

Protecting Our Future A Plan for Iberia Parish

DRAFT Ver. 02



Invest. Manage. Protect.

Parishes across Louisiana are investing in coastal restoration, protection, and water management so its residents can continue to enjoy the quality of life they have all come to know and expect. Now is time for Iberia Parish to do the same.

This draft coastal protection master plan is the first step toward protection and will continue to evolve. As you read through this document, you'll discover the purpose and benefits of building protection systems to defend communities from hurricanes and flood events. You'll also see what this protection looks like and how it can solve many problems, such as poor drainage and skyrocketing insurance costs.

But this plan can be even better with your input. Contributing your ideas, advice, and insight will ensure we create a final plan for the future of Iberia Parish everyone can agree upon and be excited about. It's time for us to come together to begin making immense strides toward fully protecting Iberia Parish.

The Iberia Parish Levee, Hurricane, & Conservation District



People across coastal Louisiana fully realize the vulnerability of the communities in which they live, work, and play.

Communities across Louisiana are experiencing increasing damage from hurricanes as sea levels rise, wetlands disappear, and storms intensify; Iberia Parish is no exception. While it was spared a direct hit from Hurricane Rita in 2005, the Parish still experienced 9' of storm surge even with the storm passing over 100 miles to the west. A direct hit would have been even more devastating. The 2005 hurricane season, specifically Hurricanes Cindy, Dennis, Katrina, and Rita, made people across coastal Louisiana fully realize the vulnerability of the communities where they live, work, and play.

In response to the devastation across Louisiana from the 2005 hurricane season, the Iberia Parish Council created the Iberia Parish Hurricane Flood Protection District Advisory Committee in August of 2006. This Advisory Committee was the beginning of what would become the Iberia Parish Levee, Hurricane, and Conservation District (Levee District). Created by house Bill No. 713 in 2010, the Levee District's purpose is to develop flood protection systems for Iberia Parish (excluding the Atchafalaya Basin District), construct and maintain those protection systems, and enforce rules and regulations regarding the protection systems.

The Levee District's Board is made up of three members appointed by the Iberia Parish Council and one member appointed by each of the Twin Parish Port Commission, the Port of Iberia Commission, the City of Jeanerette, the City of New Iberia, the Town of Delcambre, and the Village of Loreauville.

By 2012, the Levee District had developed a conceptual Draft Master Plan to provide protection from storms and flood events, reduce risk, and ultimately protect the people of Iberia Parish. This plan has evolved from those initial concepts to the latest comprehensive draft plan, which includes engineering and environmental design elements, that is ready for stakeholder input. It is intended that this draft plan be modified to reflect the opinions, values, and desires of the public which it is designed to protect.



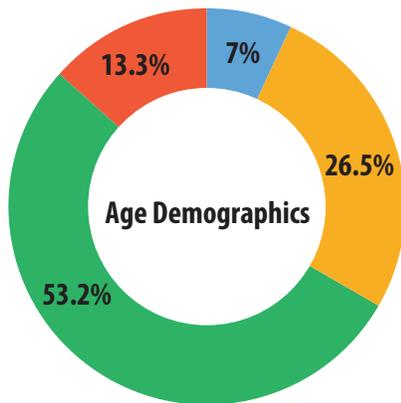
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Photograph by Kent Kanouse

Introduction

A Parish on the Rise

Iberia Parish by the Numbers



■ 0-5 ■ 6-18 ■ 19-65 ■ 66+



Median Family Income
\$45,022



Housing Units
30,087



Retail Sales
\$1.3 Billion

Sources: www.census.gov/quickfacts/table/PST045215/22045
<http://www.iberiabiz.com/Retail-Stats>

Living on and near the coastline of Louisiana naturally creates vibrant communities that arguably cannot be found anywhere else on Earth, and is largely why Iberia Parish has a rich history, strong communities, and a promising future as a Parish on the rise. But its location also has its own unique set of problems. Rising waters in the Gulf and sinking wetlands have contributed to increased damage from not only hurricanes, but tropical storms and large rain events. There are places in Louisiana, including Iberia Parish, that had never flooded from tropical systems and rain events, but are now experiencing significant storm damage and flooding. As the floodwaters rise, so do homeowner insurance rates, Parish-wide economic damages, and the cost of living. Iberia Parish is at a crossroads in its history. Unlike many other parishes that have already lost some of their coastal communities, Iberia has the chance to be at the forefront in the fight for the restoration of its environment and the protection of its communities. As flood protection projects begin to be implemented across the Parish, communities will see flood insurance rates decline significantly, industry and small businesses grow while increasing the local tax base, and residents will be secure in knowing they can raise families safely in Iberia Parish now and into the future.

Recognizing the overwhelming need for protection and restoration along the central coast, the Coastal Protection and Restoration Authority of Louisiana (CPRA) initiated a study, building off the Levee Districts Plan, for flood protection in Vermilion, Iberia, and St. Mary Parishes. This effort, known as the CPRA South Central Coastal Louisiana Flood Protection Project utilized scientific and engineering models which identified a Region-wide levee as the primary solution for flood protection. The Levee District's initial plan also identified a levee system as the best alternative for flood protection, but used a local touch to the project, aiming to produce a more acceptable approach in providing protection while minimizing negative impact to the communities. In an effort to combine these two plans and create a single plan based on sound engineering and science with valued local knowledge, the Levee District has created this Draft Coastal Protection Master Plan (Draft Plan).

This Draft Plan, discussed in this document, identifies the levee system specifications, includes preliminary engineering, cost estimations, and many other details; however, it is critical to understand that this is not a final document. The Draft Plan is a solid starting point for serious discussions between stakeholders (residents, businesses, etc.), the Levee District, and CPRA to figure out how to implement a Parish-wide protection and restoration system in the most efficient and beneficial way. Without significant coastal protection and restoration, Iberia Parish, and even places at higher elevations such as Lafayette, are facing an expensive and uncertain future. As other communities in extreme southern Louisiana begin to relocate, now is the time for Iberia Parish to begin making more significant strides toward flood protection than it has in the past.

