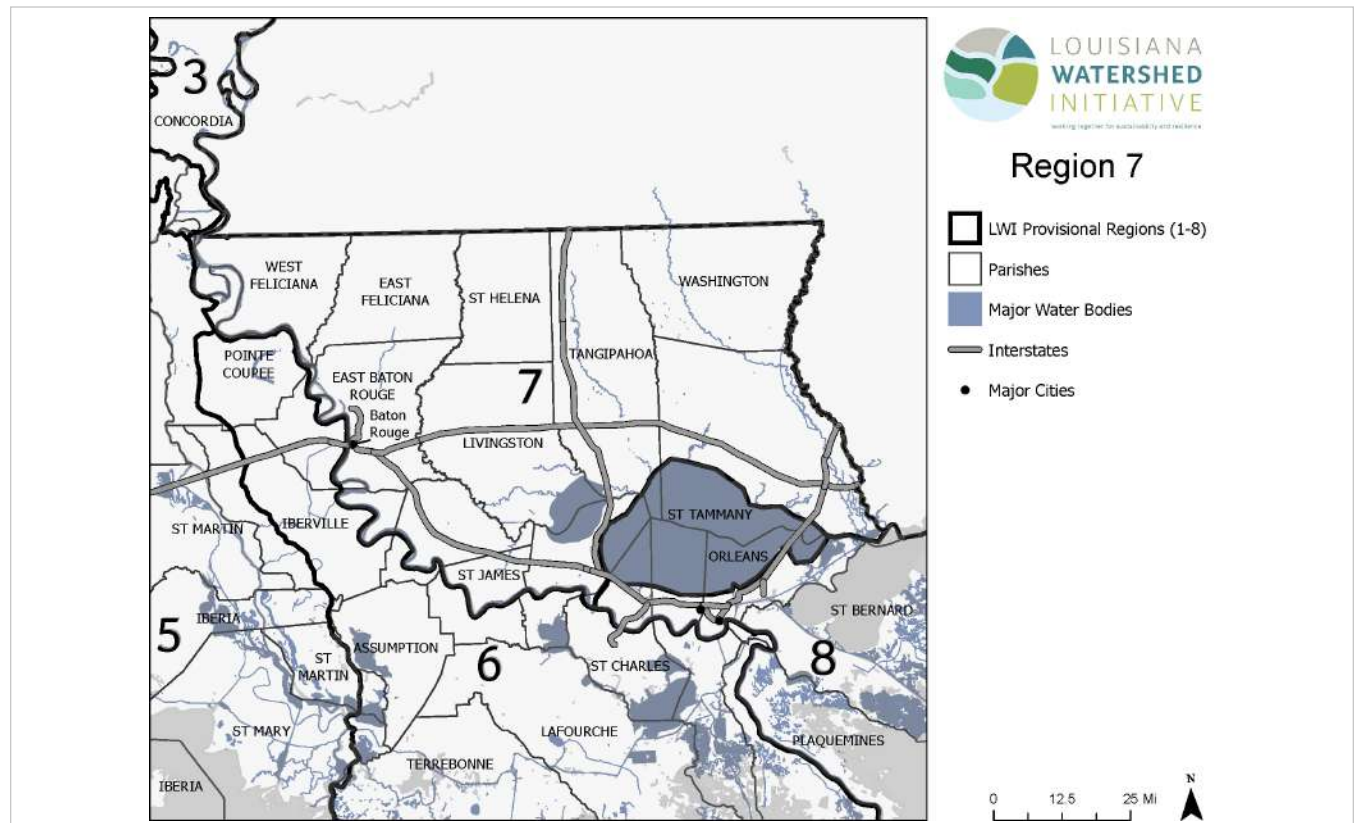
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities	●	●	●	●	●
Planning and development districts	●			●	●
Levee districts		●		●	●
Water districts	●	●		●	●
Navigation districts	●			●	●



Region 7

REGION 7 IS LOCATED ALONG THE MISSISSIPPI RIVER AND LAKE PONTCHARTRAIN BASIN



PARISHES AND MUNICIPALITIES IN REGION 7

Abita Springs	Gonzales	Sorrento
Albany	Gramercy	St. Charles Parish
Amite City	Hammond	St. Francisville
Ascension Parish	Iberville Parish	St. Gabriel
Baker	Kentwood	St. Helena Parish
Baton Rouge	Livingston Parish	St. James Parish
Bogalusa	Lutcher	St. John the Baptist Parish
Central	Madisonville	St. Tammany Parish
Covington	Mandeville	Tangipahoa Parish
Denham Springs	Pearl River	Walker
East Baton Rouge Parish	Plaquemine	Washington Parish
East Feliciana Parish	Ponchatoula	West Feliciana Parish
Folsom	Slaughter	Zachary
Franklinton	Slidell	



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and make recommendations to improve regional watershed management.

REGION 7 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 7, the table below contains a comprehensive list of the 40 other local and regional entities with water management functions.

Region 7 entities with water management authority

Coastal zone management

St. Tammany Parish Coastal Zone Management Program
St. James Parish Coastal Zone Management Program

Gravity Drainage Districts

Ascension Parish, East Ascension Gravity Drainage District No. 1
Livingston Parish, Gravity Drainage District No. 1
Livingston Parish, Gravity Drainage District No. 2
Livingston Parish, Gravity Drainage District No. 5
Livingston Parish, Gravity Drainage District No. 6
Livingston Parish, Gravity Drainage District No. 7
St. Charles Parish, Gravity Drainage District No. 2
St. Tammany Parish, Gravity Drainage District No. 3
St. Tammany Parish, Gravity Drainage District No. 4
St. Tammany Parish, Gravity Drainage District No. 5
St. Tammany Parish, Gravity Drainage District No. 5, Sub-Drainage District No. 1
St. Tammany Parish, Gravity Drainage District No. 5, Sub-Drainage District No. 2
St. Tammany Parish, Gravity Drainage District No. 5, Sub-Drainage District No. 3
St. Tammany Parish, Gravity Drainage District No. 5, Sub-Drainage District No. 4
St. Tammany Parish, Gravity Drainage District No. 5, Sub-Drainage District No. 5
St. Tammany Parish, Gravity Drainage District No. 6
Tangipahoa Parish, Gravity Drainage District No. 4
Tangipahoa Parish, Gravity Drainage District No. 5
Tangipahoa Parish, Consolidated Gravity Drainage District No. 1

Levee districts

Atchafalaya Basin Levee District
Lafourche Basin Levee District
Pontchartrain Levee District
Southeast Louisiana Flood Protection Authority-East
Tangipahoa Levee District
St. Tammany Levee, Drainage and Conservation District

Planning and development districts

District 1: New Orleans Regional Planning Commission
District 2: Capital Region Planning Commission
District 3: South Central Planning & Development Commission

Recreation and water conservation districts

Amite River Basin Commission, Amite River Basin Drainage and Water Conservation District
Capital Area Ground Water Conservation Commission



Greater Baton Rouge Water Conservation District

Soil and water conservation districts

Crescent Soil and Water Conservation District

Lower Delta Soil and Water Conservation District

New River Soil and Water Conservation District

Bogue Chitto-Pearl River Soil and Water Conservation District

Capital Soil and Water Conservation District

Feliciano Soil and Water Conservation District

Tangipahoa-St. Helena Soil and Water Conservation District

Navigation and waterway special district

Mississippi River Deepening Project



The table below compares selected entities in Region 7 and their authorities and functions.

