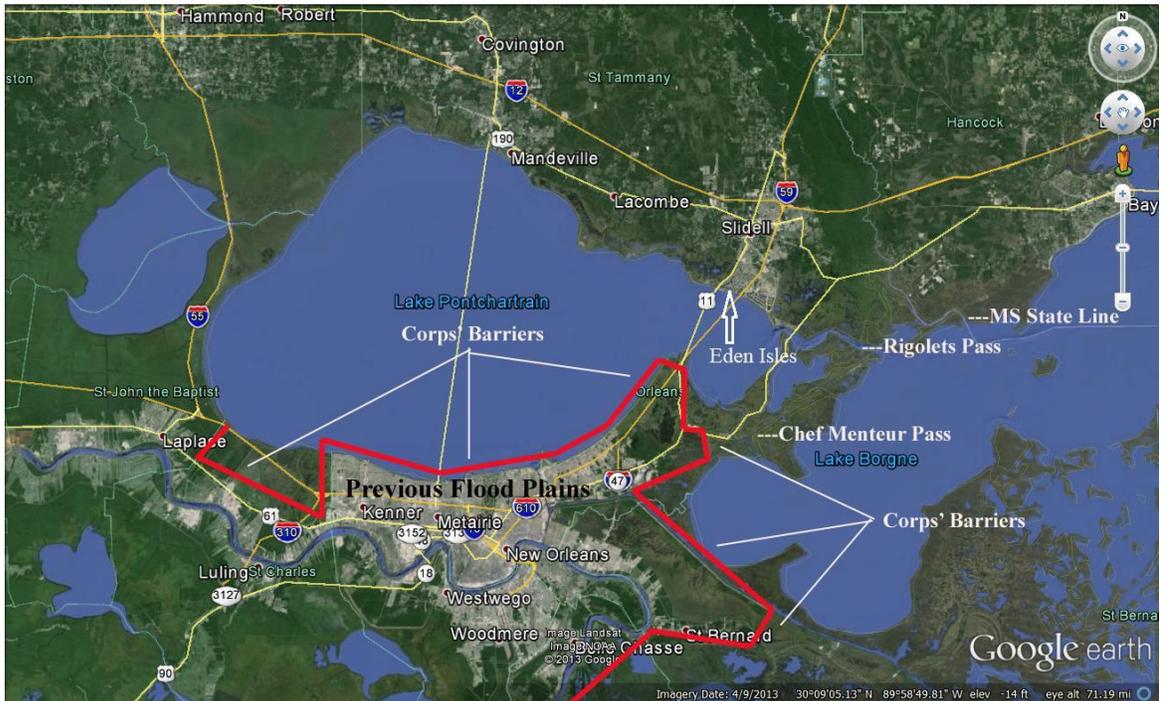


Eden Isles' Pursuit for Storm Surge Protection

Latest update: July 2020



Eden Isles Demographic Data:

- \$1.3 billion in total home value (3,696 homes with a mean value of \$341,859 as of 2017)
- \$607 million in Parish assessed property values
- \$6.3 million in yearly Parish property tax revenue
- \$3.5 million sewer & water facility servicing 3,700 connections & 13,500 people
- \$1.2 million firehouse with an operating budget of over \$20 million
- \$1.6 million hotel
- \$1.7 million marina complex
- 15 acres of park/common grounds and 905.8 acres of “pollution free” waterways
- Tens of millions in public infrastructure, businesses and amenities such as a golf course and restaurants

Eden Isles' 15 Year Storm Surge Protection Timeline

2006,

- After Katrina the need for St. Tammany flood protection was exposed
- The Eden Isles Flood Protection Committee was established to obtain storm surge protection
- The committee made presentations and lobbied local, state, and federal agencies expressing the need for comprehensive Lake Pontchartrain Basin protection

