

# Coastal Protection and Restoration Authority

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# 2017 Coastal Master Plan

# Attachment A9: Parish Fact Sheets



Report: Final

Date: September 2017

Prepared By: Coastal Protection and Restoration Authority

# **Table of Contents**

	Overview	1
1.0	Purpose	1
2.0	Description of Parish Fact Sheets	1
3.0	Parish Fact Sheets	
	Acadia Parish	3
	Ascension Parish	5
	Assumption Parish	7
	Calcasieu Parish	9
	Cameron Parish	11
	Iberia Parish	13
	Iberville Parish	15
	Jefferson Parish	17
	Jefferson Davis Parish	19
	Lafayette Parish	21
	Lafourche Parish	23
	Livingston Parish	25
	Orleans Parish	27
	Plaquemines Parish	29
	St. Bernard Parish	31
	St. Charles Parish	33
	St. James Parish	35
	St. John the Baptist Parish	37
	St. Martin Parish	39
	St. Mary Parish	41
	St. Tammany Parish	43
	Tangipahoa Parish	45
	Terrebonne Parish	47
	Varnilian Parish	//0

# Overview

# 1.0 Purpose

The 2017 Coastal Master Plan provides a wealth of information about how our coast is changing, including prediction of future land loss and the increasing flood risk and economic damage we may face from future storm events. While keeping a holistic coast wide perspective is important, residents and local planners or officials may be interested in how this information can be distilled down to a more specific geographic area such as by parish. This document includes 24 parish fact sheets that translate the coast wide master plan data and extract information on future land change, flood depths, and economic damage, as well as 2017 Coastal Master Plan projects and benefits for coastal parish jurisdictions.

# 2.0 Description of Project Fact Sheets

The first page of each project fact sheet provides an overview about each parish and potential changes the parish may face over the next 50 years if no additional protection and restoration actions are taken. The parish overview includes a summary of the current population (U.S. Census 2015 estimate), recent population change (U.S. Census 2000-2010), and local economic drivers. Maps and charts illustrate the challenges many parishes may face in terms of land loss and flood risk in a future without action context. Information is provided on predicted land change (at year 50), flood depths from storm surge based flooding (at year 0 and year 50), and economic damage (at year 0, 25, and 50) if we take no further protection or restoration actions under the medium environmental scenario. Due to the planning-level analysis and the coastal scale of the master plan, please note that all land change statistics are rounded to whole numbers, and economic damage statistics are rounded to one significant digit.

The second page of the fact sheets highlights the 2017 Coastal Master Plan projects that are recommended within a parish boundary, and the number of projects included in the parish by project type (e.g., marsh creation, shoreline protection, nonstructural risk reduction, etc.). Also incorporated is a comparison of projected land change with and without the coastal master plan, statistics on the square miles of land loss that can be reduced by the master plan projects, and the potential savings in economic damage from future flood events that risk reduction projects may offer under the medium environmental scenario.

Coast wide data and information associated with other environmental scenarios is available on CPRA's Master Plan Data Viewer at: cims.coastal.la.gov/masterplan.

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# **ACADIA PARISH**



Acadia Parish is located in southwest coastal Louisiana and in "Cajun Prairie Country." The parish seat is Crowley, and other larger towns include Eunice and Rayne. The mostly rural parish has seen modest population growth in recent decades. The parish is known for agriculture, particularly rice and crawfish. Crowley is named the "Rice Capital of America" and Rayne lays claim as the "Frog Capital of the World." The parish's name is derived from Acadia in Canada, where many Cajun French originated.





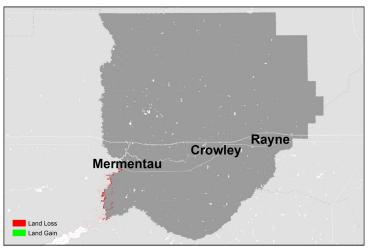
AGRICULTURE MANUFACTURING

**ECONOMIC** 

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Acadiana Economic Development and Crowley Chamber of Commerce.

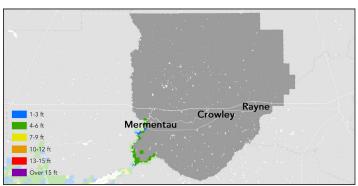
### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

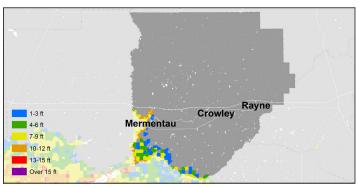


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

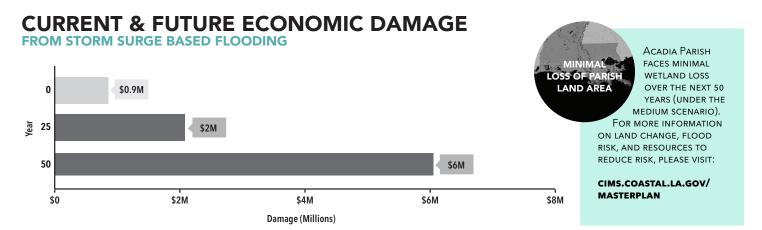
Acadia Parish faces minimal potential wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. Likewise, with no further action, the overall parish faces fairly low future storm surge based flood risk. However, 100-year flood depths may increase to 7-12 feet in areas near the Mermentau river over the next 50 years (under the medium environmental scenario). The town of Mermentau is most at risk with flood depths increasing from the 1-6 foot range to the 7-12 foot range.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ACADIA PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



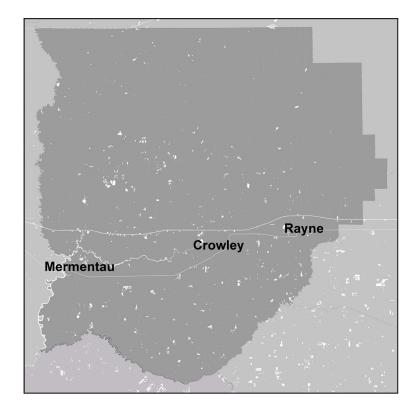
Nonstructural Protection



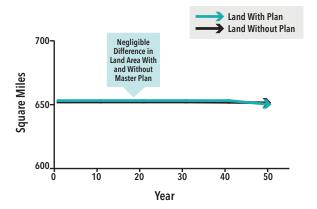
STRUCTURAL PROTECTION

# **2017 MASTER PLAN PROJECTS**

There are no 2017 Coastal Master Plan projects selected within the Acadia Parish boundary. However, master plan projects selected in areas surrounding the parish may offer flood risk reduction and ecosystem benefits to Acadia Parish.

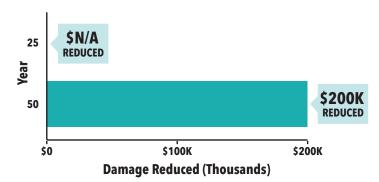


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# **ASCENSION PARISH**



Ascension Parish spans both sides of the Mississippi River just south of Baton Rouge. One of the fastest growing parishes in the state, the population has expanded by 40% from 2000 to 2010. The parish seat is Donaldsonville; other rapidly growing towns include Gonzales, Sorrento, and Prairieville, which are all located in close proximity to the I-10 interstate transportation corridor. The parish includes urban, suburban, and rural areas.



POPULATION CHANGE



DRIVERS

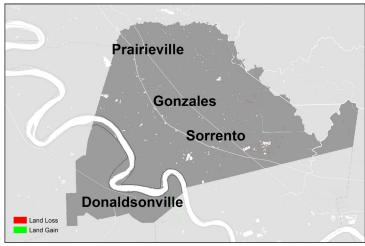
**ECONOMIC** 

CHEMICAL
OIL & GAS
EDUCATION & SERVICE INDUSTRIES
MANUFACTURING
CONSTRUCTION

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Ascension Economic Development Corporation.

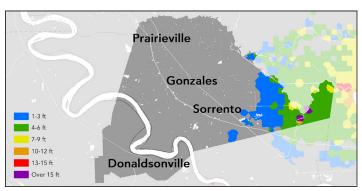
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

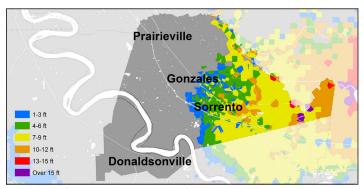


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

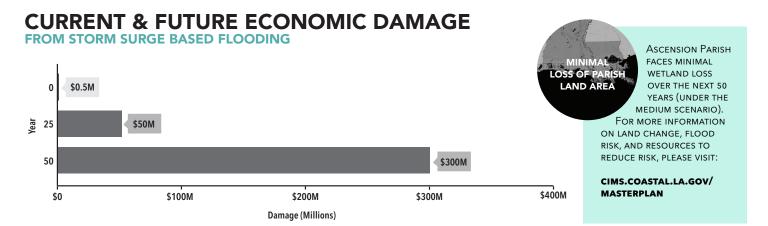
Ascension Parish faces low potential wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, with no further action, the parish faces some increased future storm surge based flood risk. The 100-year flood depths may increase to 7-12 feet in the eastern portion of the parish over the next 50 years (under the medium environmental scenario). Towns that may not have flooded before due to coastal storm surge now may flood. Towns at higher risk include Gonzales (which could experience 1-6 foot future flood depths) and Sorrento (which could experience 4-9 feet of future flooding).



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ASCENSION PARISH?

### **PROJECT TYPES**

















RESTORATION RE

RIDGE RESTORATION

Marsh Creation

SEDIMENT DIVERSION

SHORELINE PROTECTION

E HYDROLOGIC
N RESTORATION

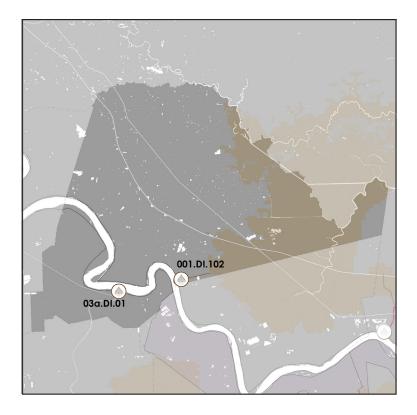
OGIC NONSTRUCTURAL PROTECTION

STRUCTURAL PROTECTION

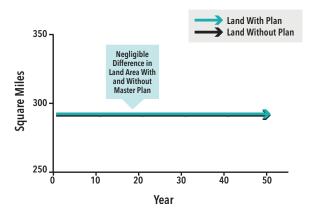
### 2017 MASTER PLAN PROJECTS

RESTORATION PROJECTS: YEAR 1-10

+ **001.DI.102:** Union Freshwater Diversion + **03a.DI.01:** Bayou Lafourche Diversion

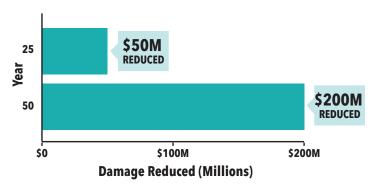


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# ASSUMPTION PARISH



Assumption Parish is located in south central Louisiana, just north of Morgan City. The parish includes suburbs and rural settlements located along higher ground on either side of Bayou Lafourche. The largest incorporated community and parish seat is Napoleonville. Important industries include manufacturing, construction, fishing and agriculture. The parish is an important producer of sugar cane in the state.





DRIVERS

MANUFACTURING

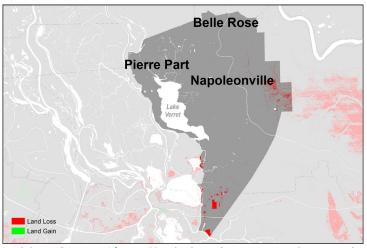
**ECONOMIC** 

AGRICULTURE
FISHING
CONSTRUCTION
TRANSPORTATION & WAREHOUSING

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Assumption Parish Government.

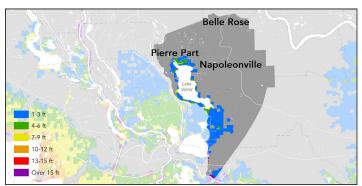
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

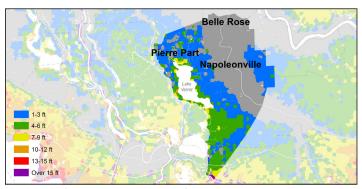


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

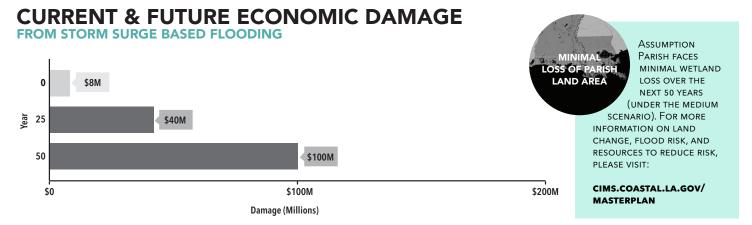
Assumption Parish faces minimal potential wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, with no further action, the parish faces increased future storm surge based flood risk where 100-year flood depths increase above current day flood depths. Some low-lying areas of the parish may face 1-6 foot future flood depths over the next 50 years (under the medium environmental scenario). The town of Pierre Part is particularly at risk (with 4-9 foot future flood depths), while coastal flooding may encroach further upland towards Napoleonville.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ASSUMPTION PARISH?