In this document, you'll find information about the exact risk Iberia Parish is facing, as well as the benefits of a flood protection project. Along with details of the size of the levee and what water control structures it has, you'll also be able to see the value of the levee as well. While protection and restoration may not be cheap, the cost of doing less comes at the price of possibly losing communities, industries, and most importantly, a unique way of life.

Purpose

A Fight That Can Be Won

Having lost over 1,800 square miles of land since the 1930s, Louisiana is facing one of the largest environmental catastrophes in our nation's history; but we have begun making progress in the fight to protect our communities and way of life. Rebuilding wetlands, building levee protection systems, and elevating homes are some of the ways to combat the increasing negative impacts to coastal communities from tropical systems and large rain events. In some communities, progress has been made, important assets have been protected, and economic damage has been minimized. The impacts facing Iberia Parish can also be reduced or nearly eliminated if protection is built.

Without protection, it's estimated that Iberia Parish would be hit with \$4.6 billion in economic damages from a 100-yr flood event, or a storm that has a 1% chance of happening in any year. Hurricane Katrina was a 500-yr storm, which only had a 0.2% chance of happening, and it turned out to be one of the costliest disasters in history. Included in this economic damage estimate is the damage to residential, commercial, and industrial interests, as well as agriculture, public infrastructure, and roads and vehicles. If protection projects were in place, it's estimated the Parish would decrease its expected damages by \$4.4 billion.

As detailed in the Draft Plan, this \$4.4 billion difference in damages is estimated to happen under a moderate environmental scenario of future conditions, which considers such factors as the expected amount of sea level rise and wetland loss. The damages significantly increase under a less optimistic scenario from \$4.6 to nearly \$7.4 billion in economic damages without protection than with protection. As an example of the effectiveness of flood protection, if a 100-year storm event occurred today, the community of Emma could expect a reduction in flood depth of up to 3 ft. These three feet are the difference between flooding homes and not flooding homes. This same scenario is played out throughout the Parish. For example, the Port of Iberia would see a reduction of 7 ft under the same scenario. Without protection, the neighborhoods near Iberia Middle School and in Lydia would experience as much as 3 ft of flooding, and severe economic damages.

The number of homeowners insurance claims rise after every storm event, and coastal communities are labeled as areas of repetitive loss with insurance rates going up as a result. Having a protection system reverses that trend so that insurance does not continue to rise to the point that is no longer affordable, a trend that has happened in other Parishes in Louisiana.

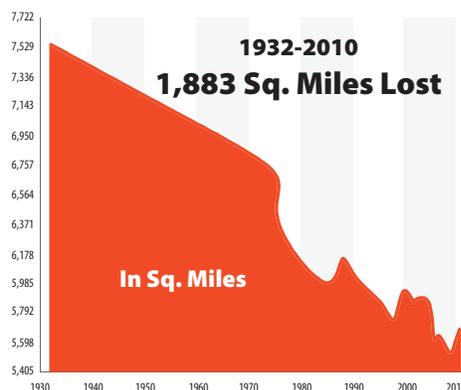
But it's not just buildings and structures that benefit from protection. Business and the local economy are given a strong chance to grow as protection grows. While providing protection and stabilizing and/or reducing insurance rates, outside business can be sure they would be investing in a safe and stable community. More business means more residents, a larger tax base, increased home values, more places to work and shop, and improved or additional local services.

Areas around Iberia Parish are seeing large amounts of growth and expansion. It's critical for Iberia to have the necessary infrastructure in place to provide secure locations for commercial, industrial, and residential expansion. With protection in place, communities and businesses could begin to shape a future in Iberia Parish that is as rich as its past.

The impacts facing Iberia Parish can be reduced or nearly eliminated if protection is built.

FIGURE 1

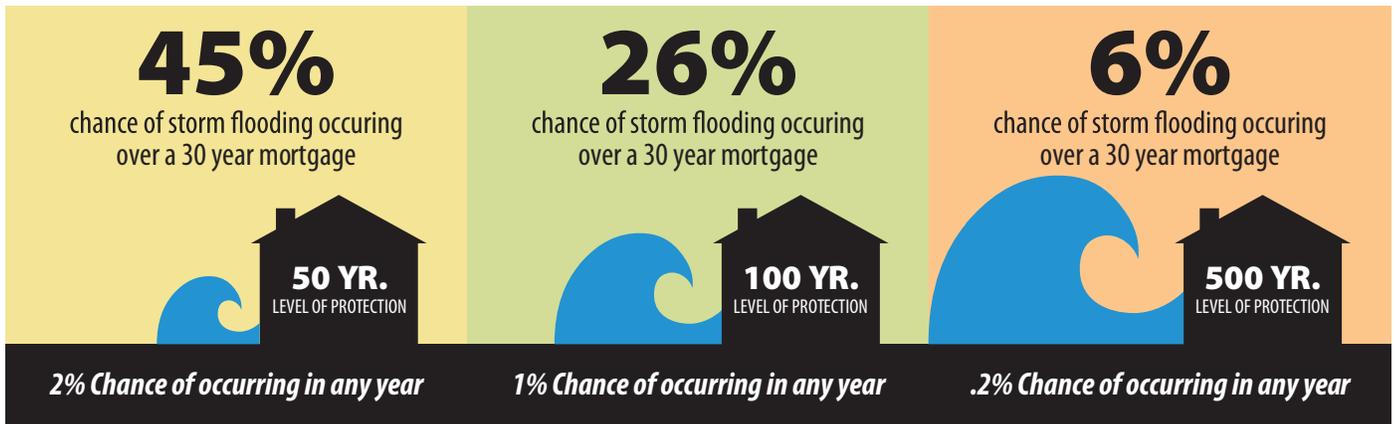
Land Loss in Coastal Louisiana



Source: United States Geological Survey

FIGURE 2

Chance of flooding with levees designed to protect against a storm surge created by a 50 year, 100 year, and 500 year storm