June 2009,

- Corps held meeting at the Harbor Center to an overflow crowd of approximately 1,000 people. The corps wanted to focus on Southeast Louisiana urban flood control (SELA) projects that are in the planning stage, but the attendees shifted focus to a comprehensive Lake basin protection plan i.e. structures at the Chef Pass and Rigolets
- Corp's engineer, Tim Axtman said the Rigolets barrier plan has already been authorized and the barriers could be built within 7 to 10 years. Attendees were frustrated with the Corp's failure to commit to a Northshore protection plan and the Corps' poor responses to questions



July 2009,

- Corps met with the Hancock County Board of Supervisors to discuss the Louisiana Coastal Restoration Plan (LACRP) that studied structures at the Chef Pass and Rigolets. Mississippi's U.S. Rep. Gene Taylor said he will fight against structures at the Chef Pass and Rigolets

January 2010,

- The Corps of engineers ruled out comprehensive Lake Basin protection (structures at the Chef Pass and Rigolets) Corps stated local projects would be more receptive to getting approval as opposed to regional projects
- The Eden Isles Flood Protection Committee changed focus to regional protection when Parish President, Kevin Davis, announced he would build a Slidell ring levee
- The Eden Isles Homeowners Association asked the Parish to model and study the impact the Slidell levee will have on the Eden Isles community
- Kevin Davis, refused to study, model or have any discussions to evaluate storm surge protection to Eden Isles
- New Orleans Times-Picayune News Article: "The \$100 million project entails building new levees and elevating some existing ones to create an interconnected levee system around eastern St. Tammany. The new levees would join existing structures from U.S. 11 in Slidell to U.S. 190 east of the city, providing 100-year flood protection for a large portion of the Slidell area, parish officials say"
- *"Scalise said that one obstacle is that the corps says it is not authorized to extend the levee system beyond Interstate 10 to the east and the Schneider Canal to the south"*

August 2010,

- The St. Tammany Parish Council passed a resolution to use \$1.7 million in state capital outlay funds to raise the existing 7 foot levee, which stretches from U.S. 11 to the Oak Harbor ring levee and from the Oak Harbor ring levee to Interstate 10 to 13 feet (the levee was subsequently raised to 16 feet)
- The resolution states that levee would provide flood protection for 3,000 to 4,000 homes in south Slidell (Eden Isles has over 3,000 home that will be placed in greater danger of flooding due to the new levee construction)
- The only governmental agency authorizing the levee construction was the St. Tammany Parish Counsel
- The levees were built:
 - Without Corps of Engineers approval
 - Without benefit of environmental impact studies
 - Without storm surge modeling
 - Without public meetings to assess the increase risk of flooding to Eden Isles
- Donna M. Urban, SELA Project Manager sent the following email:



The Schneider Canal project has not been approved for construction by the Corps of Engineers; in fact, it has not yet entered upon the detailed study phase.

We are presently working to develop an acceptable project management plan for a 533(d) study for the project. The study would have to demonstrate that the Schneider Canal project is technically sound, environmentally acceptable, and economically viable in order for the project to be approved for construction. As part of the study effort, we would determine what effects the work would have on surrounding areas.

We anticipate that the 533(d) study would take at least three years to complete; however, funding for the study is not currently available. Initiation of the study is dependent on completion of the project management plan and on appropriation by Congress of the necessary funds. The only information we have for the Schneider Canal project is the twenty-year-old reconnaissance report.

*Donna M. Urban
Protection and Restoration Office
Regional Projects Branch
Project Manager, SELA, St. Tammany Parish
504-862-1249
FAX: 504-862-2108*

September 2010,

- The Eden Isles Homeowners Association sent a letter to Parish President, Kevin Davis requesting a copy of the environmental impact study and modeling showing Slidell levee impact on Eden Isles

September 2010,

- St. Tammany Parish Engineering admitted no environmental impact study or modeling was done to evaluate the Slidell levee impact to Eden Isles

January 2011,

- State Sen. A.G. Crowe, proposes an offshore breakwater built from the Interstate 10 Twinspan Bridge to the mouth of Bayou Liberty could protect the communities of Eden Isles, Carr Drive and Palm Lake from flooding during a hurricane



