

*The Causeway Bridge - the world's longest bridge over a body of water. Located over Lake Pontchartrain, Louisiana. Find bridge & traffic information.*

The northbound span is actually slightly longer than the companion southbound span. Incorporated into the design are three main ship passes, where the bridges elevate to a height of 25 feet. Larger vessels can pass below two marine spans, each with a 50 foot clearance. A drawbridge accommodates the largest of ships at a location eight miles south of the north shore. The highest point of the bridge overall is no more than 60 feet. Causeway Boulevard connects the north end of the bridge system as an at-grade route with U. A freeway Tammany Parkway extends north from there to Interstate 12 near Covington. The south end of the causeway transitions into a heavily traveled commercial arterial Causeway Boulevard through to Interstate 10 in Metairie. These include two year construction of six, foot long shoulders, lining the bridges between each of the seven crossovers, and a year long project to make guard rail improvements on the southbound span. The proposal at the time called for a new bridge to be built to the east of the current northbound span with two travel lanes and a full right-hand shoulder. Coinciding with the plan was the addition of a new shoulder for the current southbound bridge and subsequent work to convert the span to a one-lane reversible roadway with a full shoulder. During that time, proposals arose to address the need for improved access from the city of New Orleans to the North Shore of Lake Pontchartrain. Of these, one of the more popular at the time involved a north-south causeway across the middle of the lake. The relatively low depth of the lake, an average of feet, led to an early concept for dredging a series of islands from north to south, for an eventual roadway between the two coast lines. Envisioners planned to connect these new islands with a series of land bodies, creating not only an overall crossing, but developable land. Before the project ever broke ground, several plots of land were actually sold. It was at this time, that another proposal arose for a Lake Pontchartrain crossing. This concept involved the construction of a two-lane concrete bridge to the east. Then gubernatorial candidate Huey P. His bid for office in was in vein, and the eastern crossing, named the Watson Williams Bridge U. By Huey P. Long ran successfully for the governorship of Louisiana. One of his first desires was to see a free bridge across the Pontchartrain, following the completion of the toll free Rigolets Bridge U. Success of the project to build the first pre-stressed bridge, the Walnut Street Bridge in Philadelphia, Pennsylvania, proved that the technique could work for much larger projects such as the Lake Pontchartrain Causeway. The formation of the Louisiana Bridge Company in represents the formal beginning of the Lake Pontchartrain Causeway time line. Work began in on the first span, with the acquisition of 40 acres of land between Mandeville and Lewisburg for the operations that would create the pre cast bridge sections. The prefabricated bridge pieces created at the job site were easily transported by barge for assembly over water. The on-site location of these facilities allowed for quick construction of the bridges. The first pilings were sunk on May 23, Pre-stressing the concrete piles allowed for hollow piles as opposed to solid piles. That meant that instead of having a maximum width of 24 inches for a support, engineers could now create 54 inch diameter piles. A revolutionary construction method allowed for the spinning of the new concrete supports at higher speeds. This compacted the concrete and removed excess water, allowing for stronger cured concrete. These actions produced piles with a load support of 10, pounds per inch. Each pile was no longer than 16 feet in length. Holes bored within the concrete housed pre-stressed, high strength steel wire. Assembling the piles involved stacking each pile on top of one another until the desired height of 88 feet was reached. This length allowed for each pile to submerge 70 feet within the sand strata below. Above the piles, concrete caps were mounted via steel posts. These supported 54 foot long concrete slabs that constitute the actual bridge deck and roadway surface. The original design featured two separate drawbridges, each eight miles from shore. It took engineers and workers to complete the job. The August 30, opening date culminated with the assembly of 2, piles, each supporting a 33 foot wide, 56 foot section of roadway. While the connection was welcomed by all, the convenience of the route and mileage it saved for travelers eventually overwhelmed the highway. Within a few years the bridge succumbed to 3, vehicles per day vpd. Work on span paralleling the bridge began during