Source: Coastal Protection and Restoration Authority

FIGURE 3

Estimated Economic Damages in Iberia Parish for a 100-Year Flood Event

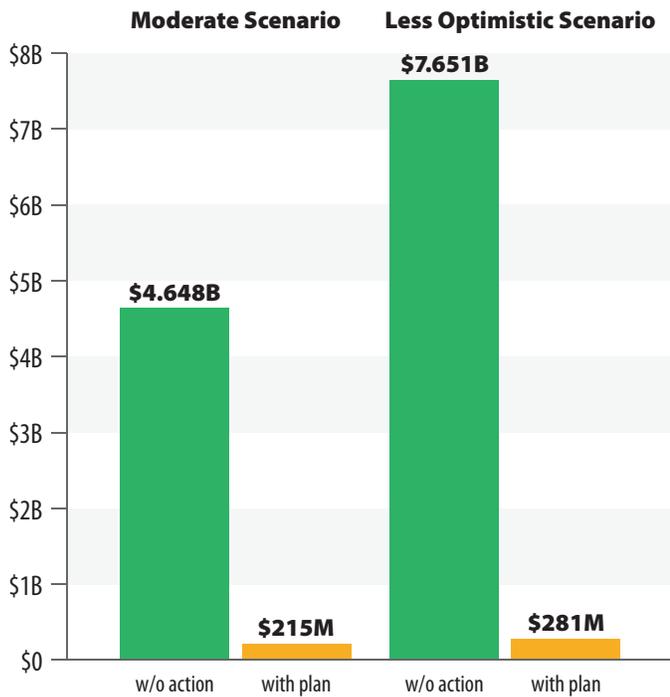


FIGURE 4

Construction Cost vs. Savings in the Event of a 100-Year Flood Event (Moderate Scenario)

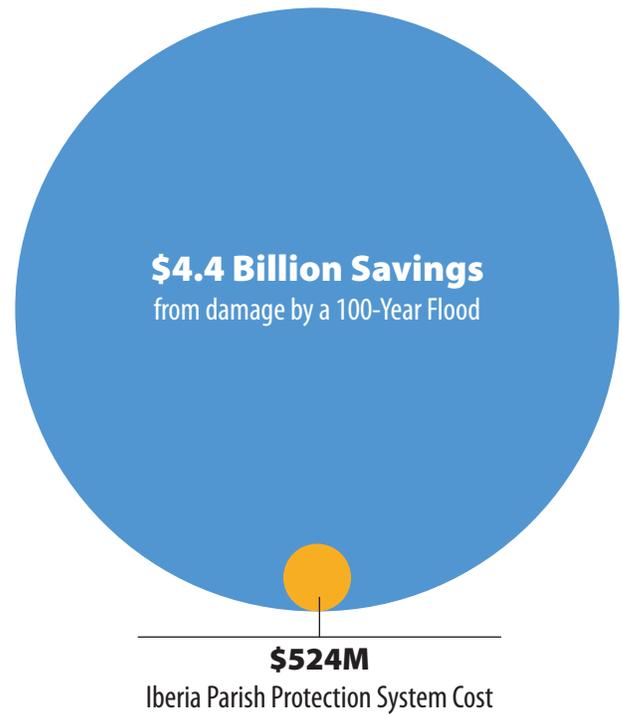


FIGURE 5

Flood Scenarios at the Port of Iberia (Not to Scale)



Elements

Protection, Restoration, & Water Management

A true protection system is more than just a mound of dirt. Like the levee described herein, it is not only protection from floodwaters from the south, but relief from floodwaters within the system to the north, improved drainage, decreased interruption on vital transportation routes, and also recreational and tourism opportunities.

The Iberia protection system found in this Draft Plan is just over 19 miles of levee combined with pumping stations, navigation gates, and drainage structures that will provide protection for a 100-year storm. The levee stretches across Iberia Parish from the Vermillion Parish line to the St. Mary Parish line, about 4.5 miles south of Hwy 90 the entire way.

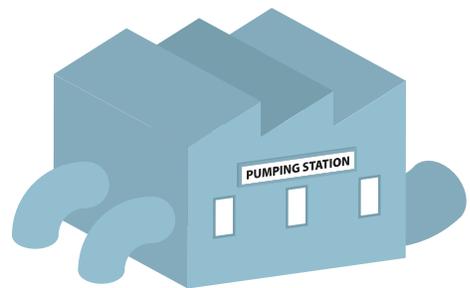
To provide the necessary 100-year storm level of protection, the height of the levee ranges from 15.4 ft to 11.3 ft high above the ground. The height decreases as it moves west to east across the Parish because the natural elevation increases so a shorter levee will provide the same amount of protection as a taller one. In comparison, the levees along the Mississippi River in New Orleans are about eight feet higher the tallest section of levee in the Iberia protection system. The width of the levee is determined, in part, by the height of the levee. This levee would be just shy of 123 ft wide in the tallest parts and just over 94 ft wide in the shorter sections. Levees in the southern end of Lafourche Parish range from 150 ft to 400 ft wide.

While levees block floodwater from the outside, they also keep floodwaters from the inside of the system from getting out. That's why pumping stations and drainage structures are planned as part of this protection system to remove water inside the system and funnel it to areas outside of the system. This type of system is ideal because it allows water to flow in and out of the levee like it does naturally on a day-to-day basis and also provides the ability to control the flow of water when needed.

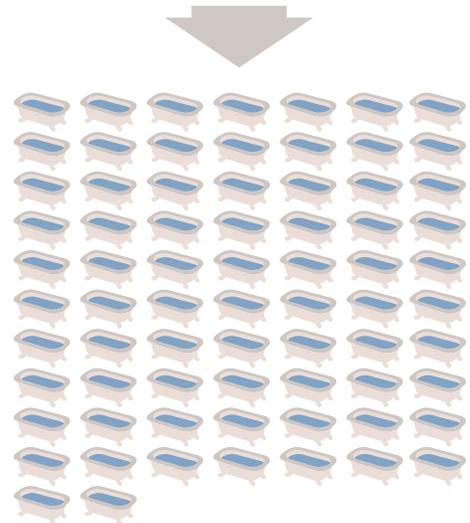
Currently, there are five pumping stations planned for this system with one at each of the following five locations: Bayou Carlin (Delcambre Avery Canal), Poufette Canal, Petit Anse Canal, Commercial Canal, and Delahoussey Canal. The sizes of these pumping stations range from 1,800 cubic feet per second (cfs) to 3,010 cfs. An 1800 cfs pumping station can pump 1800 cubic feet of water every second out of the levee system. Another way of looking at this is by imagining the amount of water in an Olympic size swimming pool. An 1800 cfs pumping station could fill up an Olympic size swimming pool every 48 seconds.