March 2011,

- Eden Isles Flood Protection Committee organized a community meeting with Mr. Steven Ward, Gulf Engineers & Consultants (GEC). GEC was the Engineering firm that the Louisiana Coastal Protection and Restoration Authority (CPRA) hired to prepare a Northshore hurricane flood protection “Master Plan”. Unfortunately, Mr. Ward canceled a few hours before the meeting was scheduled to begin and did not respond to request to reschedule the meet with the Eden Isles Flood Protection Committee

July 2011,

- Eden Isles Flood Protection Committee organized a community meeting with Garret Graves, the Chair of the Coastal Protection and Restoration Authority of Louisiana (CPRA), State Representative Nita Hutter District 104, Ms. Sherri LeBas, Greg Cromer, State Representative, District 90, A. G. Crowe, State Senator, District 1, Richard Artigue, St. Tammany Parish Councilman, District 13, Jerry Binder, St. Tammany Parish Councilman, District 12, and Ms. Sherri LeBas, Secretary, Louisiana Department of Transportation
- Mr. Graves said that comprehensive studies to assess Northshore storm risk factors and cost benefit studies associated with various protection projects are currently underway



November 2011,

- A request was made to the CPRA to model the before and after impacts associated with the construction of the Slidell levee and the Hurricane and Storm Damage Risk Reduction System (HSDRRS). Corps response was: the CPRA is currently analyzing risk reduction projects in the Northshore vicinity, but “would not” look at the surge impacts on projects that have been previously constructed

April 2012,

- Request for Corps to model HSDRRS impact to Northshore of Lake Pontchartrain.
- Corps response was: HSDRRS impact to Eden Isles from a 100-500 year storm probability surge is limited to 2 tenths of a foot (in 2020, corrected Corps' models doubled the impact to Eden Isles)

May 2012,

- After Pat Brister became Parish President, the Eden Isles Flood Protection Committee met with the Parish Chief Administrative Officer (CAO), Mr. Bill Oiler. Mr. Oiler said he was contracting with a consulting firm to conduct an environmental study to determine the impact the Slidell levee will have on Eden Isles and he would look into ways to provide storm surge protection for Eden Isles

June 2012,

- CPRA's Northshore Hurricane/Flood Protection/Restoration Plan, prepared by GEC made the following statements/recommendations:



June 15, 2012

Final Report

- The Lake Pontchartrain/Slidell region appears to be primarily impacted by storm surge and the Slidell area presents one of the greatest vulnerability risks for multi-flood hazards in the entire Northshore region. The level of potential for economic losses increases significantly as you move south towards the lake
- The overall vulnerability of the Slidell area cannot be overstated, this central corridor of the Slidell area presents one of the greatest vulnerability risks for multi-flood hazards in the entire Northshore region
- Marsh restoration will offer little flood protection
- An offshore breakwater from the Interstate 10 Twinspan Bridge to the mouth of Bayou Liberty would protect the Northshore from flooding and slow down coastal erosion

NORTHSHORE HURRICANE/FLOOD PROTECTION/RESTORATION PLAN

June 2012,

- CPRA 2012 Master Plan approved the construction of a Slidell ring levee to an elevation of 16.0 feet (this was done without modeling the levee's impact on surrounding communities)

June 2012,

- Mr. Oiler, Parish, CAO, sent an email to the Eden Isles Flood Protection Committee, stating he had met with his engineering staff about elevating and using Highway 11 and Lakeview Dr. to extend storm surge protection to Eden Isles and said his staff was looking for funding for the feasibility study that will start the formal examination of the project

September 2012,

- Mr. Oiler, Parish CAO, sent an email stating the Parish had identified funding to begin modeling the shoreline area to assess the Slidell levee impact and was negotiating a contract with a firm to do the modeling, he also said the Parish has had conversations with the RPC and DOTD on using Highway 11 to extend flood protection to the communities affected by the Slidell levee