September of Breakthroughs in construction methods were evident with the design of the new bridge. Instead of two piles per support, designers increased the number of piles to three. The added strength increased the load support, so instead of 54 foot slabs used in the first bridge, 84 foot slabs were used instead. Accelerated construction created up to 20, ton slabs during seven day periods, with the construction of 1, feet of bridge per day. Additionally, the increased diameter of the pile walls to 5 inches allowed for more cover over the steel reinforcement bars. This increase provided better insulation for the steel against the effects of the brackish water. Work also coincided at the time on the old bridge as well, with the installation of the draw bridge bascules, widening of the navigational channel to feet, and the replacement of southern drawbridge with a ship channel. The expanded causeway opened to traffic on May 10, Additions to the Causeway vicinity include the placement of "spare parts" at various locations along side the bridges. These were placed in case of structural impairment due to boating collisions. A radar system was also implemented to alert officials when a boat entered a one mile buffer around the spans. Between and , 55 people lost their lives along the causeway. Variable Message Signs VMS operating at the crossovers alert motorists of potential accidents and other hazards. Other safety precautions included a radio station and call boxes. These operations in conjunction with yearly inspections improved safety along the bridge system. When eight miles from either shore, land no longer is visible. Approaching one of the crossovers along Lake Pontchartrain Causeway northbound. These turnouts are fairly wide and used by police or maintenance crews. There are seven crossovers along the 24 mile route. Dynamic message sign posted at the crossover preceding the south maritime channel. The south channel is located eight miles north from the Lake Pontchartrain shoreline at Metairie. Lowering from the crest over the south channel on Lake Pontchartrain Causeway northbound. The rise provides 50 feet of clearance for boats. The movable bridge portion of the Lake Pontchartrain Causeway lies eight miles south of the North Shore. The draw bridge is one of the few stretches along the 24 mile causeway where passing is prohibited. Passing is permitted again along the causeway northbound once it levels out beyond the draw bridge. Speed limits along the causeway were increased to 65 miles per hour in Mileage sign posted ahead of the Lake Pontchartrain Causeway north end, one mile from Mandeville and three miles from the U. A succeeding sign touts the next five exits for Mandeville, but the ensuing stretch of Causeway Boulevard is not a full freeway. A diamond interchange joins the north end of Causeway Boulevard with Louisiana 22 west and U. The arterial upgrades to a freeway as part of U. Or keep as it is?

## Chapter 2 : The Lake Pontchartrain Causeway – Google Sightseeing

*The Lake Pontchartrain Causeway, sometimes only the Causeway, is a fixed link composed of two parallel bridges crossing Lake Pontchartrain in southern Louisiana, United States. The longer of the two bridges is miles ( km) long.*

Description[ edit ] Lake Pontchartrain is an estuary connected to the Gulf of Mexico via the Rigolets strait known locally as "the Rigolets" and Chef Menteur Pass into Lake Borgne , another large lagoon, and therefore experiences small tidal changes. It is one of the largest wetlands along the Gulf Coast of North America. Lake Maurepas , a true freshwater lake, connects with Lake Pontchartrain on the west via Pass Manchac. The lake was created 2, to 4, years ago as the evolving Mississippi River Delta formed its southern and eastern shorelines with alluvial deposits. Human habitation of the region began at least 3, years ago, but increased rapidly with the arrival of Europeans about years ago. The great American naturalist, William Bartram , explored the north shore during a trip west in Engines turned at Pass Manchac. However, the pilings were burned to the water line in the Civil War. Marshes, for example, are turning to open water, and cypress swamps are being killed by salt water intrusion. However, brown pelicans and bald eagles, once scarce, are now a common sight along the shores. A team of experts assembled by The Nature Conservancy assessed the situation in The bottomland hardwood forest and cypress swamp are suffering from lack of fresh water input and sediment deposition owing to the levees upstream from the lake. These were rangia clam representing lake bottom habitat , gulf sturgeon and paddlefish representing fish communities and the alligator snapping turtle one of the largest freshwater turtles in the world, but in decline owing to over-harvesting. The future of the lake depends, in part, on restoring annual spring floods to the wetlands of the lake basin, and controlling urban sprawl on the North shore. Selected species, like the paddlefish and alligator snapping turtle, would benefit from reduced harvesting. The lake could change considerably without such conservation planning. A few examples of future change might include more cypress swamps converting to anthropogenic marsh or open water, Chinese tallow displacing native forests, and, with a warming climate, mangrove trees replacing brackish marsh. The current population in the region is over 1. There have been many problems with conservation management of the forests and wetlands. These three Northshore parishes are the eastern Florida Parishes. The landscape here is mostly uplands that were once dominated by long leaf pine savannas and interrupted by occasional large rivers. The savannas were maintained by regular fires caused by lightning; they produced the distinctive fauna and flora of this region. Lake Pontchartrain forms the northern boundary of the city of New Orleans, which is coterminous with Orleans Parish , and the northern boundary of its two largest suburbs Metairie and Kenner ; as well as forming the northern boundaries of Jefferson Parish and Saint Charles Parish and much of the northern and eastern boundaries of Saint John the Baptist Parish. The lake provides numerous recreational activities for people in New Orleans and is also home to the Southern Yacht Club. In the s, the Industrial Canal in the eastern part of the city opened, providing a direct navigable water connection, with locks , between the Mississippi River and the lake. The Lake Pontchartrain Causeway was constructed in the s and s, connecting New Orleans by way of Metairie with Mandeville, and bisecting the lake in a north-northeast line. Hurricanes[ edit ] Lake Pontchartrain at New Orleans during Hurricane Georges in ; lakefront fishing camps outside of the protection levee suffered severe damage. During hurricanes , a storm surge can build up in Lake Pontchartrain. Wind pushes water into the lake from the Gulf of Mexico as a hurricane approaches from the south, and from there it can spill into New Orleans. A hurricane in flooded much of Metairie , much of which is slightly below sea level due to land subsidence after marshland was drained. A storm surge of 10 feet 3. After this the levees encircling the city and outlying parishes were raised to heights of 14 to 23 feet 4. Due to cost concerns, the levees were built to protect against only a Category 3 hurricane ; however, some of the levees initially withstood the Category 5 storm surge of Hurricane Katrina August , which only slowed to Category 3 winds within hours of landfall due to a last-minute eyewall replacement cycle. Experts using computer modeling at Louisiana State University after Hurricane Katrina have concluded that the levees were never topped but rather faulty design, inadequate construction, or some combination of the two were responsible for the flooding of most of New Orleans: Hurricane Katrina[ edit ]