### **PROJECT TYPES**



RIDGE



2 SEDIMENT









Barrier Island Restoration

RIDGE RESTORATION

Marsh Creation

SEDIMENT DIVERSION

SHORELINE PROTECTION

HYDROLOGIC RESTORATION

Nonstructural Protection

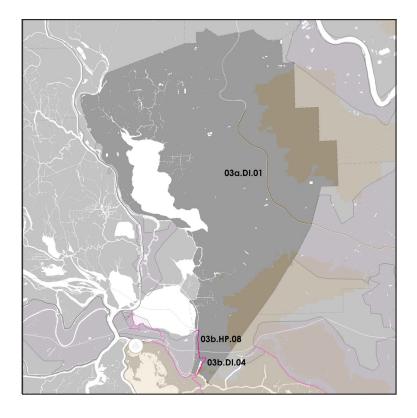
STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

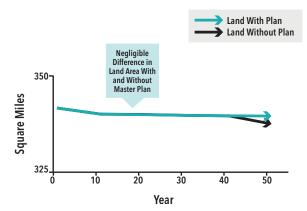
RISK REDUCTION PROJECTS: YEAR 1-30 + 03b.HP.08: Amelia Levee Improvements

RESTORATION PROJECTS: YEAR 1-10 + 03a.DI.01: Bayou Lafourche Diversion

+ 03b.DI.04: Increase Atchafalaya Flow to Terrebonne

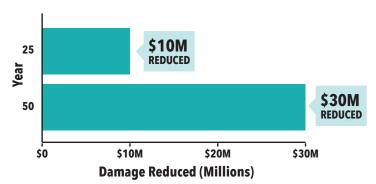


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# CALCASIEU PARISH



Calcasieu Parish is one of Louisiana's westernmost coastal parishes and includes Lake Charles, Calcasieu Lake, and the Calcasieu River. Calcasieu Parish has experienced moderate population growth as well as rapid industrial expansion. The parish seat and largest city is Lake Charles, and other more populous towns include Sulphur, DeQuincy, and Westlake. Economic growth has long been driven by the petrochemical industry, as well as the more recent rise of the aerospace and gaming industries.





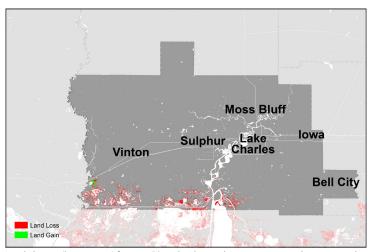
# ECONOMIC DRIVERS

PETROCHEMICALS
NAVIGATION
AEROSPACE
GAMING

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Southwest Louisiana Economic Alliance.

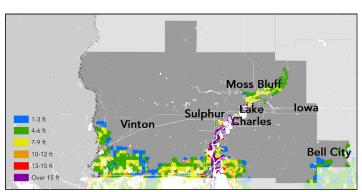
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

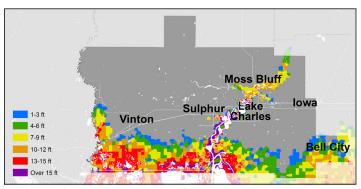


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

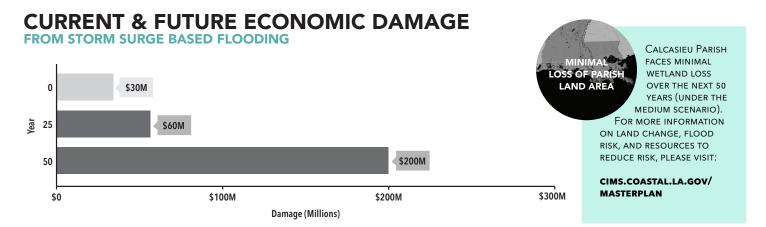
Calcasieu Parish faces minimal wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, the parish faces some increased future storm surge based flood risk with no further action. Over the next 50 years (under the medium environmental scenario), 100-year flood depths could increase to 15 feet or higher in southern areas of the parish and along Lake Charles, Calcasieu Lake, and the Calcasieu River. The towns of Lake Charles, Moss Bluff, and Bell City are particularly at risk of increased future flood depths, while coastal flooding also encroaches closer to Vinton.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR CALCASIEU PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

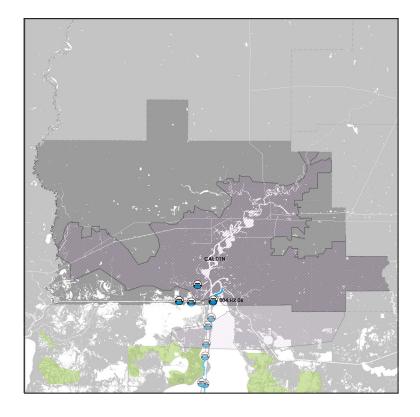
### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30

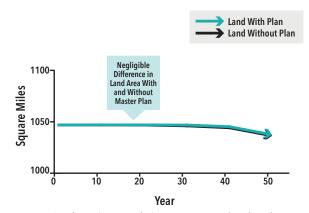
+ CAL.01N: Calcasieu Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10

+ 004.HR.06: Calcasieu Ship Channel Salinity Control Measures

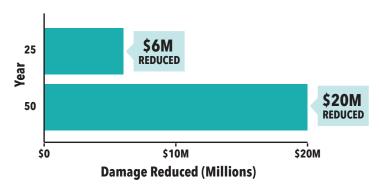


### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# CAMERON PARISH



Cameron Parish is located in southwest Louisiana in the Chenier Plain and borders the Gulf of Mexico. While the parish is one of the largest by land area, it has the second smallest population, which decreased by 31% from 2000 to 2010. Cameron is the largest community and parish seat. Petrochemical companies, oil and gas activities, as well as marine support drive the local economy. In addition, national wildlife refuges offer many recreational opportunities including hunting, fishing, birding, and wildlife viewing.



POPULATION CHANGE

-31%

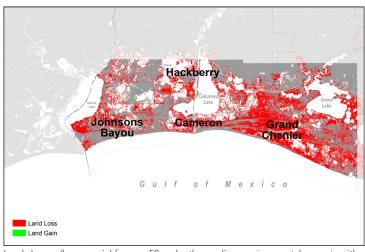
ECONOMIC DRIVERS

OIL & GAS
OUTDOOR RECREATION

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Southwest Louisiana Economic Alliance.

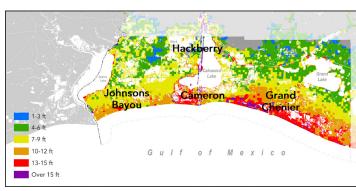
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

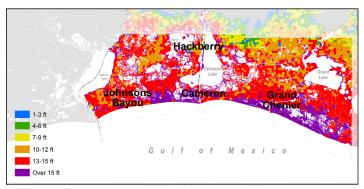


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

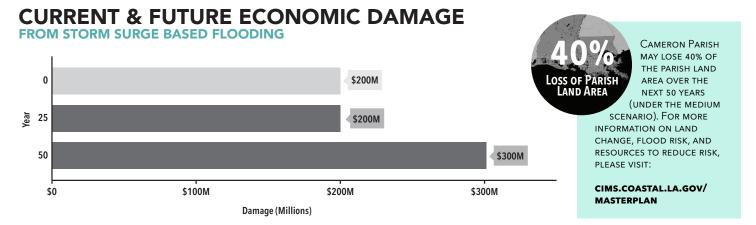
Cameron Parish faces severely increased wetland loss across most of the parish over the next 50 years, and could experience the highest total amount of total land loss of any coastal parish (under the medium environmental scenario). With no further coastal protection or restoration actions, the parish could lose an additional 444 square miles, or 40% of the parish's land area, with impacts to its coastal towns. Likewise, with no further action, the parish faces severely increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 15 feet across much of the parish, and higher in some areas. All communities are at potentially increased risk including Hackberry, Cameron, Johnson's Bayou, and Grand Chenier.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR CAMERON PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



Shoreline Protection



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30

+ CAM.01N: Cameron Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10

+ 004.HR.06-0: Calcasieu Ship Channel Salinity Control Measures

RESTORATION PROJECTS: YEAR 11-30

+ 004.MC.01: South Grand Chenier Marsh Creation

+ 004.MC.04: Mud Lake Marsh Creation

+ 004.MC.10: Southeast Calcasieu Lake Marsh Creation

+ 004.MC.13: Cameron Meadows Marsh Creation

+ **004.MC.23:** Calcasieu Ship Channel Marsh Creation

+ 004.MC.107: West Sabine Refuge Marsh Creation\*

+ 004.SP.05a: Gulf Shoreline Protection (Calcasieu River to Rockefeller)

RESTORATION PROJECTS: YEAR 31-50

+ 004.MC.19: East Calcasieu Lake Marsh Creation

+ 004.MC.103: Little Chenier Marsh Creation

+ 004.MC.104: Calcasieu Lake West Bank Marsh Creation

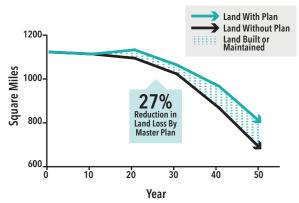
+ 004.MC.105: West Brown Lake Marsh Creation

+ 004.MC.107: West Sabine Refuge Marsh Creation\*

**Note:** Projects with a (\*) designate the implementation of a portion of a larger marsh creation project.

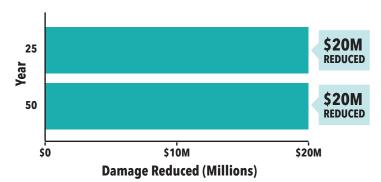
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### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# **IBERIA PARISH**

Iberia Parish is located along the Gulf of Mexico, west of Morgan City, and in the heart of "Cajun Country." The largest town and parish seat is New Iberia, and other towns and communities include Jeanerette, Loreauville, Delcambre, and Avery Island. The eastern half of the parish extends across Lake Fausse Pointe State Park and the Attakapas Island Wildlife Management Area. Located on a salt dome, Avery Island is known for its famous Tabasco pepper sauce.





# -0.03%

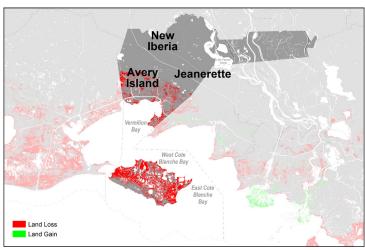
# ECONOMIC DRIVERS

Transportation
Navigation
Industry
Airports

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Acadiana Economic Development.

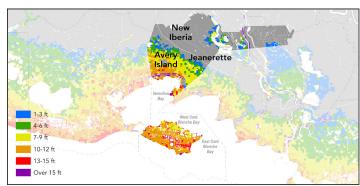
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

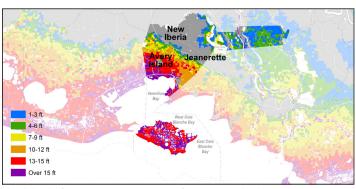


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

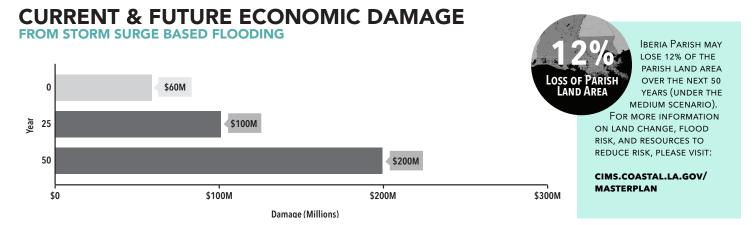
Iberia Parish faces some increased wetland loss in southern areas of the parish over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 64 square miles, or 12% of the parish land area, with impacts to coastal towns. Likewise, with no further action, the parish faces severely increased future storm surge based flood risk. Over the next 50 years, 100-year flood depths increase to 15 feet and above near Avery Island (under the medium environmental scenario). Flood depths ranging between 3-12 feet also encroach upon New Iberia and Jeanerette.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR IBERIA PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30

+ 03b.HP.14: Iberia/St Mary Upland Levee

+ **004.HP.15:** Abbeville and Vicinity Hurricane Protection

+ IBE.01N: Lower Iberia Nonstructural Risk Reduction

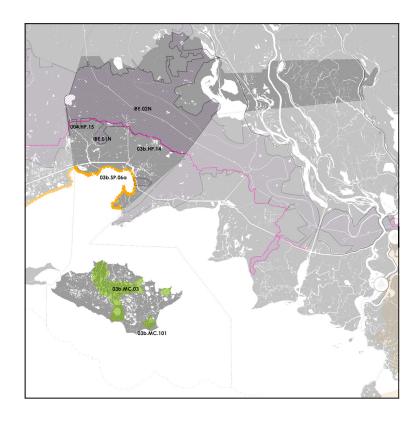
+ IBE.02N: Iberia Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 11-30

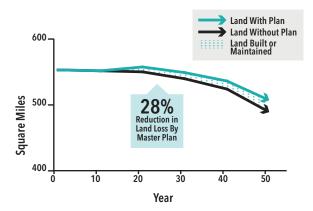
+ 03b.MC.03: Marsh Island Marsh Creation

+ 03b.MC.101: Southeast Marsh Island Marsh Creation + 03b.SP.06a: Vermilion Bay and West Cote Blanche Bay

Shoreline Protection (Critical Areas)

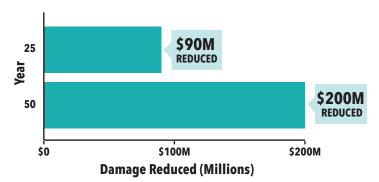


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# IBERVILLE PARISH



Iberville Parish is located southwest of Baton Rouge and stretches from east of the Mississippi River to the Atchafalaya National Wildlife Refuge. The parish seat is Plaquemine, and other towns include St. Gabriel, White Castle, Maringouin, and Gross Tete. One of the fastest growing parishes in Louisiana, the parish population has increased by 20% in 2000 to 2010. The parish is named for Pierre Le Moyne d'Iberville who founded *La Louisiane* as a colony of France.