FIGURE 6

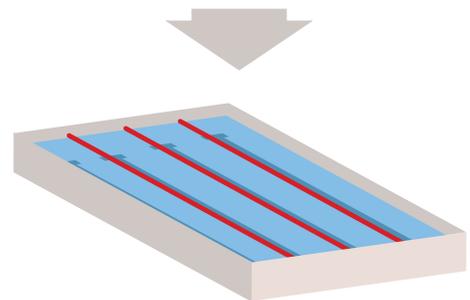
1800 CFS Pumping Station Capacity



1800 cubic feet of water every second



72 Bathtubs every second



1 Olympic Size pool every 48 seconds

Drainage structures provide a way for water inside of the levee to flow outside, but also improve daily drainage. There are 17 drainage structures planned for this protection system which vary from 1 to 3 box culverts at each location with flap gates. Flap gates close to prevent any rising floodwater on the outside from getting in, but allow normal water flows when open.

The drainage structures are in canals or natural bayous that do not have navigation demands. But because many people access waterways across the Parish for recreational and commercial purposes, this protection system includes 6 navigation gates to provide uninterrupted access. These navigation gates are planned to be swing barge gates that range in size from 200 to 30 ft in width and are to be placed in Bayou Carline (Delcambre/ Avery Canal), Petit Anse Canal, Commercial Canal, Wilkins Canal, Patout Canal, and Delahoussey Canal. The navigation gates would remain open daily and only close in response to rising floodwaters or when needed to provide safe harbor for boats in an approaching storm.

This protection system requires installing a highway gate where the levee crosses LA highway 329 (Avery Island Road) and also elevating a portion of LA 329. A highway gate would also be installed at LA Highway 83. These gates would only be closed during a storm event. This protects the communities and roadways north of where the levee crosses each highway, which are critical evacuation routes. While closed, there would be an alternative route over the earthen levee to be used for evacuation.

The levee would block floodwater that would cover parts of the Parish without it. While the floodwater would not be inside of the levee system, it would stack up on the outside of the system, which would increase the amount of water impacting anything south of the levee, including Avery Island. Avery Island itself has some of the highest natural elevations in the region so it would not be inundated; however the roadway from the levee to the Island, about 1.5 miles, would need to be raised so it would not be flooded.

FIGURE 7
Levee Height Comparisons

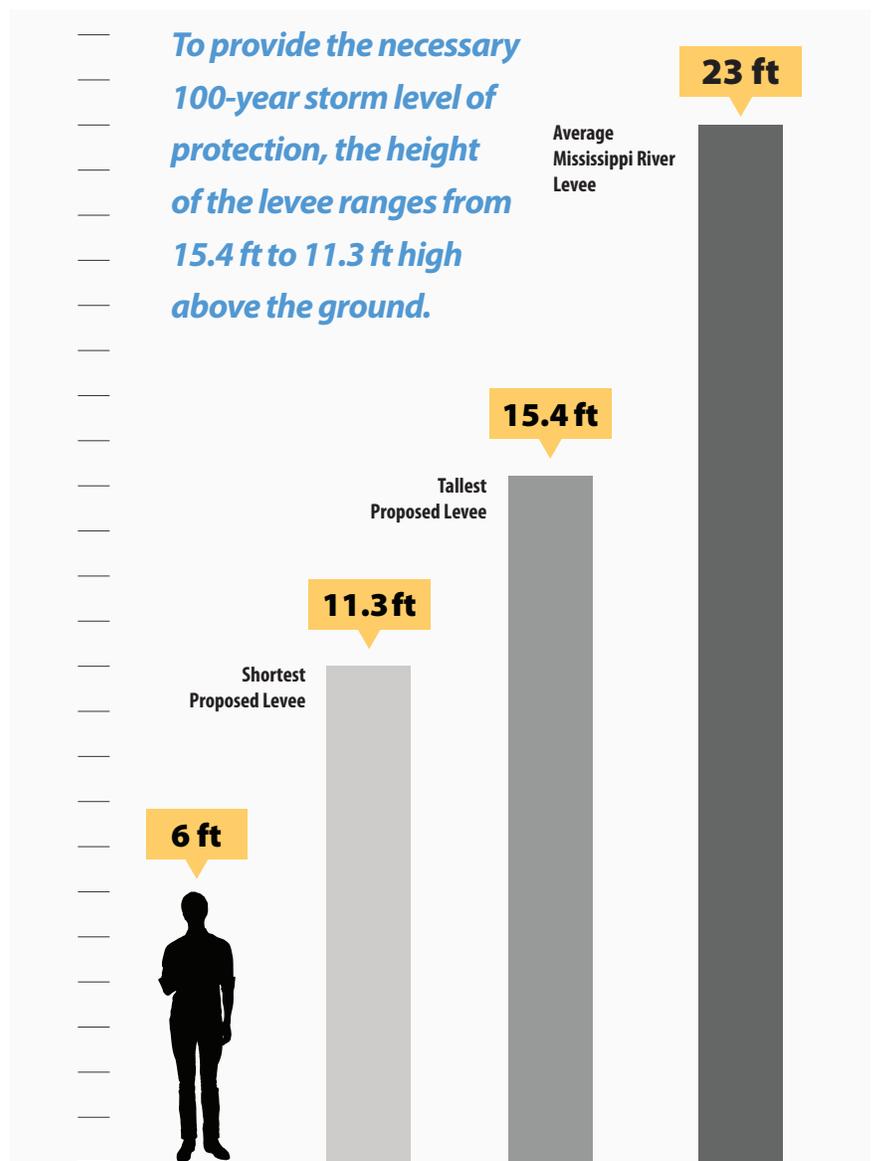
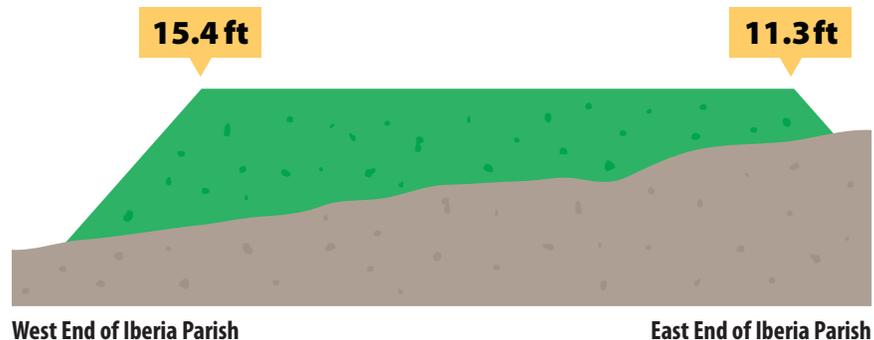


