History of Storm Surge Protection for Lake Pontchartrain

1962

The Corps Of Engineers Receives Approval Of A Lake Pontchartrain "Barrier Plan" From The U.S. Wildlife Service:
The United States Department of The Interior Fish and Wildlife Service Bureau of Sport Fisheries and Wildlife issued their findings that the Corps of Engineers proposed hurricane "Barrier Plan" for Lake Pontchartrain has no adverse affects to the salinity levels in Lake Pontchartrain.

1964

The Corps Of Engineers Chooses The "Barrier Plan" To Protect All The Parishes That Surround Lake Pontchartrain:
After studying both a "Barrier Plan" and a "High-Level Plan" the Corps selected the "Barrier Plan" as the best, most comprehensive and cost effective method of providing storm surge protection for the greater New Orleans area. The "Barrier Plan" was selected because it provided comprehensive protection for all the parishes surrounding Lake Pontchartrain (St. Tammany, Tangipahoa, Livingston, St. John, St. Charles, Orleans and Jefferson) also the Corp determined it was less expensive and could be implemented sooner than the "High-Level Plan", which proposed building 16' to 18.5' levees along the lake front without the barriers.

The "Barrier Plan" included not only flood control gates located at the Rigolets and Chef Menteur Pass areas, but construction of a series of 9.3 feet to 13.5 foot levees along the Orleans and Jefferson lakefront, concrete floodwalls along the Inner Harbor Navigation Canal. The Rigolets and Chef Menteur Pass structures were intended to prevent storm surges from entering Lake Pontchartrain and overflowing the levees along the lakefront and would only be closed only if a major storm surge event occurred. The cost estimate for the "Barrier Plan" was $85 million (in 1961 dollars) and the estimated completion date was 1978.

1965

Congress Authorized Construction And Funding Of The Lake Pontchartrain And Vicinity, Louisiana Hurricane Protection Project (The Barrier Plan):
The Flood Control Act of 1965 provided hurricane protection to areas around the lake. It was a joint effort with the federal government paying 70% and the state and local interest paying 30%. The Corps was responsible for the design and construction of the "Barrier Plan", and local interest was responsible for the maintenance of the flood controls.

Construction began, first by upgrading the levees along the New Orleans lake front and main drainage canals, but the Corps faced project delays and cost overruns due to design changes caused by technical issues, environmental concerns, legal challenges, and local opposition to various aspects of the project.

1977

Corps Faced Opposition To The "Barrier Plan":
St. Tammany Parish State Representative Edward Scoggins strongly opposed the "Barrier Plan".

A lawsuit was filed by Save Our Wetlands, Inc., and the St. Tammany Parish Police Jury.

In 1977, a court enjoined the Corps from constructing the barrier complexes until a revised environmental impact statement could be prepared and accepted.

1978

Governor Edwards meets with State Representative Scoggins & Orleans levee Board President Guy LeMieux and agreed to drop the "Barrier Plan".

1982

As a result of design changes caused by technical issues, environmental concerns, legal challenges and local opposition the estimated cost of the Lake Pontchartrain protection plan went from $85 million to $757 million.

1985

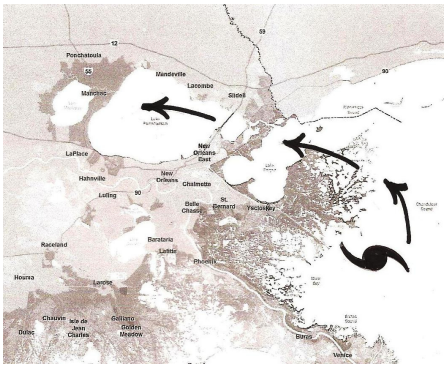
Corps Of Engineers Abandons Its Plan To Build A Storm Surge Barrier Along The Eastern Edge Of Lake Pontchartrain:
The Corps decided to abandon its "Barrier Plan" and adopted the less controversial "High-Level Plan" that was originally rejected in 1964. The "High-Level Plan" was designed to only provide protection to Orleans, Jefferson and St. Bernard parishes; St. Tammany, Tangipahoa, Livingston, and St. John Parishes would be left without protection.