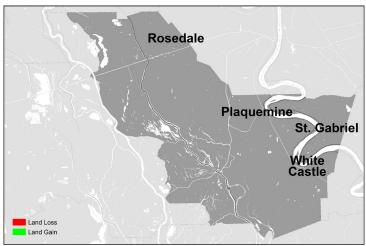
# ECONOMIC DRIVERS

Transportation &
Navigation
Industry & Chemical
Tourism
Agriculture
Fishing

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Iberville Parish Government.

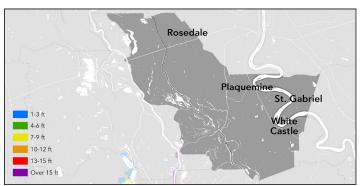
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

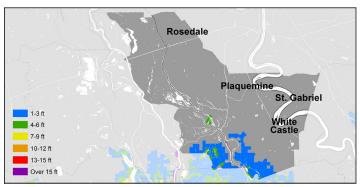


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

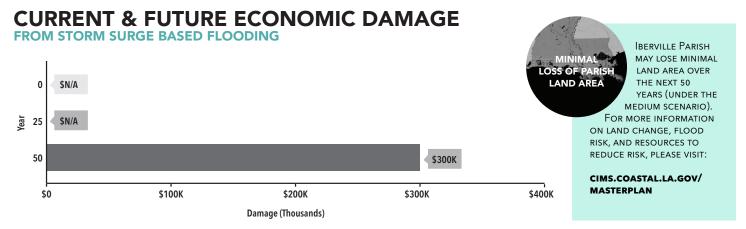
Iberville Parish does not likely face future wetland loss over the next 50 years under the medium environmental scenario. Similarly, with no further action, the parish faces low increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths only slightly increase to 1-3 feet in a few southern areas of the parish. The towns of Plaquemine, St. Gabriel, White Castle, Rosedale, and others are not at significant risk from coastal storm surge.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR IBERVILLE PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



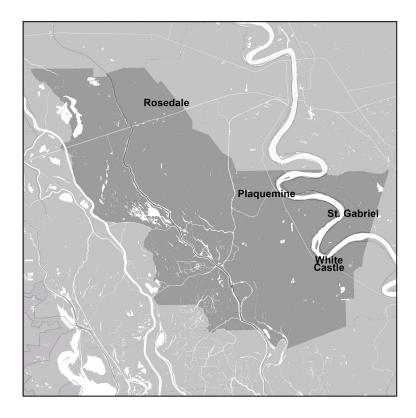
Nonstructural Protection



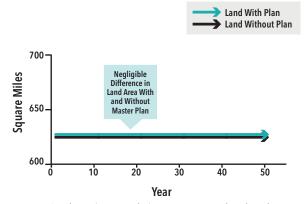
STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

There are no 2017 Coastal Master Plan projects selected within the Iberville Parish boundary. The parish faces low risks of land loss and flooding over the next 50 years both with and without master plan projects implemented in the surrounding areas.



# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# JEFFERSON PARISH



Jefferson Parish is the second-most populous parish in the state (after East Baton Rouge Parish) with about 436,000 residents in 2015. The parish extends from the greater New Orleans area below Lake Pontchartrain to Grand Isle and the Gulf of Mexico. Other major towns include Gretna (the parish seat), Harahan, Kenner, Westwego, and many unincorporated areas such as Metairie. The parish is typified by urban and suburban development along the Eastbank and Westbank of the Mississippi River.

# 436,275

POPULATION CHANGE



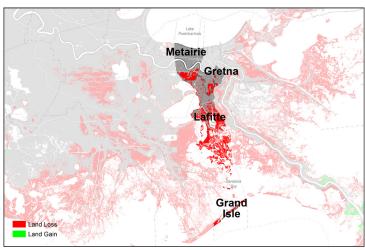
ECONOMIC DRIVERS

Navigation Fishing Tourism Oil & Gas

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Jefferson Parish Economic Development Commission.

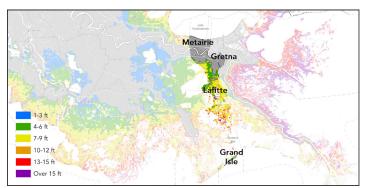
### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

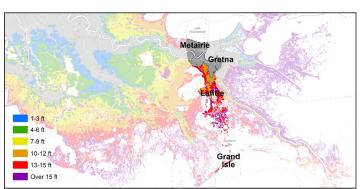


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

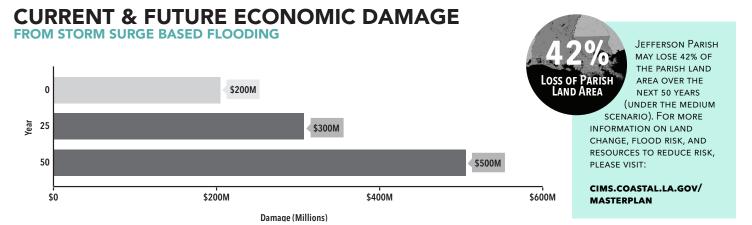
Jefferson Parish faces significantly increased wetland loss in areas in the Westbank and outside the hurricane protection system over the next 50 years (under the medium environmental scenario). With no further coastal protection or restoration actions, the parish could lose an additional 112 square miles, or 42% of the parish land area. Likewise, with no further action, the parish faces severely increased future storm surge based flood risk in areas outside the hurricane protection system. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 15 feet and above across the southern portion of the parish.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR JEFFERSON PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30

+ 002.HP.06: Upper Barataria Risk Reduction
+ JEF.01N: Grand Isle Nonstructural Risk Reduction
+ JEF.02N: Lafitte/Barataria Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50

+ 001.HP.04: Greater New Orleans High Level

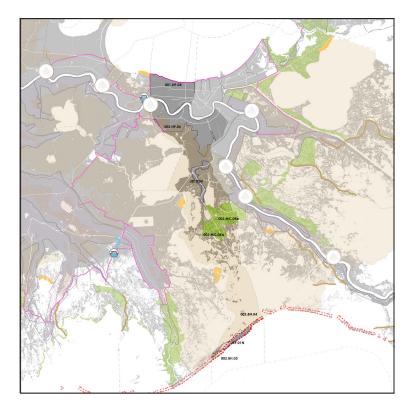
RESTORATION PROJECTS: YEAR 11-30

+ 002.MC.05e: Large-Scale Barataria Marsh Creation - Comp E

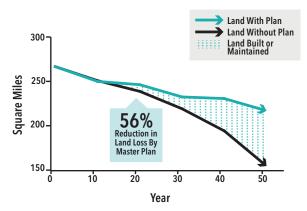
RESTORATION PROJECTS: YEAR 31-50

+ 002.MC.04a: Lower Barataria Marsh Creation - Comp A

**Note:** Barrier islands and headlands will be addressed through CPRA's Barrier Island Program. Jefferson Parish may also receive some benefits from sediment diversion projects in adjacent parishes.

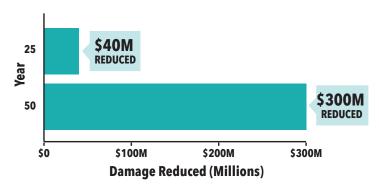


### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# JEFFERSON DAVIS PARISH



Jefferson Davis Parish is located in southwestern Louisiana in "Cajun Country." Towns include Jennings (parish seat), Elton, Fenton, Welsh, Lake Arthur, as well as many unincorporated areas. Economic activities include health services, oilfield services, shipbuilding, and agriculture. The mostly rural parish also includes the Lacassine National Wildlife Refuge. The parish is named for Jefferson Davis, the President of the Confederacy during the American Civil War.

# 31,439

### POPULATION CHANGE

# +0.5%

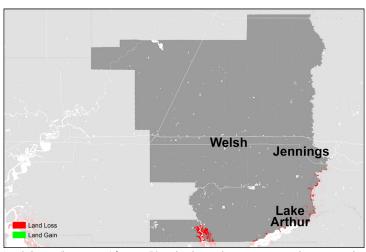
# ECONOMIC DRIVERS

HEALTHCARE SERVICES
SHIPBUILDING
CONSTRUCTION
AGRICULTURE
OIL FIELD SERVICE

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Southwest Louisiana Economic Alliance.

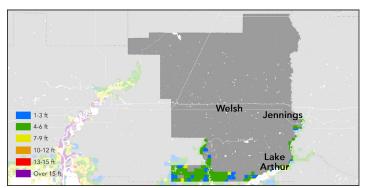
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

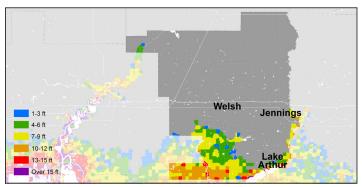


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

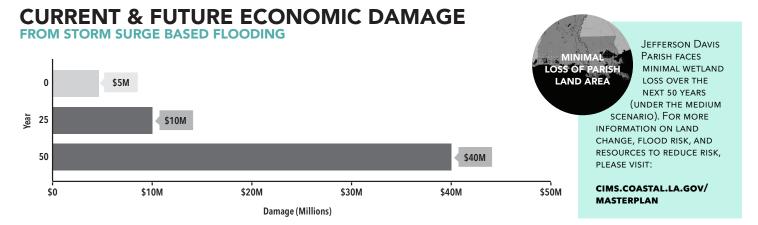
Jefferson Davis Parish does not face much wetland loss over the next 50 years under the medium environmental scenario. However, with no further action, the parish faces some increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths move northward and increase to 4-12 feet in southern areas of the parish. The communities along the Calcasieu River near Lake Arthur and Jennings face higher risk.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR JEFFERSON DAVIS PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RIE RESTORATION RESTO



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



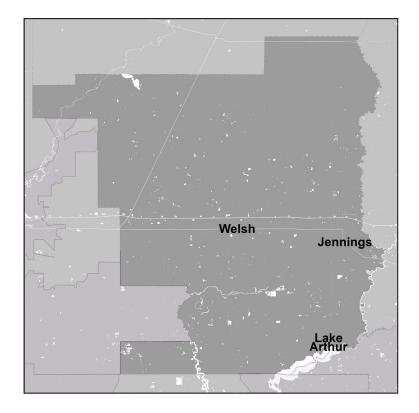
Nonstructural Protection



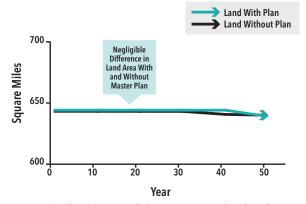
STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

There are no 2017 Coastal Master Plan projects selected within the Jefferson Davis Parish boundary. However, master plan projects selected in areas surrounding the parish could also offer flood risk reduction and ecosystem benefits to Jefferson Davis Parish.

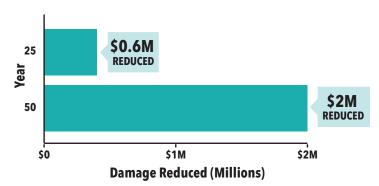


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# LAFAYETTE PARISH



Lafayette Parish is located in the heart of Acadiana and is a center of Cajun and Creole culture. The parish seat and city of Lafayette is known for its cultural attractions showcasing local music, art, film, and digital media. Other towns include Scott, Broussard, Youngsville, and Carencro. The University of Louisiana at Lafayette is also known for its "Ragin' Cajuns" sports teams.



POPULATION CHANGE



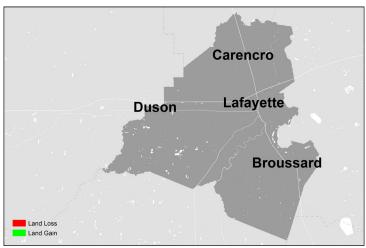
ECONOMIC DRIVERS

Education & University Health Care Oil & Gas Public Administration

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Lafayette Economic Development Authority.