		St. Tammany Levee, Drainage and Conservation District	Amite River Basin Commission	New Orleans Regional Planning Commission	Capital Area Ground Water Conservation Commission	Greater Baton Rouge Water Conservation District	Capital Region Planning Commission	Feliciano Soil and Water Conservation District	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Standards development and enforcement									
Building and development code									
Local building code amendments	Establish standards beyond statewide code to reduce flood risk		■						■
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	■	■						■
Land use regulations									
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	■	■		■			■	■
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts		■		■			■	■
Integrated planning									
Watershed management planning									
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards		■						■
	Develop and adopt watershed plans with authority to prioritize projects and project funding		■	■	■	■	■	■	
Local plan review	Review, revise and approve local plans in accordance with regional or state watershed management standards								
Floodplain mapping and delineation									
Authority to measure and define floodplains	Delineate floodplain boundaries								
	Determine floodplain expansion areas								
	Conduct official watershed hydrologic assessments for planning purposes		■		■	■		■	■

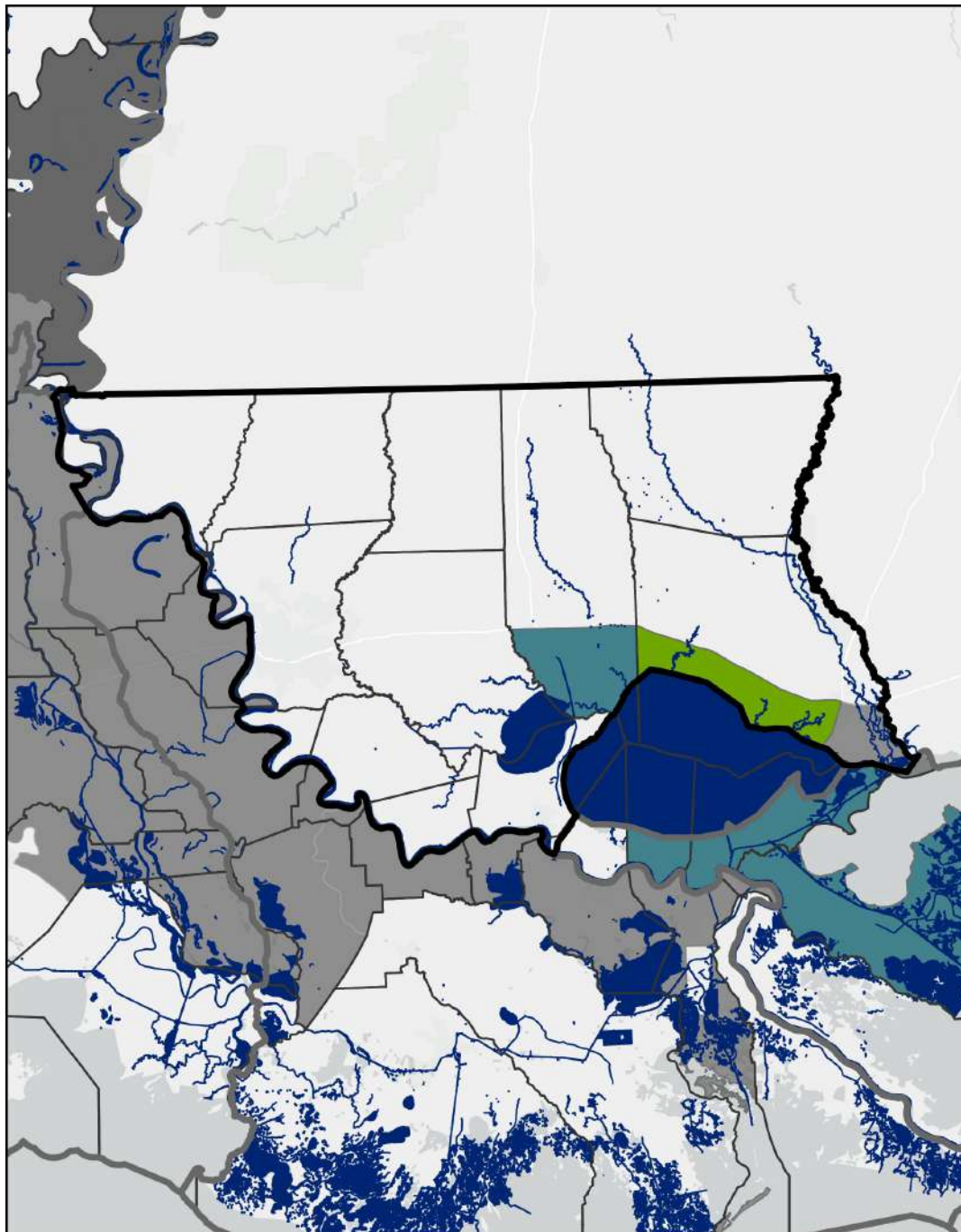


REGIONAL WATERSHED MANAGEMENT IN LOUISIANA
A GUIDEBOOK TO LOCAL AND REGIONAL ENTITIES, THEIR AUTHORITIES AND FUNCTIONS

		St. Tammany Levee, Drainage and Conservation District	Amite River Basin Commission	New Orleans Regional Planning Commission	Capital Area Ground Water Conservation Commission	Greater Baton Rouge Water Conservation District	Capital Region Planning Commission	Feliciano Soil and Water Conservation District	Parish/municipal governing authorities
AUTHORITY	FUNCTION								
Sustainable funding and implementation									
Recurring revenue									
Funding	Taxing authority	■	■	■	■		■		■
Financing	Bonding authority	■	■	■	■		■		■
Project implementation									
Project design and construction	Design and construct water management projects	■	■	■			■	■	■
	Design and construct water management projects throughout the entire region								
Operation and maintenance	Operate and maintain drainage or water management infrastructure	■	■	■			■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■		■	■	■