The Corps' decision to abandon the "Barrier Plan" was not based on engineering data, storm surge data, technical considerations, financial constraints or any substantiated environmental issues, but simply because the Corps chose to take the path of least resistance.

2005

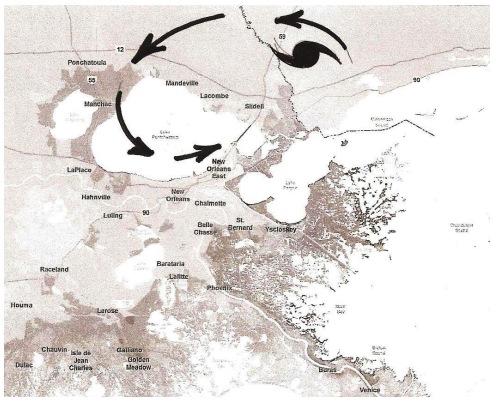
When Hurricane Katrina Struck:
The Corps' "High-Level Plan" had constructed only 125 miles of levees, with an estimated completion cost of $738 million.

Storm surge slowly entered Lake Pontchartrain and was pushed to the west towards Manchack and the lake Maurepas marsh.



Once the storm passed the wind direction rapidly changed and pushed the built up "lake tilt" into an east bound 16 foot tidal surge as it tried to escape through the narrow five mile opening under the I-10 Twin Span resulting in an estimated $110 billion in damages.

The Eden Isles residents that remained during the storm said their homes did not flood until after the hurricane had passed and the wind direction had changed pushing the water into their homes as it tried to escape under the I-10 Twin Spans.



2007

Retired Head Of Corps Of Engineers Submits Letter To The Times-Picayune Editor Accepting Blame For Katrina Engineering Failures; Friday June 22, 2007:

Re: "Save Our Wetlands called a positive force," Your Opinions, June 19.

In 1974-'75, I was the colonel commanding the U.S. Army Corps of Engineers New Orleans District. Several groups, including Save Our Wetlands, fought tooth and nail to stop the corps designing twin barriers at the east end of lake Pontchartrain. The gates would have remained open except when a large storm approached. Those structures were the supplement what we knew would be problematic dikes and levees nearer the city.

The corps felt strongly that those barriers were essential to blunt a hurricane's attack, especially from the east. Yet the opponents took the corps to court to stop work on them.

After I left New Orleans, a federal judge was somehow persuaded to direct that work cease on the barriers' designs. The mantra then: "Just build the levees higher." We knew that was the wrong answer.

Several years later, the corps had not completely given up on pushing again for those essential barriers. By 1985, I was head of the corps (as chief of engineers in Washington). My staff brought me a proposal to stop fighting for the barriers; the opponents in Louisiana were still as strong as when I had left a decade earlier.

I was discouraged and decided to stop fighting for the barriers any longer. I had concluded: "the judge and Louisiana have spoken – the corps simply had not convinced the system."

In retrospect, that was the biggest mistake I made during my 35 years as an Army officer.

The recently released review of the Katrina engineering issues by the American Society of Civil Engineers appears to me to reconfirm the need for those barriers, or something like them.

As too many continue to rush around to find someone to blame for the Katrina engineering failures, they can blame me. I gave up too easily.

Now I hope that the studies reconsider barriers at the east end of the lake, much like the storm surge protection used by the Dutch, the Brits and other nations.

Elvin R. "Vald" Heiberg III
Lieutenant General
U.S. Army (Retired)
Arlington, Va.

2009

Corp Of Engineers Holds Meeting On Storm Surge Protection For St. Tammany:
After years of neglect and inactivity from elected officials two Eden Isles residents decided to take matters into their own hands and requested a Corps' public meeting to publicize the need for a comprehensive barrier protection system.

The turnout for the Corps' meeting on June 16th was overwhelming, a standing room only crowd of over 1,000 people showed up at the Harbor Center. The Corps gave a presentation and admitted that they have no plans to protect the 1.5 million people who live around the north shore of Lake Pontchartrain from storm surge.