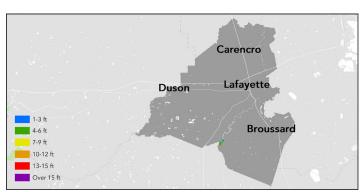
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

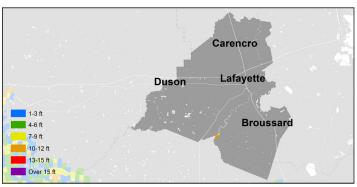


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

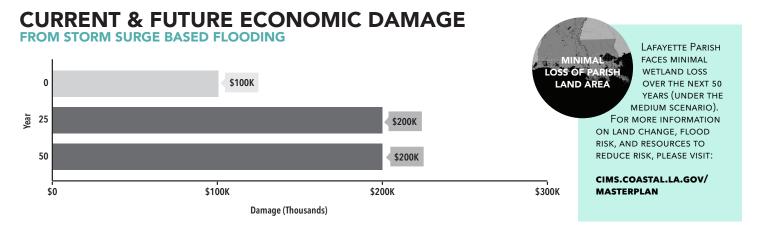
Lafayette Parish does not likely face future wetland loss over the next 50 years under the medium environmental scenario. Similarly, with no further action, the parish also does not face significant future storm based surge flood risk. The towns of Lafayette, Broussard, Carencro, Duson, and others all remain at low risk from a 100-year storm surge based flood event over the next 50 years (under the medium environmental scenario).



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR LAFAYETTE PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



Nonstructural Protection



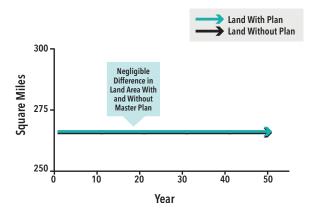
STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

There are no 2017 Coastal Master Plan projects selected within the Lafayette Parish boundary. However, the parish faces low risks of land loss and flooding over the next 50 years both with and without master plan projects implemented in the surrounding areas.

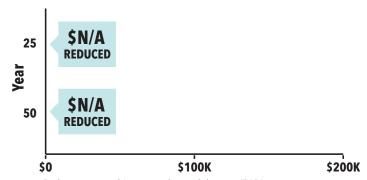


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# LAFOURCHE PARISH



Lafourche Parish is located in southeast Louisiana and includes three incorporated municipalities: Thibodaux (parish seat), Lockport, and Golden Meadow. The parish is named for Bayou Lafourche that runs through the parish and created areas of high ground. Lafourche Parish includes marshes, sandy ridges, lakes, bayous, and natural levees. Known as the "Sportsman's Paradise," the parish boasts a natural habitat for a wide range of wildlife such as deer, alligators, waterfowl, fish, and shellfish.



# POPULATION CHANGE



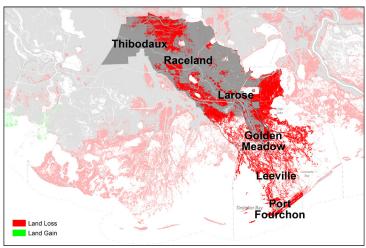
# ECONOMIC DRIVERS

Ports & Shipping
Oil & Gas
Shipbuilding
Fisheries
Agriculture & Livestock

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Lafourche Parish Government.

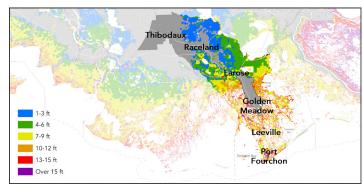
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

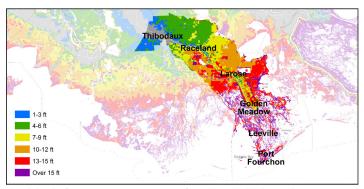


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

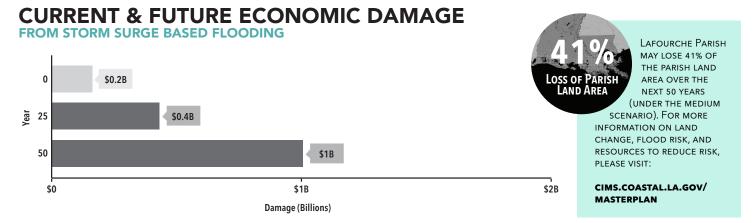
Lafourche Parish faces potentially severely increased wetland loss across most of the parish over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 370 square miles, or 41% of the parish land area, with impacts to many coastal towns. Likewise, with no further action, the parish faces severely increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 13-15 feet and above in areas south of Golden Meadow. Raceland and Larose face significant flood risk, and flooding also encroaches closer to Thibodaux.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR LAFOURCHE PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30 + 02.HP.06: Upper Barataria Risk Reduction + 03a.HP.02b: Morganza to the Gulf

+ 03a.HP.20: Larose to Golden Meadow

+ LAF.01N: Lower Lafourche Nonstructural Risk Reduction
+ LAF.02N: Larose/Golden Meadow Nonstructural Risk Reduction

+ LAF.03N: Raceland Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10

+ 002.SP.102: East Snail Bay Shoreline Protection + 002.SP.106: Bayou Perot Shoreline Protection + 03a.DI.01: Bayou Lafourche Diversion

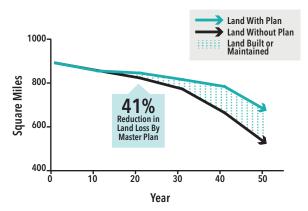
RESTORATION PROJECTS: YEAR 11-30

+ 002.SP.103: West Snail Bay Shoreline Protection
+ 03a.HR.100: Grand Bayou Hydrologic Restoration
+ 03a.MC.07: Belle Pass-Golden Meadow Marsh Creation

**Note:** Barrier islands and headlands will be addressed through CPRA's Barrier Island Program. Lafourche Parish may also receive some benefits from sediment diversion projects in adjacent parishes.

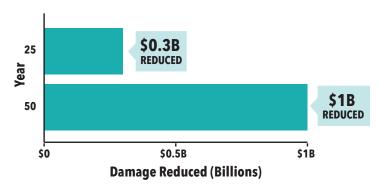
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# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# LIVINGSTON PARISH



Livingston Parish includes the following municipalities: Albany, Denham Springs, French Settlement, Killian, Livingston (parish seat), Port Vincent, Springfield, and Walker. The parish includes a varied landscape from rolling terrain covered by slash pine and hardwood forests, to rich cypress forests and marshes that border on Lake Maurepas and the Amite River. Livingston Parish's industrial base consists largely of companies in wood products businesses, along with several metal products companies and the plastics industry.



### POPULATION CHANGE



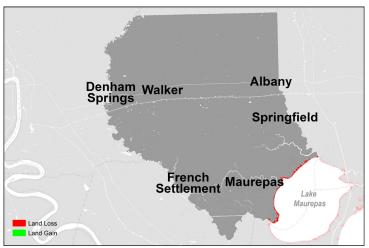
# ECONOMIC DRIVERS

Suburban Development
Manufacturing
Transportation Businesses

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Livingston Economic Development Council.

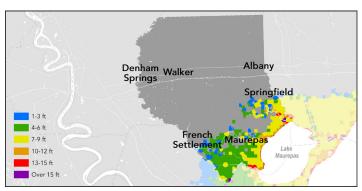
# **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

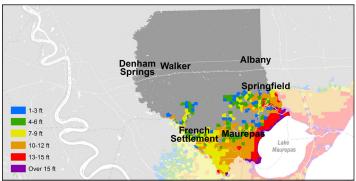


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

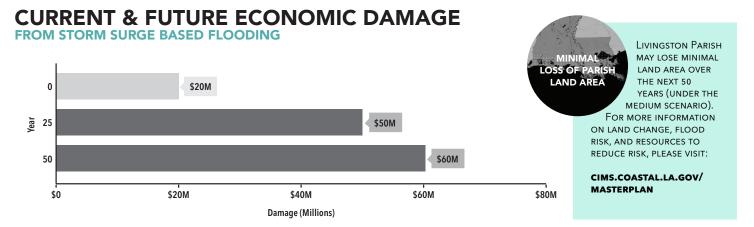
Livingston Parish likely faces low future wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, with no further action, the parish faces some increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 10-15 feet in the Maurepas area. The communities of French Settlement and Springfield are also at greater risk from future coastal storm surge.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR LIVINGSTON PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



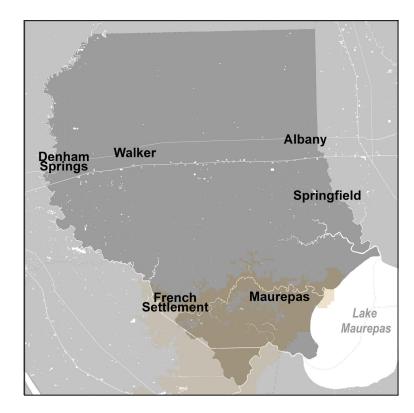
Nonstructural Protection



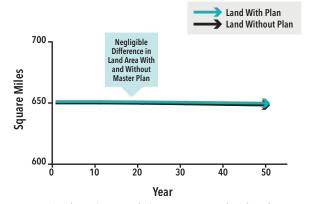
STRUCTURAL PROTECTION

### 2017 MASTER PLAN PROJECTS

There are no 2017 Coastal Master Plan projects selected within the Livingston Parish boundary. However, the parish receives benefits from the adjacent East Maurepas Sediment Diversion (001.Dl.21) that is located in St. John the Baptist Parish. In addition, the master plan projects selected in areas surrounding the parish also offer flood risk reduction and ecosystem benefits to Livingston Parish.

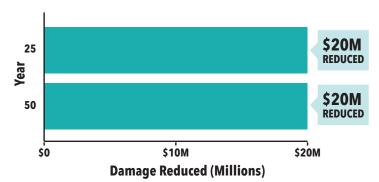


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# ORLEANS PARISH



Orleans Parish is located south of Lake Pontchartrain and is the smallest parish by land area in Louisiana, but one of the largest in total population. The City of New Orleans and the parish of Orleans operate as a unified city-parish government. New Orleans has one of the largest and busiest ports in the world and the greater New Orleans area is a center of maritime industry and accounts for a significant portion of the nation's oil refining and petrochemical production. New Orleans also serves as a white-collar corporate base for onshore and offshore petroleum and natural gas production, in addition to being a city with several universities and other arts and cultural centers.

# 389,617

# POPULATION CHANGE



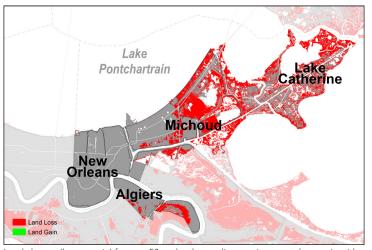
# ECONOMIC DRIVERS

Transportation & Navigation Tourism Business Oil & Gas

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) City of New Orleans Economic Development.

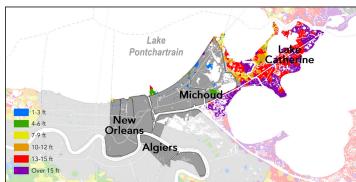
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

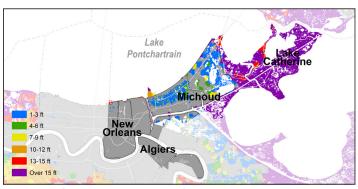


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

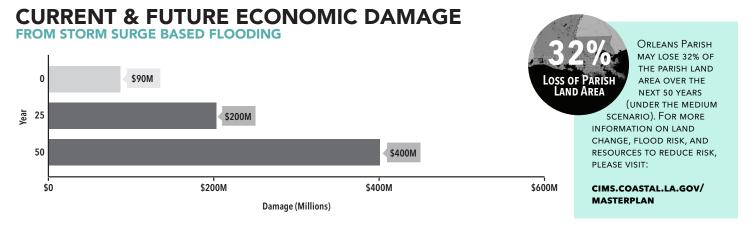
Orleans Parish faces significantly increased wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 51 square miles, or 32% of the parish land primarily in the New Orleans East area. Additionally, with no further action, areas outside of the hurricane protection system face severe future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to over 15 feet outside the levee system. Additionally, areas of New Orleans East may experience 1-6 feet future flood depths.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ORLEANS PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30 + 001.HP.08: Lake Pontchartrain Barrier

+ ORL.01N: Rigolets Nonstructural Risk Reduction + ORL.02N: Lake Catherine Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50

+ 001.HP.04: Greater New Orleans High Level

RESTORATION PROJECTS: YEAR 1-10

+ 001.MC.05: New Orleans East Landbridge Restoration\*

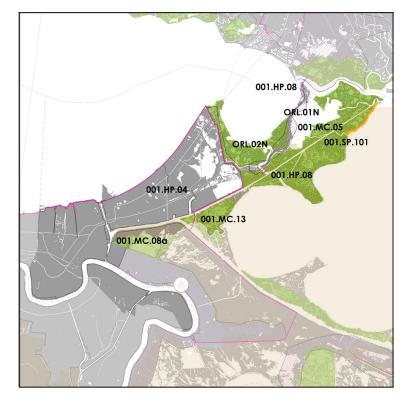
+ 001.MC.13: Golden Triangle Marsh Creation

+ 001.SP.101: Unknown Pass to Rigolets Shoreline Protection

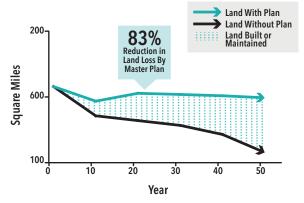
RESTORATION PROJECTS: YEAR 11-30

+ 001.MC.05: New Orleans East Landbridge Restoration\* + 001.MC.08a: Central Wetlands Marsh Creation - Comp A

**Note:** Projects with a (\*) designate the implementation of a portion of a larger marsh creation project. In addition, Orleans Parish may also receive some benefits from sediment diversion projects in adjacent parishes.