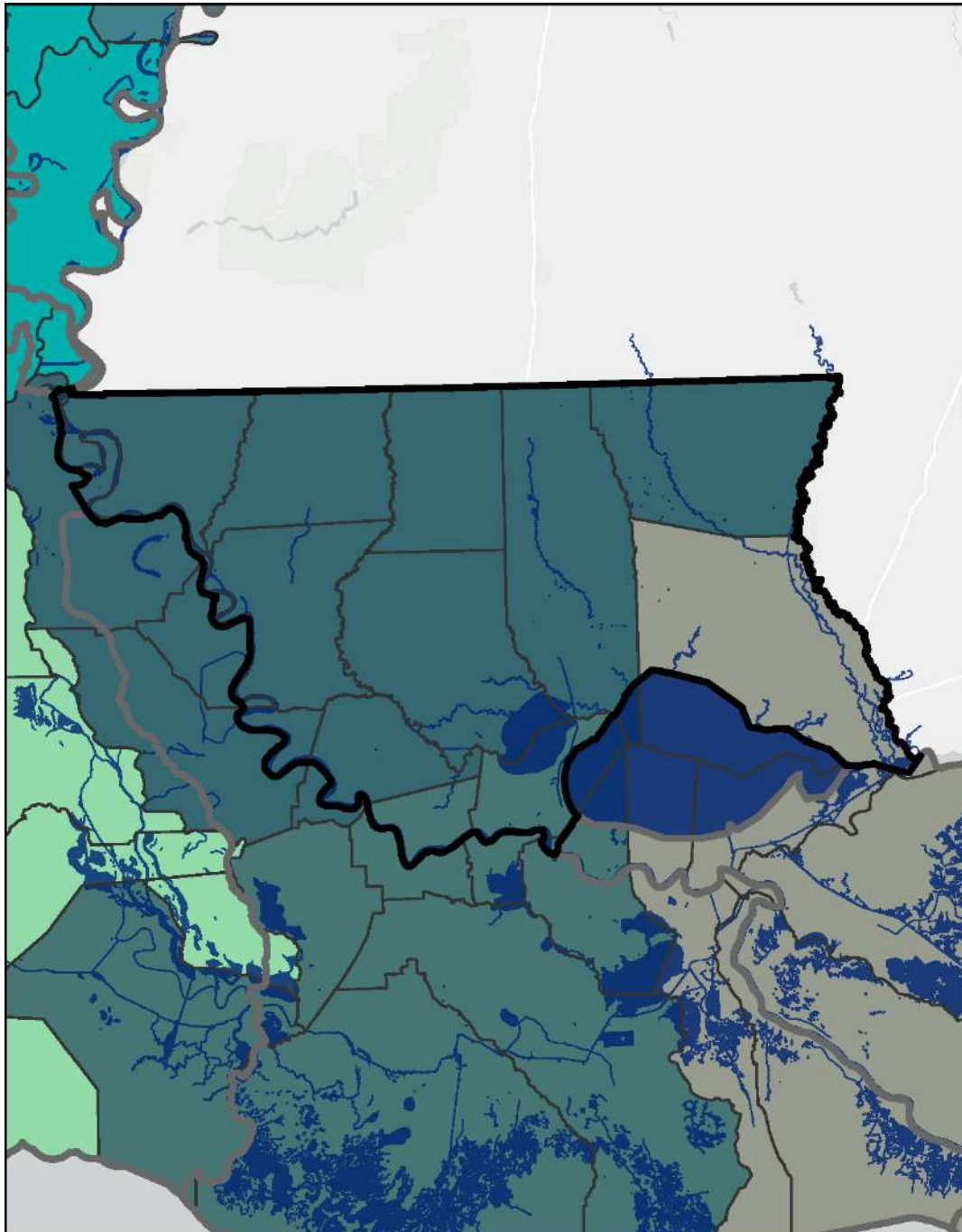


MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS





Region 7 Planning and Development Districts



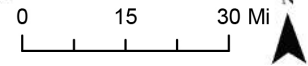


Region 7 Recreation and Water Conservation Districts

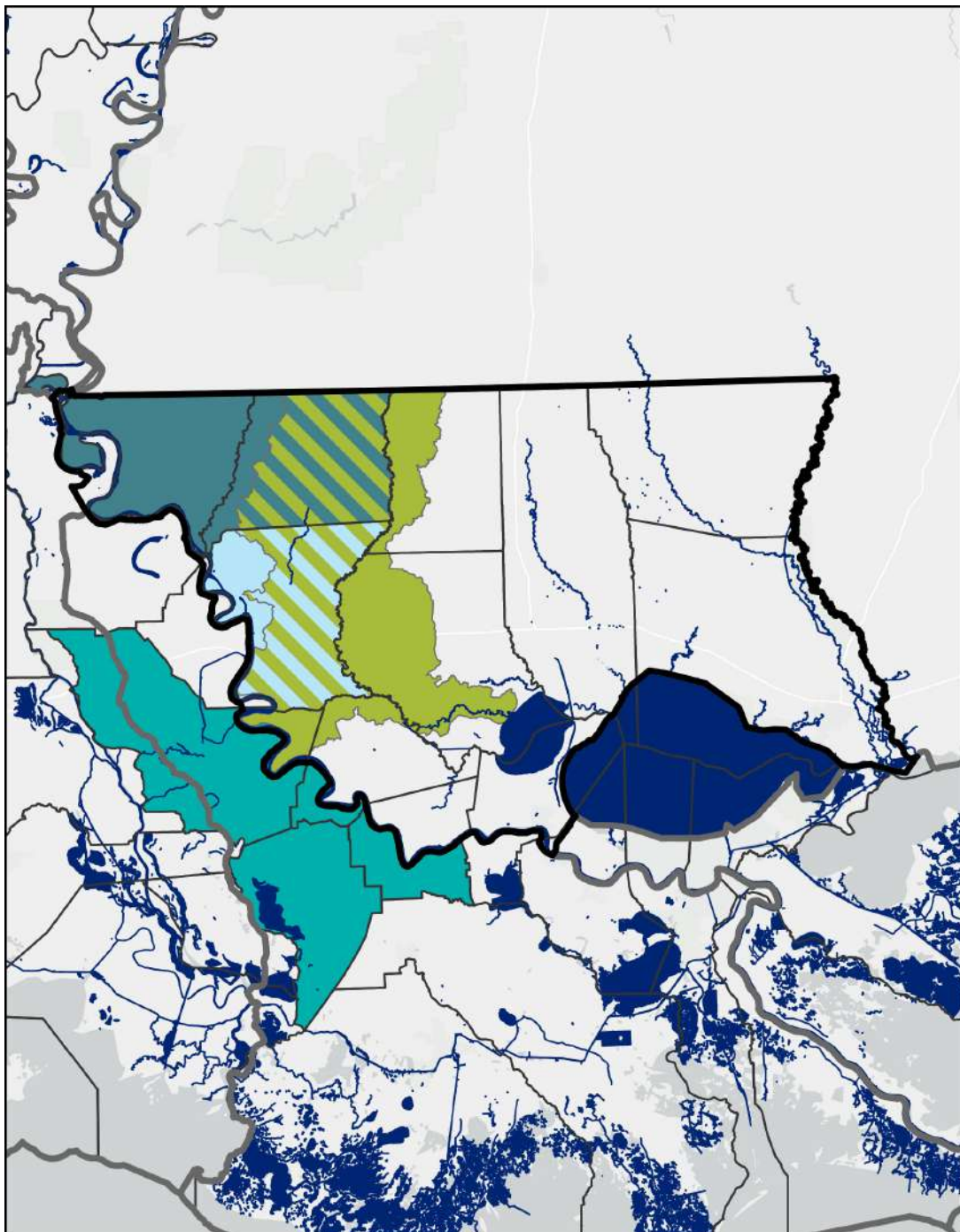
- Region 7
- LWI Provisional Regions
- Parishes
- Major Water Bodies