November 2012,

- Corps held a public meeting to present their finding on HSDRRS flood impact from hurricane Isaac. At the meeting, Colonel Fleming, Commander of the Corps' New Orleans District Office, admitted the Corps only modeled 40% of their HSDRRS for impact. In addition, Col. Fleming stated the Corps has a policy of accepting responsibility to mitigate problems their projects cause



December 2012,

- The Southeast Louisiana Flood Protection Authority-East, unveiled their \$1.1 billion, 17-mile levee along the New Orleans East Land Bridge, stretching into St. Tammany Parish, to reduce hurricane storm surge flooding of communities along Lake. The project may increase Bay Saint Louis' flood risk by six inches under worse case conditions

New \$1.1 billion hurricane levee proposed for New Orleans East Land Bridge

By Mark Schiefelstein, NOIA.com | The Times-Picayune
on December 19, 2012 at 5:54 PM, updated December 19, 2012 at 11:13 PM

A \$1.1 billion, 17-mile levee along the New Orleans East Land Bridge, stretching into St. Tammany Parish, to reduce hurricane storm surge flooding of communities along Lake Pontchartrain will be unveiled Thursday during a Thursday meeting of the Southeast Louisiana Flood Protection Authority-East.



January 2013,

- The Eden Isles Homeowners Association Flood Control Committee met with Mr. Oiler, the Parish CAO, and he stated he was still working on providing surge protection for Eden Isles, but the consultant's modeling contract was delayed and is now scheduled for completion in June 2013

February 2013,

- Eden Isles requested the Corps model Lake Pontchartrain surge differences with and without the comprehensive impact of the HSDRRS

April 2013,

- Corps agreed to model Lake Pontchartrain surge differences with and without the comprehensive impact of the HSDRRS (the models were scheduled for release by November 2013, but were not released until 2018, after a Freedom of Information Act (FOIA) request was made



May 2013,

- Senator Thad Cochran, R-Miss., amended water-projects bill to require a project to block surge from entering Lake Pontchartrain must include the consultation and approval of the governors of Mississippi and Louisiana

June 2013,

- Mr. Oiler retired as St. Tammany Parish CAO and replaced by Ms. Campo
- The Eden Isles Flood Protection Committee scheduled a meeting with Ms. Campo concerning all the unresolved issues of extending surge protection to Eden Isles in order to mitigate the added risk the Slidell levee will cause

July 2013,

- State DOTD plans to raise Highway 11 to close the gap in the Slidell ring levee that separates Slidell from Eden Isles

August 2013,

- The Eden Isles Flood Protection Committee met with Ms. Campo, the new Parish CEO, and was informed that Mr. Oiler did not leave any record of our previous meetings or what he had been working on concerning mitigating the damage caused by the Slidell levee, and the Parish would have to start from scratch in the mitigation process
- Ms. Campo said storm surge modeling was “well on its way” and she would evaluate mitigation projects to extend flood protection to our community
- Ms. Campo agreed to meet with us in October, if not sooner, to provide a status report on the modeling and mitigation plans

November 2013,

- The Eden Isles Flood Protection Committee met with Ms. Campo, the new Parish CEO, Ms. Campo said the modeling would be delayed until July 2014, and extending surge protection to our community would cost too much and therefore the parish has no viable plan to mitigate the Slidell levee damage

November 2013,

- The Eden Isles Flood Protection Committee emailed Ms. Campo requesting the opportunity to work with the Parish Engineering office to develop a cost efficient surge protection plan for Eden Isles

December 2013,

- Ms. Campo responded to Eden Isles’ November request to work with the Parish to develop a cost efficient surge protection plan for Eden Isles with the following: I am looking for the proper vehicle for your participation. I am also continuing to work with my staff to prepare an action plan to address your concerns. I will set up a follow up meeting with you immediately after the holidays. (Ms. Campo never followed up or responded to additional request to work together in developing a cost efficient surge protection plan for Eden Isles)

January 2014,

- The Eden Isles Flood Protection Committee expanded its base with representation from all five subdivisions within Eden Isles and transitioned into the East St. Tammany Storm Protection Committee (ESTSPC)
- The ESTSPC worked with Senator Crowe and Parish President Brister to establish the St. Tammany Levee Board and added the requirement that at least four of the nine board members be residents of unincorporated areas of the district