Attendees left the meeting frustrated and angry that they were not allowed to speak at the meeting and voice their concerns over the Corps' decision to disregard the storm surge protection needs of the north shore.

St Tammany Parish Counsel Supports Storm Surge Structures For The Lake:
After the outrage expressed at the Corps' meeting the St Tammany Parish Council held their own storm surge meeting on July 2nd and passed a resolution in support of storm surge structures for the east end of Lake Pontchartrain.

2010

Three Eden Isles Residents Continued To Fight For Storm Surge Protection By Attending Meetings Held Throughout The New Orleans Area:
This small group of Eden isles residents began attending meetings and collecting studies and reports concerning storm surge projects and impacts. In particular they requested Corps' studies and models that show how the south shore projects have adversely impacted the north shore.

At one meeting it was discovered that the Coastal Protection and Restoration Authority of Louisiana (CPRA) had hired a consulting firm to develop a comprehensive Louisiana Coastal Protection Master Plan.

The small group of Eden Isles residents began a letter writing campaign requesting the Master Plan include storm surge structures to protect the entire Lake Pontchartrain basin.

2011

Eden Isles' Quest For Storm Surge Protection Begins To Show Some Progress:
With an election drawing near and politicians vying for our vote; the Eden Isles Eden Isles Homeowners Association special projects committee held a meeting that was attended by: Mr. Garret Graves, the Chair of the Coastal Protection and Restoration Authority of Louisiana (CPRA), Ms. Sherri LeBas, Secretary, Louisiana Department of Transportation, Nita Hutter, State Representative, District 104, 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, along with representatives from other organizations.

A presentation was given explaining the Eden Isles concern that storm projects along the south shore have increased storm risk on the north shore. It was requested that the state file a mitigation lawsuit against the Corps of Engineers showing how their projects have increased the storm surge risk and environmental harm to St. Tammany and other parishes. By using this mitigation process, control structures at the Rigolets and Chef Passes could be "Fast Tracked" - bypassing much of the "Red Tape" similar to what was done to close the MRGO.

Mr. Graves conceded that filing a mitigation lawsuit against the Corps may result in forcing the Corps to redirect their efforts to build control structures at the Rigolets and Chef Passes, but he believed filing a lawsuit against the Corps is not a direction that the state should pursue at this time.

Mr. Graves did not disagree that control structures at the Rigolets and Chef Passes would provide the greatest protection and that the environmental concerns raised in the 1960's could be addressed using modern design and construction techniques; however, he felt building storm structures would take too long and funding the project would be a problem. His position on north shore protection was: the state should concentrate their time, energy and resources on smaller projects like dredging drainage waterways, constructing pumping stations, rebuild costal wetlands and constructing levee systems to protect smaller self contained areas.

At the conclusion of the meeting Mr. Graves would not commit to including surge structures in the state's Master Plan, but they would evaluate it. Both, Representative Hutter and Senator Crowe pledged their support for Lake Pontchartrain storm structures.

2012

The Coastal Protection And Restoration Authority Of Louisiana (CPRA) Submitted Their Preliminary Master Plan For Comments:
The only reference within the 170 page document concerning Lake Pontchartrain surge structures was two paragraphs that acknowledged the structures are "one of the most cost effective risk reduction projects analyzed". It then stated the structures were removed from the list of projects because it "increases storm surge flood levels along the Mississippi coast".

While pleased that the preliminary Master Plan documented surge structures were cost effective and would reduce flood risk it was disappointing that despite the overwhelming evidence of the value of the structures they were omitted from the Master Plan.

Once Again The Small Group Of Eden Isles Residents Petitioned The CPRA To Reconsider And Include Storm Surge Structures In Their Master Plan Based Upon The Following Rational:

1. In 1964, the U.S. Army Corps of Engineers concluded Storm Surge Control structures to reduce storm surge from entering the lake was the best, most comprehensive and cost effective method of providing storm surge protection for the greater New Orleans area.

2. Storm Surge Control structures at the Rigolets and Chef Menteur Pass would provide protection for all the parishes that surround Lake Pontchartrain. (Orleans, Jefferson, St. Tammany, Tangipahoa, Livingston, St. John, St. Charles).