Water Districts

- Amite River Basin Drainage and Water Conservation District
- Feliciana Soil and Water Conservation District
- Greater Baton Rouge Water Conservation District
- Lower Delta Soil and Water Conservation District



Note: Hatching means overlapping district boundaries.





Region 7 Governance Analysis

Region 7 is home to multiple entities with some authority related to water management, but these entities are limited in both authority and jurisdiction, creating gaps in the ability to manage flood risk across political boundaries. Parish and municipal governing authorities and the Amite River Basin Commission have the broadest authority to create and execute watershed management plans by enforcing development regulations and implementing projects. By their nature, however, these entities are limited to their jurisdictional boundaries, such as a city, parish or drainage district, in terms of their authority to develop and execute watershed management plans. While the Amite River Basin Commission's boundaries cross multiple parishes, it does not span the entire LWI watershed region. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding. However, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Several special districts in Region 7 also have the authority to implement and maintain flood risk reduction projects. These districts are also limited in authority to their jurisdictional boundaries and specific purposes, which can make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address. For instance, the Capital Area Ground Water Conservation Commission has broad authority to develop and adopt watershed plans and to implement projects, but it is limited by its district boundaries and lack of authority to enforce regulations to support its plans.

Of the three planning and development districts in Region 7, the Capital Region Planning Commission covers the largest geographic area. The CRPC delivers externally funded programs, promotes coordination, offers technical assistance and planning services within its established district boundaries and has broad authority to develop plans and implement/coordinate projects. However, it cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 7 GAP ANALYSIS

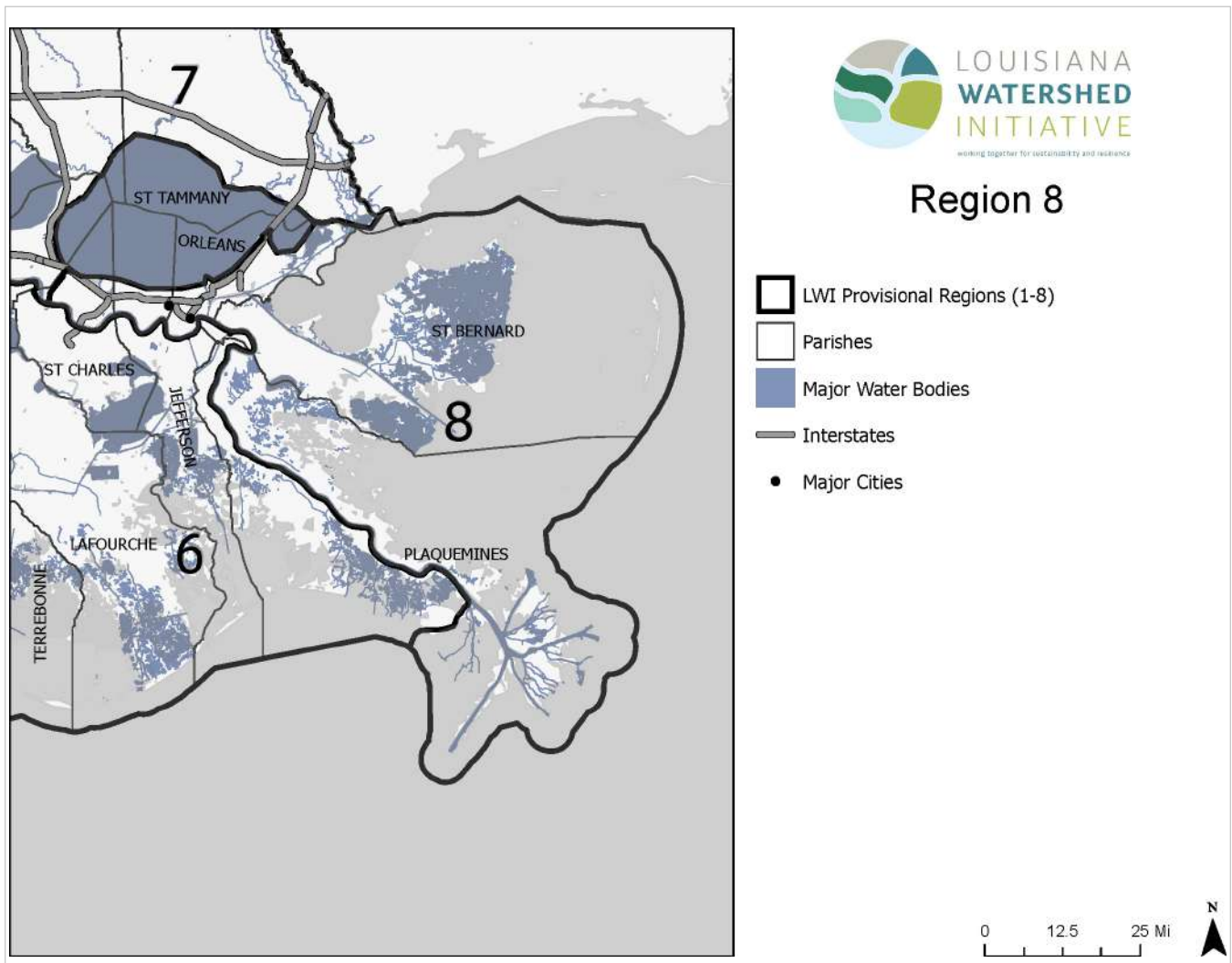
Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities					
Planning and development districts					
Levee districts					
Water districts					
Navigation districts					



Region 8

REGION 8 COVERS NEW ORLEANS, THE LOWER MISSISSIPPI RIVER AND THE COAST



PARISHES & MUNICIPALITIES IN REGION 8

Harahan
Jefferson Parish
Kenner

New Orleans
Orleans Parish
Plaquemines Parish

St. Bernard Parish
St. Charles Parish



The provisional watershed regions and their associated regional steering committees recognized by the Council on Watershed Management play important roles in the Louisiana Watershed Initiative. However, they do not have legal authority to provide the functions identified for regional watershed coalitions. One of their goals is to understand the authorities of the existing entities and make recommendations to improve regional watershed management.