FIGURE 8
Levee Height vs. Ground Level Across Iberia Parish



Elevating this roadway also provides an opportunity to increase tourism and recreational opportunities in the Parish. Iberia Parish is known across the country as a birder's paradise, but is not easy to access. Expanding the width of LA Highway 329 would make it possible to build a nature trail open to pedestrian and bicycle traffic with wildlife viewing observation decks. The wetland areas surrounding the nature trail could be improved by planting species of plants native to Iberia Parish. Other sections of the levee could be utilized as walking trails, like those in St. Charles Parish.

The Iberia protection system can improve the local environment for people and wildlife, but can also lead to direct environmental restoration. Wetlands and other sensitive ecological areas will naturally be disturbed or damaged through the construction process. Repairing this damage is not only required by law, but it is important for the Parish to have the greatest amount of wetlands in front of the levee to act as a natural buffer. The Levee District plans to mitigate for these damaged wetland areas by restoring coastal wetlands within the Parish, ensuring Iberia Parish receives the most benefit from the mitigation process. This is why wetlands would be rebuilt in areas of the Parish that are experiencing accelerated rates of loss and also in locations that are critical to providing a buffer against storms.

The Iberia protection system would provide protection against a 100-year storm by utilizing 19 miles of levee, 5 pumping stations, 17 drainage canals, 6 navigation gates, a 1.5 mile section of elevated highway, and a highway gate. In addition to the protection of communities, commercial interests, and vital transportation and evacuation routes, this system also provides recreational and tourism opportunities, rebuilds wetlands, and improves daily drainage.

The system provides recreational and tourism opportunities, rebuilds wetlands, and improves daily drainage.



Photographs (clockwise) by US Army Corps of Engineers, LA GOHSEP, and Timothy Brown

The Economics of Security

Any protection system requires a significant amount of funding. The West Bank and Vicinity project by CPRA will build 71 miles of levee and associated structures to provide 100-year protection and the estimated cost is over \$4 billion. A project to just elevate 8.5 miles of levee between Cut Off and Pointe-Aux-Chenes is estimated to cost \$8.5 million. A project in St. Mary Parish to raise almost two miles of levee is estimated to cost \$5 million.

Based on real world costs and professional experience, the Iberia Parish protection system is estimated to cost nearly \$524 million. This estimated cost covers the Planning, Engineering and Design, Construction, and Operations, Maintenance, and Monitoring over 50 years.

FIGURE 9

Estimated Costs of the Complete Protection System

Item Description	Total	w/ 25% Contingency
Planning and Program Management	\$ 11,666,278	\$ 14,582,847
Environmental and Permitting	\$ 3,521,555	\$ 4,401,943
NEPA Compliance	\$ 1,392,434	\$ 1,740,543
Wetland Study	\$ 603,388	\$ 754,235
Permitting	\$ 1,525,732	\$ 1,907,165
Land Acquisition and Mitigation	\$ 15,808,890	\$ 19,761,113
Acquisition Study	\$ 1,250,000	\$ 1,562,500
Mitigation Analysis	\$ 450,000	\$ 562,500
Land Acquisition	\$ 3,249,013	\$ 4,061,266
Mitigation	\$ 10,859,877	\$ 13,574,846
Engineering & Design	\$ 30,514,647	\$ 38,143,308
Preliminary Design	\$ 20,189,470	\$ 25,236,838
Final	\$ 10,325,176	\$ 12,906,470
Procurement	imbedded in design costs	
Construction	\$ 376,136,455	\$ 470,170,569
Pre-Construction Activities	imbedded in construction costs	
Construction Completion	\$ 352,154,719	\$ 440,193,399
Construction Management	\$ 23,981,736	\$ 29,977,170
Close Out	\$ 1,880,682	\$ 2,350,853
Operation & Maintenance over 50 years	\$ 85,270,134	\$ 106,587,668
EST. TOTAL	\$ 524,798,641	\$ 655,998,301

Fortunately for Iberia Parish, the residents of the Parish do not have to pay for this protection system alone. Many other sources of funding can be utilized such as offshore oil and gas lease revenues, known as GOMESA funding, RESTORE Act funding allocated to the Parish from the BP oil disaster, and state and federal sources.

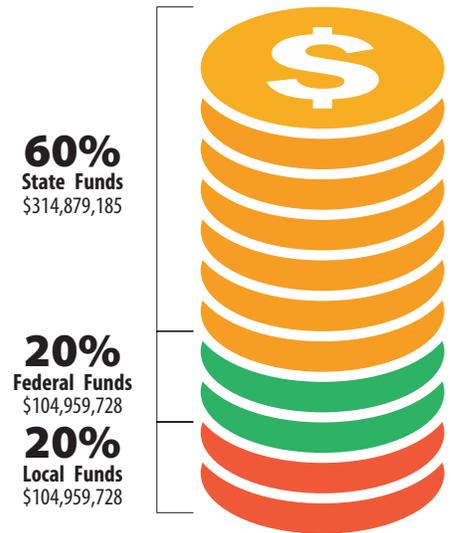
With any State or Federal Government funding source, the most critical component to successfully obtaining these funds is the availability of locally generated matching dollars. Having these dollars available allows for acceleration of initial planning, engineering, and permitting activities that advance individual projects to the “shovel ready” phase. Access to these types of funds also allow for committed matching funds from the Parish when pursuing the State or Federal Government funding sources.