2014,

- St. Tammany Parish submitted its CPRA 2017 Master Plan requesting \$362,694,957 for marsh protection projects and \$0 to study storm surge protection for Eden Isles or any other unincorporated community within St. Tammany Parish
- The Parish’s submittal stated: Extending south Slidell levee protection was “not practical or feasible”; and the “only” way to protect structures south of the Slidell levee, is to elevate them

October 2014,

- The ESTSPC developed its own Storm urge Protection Plan for Eden Isles to demonstrate both feasibility and cost benefit and submitted the plan to the CPRA, and requested a Feasibility Study as part of their 2017 Master Plan
- The CPRA refused to consider the ESTSPC’s request for a Feasibility Study, because the ESTSPC was not a governmental agency and the St. Tammany Parish Government had already concluded that protecting Eden Isles was not practical or feasible



December 2014,

- The St. Tammany Levee, Drainage and Conservation District Board was establish and held its first meeting
- The ESTSPC presented their Eden Isles storm Surge Protection Plan to the new St. Tammany Levee Board and asked the Levee Board to resubmit the Feasibility Study request to the CPRA



February 2015,

- The Lake Pontchartrain Basin Foundation (LPBF) began a program to study Lake Basin protection, which bringing much needed exposure to the issue

July 2015,

- Requested the DOTD verify St. Tammany Parish complied with all Federal and State environmental and permitting requirements before raising Highway 11 to extend the Slidell Levee across Highway 11

September 2015,

- DOTD Response to elevating Highway 11: The levee will be treated as an existing condition, and the roadway will be raised to match the adjacent levee height
- The inclusion of this work in our construction project is not an endorsement of the levee, but rather an accommodation to a local entity (The issue is: the levee was not already in place across highway 11)

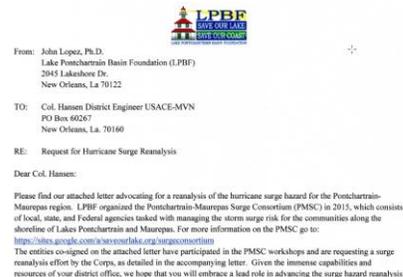


November 2015,

- The St. Tammany Parish Levee Board made a formal request for the CPRA to add into their 2017 Master Plan, a “Feasibility Study” to extend Slidell levee protection to Eden Isles

January 2016,

- Lake Pontchartrain Basin Foundation (LPBF), request Corps to updated analysis of surge and wave conditions for the HSDRRS to provide a broader understanding of storm surge dynamics in the lakes, and impact to communities around the lakes



February 2016,

- In response to St. Tammany Levee Board’s request for a Project Feasibility Study for Eden Isles, the CPRA instructed the parish and levee district to work together to prepare a scope of work for a reconnaissance study to identify optimum Northshore flood protection measures needed
- The study was funded with the \$2 million initially approved for the Slidell ring levee
- The Parish and levee district will determine the scope of the implementation and next steps based on analysis, recommendations and benefit cost analysis set forth in the reconnaissance study (the study was a direct result of Eden Isles’ request for the study and it was understood that the study would specifically address levee protection to Eden Isles)

May 2016,

- During the May Levee Board meeting, the Parish Government said it would conduct a parish wide “Master Plan” assessment, but it would not specifically address extending Slidell levee protection to Eden Isles

May 2016,

- The LPBF releases its report on Lake Pontchartrain storm surge dynamics
- The report focused on surge rotation within the lake basin and its impact on outflow impact and explains why highest surge in the Slidell area can occur after the storm has moved inland
- The LPBF recommends a surge rotation model for the lake basin, which shows areas that are most at risk based on the location of the eye of the storm and the surge rotation model



Figure 11: General pattern of maximum surge in the PMSOC region during an east passage of a hurricane.