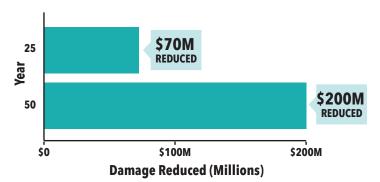


### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection and restoration projects in your parish, please visit:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

# PLAQUEMINES PARISH



Plaquemines Parish is Louisiana's southernmost parish where the Mississippi River meets the Gulf of Mexico. The parish consists of the following Census-designated places: Belle Chasse, Boothville, Buras, Empire, Pointe à la Hache (parish seat), Port Sulphur, Triumph, and Venice. It is truly a Sportsman's Paradise with some of the best commercial and sportsman fishing areas in the world. The seafood industry is one of the leading employers in Louisiana, and Plaquemines Parish produces millions of pounds of shrimp, oysters, crabs, and fish annually. The parish also serves as a hub for the offshore oil and gas industry.





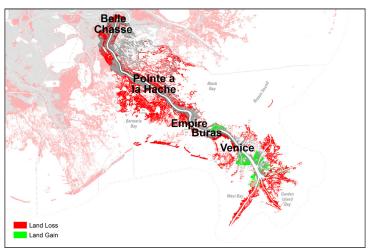
# **ECONOMIC DRIVERS**

Navigation & Shipping Fisheries Oil & Gas

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Plaquemines Parish Economic Development.

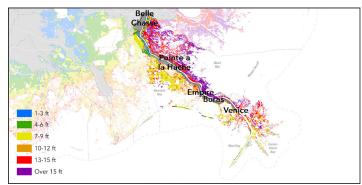
### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

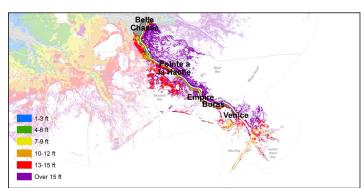


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

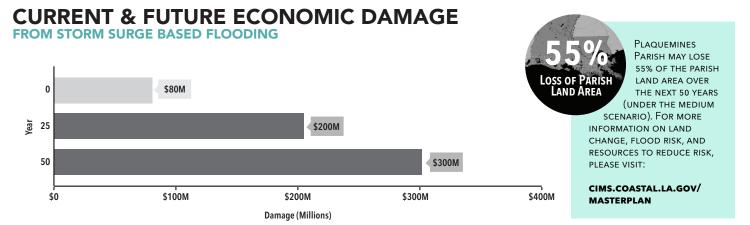
Plaquemines Parish faces extensive wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 296 square miles, or 55% of the parish land area. Plaquemines Parish faces the second highest percent of land area loss over the next 50 years (behind St. Bernard). Additionally, with no further action, most areas of the parish outside the levee system face severe future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 13-15 feet or above in most locations except for Belle Chasse.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR **PLAQUEMINES PARISH?**

### PROJECT TYPES



BARRIER ISLAND Restoration\*



RESTORATION



**M**ARSH CREATION



SEDIMENT DIVERSION



SHORELINE **PROTECTION** 



Hydrologic RESTORATION



NONSTRUCTURAL **PROTECTION** 



**PROTECTION** 

### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30

- + PLA.01N: West Bank Nonstructural Risk Reduction + PLA.02N: Braithwaite Nonstructural Risk Reduction + PLA.03N: Grand Bayou Nonstructural Risk Reduction
- + PLA.05N: Phoenix/Pointe A La Hache Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50

+ 001.HP.04: Greater New Orleans High Level

RESTORATION PROJECTS: YEAR 1-10 + 001.DI.02: Lower Breton Diversion

+ 001.DI.104: Mid-Breton Sound Diversion + 002.DI.102: Mid-Barataria Diversion

+ 001.RC.100: Bayou Terre aux Boeufs Ridge Restoration

+ 001.RC.103: Carlisle Ridge Restoration + 002.RC.101: Adams Bay Ridge Restoration + 002.RC.102: Bayou Eau Noire Ridge Restoration + 002.RC.103: Grand Bayou Ridge Restoration + 002.SP.100: Lake Hermitage Shoreline Protection

RESTORATION PROJECTS: YEAR 11-30

+ 001.MC.102: Pointe a la Hache Marsh Creation\* + 001.MC.104: East Bank Land Bridge Marsh Creation

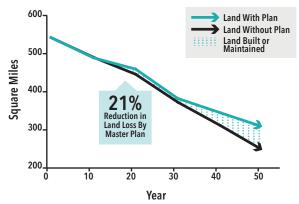
+ 001.MC.105: Spanish Lake Marsh Creation + 001.MC.107: Tiger Ridge/Maple Knoll Marsh Creation

+ 002.MC.05e: Large-Scale Barataria Marsh Creation - Comp E + 002.RC.02: Spanish Pass Ridge Restoration + 002.RC.100: Red Pass Ridge Restoration

RESTORATION PROJECTS: YEAR 31-50 + 001.MC.101: Uhlan Bay Marsh Creation + 001.MC.102: Pointe a la Hache Marsh Creation\*

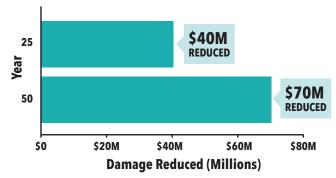
Note: Projects with a (\*) designate the implementation of a portion of a larger marsh creation project. Barrier islands and headlands will be addressed through CPRA's Barrier Island Program.

### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# ST. BERNARD PARISH



St. Bernard Parish is located southeast of New Orleans and includes the communities of Arabi, Chalmette (parish seat), Meraux, Violet, Caernarvon, Contreras, Delacroix Island, Hopedale, Kenilworth, Poydras, Reggio, Sebastopol, Shell Beach, Toca, Verret, and Yscloskey. Wildlife, fisheries, and agriculture have long influenced the culture of the parish. In addition, with the growth and expansion of New Orleans, St. Bernard has developed major industrial and petrochemical industries, as well as port, commercial, and retail businesses.

# **POPULATION**45,408

### POPULATION CHANGE



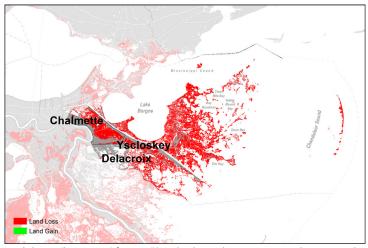
# ECONOMIC DRIVERS

PETROCHEMICAL
OIL & GAS
SEAFOOD PROCESSING
COMMERCIAL FISHING

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Greater New Orleans Inc. Regional Economic Development.

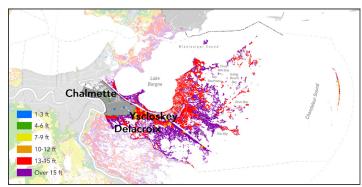
### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

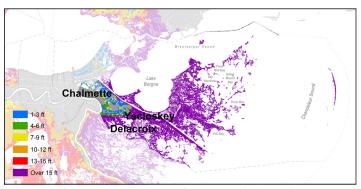


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

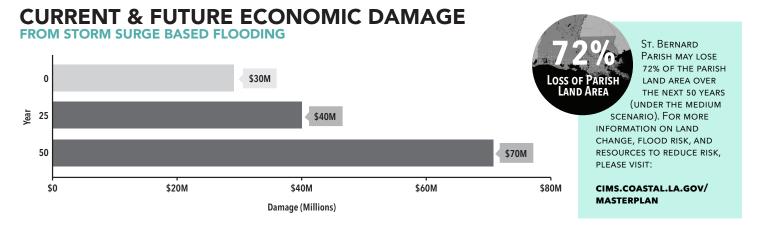
St. Bernard Parish may incur some of the highest wetland loss as a percentage of total parish land area over the next 50 years (under the medium environmental scenario) of any coastal parish. With no further coastal protection or restoration actions, the parish could lose an additional 237 square miles, or 72% of the parish land area. Additionally, with no further action, most areas of the parish outside the levee system face severe future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to over 15 feet in Delacroix and Yscloskey. Chalmette and some other areas within the levee system may experience 1-6 feet flood depths.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. BERNARD PARISH?

### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30

+ STB.01N: Yscloskey/Delacroix Nonstructural Risk Reduction

+ STB.02N: St. Bernard Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50

+ 001.HP.04: Greater New Orleans High Level

RESTORATION PROJECTS: YEAR 1-10

+ **001.DI.18:** Central Wetlands Diversion + **001.MC.13:** Golden Triangle Marsh Creation

+ 001.RC.100: Bayou Terre aux Boeufs Ridge Restoration

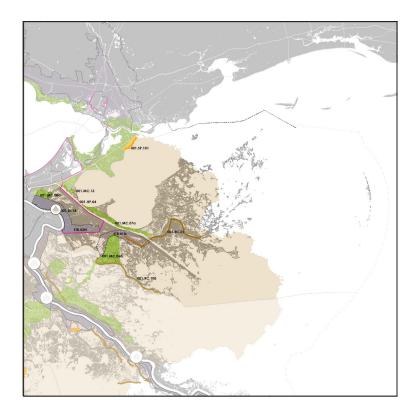
RESTORATION PROJECTS: YEAR 11-30

+ 001.MC.06a: Breton Marsh Creation - Comp A

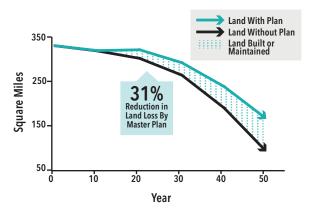
+ 001.MC.07a: Lake Borgne Marsh Creation - Comp A

+ 001.MC.08a: Central Wetlands Marsh Creation - Comp A

+ 001.RC.01: Bayou LaLoutre Ridge Restoration

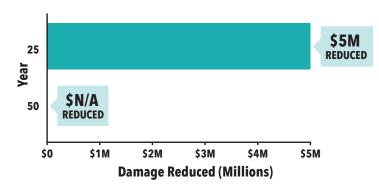


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

# ST. CHARLES PARISH



St. Charles Parish is located 25 minutes west of New Orleans and includes the communities of Ama, Bayou Gauche, Boutte, Des Allemands, Destrehan, Hahnville (parish seat), Killona, Luling, Montz, New Sarpy, Norco, Paradis, St. Rose, and Taft. The economic base of St. Charles Parish is dominated by the energy and petrochemical industries.

# 52,812

POPULATION CHANGE



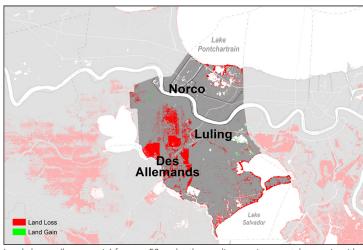
ECONOMIC DRIVERS

Navigation
Energy & Petrochemical
Industry
Emerging Transportation &
Technology

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) St. Charles Parish Economic Development and Tourism.