The combination of these two activities gives the ability to leverage local funds and create a project bigger than would have resulted if just one of the sources was used. The table displayed in Figure 10 illustrates a hypothetical scenario when the Levee District generates local funding and leverages that funding against existing sources. The scenario assumes the allocation of GOMESA funds, Parish shares of the RESTORE Act, and a locally generated tax that produces a bondable instrument in early 2018. The result of this allows the entire system to be completed within 15 years, leverage local dollars at a 4:1 return, and create local jobs.

Paying for a Parish-wide protection system is never cheap, but the cost of only going half way or doing nothing is even more expensive. By raising local funding and combining it with State and Federal sources, Iberia Parish can build the protection needed to survive the storm.

FIGURE 10

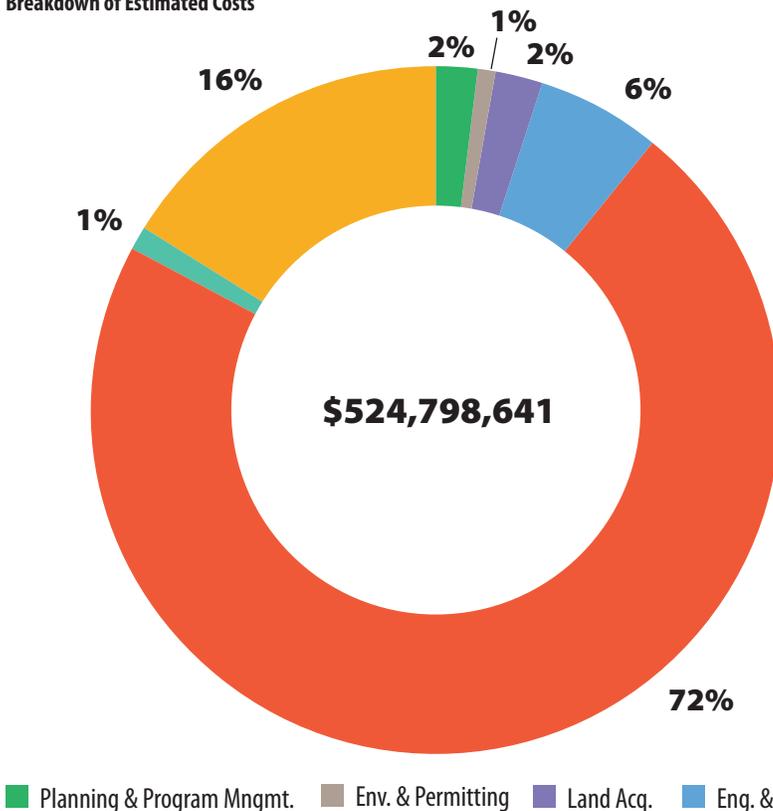
Example of How Leveraging Funding Sources Works



By leveraging local funds, the Parish could receive a 4:1 return on investment.