REGION 8 WATER MANAGEMENT ENTITIES

In addition to the parishes and municipalities in Region 8, the table below contains a comprehensive list of the 13 other local and regional entities with water management functions.

Region 8 entities with water management authority

Coastal zone management

- Jefferson Parish Coastal Zone Management Program
- Orleans Parish Coastal Zone Management Program
- Plaquemines Parish Coastal Zone Management Program
- St. Bernard Parish Coastal Zone Management Program

Gravity drainage districts

- St. Charles Parish, Gravity Drainage District No. 2

Levee districts

- Lafitte Area Independent Levee District
- Lafourche Basin Levee District
- Southeast Louisiana Flood Protection Authority-East

Soil and water conservation districts

- Plaquemines Soil and Water Conservation District

Planning and development districts

- District 1: New Orleans Regional Planning Commission
- South Central Planning & Development District

Special districts

- Lakefront Management Authority

Navigation and waterway special districts

- Mississippi River Deepening Project



The table below compares selected entities in Region 8 and their authorities and functions.

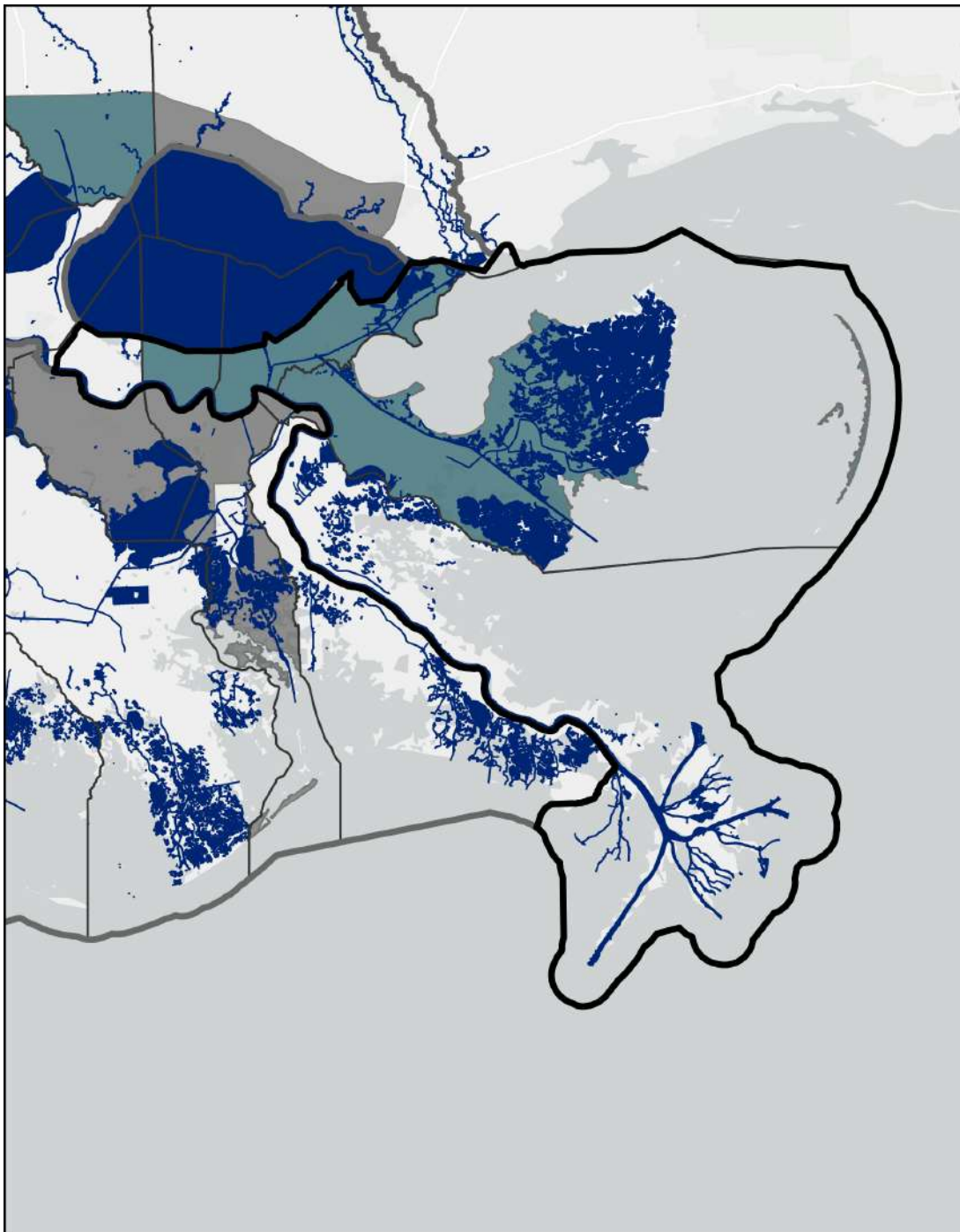
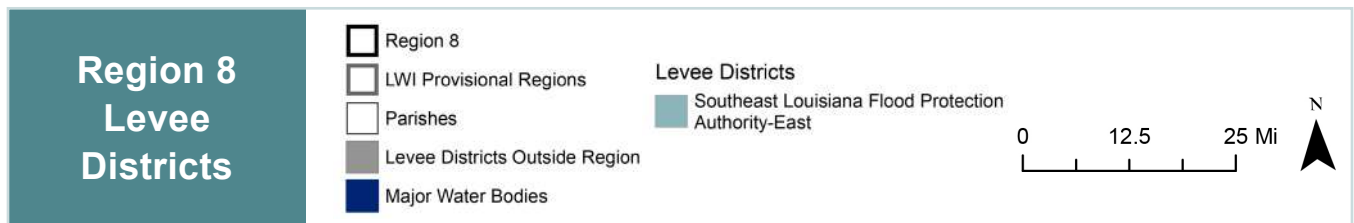
AUTHORITY		FUNCTION	Southeast Louisiana Flood Protection Authority-East	Plaquemines Soil and Water Conservation District	New Orleans Regional Planning Commission	Parish/municipal governing authorities
Standards development and enforcement						
Building and development code						
Local building code amendments	Establish standards beyond statewide code to reduce flood risk					■
Building code enforcement	Permit review, site inspection and/or rule-making functions for development with water management impacts	■				■
Land use regulations						
Adopt new land use and zoning standards	Establish standards or processes to require water management provisions	■	■			■
Enforce land use and zoning standards	Permit review, site inspection and/or rule-making functions for development with water management impacts		■			■
	Inspect construction sites and developed sites and issue stop work orders, corrective action orders and/or fines					■
Integrated planning						
Watershed management planning						
Develop and adopt watershed management plan	Develop and adopt watershed plans with authority to establish floodplain management standards					■
	Develop and adopt watershed plans with authority to prioritize projects and project funding		■	■		■
Local plan review	Review, revise and approve local plans in accordance with regional or state watershed management standards					
Floodplain mapping and delineation						
Authority to measure and define floodplains	Delineate floodplain boundaries					
	Determine floodplain expansion areas					
	Conduct official watershed hydrologic assessments for planning purposes		■			■