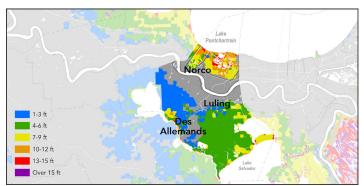
### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

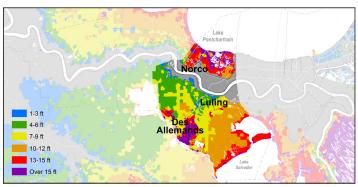


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

St. Charles Parish faces increased wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 13 square miles, or 13% of the parish land area. In addition, with no further action, the parish faces increased future storm surge based flood risk in areas outside the hurricane protection system. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 13-15 feet and above near Lake Pontchartrain and in the vicinity of Lake Salvador. The communities of Des Allemands and Luling are at greatest risk from coastal storm surge based flooding.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

### CURRENT & FUTURE ECONOMIC DAMAGE FROM STORM SURGE BASED FLOODING St. Charles PARISH MAY LOSE 13% OF THE PARISH \$80M 0 LAND AREA OVER LAND AREA THE NEXT 50 YEARS (UNDER THE MEDIUM .eg 25 \$400M SCENARIO). FOR MORE INFORMATION ON LAND CHANGE, FLOOD RISK, AND \$700M 50 RESOURCES TO REDUCE RISK, PLEASE VISIT: \$200M \$400M \$600M \$800M \$0 CIMS.COASTAL.LA.GOV/ MASTERPLAN Damage (Millions)

# WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. CHARLES PARISH?

### PROJECT TYPES



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30
+ 001.HP.05: West Shore Lake Pontchartrain
+ 002.HP.06: Upper Barataria Risk Reduction
+ STC.05N: Salvador Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50

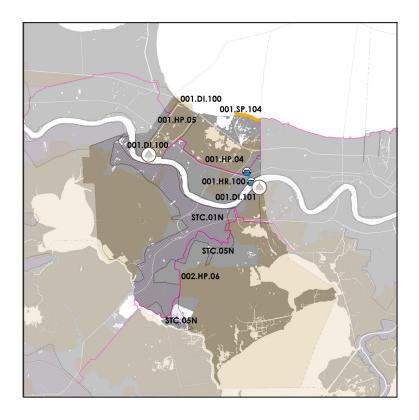
+ 001.HP.04: Greater New Orleans High Level

+ STC.01N: Hahnville/Luling Nonstructural Risk Reduction

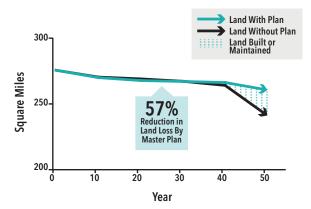
RESTORATION PROJECTS: YEAR 1-10

+ 001.DI.100: Manchac Landbridge Diversion + 001.HR.100: LaBranche Hydrologic Restoration + 001.SP.104: LaBranche Wetlands Shoreline Protection

RESTORATION PROJECTS: YEAR 11-30 + 001.DI.101: Ama Sediment Diversion

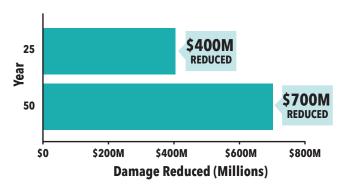


# **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

# REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

### ST. JAMES PARISH



St. James Parish is located midway between New Orleans and Baton Rouge on the Mississippi River and includes the communities of Convent (parish seat), Gramercy, Lutcher, North Vacherie, Paulina, South Vacherie, St. James, and Welcome. St. James Parish includes facilities that are part of the Port of South Louisiana, the largest tonnage port in the world, and its unique mix of industry and worldwide transport makes the parish an important area for commercial and industrial services.





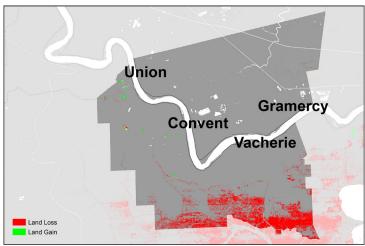
#### ECONOMIC DRIVERS

Navigation
Oil & Gas
PETROCHEMICALS
AGRICULTURE
SERVICE INDUSTRY

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) St. James Parish Government Comprehensive Plan 2031.

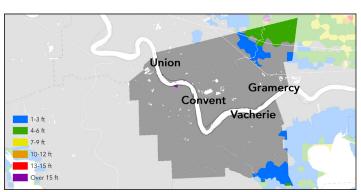
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

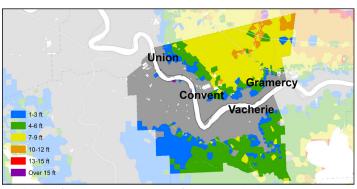


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

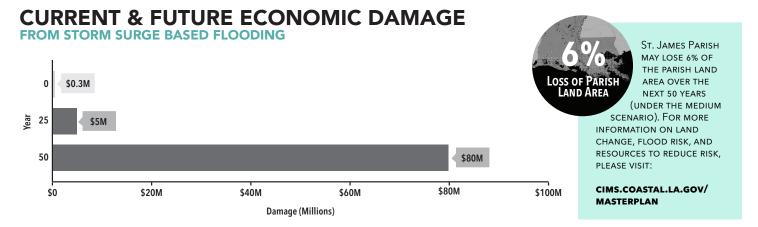
St. James Parish faces some increased wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 13 square miles, or 6% of the parish land area. In addition, with no further action, the parish faces increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase to 7-12 feet in northern areas of the parish. Future flood depths also encroach much closer to Gramercy, Union, Convent, and Vacherie, though these areas are still at relatively low risk of coastal storm surge flooding.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. JAMES PARISH?

#### PROJECT TYPES



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

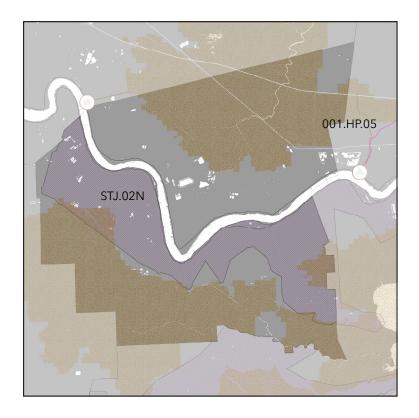
#### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30 + 001.HP.05: West Shore Lake Pontchartrain

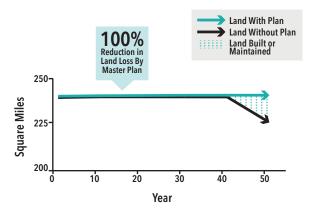
RISK REDUCTION PROJECTS: YEAR 31-50

+ STJ.02N: Vacherie Nonstructural Risk Reduction

**Note:** St. James Parish may also receive benefits from sediment diversion projects in adjacent parishes.

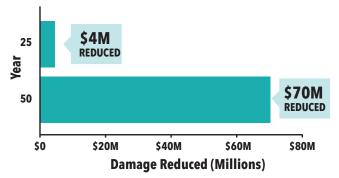


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

FOR MORE INFORMATION ABOUT THE 2017 COASTAL MASTER PLAN AND PROTECTION AND RESTORATION PROJECTS IN YOUR PARISH, PLEASE VISIT:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

### ST. JOHN THE BAPTIST PARISH



St. John the Baptist Parish is located in southeast Louisiana to the west of Lake Pontchartrain and is bisected by the Mississippi River. The parish includes the communities of Edgard, Garyville, LaPlace, Mount Airy, Reserve, and Wallace. The region contains a good supply of raw materials, which has helped in the production of natural gas, petroleum, sulphur, salt, and fur pelts. High silica sands, lime, clays, timber, seafood, and various agricultural products are also produced in abundance.

# 43,626

#### POPULATION CHANGE

## +7%

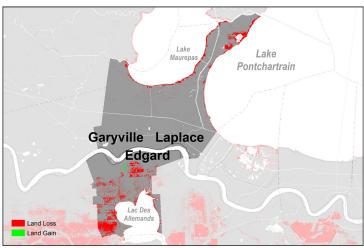
#### ECONOMIC DRIVERS

Navigation
Oil & Gas
PETROCHEMICALS
SERVICE INDUSTRY

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) St. John the Baptist Comprehensive Resilience Plan.

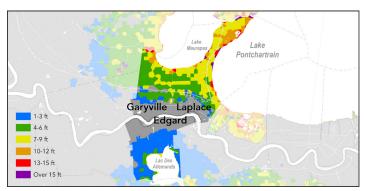
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

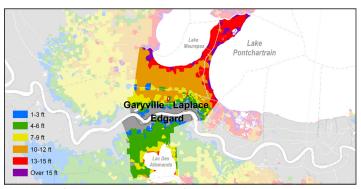


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

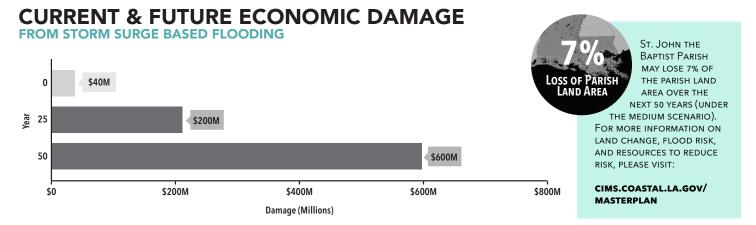
St. John the Baptist Parish faces some increased wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 14 square miles, or 7% of the parish land area. In addition, with no further action, the parish faces increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase substantially to 15 feet and above near Lake Maurepas and Lake Pontchartrain. Future flood depths also increase to 1-6 feet in the vicinity of Laplace, Garyville, and Edgard.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. JOHN THE BAPTIST PARISH?

#### **PROJECT TYPES**



BARRIER ISLAND
RESTORATION F



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

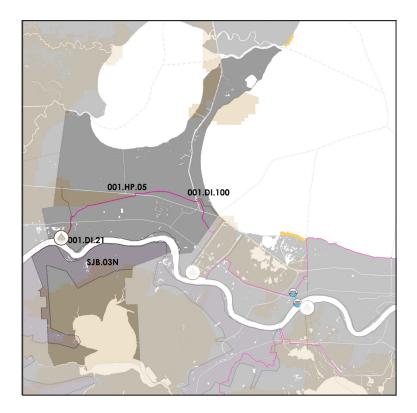
#### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30
+ 001.HP.05: West Shore Lake Pontchartrain
+ SJB.03N: Edgard Nonstructural Risk Reduction

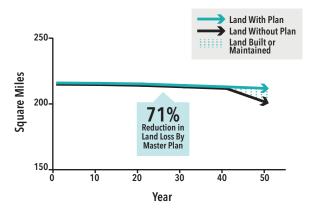
RESTORATION PROJECTS: YEAR 1-10

+ **001.DI.100:** Manchac Landbridge Diversion + **001.DI.21:** East Maurepas Diversion

**Note:** St. John the Baptist Parish may also receive some benefits from sediment diversion projects in adjacent parishes.

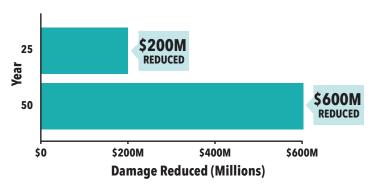


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

### ST. MARTIN PARISH



St. Martin Parish is located in south central Louisiana and includes the towns of Breaux Bridge, Henderson, and St. Martinville (parish seat); and the Census-designated places of Cade, Catahoula, and Cecilia. It is the only parish to have two non-contiguous geographic areas. There are three major landscape types in the parish, including the forested wetlands of the Atchafalaya Basin, open prairie, and the Bayou Teche area.



POPULATION CHANGE



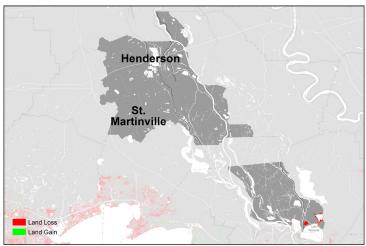
ECONOMIC DRIVERS

Transportation
Agriculture
Outdoor Recreation
Business Park

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Acadiana Economic Development.

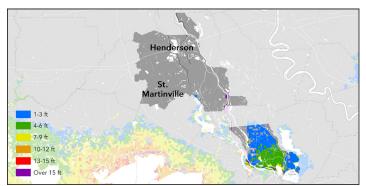
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

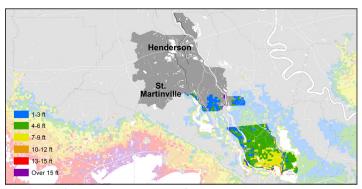


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

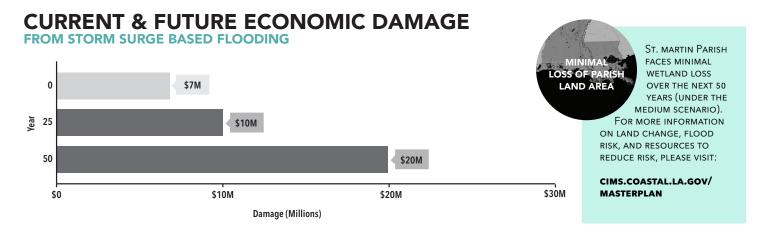
St. Martin Parish faces almost no wetland loss over the next 50 years under the medium environmental scenario with no further protection or restoration actions. In addition, with no further action, the parish faces relatively low increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase somewhat in wetland areas in the southern portion of the parish. However the communities of St. Martinville and Henderson are not at significant risk from a 100-year storm surge based flood event.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



#### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. **MARTIN PARISH?**

#### PROJECT TYPES



RESTORATION

BARRIER ISLAND RIDGE



RESTORATION

Marsh **C**REATION



SEDIMENT DIVERSION



SHORELINE **PROTECTION** 



Hydrologic RESTORATION



Nonstructural **PROTECTION** 

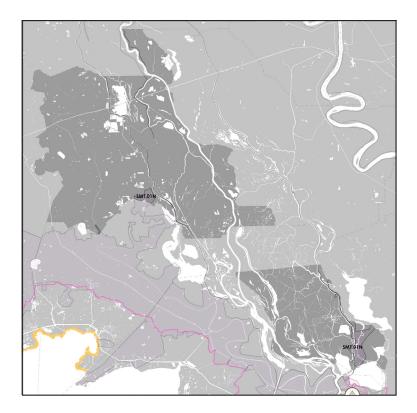


STRUCTURAL PROTECTION

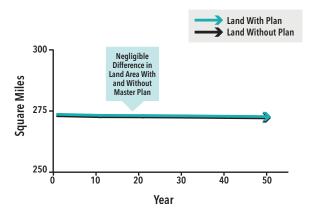
#### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30

+ SMT.01N: St. Martin Nonstructural Risk Reduction

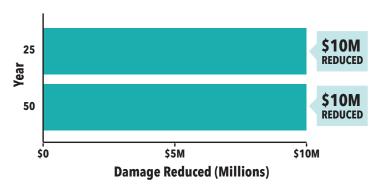


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

#### REDUCTION IN ANNUAL **ECONOMIC DAMAGE**



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

For more information about the 2017 Coastal Master Plan and protection AND RESTORATION PROJECTS IN YOUR PARISH, PLEASE VISIT: COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

### ST. MARY PARISH



St. Mary Parish includes the cities of Franklin (parish seat), Morgan City, Patterson; the towns of Baldwin and Berwick; and the Census-designated places of Amelia, Bayou Vista, Charenton, Four Corners, Glencoe, Siracusaville, and Sorell. Agriculture and sugar mills, carbon black plants, shipbuilders, fabrication firms and seafood processors are all part of the industries found in St. Mary Parish. The parish also has two strategically located ports to accommodate business, industry, and international trade.