FIGURE 11

Breakdown of Estimated Costs

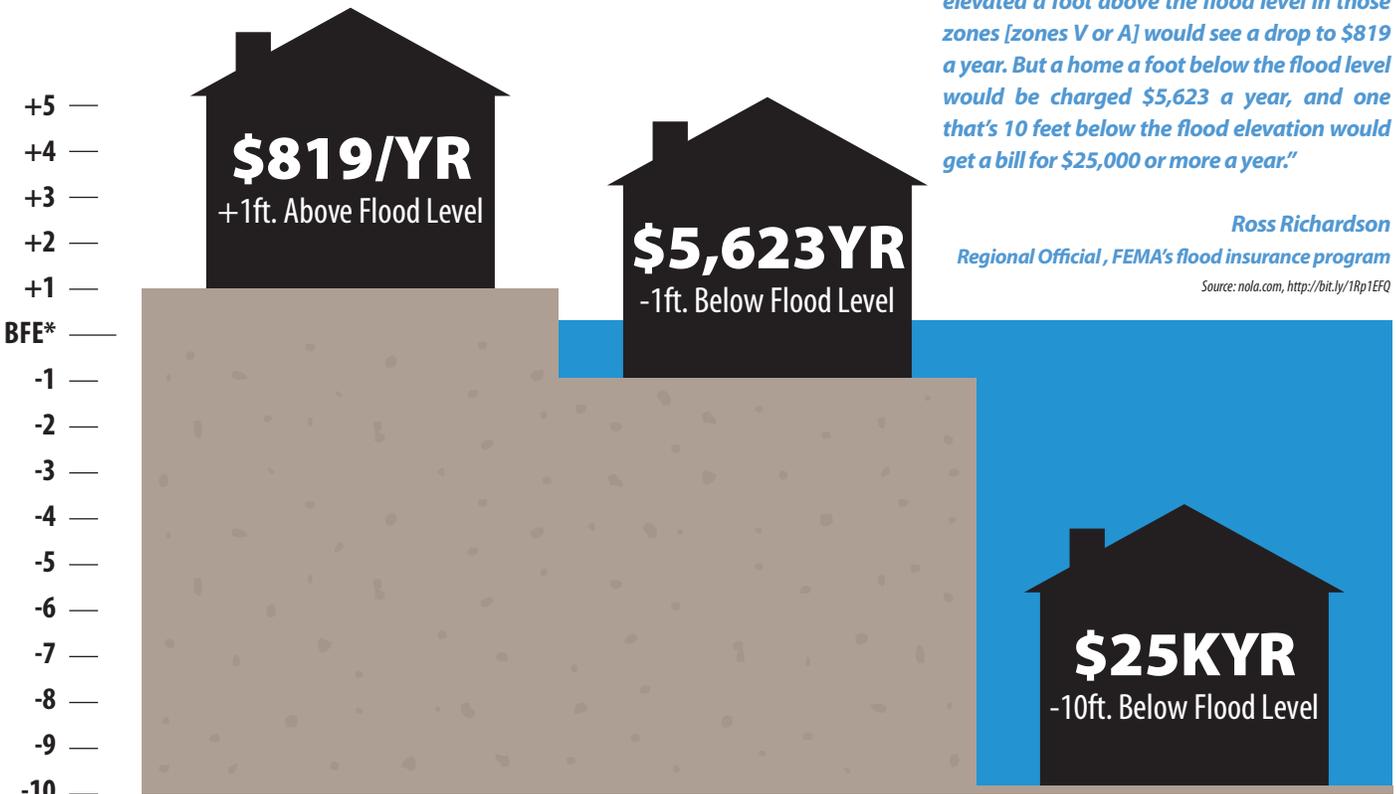


- Planning**
Includes performing the necessary hydrologic drainage and hydraulic analyses to determine the sizing, placement, and necessity of pumping stations and other required water management.
- Engineering & Design**
Includes the necessary future steps of surveying, geotechnical analysis, and further refining the design of the system as conditions dictate once future data becomes available.
- Land Acquisition**
The cost of obtaining land rights was estimated by considering the impact of the footprint of the protection system could have on properties and the cost of conducting a detailed study on properties that could be affected.
- Operation & Maintenance**
Includes things such as mowing, quarterly and annual inspections, debris removal, periodic surveying, and maintenance and repairing of water control structures.

■ Planning & Program Mngmt. ■ Env. & Permitting ■ Land Acq. ■ Eng. & Design ■ Construction ■ Close Out ■ Operation & Maint.

FIGURE 12

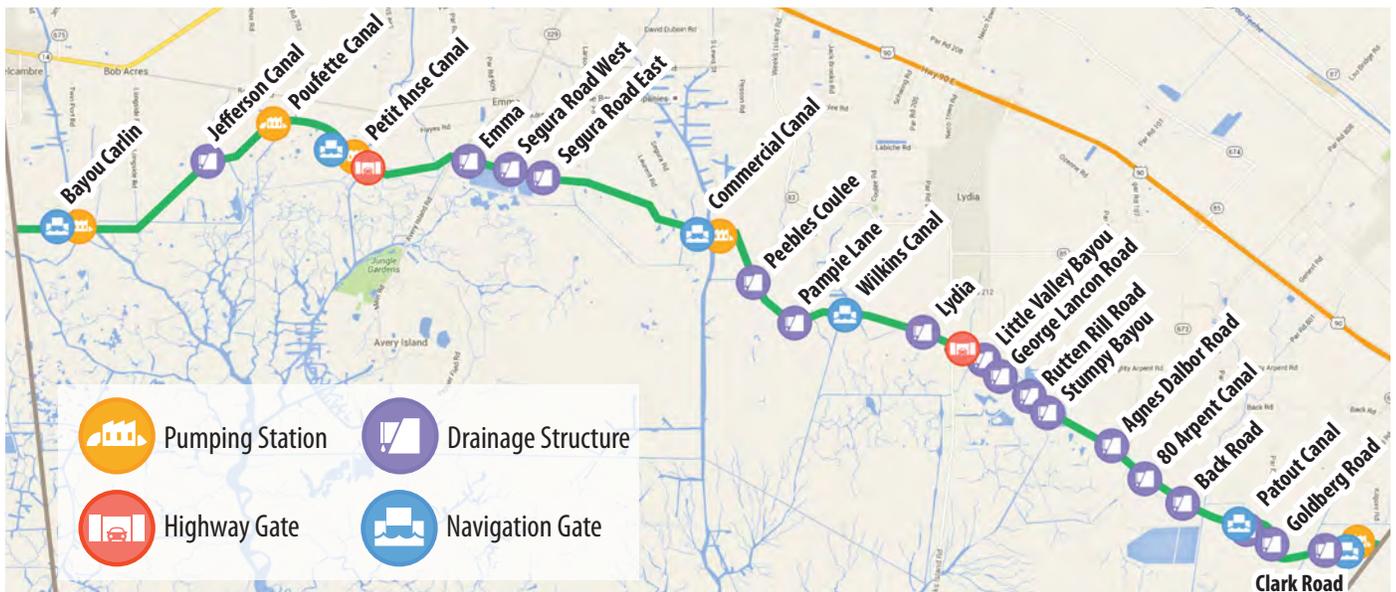
The levee protection system changes the base flood elevation recognized by FEMA and would most likely put it in zone X, a low risk flood zone.



*Base Flood Elevation
Source: National Flood Insurance Program

FIGURE 13

Recommended Levee Alignment and Structures





Saving Time, Saving Money

FIGURE 14

Project Timeline



It will take years to develop and build a Parish-wide protection system, but there is no better time to start than now. Other Parishes, such as Terrebonne, Lafourche, and Orleans have shown that it is possible. The levee system can be broken into smaller sections to make it quicker to build, with each section of levee providing benefits on its own while the rest of the system is constructed, and it can be built in phases over time as funding is secured. This approach to building a levee protection system allows communities to receive protection before construction is even complete.

Before construction can begin, the project must be designed and all related permits must be acquired. A project this large would be broken down into smaller sections so the design and permitting of one section can begin while another is being constructed. This kind of “project stacking” will help to shorten the overall time needed to complete the engineering of the levee and all other features such as navigation gates and pumping stations. It will also ensure that each section built has its own benefits, and these benefits would be fully maximized once the entire system is complete. For example, a portion of levee between two water control structures could serve as its own section. This section of levee alone would protect communities to the north of it while the water control structures would provide the ability to remove floodwaters within communities. Even if the entire system is not built at one time, each section of levee and each water control structure would provide its own benefit.

Stacking the engineering and construction of levee sections and other features also provides the ability to maximize funding. If funding is not secured for one section at one time, it may be in the best interest of the Parish to build a smaller levee and go back later to increase to full protection. This way, more communities can at least benefit from some protection, as opposed to only a few having full protection.