		Southeast Louisiana Flood Protection Authority-East	Plaquemines Soil and Water Conservation District	New Orleans Regional Planning Commission	Parish/municipal governing authorities
AUTHORITY	FUNCTION				
Sustainable funding and implementation					
Recurring revenue					
Funding	Taxing authority	<div></div>		<div></div>	<div></div>
Financing	Bonding authority	<div></div>		<div></div>	<div></div>
Project implementation					
Project design and construction	Design and construct water management projects	<div></div>	<div></div>	<div></div>	<div></div>
	Design and construct water management projects throughout the entire region				
Operation and maintenance	Operate and maintain drainage or water management infrastructure	<div></div>	<div></div>	<div></div>	<div></div>
Land acquisition	Acquire, hold and steward real property	<div></div>	<div></div>	<div></div>	<div></div>



MAPS OF SELECT ENTITIES WITH KEY WATER MANAGEMENT FUNCTIONS

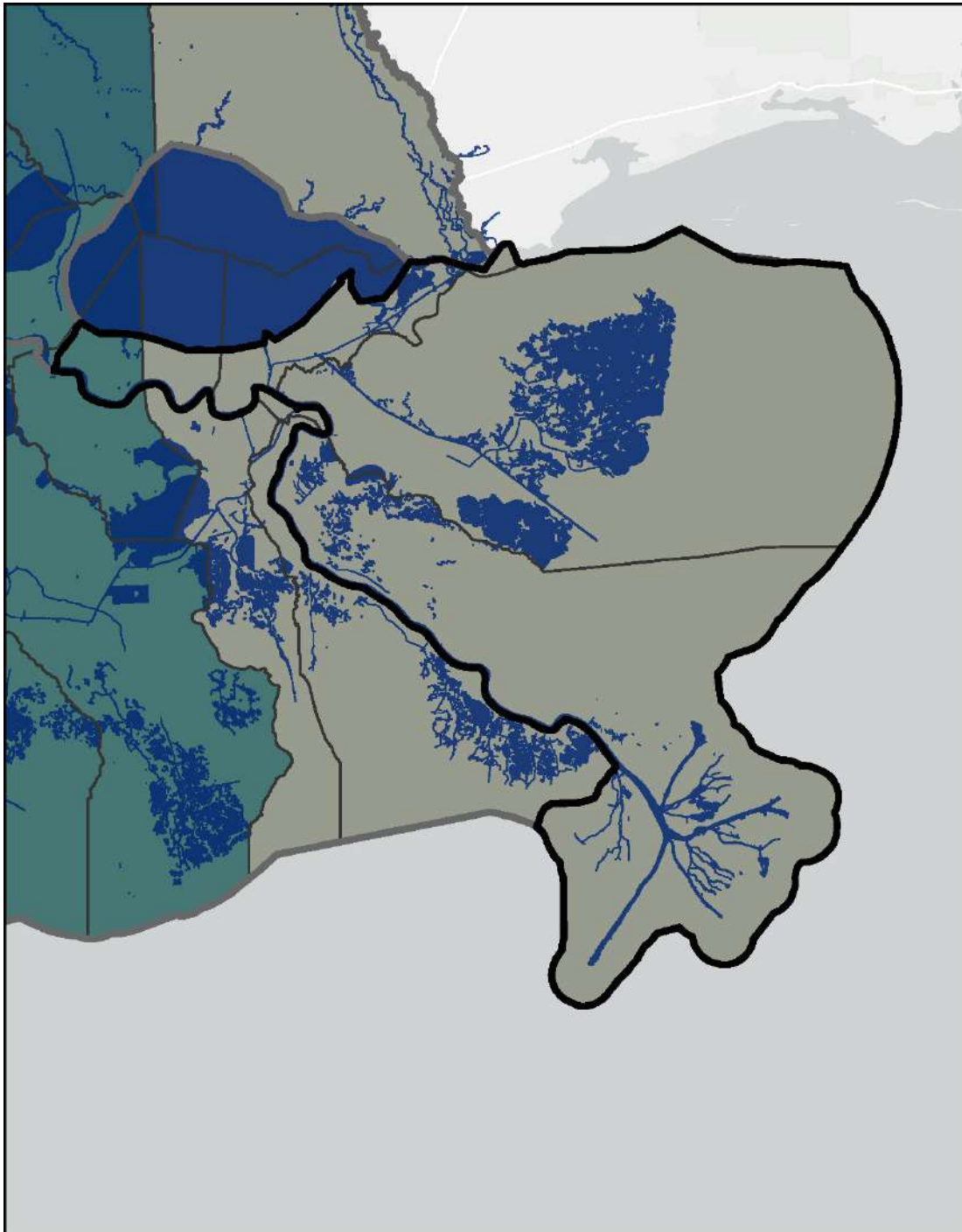




Region 8 Planning and Development Districts




-  Region 8
 -  LWI Provisional Regions
 -  Parishes
 -  Major Water Bodies
- Planning and Development Districts**
-  South Central Planning & Development Commission
 -  Capital Region Planning Commission
 -  New Orleans Regional Planning Commission