# 52,810

#### POPULATION CHANGE



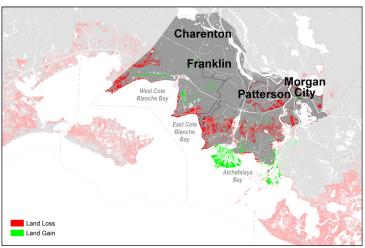
#### ECONOMIC DRIVERS

SHIPPING & NAVIGATION FISHERIES METAL FABRICATION SHIPBUILDING OIL & GAS

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) St. Mary Parish Economic Development.

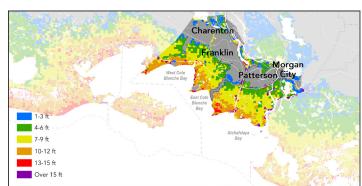
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

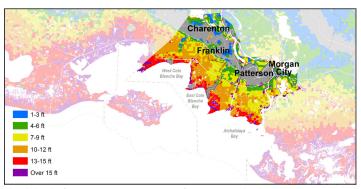


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

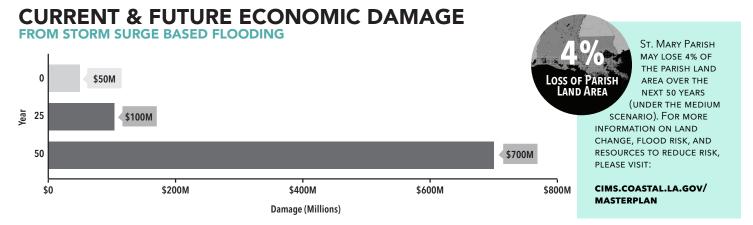
St. Mary Parish faces some increased wetland loss as well as some areas of land gain over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 27 square miles, or 4% of the parish land area. However, the Atchfalaya River delta and the Wax Lake outlet areas continue to grow. In addition, with no further action, the parish faces increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase substantially to 7-15 feet across the coast. Flood depths also increase to 4-9 feet in the vicinity of Morgan City and Franklin.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. MARY PARISH?

#### **PROJECT TYPES**















BARRIER ISLAND RESTORATION

RIDGE RESTORATION

Marsh Creation

SEDIMENT DIVERSION

SHORELINE PROTECTION

Hydrologic Restoration

Nonstructural Protection

STRUCTURAL PROTECTION

#### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30 + 03b.HP.08: Amelia Levee Improvements

+ 03b.HP.13: Bayou Chene

+ 03b.HP.14: Iberia/St Mary Upland Levee

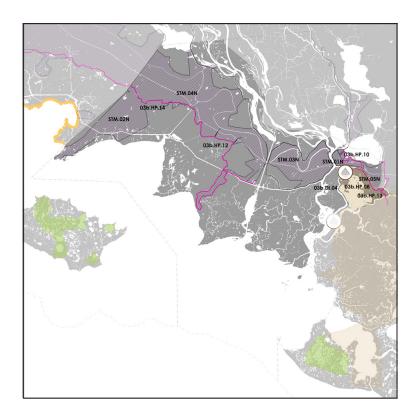
+ **STM.04N:** Franklin/Charenton Nonstructural Risk Reduction + **STM.05N:** Lower St. Mary Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50 + 03b.HP.10: Morgan City Back Levee + 03b.HP.12: Franklin and Vicinity

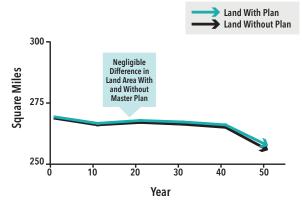
+ **STM.01N:** Morgan City Nonstructural Risk Reduction + **STM.02N:** Glencoe Nonstructural Risk Reduction + **STM.03N:** Patterson Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10

+ 03b.DI.04: Increase Atchafalaya Flow to Terrebonne

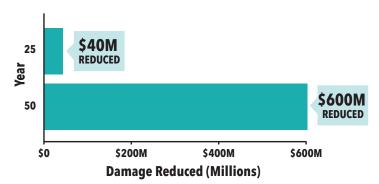


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

### ST. TAMMANY PARISH



St. Tammany Parish lies to the northeast of Lake Pontchartrain's shores and includes the municipalities of Abita Springs, Covington (parish seat), Folsom, Mandeville, Pearl River, and Slidell. The parish boasts a public school system that is consistently rated among the highest-performing in the state. St. Tammany Parish is a multi-faceted, culturally rich, and economically diverse area and is located at the crossroads of three Interstates and adjacent to the shores of Lake Pontchartrain.



POPULATION CHANGE



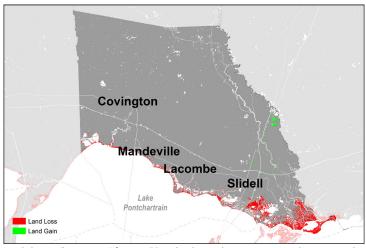
ECONOMIC DRIVERS

DIVERSE ECONOMIC BASE CORPORATE HEADQUARTERS

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) St. Tammany Economic Development Foundation.

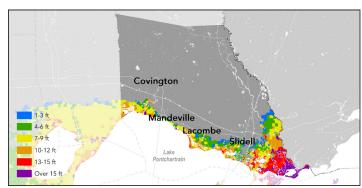
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

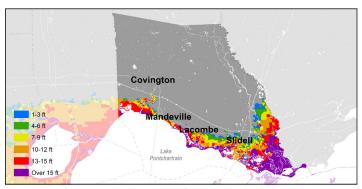


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

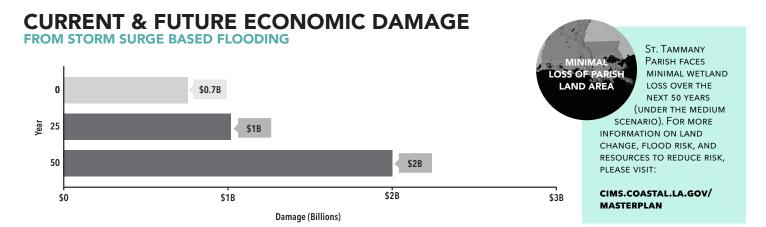
St. Tammany Parish faces minimal potential land loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, with no future action, the southern portion of the parish faces increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase substantially to 7-15 feet and above along the Northshore of Lake Pontchartrain. The towns of Mandeville, Lacombe, and Slidell all face increased risk.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR ST. TAMMANY PARISH?

#### PROJECT TYPES



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

#### **2017 MASTER PLAN PROJECTS**

RISK REDUCTION PROJECTS: YEAR 1-30 + 001.HP.08: Lake Pontchartrain Barrier

+ 001.HP.13: Slidell Ring Levees

+ STT.01N: St. Tammany Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10

+ 001.MC.05: New Orleans East Landbridge Restoration\*

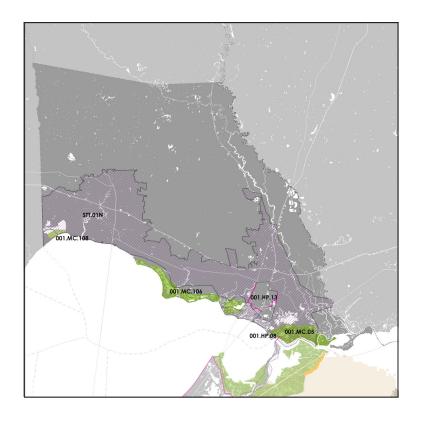
+ 001.MC.108: Guste Island Marsh Creation

RESTORATION PROJECTS: YEAR 11-30

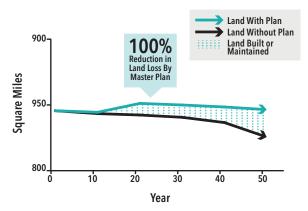
+ 001.MC.05: New Orleans East Landbridge Restoration\*

+ 001.MC.106: St. Tammany Marsh Creation

**Note:** Projects with a (\*) designate the implementation of a portion of a larger marsh creation project.

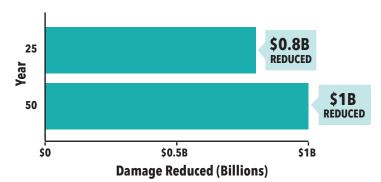


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

### TANGIPAHOA PARISH



Tangipahoa Parish is located in eastern Louisiana, north of Lake Pontchartrain, and includes the communities of: Amite City (parish seat), Baptist, Fluker, Hammond, Husser, Independence, Kentwood, Loranger, Manchac, Natalbany, Ponchatoula, Robert, Rosaryville, Roseland, Tangipahoa, Tickfaw, and Wilmer. The parish name comes from the Tangipahoa River and the historic Tangipahoa Native American people; *Tangipahoa* comes from an Acolapissa word meaning "ear of corn" or "those who gather corn."

# 128,755

POPULATION CHANGE



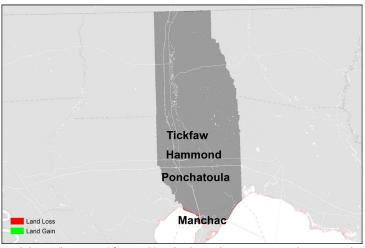
ECONOMIC DRIVERS

Agriculture
Distribution Centers
Outdoor Recreation
Southeastern Louisiana
University

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Tangipahoa Economic Development Foundation, Inc.

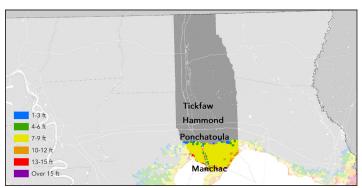
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

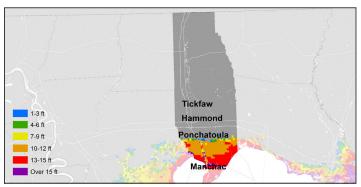


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

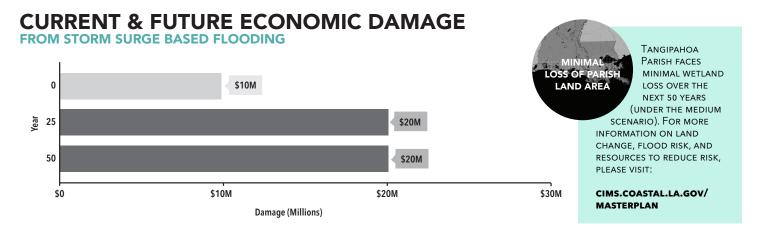
Tangipahoa Parish faces minimal wetland loss over the next 50 years under the medium environmental scenario with no further coastal protection or restoration actions. However, with no further action, the southern portion of the parish faces increased future storm surge based flood risk. Over the next 50 years (under the medium environmental scenario), 100-year flood depths increase substantially to 10-15 feet along the Northshore of Lake Pontchartrain. The community of Manchac is at severe risk due to 13-15 foot flood depths, and flood depths increase in the vicinity of Ponchatoula.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR TANGIPAHOA PARISH?

#### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



SHORELINE PROTECTION



Hydrologic Restoration



Nonstructural Protection



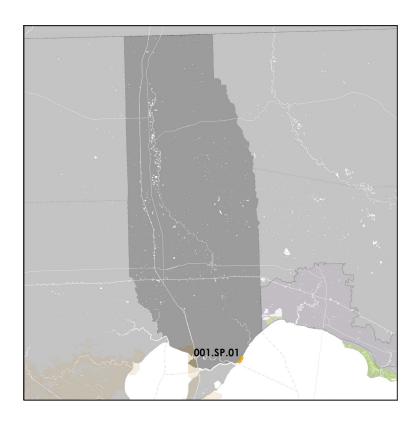
STRUCTURAL PROTECTION

#### 2017 MASTER PLAN PROJECTS

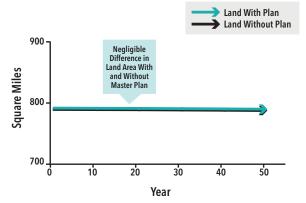
RESTORATION PROJECTS: YEAR 1-10

+ 001.SP.01: Manchac Landbridge Shoreline Protection

**Note:** Tangipahoa Parish may also receive some benefits from sediment diversion projects in adjacent parishes.

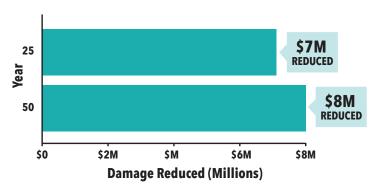


#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.

### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

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COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

### TERREBONNE PARISH



Terrebonne Parish is one of coastal Louisiana's southernmost parishes and borders the Gulf of Mexico. Located along a confluence of five bayous, Houma is the largest town and parish seat. The parish has grown in recent years with a 7% population increase from 2000 to 2010. The primary economic driver is oil and gas, and fisheries, navigation, and tourism are other important industries. Illustrating its Cajun French history, terre bonne means "good earth."







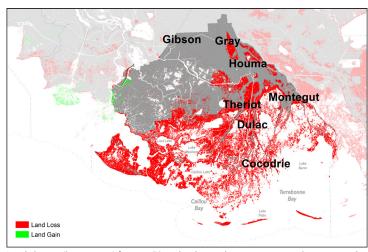
#### ECONOMIC DRIVERS

FISHERIES
NAVIGATION
OIL & GAS
TOURISM

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Houma-Terrebonne Chamber of Commerce.

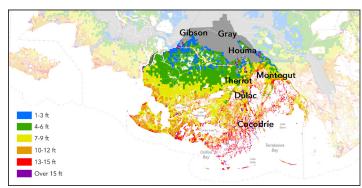
#### FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

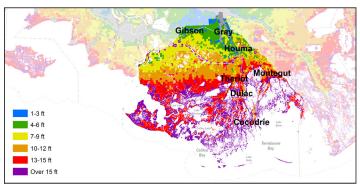


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

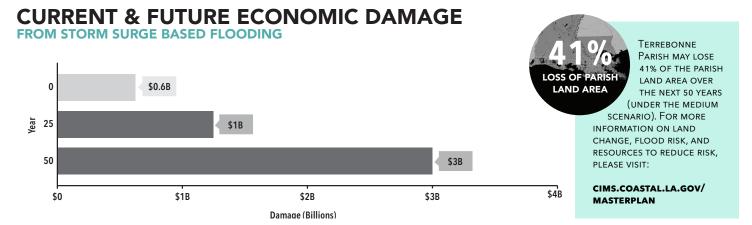
Terrebonne Parish faces severely increased wetland loss across much of the parish over the next 50 years under the medium environmental scenario with no action. With no further coastal protection or restoration actions, the parish could lose an additional 409 square miles, or 41% of the parish land area, with impacts to many coastal towns. Likewise, with no further action, the parish faces increased future storm surge based flood risk where 100-year flood depths increase to 7-15 feet and above in many coastal areas over the next 50 years (under the medium environmental scenario). Towns that are particularly at risk include Dulac, Cocodrie, and Chauvin which could experience over 15 feet of coastal flooding. Houma could also experience 4-9 feet of flooding.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.



### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR TERREBONNE PARISH?

#### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



Shoreline Protection



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

#### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30 + 03a.HP.02b: Morganza to the Gulf

+ 03b.HP.13: Bayou Chene

+ TER.01N: Lower Terrebonne Nonstructural Risk Reduction

+ TER.02N: Houma Nonstructural Risk Reduction

RESTORATION PROJECTS: YEAR 1-10 + 03a.DI.05: Atchafalaya River Diversion

+ 03b.DI.04: Increase Atchafalaya Flow to Terrebonne

+ 03a.HR.02: Central Terrebonne Hydrologic Restoration + 03a.MC.03p: Terrebonne Bay Rim Marsh Creation Study

+ 03a.RC.04: Mauvais Bois Ridge Restoration

+ 03a.RC.06: Bayou Pointe aux Chenes Ridge Restoration

RESTORATION PROJECTS: YEAR 11-30

+ 03a.MC.09b: North Terrebonne Bay Marsh Creation- Comp B

+ 03a.MC.100: South Terrebonne Marsh Creation
+ 03a.MC.101: North Lake Mechant Marsh Creation
+ 03a.RC.02: Bayou Dularge Ridge Restoration

+ 03a.RC.05: Bayou Terrebonne Ridge Restoration

+ 03a.SP.100: North Lake Boudreaux Shoreline Protection

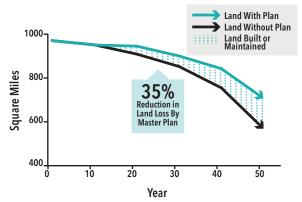
RESTORATION PROJECTS: YEAR 31-50

+ 03b.MC.09: Point Au Fer Island Marsh Creation

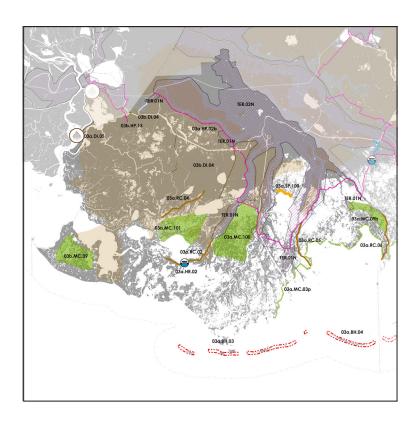
Note: Barrier islands and headlands will be addressed through

CPRA's Barrier Island Program.

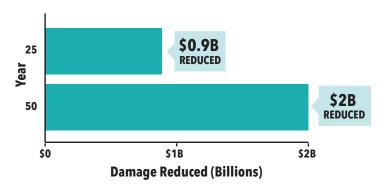
#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.



### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.

FOR MORE INFORMATION ABOUT THE 2017 COASTAL MASTER PLAN AND PROTECTION AND RESTORATION PROJECTS IN YOUR PARISH, PLEASE VISIT:

COASTAL.LA.GOV/OUR-PLAN/2017-COASTAL-MASTER-PLAN/

### VERMILION PARISH



Vermilion Parish is located in south central Louisiana and includes the communities of Abbeville (parish seat), Delcambre, Erath, Gueydan, Kaplan, and Maurice. The parish is known for its fresh seafood, bountiful agriculture, and a rich history of cultural and eco-tourism. Vermilion Parish is immediately adjacent to the Gulf of Mexico, making it ideal for the numerous companies needed to serve the region's oil and gas industry.



#### POPULATION CHANGE



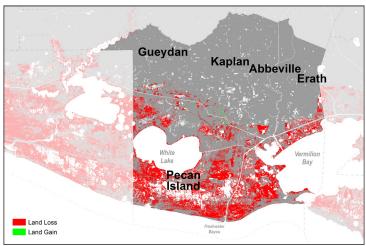
#### ECONOMIC DRIVERS

AGRICULTURE
FISHERIES
SEAFOOD INDUSTRY
SERVICE TO OIL & GAS

Information from: 1) U.S. Census Quick Facts (2015 Estimate) 2) U.S. Census (2000-2010); and 3) Acadiana Economic Development.

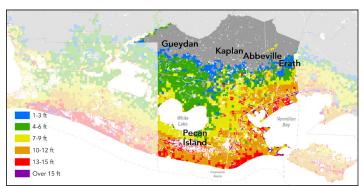
#### **FUTURE WITHOUT ACTION LAND LOSS AND FLOOD RISK**

YEAR 50, MEDIUM ENVIRONMENTAL SCENARIO

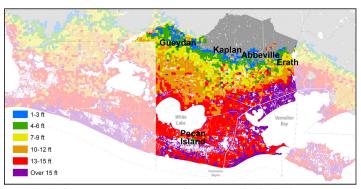


Land change (loss or gain) for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

Vermilion Parish faces increased wetland loss over the next 50 years under the medium environmental scenario. With no further coastal protection or restoration actions, the parish could lose an additional 186 square miles, or 17% of the parish land area. In addition, with no further action, the southern portion of the parish faces significantly increased future storm surge based flood risk where 100-year flood depths increase to 15 feet and above in some areas over the next 50 years (under the medium environmental scenario). Flood depths shift inland and flood depths increase to 7-12 feet near Erath, and increase to 1-9 feet near Gueydan, Kaplan, and Abbeville.



Flood depths from a 100-year storm event for initial conditions (year 0).



Flood depths from a 100-year storm event for year 50 under the medium environmental scenario with no future protection or restoration actions taken.

#### **CURRENT & FUTURE ECONOMIC DAMAGE** FROM STORM SURGE BASED FLOODING VERMILION PARISH MAY LOSE 17% OF THE PARISH LAND Loss of Parish Land Area AREA OVER THE 0 \$200M **NEXT 50 YEARS** (UNDER THE MEDIUM SCENARIO). FOR MORE jg 25 \$300M INFORMATION ON LAND CHANGE, FLOOD RISK, AND RESOURCES TO REDUCE RISK, 50 \$400M PLEASE VISIT: CIMS.COASTAL.LA.GOV/ \$100M \$200M \$300M \$400M \$0 \$500M MASTERPLAN Damage (Millions)

### WHAT'S IN THE 2017 COASTAL MASTER PLAN FOR VERMILION PARISH?

#### **PROJECT TYPES**



BARRIER ISLAND RESTORATION



RIDGE RESTORATION



Marsh Creation



SEDIMENT DIVERSION



Shoreline Protection



HYDROLOGIC RESTORATION



Nonstructural Protection



STRUCTURAL PROTECTION

#### 2017 MASTER PLAN PROJECTS

RISK REDUCTION PROJECTS: YEAR 1-30

+ VER.01N: Vermilion Nonstructural Risk Reduction

+ VER.02N: Abbeville/Delcambre Nonstructural Risk Reduction

RISK REDUCTION PROJECTS: YEAR 31-50 + 004.HP.15: Abbeville and Vicinity

RESTORATION PROJECTS: YEAR 1-10 + 03b.MC.07: East Rainey Marsh Creation

+ **004.MC.100:** Freshwater Bayou North Marsh Creation + **004.MC.101:** Freshwater Bayou South Marsh Creation

+ 03b.SP.01: Freshwater Bayou Shoreline Protection (Belle Isle Canal to

Lock)

+ 03b.SP.06a: Vermilion Bay and West Cote Blanche Bay Shoreline Protection (Critical Areas)

+ 004.SP.03: Freshwater Bayou Canal Shoreline Protection

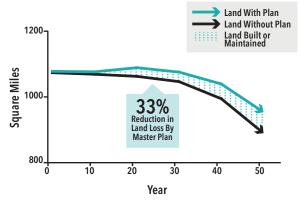
+ 004.SP.05a: Gulf Shoreline Protection (Calcasieu River to Rockefeller)

RESTORATION PROJECTS: YEAR 11-30
+ 004.MC.07: West Rainey Marsh Creation
+ 004.MC.16: East Pecan Island Marsh Creation
+ 004.MC.102: White Lake Marsh Creation

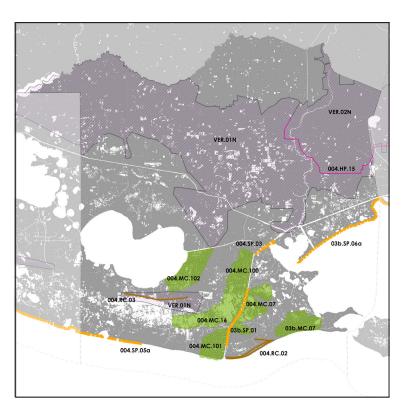
RESTORATION PROJECTS: YEAR 31-50

+ **004.RC.02:** Cheniere au Tigre Ridge Restoration + **004.RC.03:** Pecan Island Ridge Restoration

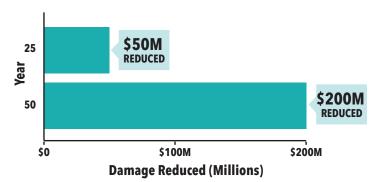
#### **FUTURE LAND CHANGE**



Land area (square miles) over time in parish with and without the 2017 Coastal Master Plan projects under the medium environmental scenario.



### REDUCTION IN ANNUAL ECONOMIC DAMAGE



Reduction in parish's expected annual damage (EAD) over time with the implementation of the 2017 Coastal Master Plan projects under the medium environmental scenario.