Using conservative estimates, which provides for a lot of adjustment room in the schedule, the Iberia Parish protection system could be fully planned, designed, engineered and completely constructed within 15 years. Construction could begin in the third year after the project is kicked off, and protection benefits would begin upon construction. Half of the project could be complete in less than eight years. Many parishes in Louisiana have worked on protection systems for decades because they must have larger systems, higher levees, and their soils are weaker; with the scope, scale and conditions of Iberia Parish, it’s possible to build a system to protect against damage and improve drainage in just over one decade.



Photograph by Kent Kanouse

Next Steps Moving Forward

There is a solution based upon solid science and local knowledge that's ready for a commitment from the Parish to begin moving forward.

The bounty of Louisiana's natural environment has created a unique and treasured way of life for generations. In order to allow this tradition to continue, Iberia Parish must act to decrease its vulnerability to increased storm damage and flood risk. This draft plan begins the process of seriously deciding exactly how to establish protection across the Parish. It has been built on years of hard work, dedication, and local knowledge, but needs the input of communities, businesses, and other stakeholders as it develops.

Together, the Levee District and communities of Iberia Parish must determine a final alignment and the features for this project as they naturally change over time as they progress and the required additional scientific and engineering data is collected and analyzed. These changes may mean moving a section of levee north or south of where it is planned, using a smaller pump station, or adding a drainage culvert.

Funding must be secured to get this project "shovel ready" and built. Locally generated funding, such as funding from a local tax or the Parish's share of RESTORE Act funds, greatly increases the willingness of state and federal sources to make even larger funding available. Even though locally generated funding may not seem like it would build much of this project, it shows the citizens of Iberia Parish are serious about protection. Combining these funding sources makes it easier and faster to design, engineer, and construct large projects like this one.

Protection systems generate an outstanding return on investments. Sometimes that return comes in the form of not having a home flooded or not having insurance costs skyrocket, but it also comes in the form of knowing communities are safe in their most vulnerable hours and that a unique way of life can continue to thrive.

Right now Iberia Parish is at what will be marked as a pivotal point in its history. In the near future, people could remember this as being the time when residents of Iberia Parish had the foresight to fund and construct a protection system to protect and improve their daily lives, to grow commerce, and give future generations a chance to thrive.

Of course the solution to providing storm protection and fighting floodwaters is not cheap, does not happen overnight, and will take the full support of an entire Parish, but the problem is not going to go away. Fortunately, there is a solution based upon solid science and local knowledge that's ready for a commitment from the Parish to begin moving forward.

Glossary of Terms

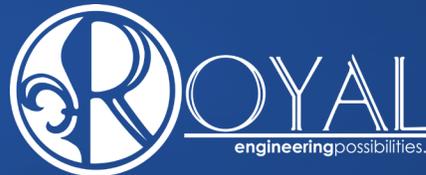
CPRA	Coastal Protection and Restoration Authority; the central authority in Louisiana responsible for coastal restoration, protection, and risk reduction in Louisiana
Iberia Parish Levee, Hurricane, and Conservation District (or “Levee District”)	Entity created by house Bill No. 713 in 2010 to develop flood protection systems for Iberia Parish. The board is represented by three Iberia Parish Council members and one member each from Twin Parish Port Commission, the Iberia Parish Port Commission, the City of Jeanerette, the City of New Iberia, the Town of Delcambre, and the Village of Loreauville
South Central Coastal Louisiana Flood Protection Project	A project by CPRA to develop a comprehensive plan to provide hurricane and storm damage risk reduction, as well as coastal restoration in Vermilion, Iberia, and St. Mary Parishes.
Conceptual Draft Initial Plan	Conceptual plan developed by Levee District in 2012 to provide protection from storms and flood events
Draft Coastal Protection Master Plan (or “Draft Plan”)	The plan developed by Levee District in 2016 to implement hurricane and storm damage risk reduction plan projects.
100-yr flood event (or “100-year storm”)	A rain event or hurricane that has a 1% chance of occurring every year.
500-yr storm	500-yr storm: A rain event or hurricane that has a 0.2% chance of occurring every year.
cfs	cubic feet per second
RESTORE Act	Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act of 2012
GOMESA	Gulf of Mexico Energy Securities Act of 2006
Moderate environmental scenario	A scenario used to determine hurricane impacts based on variables such as moderate levels of sea level rise and wetland loss
Less optimistic scenario	A scenario used to determine hurricane impacts based on variables such as high amounts of sea level rise and wetland loss
Pumping Station	a structure that pumps water from the inside to the outside of a levee system
Navigation Gates	a structure that can be open and closed to allow boat traffic to pass up and down a waterway and is only closed during a storm event
Swing Barge Gates	a barge that can swing open and closed to allow boat traffic to pass up and down a waterway and is only closed during a storm event
Flap Gates	a metal gate that prevents water from flowing into a levee system
Highway Gate	a metal and concrete gate that can be closed to prevent water from flowing into a levee system
NEPA	National Environmental Policy Act is a law that promotes the enhancement of the environment
Bondable instrument	a sum of funding used to get a larger amount of funding at one time, similar to a loan
Local funding	funding provided by local government
Project Stacking	Concept of executing engineering and construction activities simultaneously to realize most timely project delivery
Shovel Ready	a project that is ready to be constructed



Ray Fremin, Jr.
Executive Director
Iberia Parish Levee, Hurricane, and
Conservation District

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Invest. Manage. Protect.

Communities across Louisiana are experiencing increasing damage from hurricanes as sea levels rise, wetlands disappear, and storms intensify; Iberia Parish is no exception. While it was spared a direct hit from Hurricane Rita in 2005, the Parish still experienced 9' of storm surge even with the storm passing over 100 miles to our west. A direct hit would have been even more devastating. The 2005 hurricane season, specifically Hurricanes Cindy, Dennis, Katrina, and Rita, made people across coastal Louisiana fully realize the vulnerability of the communities where they live, work, and play.