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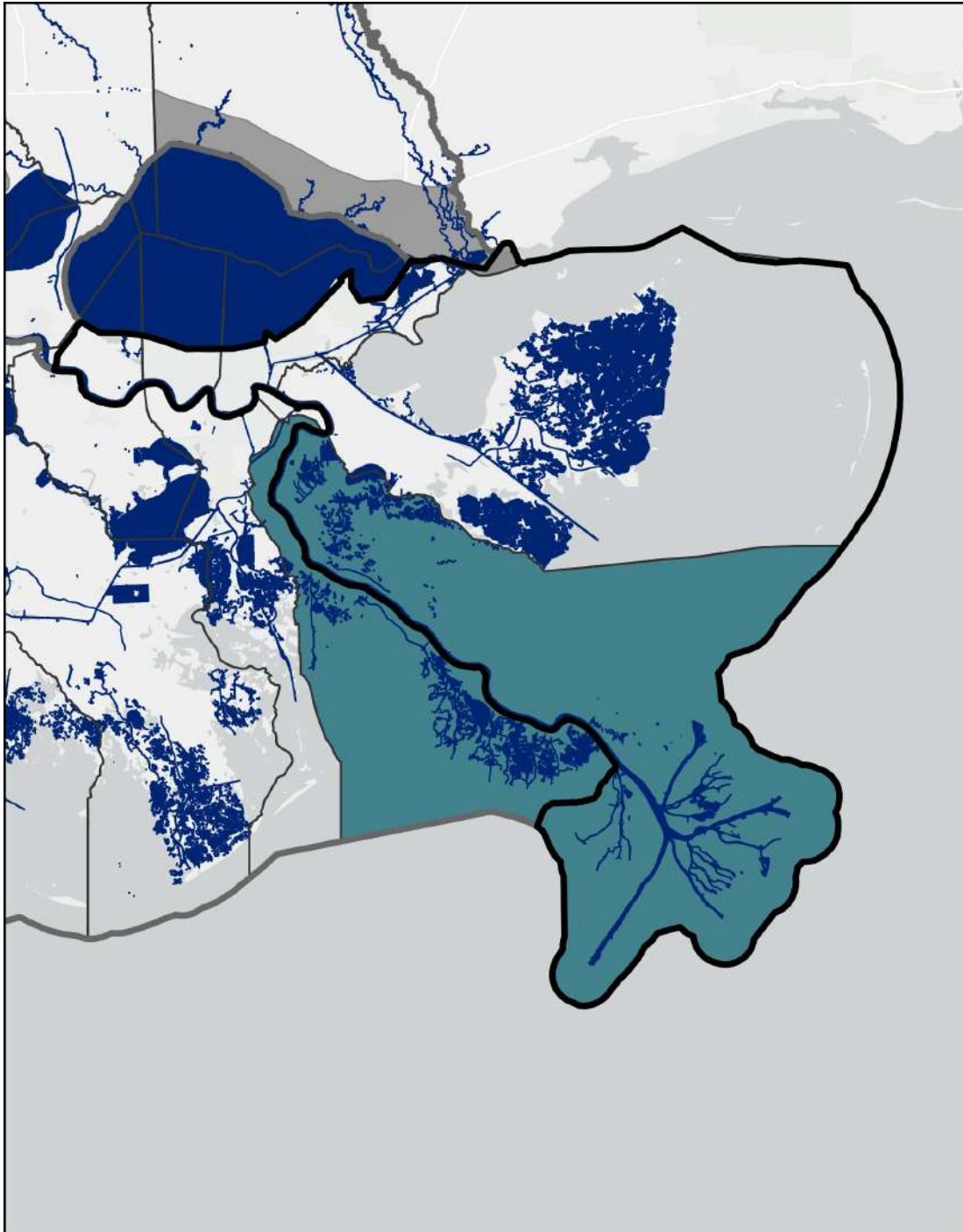
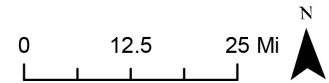




Region 8 Water Districts

-  Region 8
-  LWI Provisional Regions
-  Parishes
-  Water Districts Outside Region
-  Major Water Bodies

- Water Districts
-  Plaquemines Soil and Water Conservation District





Region 8 Governance Analysis

Parish and municipal governing authorities have the most authority related to the development and execution of watershed management plans and projects in Region 8. However, these governing authorities are limited in their use of that authority to their jurisdictional boundaries, such as a city, gravity drainage district or parish. Parish and municipal governments can voluntarily coordinate on regional initiatives across jurisdictional boundaries through formal agreements such as cooperative endeavor agreements or memoranda of understanding, however, these efforts sometimes face difficulties ensuring broad participation or can vary in their effectiveness based on changes to local ordinances or levels of support from local administrations.

Other than parish and municipal governing authorities, the Southeast Louisiana Flood Protection Authority has the most authority related to the implementation of flood control projects. However, the SLFPA (East and West) is limited to its district boundaries, which do not cover all of Region 8, and to constructing and maintaining flood protection systems.

Region 8 includes both the South Central Planning & Development Commission and the New Orleans Regional Planning Commission. By far, the NORPC covers the largest geographic area within the region. Both entities deliver externally funded programs, promote coordination, offer technical assistance and planning services within their established district boundaries and have broad authority to implement projects. However, they cannot develop or enforce higher standards or codes.

It should be noted that there are a few key functions that are not provided by any entity in the region:

Review, revise and approve local plans in accordance with regional or state watershed management standards on behalf of the region

Delineate floodplain boundaries

Determine floodplain expansion areas

Design and construct projects throughout the entire region

None of the entities researched have clear authority to provide the above functions.

REGION 8 GAP ANALYSIS

Existing versus potential authorities for regional watershed coalitions

Entity type	Develop and adopt watershed plans	Regulate development	Develop and enforce higher standards	Fund, construct, operate and maintain flood risk reduction projects	Authority to operate throughout entire watershed region
Parish/municipal governing authorities	●	●	●	●	●
Planning and development districts	●			●	●
Levee districts		●		●	●
Water districts	●	●	●	●	●
Navigation districts	●			●	●



Statewide Gap Analysis

A multitude of entities in Louisiana have some authority related to water management. However, none have the authority to perform the regional watershed management functions identified in earlier studies. Every entity is limited in authority, purpose and jurisdiction. This creates gaps in the ability for any one entity to manage water and flood risk at the watershed region level. Furthermore, many entities have overlapping geographies and authorities, making it unclear which entities are responsible for leading which elements of water management in their jurisdictions.

Parish and municipal governing authorities have the most authority to create and execute watershed management plans by enforcing development regulations and implementing projects. By their nature, however, these governing authorities are limited to their jurisdictional boundaries, such as a city, parish or district, in terms of their authority to develop and execute watershed management plans.

Beyond parish and municipal governing authorities, every provisional watershed region has at least one entity with the authority to implement and maintain flood control projects, such as levee districts and conservation districts. These districts are also limited to their jurisdictional boundaries and specific purposes, which make it difficult to coordinate project planning and implementation and to leverage their dedicated funding for projects that provide benefits beyond the specific needs, purposes or geographies these districts were created to address.