3. Congress approved and authorized funding for Storm Surge Control structures at the Rigolets and Chef Menteur Pass under the flood Control Act of 1965; that approval has never been rescinded although the funding was redirected to provide levee protection only to the south shore.

4. The project was studied and designed 40 years ago; the original plans can be updated to current engineering standards and fast tracked through the system, similar to what was done for the Corps' MRGO project.

5. New design techniques will eliminate environmental concerns while providing cost effective solutions to keeping storm surge from entering the lake.

6. In 2007, the former colonel commanding the U.S. Corps of Engineers, New Orleans district, in a Times-Picayune editorial, said the biggest mistake he made during his 35 years as an Army officer was not pursuing control structures at the Rigolets and Chef Pass.

7. The Army Corps' 2008 LACPR Hydraulics and Hydrology Study concluded that a Lake Pontchartrain weir surge structure will only increase Bay Saint Louis' flood risk by a maximum average of six inches while protecting the entire Lake Pontchartrain basin. That assessment was made before the Bay Saint Louis flood wall was constructed.

8. Corps' projects along the south shore of Lake Pontchartrain have increased storm surge risk to the north shore and the Corps should recognize their legal and moral responsibility to mitigate the damage their projects have caused.

Louisiana Senator A. G. Crowe Extended His Support For The Surge Structures; Senator Crowe Wrote And Met With Governor Jindal And Mr. Graves Requesting The Master Plan Include Surge Structures.

Great News! The CPRA Agrees To Include Storm Surge Structures In The State's Master Plan:

Coastal Master Plan to Include Lake Pontchartrain Barrier Project

STATE SENATOR A.G. CROWE COMMENDS CPRA ON REFINING THE STATE'S 2012 COASTAL MASTER PLAN

PLAN NOW INCLUDES LAKE PONTCHARTRAIN BARRIER PROJECT

District 1 State Senator A.G. Crowe (R-Slidell), State Representatives Gregory Cromer (R-Slidell) and J. Kevin Pearson (R-Slidell), and St. Tammany Parish President Pat Brister commend and thank Chairman Garret Graves and the Coastal Protection and Restoration Authority for taking a second look at the importance of the Lake Pontchartrain Barrier project and revising the 2012 Coastal Master Plan.

Sen. Crowe says that while the original draft of the Master Plan only scratched the surface of the benefits of the project, it now includes the dedication of funds to further study the project and to determine the most effective way to carry it out while mitigating any environmental or storm surge issues.

"Once completed, the Lake Pontchartrain Barrier is a project that is sure to protect the citizens of the entire New Orleans area and its surrounding parishes. With the encouragement of determined local officials, community leaders and citizens, CPRA has brought the project one step closer to reality and one step closer to reducing storm surge risk for thousands of homes and businesses," said Sen. Crowe. "We commend CPRA Chairman Garrett Graves and the entire authority's efforts in making this vital revision to the Master Plan."

CPRA will take a dual approach at protecting the North Shore by further evaluating the Lake Pontchartrain Barrier project in concert with the State of Mississippi and funding other structural and nonstructural projects, such as the Slidell Ring Levee.

Supporting Documentation:
Supporting documentation may be found at:
eihoa.org
-Publications
-Flood issues in our region

Times Picayune News Paper Article On March 20, 2012 Made The Following Statements:

For Slidell and other north shore communities angry they're not being provided the same level of protection as those on the south shore, the state has promised to spend $75 million to design a barrier and surge gate structure at the Chef Menteur and Rigolets passes during the first 20 years of the 50-year, $50 billion master plan. The plan also calls for an $81 million, 16-foot high ring levee at Slidell.

~

"Just to be clear on that, the barrier ranks as the highest priority project when you use our planning tools," Graves said. "But it has raised environmental concerns in the past and modeling data indicates it has effects on surge in Mississippi." The money now included in the plan would be aimed at finding ways to design the barrier and gates to avoid impact to Mississippi. The proposed plan does not include construction money for the barrier.