June 2016,

- President of the Moonraker Civic Association, held a meeting with Mr. Bradberry, the Governor’s Executive Assistant for Coastal Activities to notify Mr. Bradberry that the Parish was not complying with the CPRA direction to address Eden Isles surge protection
- Mr. Bradberry, re-affirmed that the CPRA’s direction was to study how to extend south Slidell levee protection to Eden Isles



June 15, 2016,

- At the June Levee Board meeting, Parish Government once again stated the CPRA direction was to conduct a parish wide Master Plan that will not specifically address extending south Slidell protection to Eden Isles (this was a contradiction of Mr. Bradberry's direction to evaluate extending south Slidell levee protection to Eden Isles)

June 2016,

- At the US Highway 11 Widening (Spartan Drive to Lake Pontchartrain) Public Hearing the St. Tammany Parish CAO, Ms. Campo, said she would meet with Eden Isles to discuss storm surge issues and would set up a meeting the following week (Ms. Campo never followed up on her commitment to meet and discuss storm surge issues with Eden Isles)

August 2016,

- Senator Hewitt convened a meeting between the Parish, levee Board representatives and the ESTSPC to resolved issues associated with the CPRA's "St. Tammany Parish Coastal Master Plan and Reconnaissance Study" scope of work. It was agreed that a protection plan for Eden Isles would be specifically addressed in the Parish Coastal Master Plan and Reconnaissance Study

August 2017

- Congressman Scalise's office held a meeting with the Corps of Engineers, the CPRA, Parish representatives, St. Tammany Levee Board, the East St. Tammany Storm Protection Committee, and the Presidents of the HOAs impacted by the Slidell ring levee. This was the first time all the players have come together to discuss Eden Isles' surge protection needs
- The meeting highlighted the critical need for storm surge protection and demonstrated the community's involvement in working towards a solution to mitigate the damage caused by the South Slidell levee (the Corps still had not released their HSDRRS impact study)



March 2018,

- A Freedom of Information Act (FOIA) request was made to release the Corps' Evaluation of Storm Surge with and without the HSDRRS
- This document was originally scheduled for release in November 2013

June 2018,

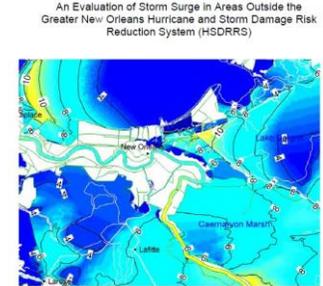
- The Corps of Engineers denied the FOIA request to release their HSDRRS impact report, claiming deliberative process privilege

July 2018,

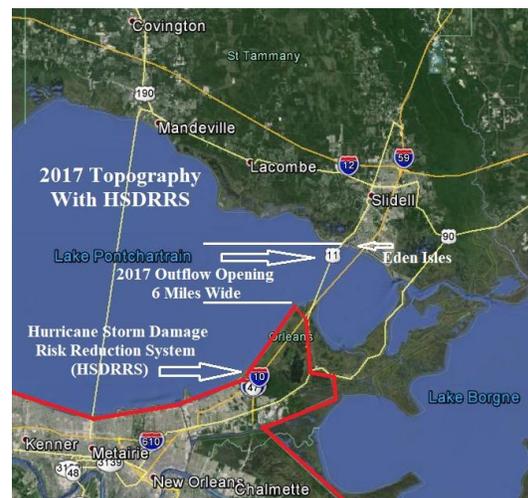
- A Freedom of Information Act FOIA appeal request was made to release the Corps' Evaluation of Storm Surge with and without the HSDRRS

August 2018,

- In response to the FOIA appeal, the Corps of Engineers released their evaluation of storm surge outside of the HSDRRS. The report containing the topographic data and models used in reaching their conclusion that the HSDRRS increased Eden Isles storm surge by 0.19 feet in a hurricane Katrina type storm
- Topographic errors in the Corps' 1965 baseline model were found and documents supporting the errors were submitted to the Corps for evaluation
- The Corps' 1965 model (pre-HSDRRS), showed an incorrect, nonexistent, 14 foot high levee that restricted Lake Pontchartrain's outflow opening from a 12 miles to a 6 miles