Generally, planning and development districts have the broadest combination of jurisdiction, authority and purpose. In each watershed region, these districts cover the largest geographic areas. Planning and development districts deliver externally funded programs, promote regional coordination, offer technical assistance and planning services within their established district boundaries and have broad authority to fund and implement projects. However, these entities cannot develop and enforce higher standards, regulate development or develop and adopt watershed plans.

There are a few key functions not provided by any entity in any region, as none of them have clear authority to provide them:

- Review, revise and approve local plans in accordance with regional or state watershed management standards
- Delineate floodplain boundaries
- Determine floodplain expansion areas
- Design and construct projects throughout the region

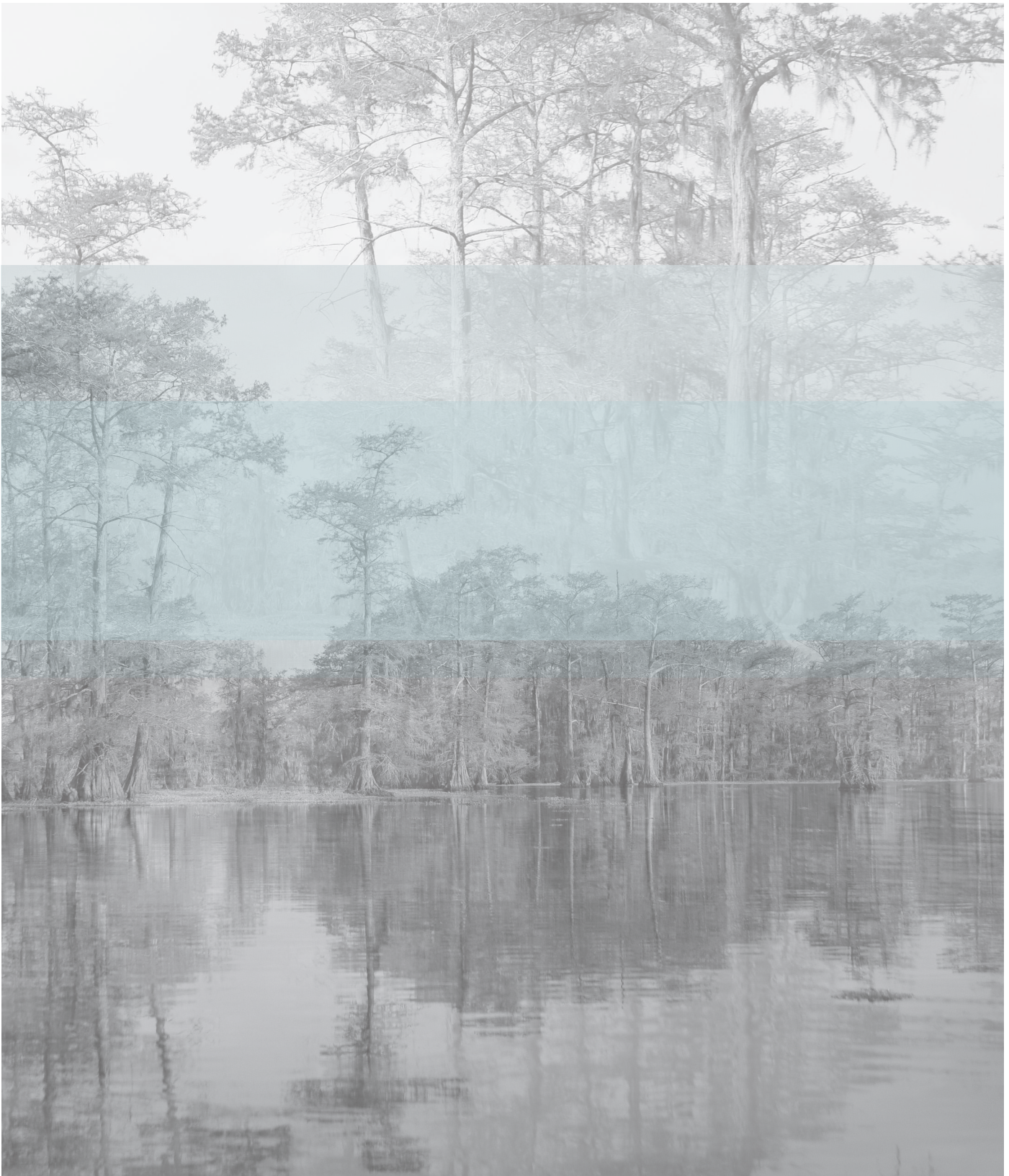


Watershed management entities statewide

		Levee districts	Water conservation districts	Watershed special districts	Soil and water conservation districts	Waterway special districts	Planning and development districts	Parish/municipal governing authorities
AUTHORITY	FUNCTION							
Standards development and enforcement								
Building and development code								
Statewide building code amendments	Adopt new standards and/or amend existing standards to reduce flood risk							
Local building code amendments	Establish standards beyond statewide code to reduce flood risk			■				■
Building code enforcement	Review and approve/decline proposed development applications	■		■				■
	Inspect construction sites and developed sites and issue stop work orders, corrective action orders and/or fines							■
Land use regulations								
Adopt new land use and zoning standards	Add or amend standards and processes to require flood risk reduction provisions	■			■			■
Enforce land use and zoning standards	Review and approve/decline proposed development applications				■			■
	Inspect construction sites and developed sites and issue stop work orders, corrective action orders and/or fines							■
Integrated planning								
Watershed management planning								
Develop and adopt watershed management plans	Develop and adopt watershed plans with authority to establish floodplain management standards		■					■
	Develop and adopt watershed plans with authority to prioritize projects and project funding		■		■		■	■
Local plan review	Review, revise and approve local plans in accordance with watershed management standards						■	■



		Levee districts	Water conservation districts	Watershed special districts	Soil and water conservation districts	Waterway special districts	Planning and development districts	Parish/municipal governing authorities
AUTHORITY	FUNCTION							
Floodplain mapping and delineation								
Authority to measure and define floodplains	Delineate floodplain boundaries							
	Determine floodplain expansion areas							
	Conduct official watershed hydrologic assessments for planning purposes			■	■	■		■
Sustainable funding and implementation								
Recurring revenue								
Funding	Taxing authority	■		■		■	■	■
Financing	Bonding authority	■	■	■		■	■	■
Project implementation								
Project design and construction	Design and construct flood control projects	■	■	■	■	■	■	■
Operation and maintenance	Operate and maintain flood control infrastructure	■	■	■	■	■	■	■
Land acquisition	Acquire, hold and steward real property	■	■	■	■	■	■	■



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