New Orleans District (M/N) Authors:
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Julie Z. LeBlanc, P.E., M/N H&H Branch
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January 2020,

- The U. S. Army Corps of Engineers held a public “kick-off” meeting for their new St. Tammany Flood Protection Feasibility Study
- The corps explained their “3 by 3 by 3” study format, and the process of selecting a project for development
- A project will be tentatively selected by January 2021
- The Final Feasibility Report by June 2022
- The Corps' Chief's Project Milestone Report by 2023

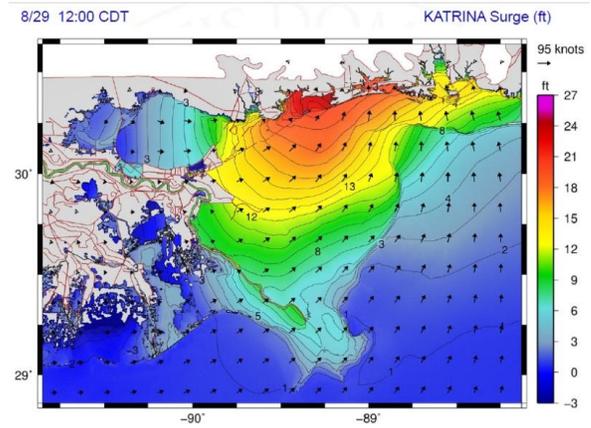


January 2020,

- The Corps of Engineers concurred that their HSDRRS impact baseline 1965 model, submitted in 2018, contained errors and Appendix D to the HSDRRS impact study was issued to correct the 1965 baseline model
- The revised 1965 model, without the nonexistent 14 foot high levee, showed the HSDRRS increased surge impact to Eden Isles from 0.19 feet to 0.47 feet
- However, a new error incorrectly replaced the nonexistent 14 foot high levee, with a 9 foot high railroad embankment that Corps' documents said could not function as a levee. The railroad embankment also incorrectly restricted lake Pontchartrain's outflow opening from 12 miles to 6 miles

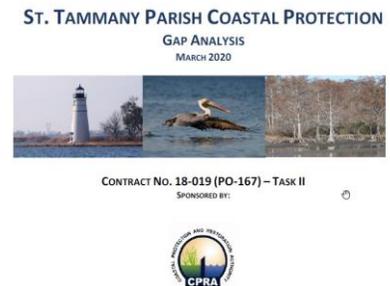
February 2020,

- The Corps of Engineers once again concurred that their 1965 baseline model was incorrect and they removed the railroad embankment structure, which increased Lake Pontchartrain’s 1965 outflow opening from 6 miles to 12 miles and Appendix D was re-issued
- Appendix D’s revised models comparing the 12 mile wide 1965 lake opening with the smaller 6 mile wide 2017 opening actually reduced the HSDRRS’ impact to Eden Isles from 0.47 feet to 0.40 feet
- The Corps’ models did not evaluate the increased outflow surge velocity resulting from reducing the outflow opening from 12 miles to 6 miles
- The Corps was asked to explain how a narrower Lake Pontchartrain outflow opening would have less outflow storm surge impact to Eden Isles than a wider Lake Pontchartrain outflow opening
- The 1965 baseline model still incorrectly showed the industrial canal outflow opening close with a non-existing gate



March 2020,

- The St. Tammany Parish Coastal Protection Gap Analysis is officially released. The Gap Analysis Report identifies and describes gaps in St. Tammany Parish’s flood protection along with recommendations for further study/actions to address gap areas
- An Eden Isles storm surge protection project was included in the study’s structural protection projects alternatives



April 2020,

- The U. S. Army Corps of Engineers releases 11 alternative St. Tammany Parish flood protection projects that will undergo screening for final selection and development. The Eden Isles protection plan recommended by the St. Tammany Parish Coastal Protection Gap Analysis was selected as alternative 6