Windspeed of Hurricane Katrina 7 a. Windspeed of Hurricane Katrina 10 a. Although Katrina weakened to a Category 3 before making landfall on August 29 with only Category strength winds in New Orleans on the weaker side of the eye of the hurricane , the outlying New Orleans East area along south Lake Pontchartrain was in the eyewall with winds, preceding the eye, nearly as strong as those experienced in Bay St. The walls of the Industrial Canal were breached by storm surge via the Mississippi River Gulf Outlet , while the 17th Street Canal and London Avenue Canal experienced catastrophic breaches, even though water levels never topped their flood walls. Louisiana State University experts presented evidence that some of these structures might have had design flaws or faulty construction. In the weeks before Katrina, tests of salinity in seepage pools near canals showed them to be lake water, not fresh water from broken mains. Much of the northern sector of the suburban areas of Metairie and Kenner was flooded with up to 2 to 3 feet 0. In this area, flooding was not the result of levee overtopping, but was due to a decision by the governmental administration of Jefferson Parish to abandon the levee-aligned drainage pumping stations. When the pump operators were returned to their stations, water was drained out of Metairie and Kenner in less than a day. On September 6, the Corps began pumping flood water back into the lake after seven days in the streets of New Orleans. Because it was fouled with dead animals, sewage, heavy metals , petrochemicals , and other dangerous substances, the Army Corps worked with the U. It is unclear how long the pollution will persist and what its environmental damage to the lake will be, or what the long-term health effects will be in the city from mold and other contamination. On September 24, , Hurricane Rita did not breach the temporary repairs in the main part of the city, but the repair on the Industrial Canal wall in the Lower 9th Ward was breached, allowing about 2 feet 0. Notable deaths[ edit ] Eastern Air Lines Flight crashed into the lake on February 25, , resulting in the deaths of 51 passengers and 7 crew. Very little of the plane or passengers was ever recovered. On December 31, , a chartered plane crashed into Lake Pontchartrain, killing 5 servicemen and the pilot. On September 15, , six-year-old Benjamin Daly, along with the pilot, died when a private plane his parents had chartered crashed into the lake. On February 23, , a twin engine plane crashed into Lake Pontchartrain, killing 7. The cause of death was homicide by asphyxia. She was not identified and no leads were ever identified in the case. Navy T training plane crashed into the lake on January 23, , after a routine training mission. Clinton Wermers, was found at on January 27, The student pilot was rescued about two hours after the crash.

### Chapter 3 : Lake Pontchartrain Causeway - AARoads - Louisiana

*The causeway is a true engineering marvel, and carries travelers across the Lake Pontchartrain, the largest inland body of water in Louisiana. A manufacturing plant was designed specifically for the construction of the bridge, and took a total of 14 months and 30 million dollars to complete.*

In the last few years, China has been pushing the boundaries of bridge construction with many record breaking bridges that blow all competitors out of the water. Out of the top ten positions, only two bridges lie outside Asia, in the United States, a country once known for its engineering and technological marvels. One of them is the Lake Pontchartrain Causeway that cuts straight across Lake Pontchartrain in southeastern Louisiana. A satellite image of Lake Pontchartrain. The Causeway can clearly be seen bisecting the lake. One was completed in and the other, a slightly longer version, was completed in The Lake Pontchartrain Causeway was a monumental achievement for civil engineers, not only for its astonishing length, but also for the innovative techniques used in its construction. The Causeway was the first bridge ever to be constructed using inch in diameter hollow, cylindrical pre-stressed concrete piles that were larger and stronger than the norm, allowing fewer of them to be used and reducing costs. Also unique at the time was the manner of construction. The Causeway was the first bridge ever to employ mass-production, assembly line techniques in fabricating and assembling a bridge. The bridge components were built in a state-of-the-art concrete casting plant on the shore of the lake in Mandeville, and then sent by barge to the construction site. Previously, bridge components were cast-in-place. A comparison rendering of the two bridges, provided by the Lake Pontchartrain Causeway Commission. When such a historic bridge was challenged by another bridge in another country, no less, it was almost natural for the bridge officials to get offended. So they started probing the Chinese claim and soon found a flaw. The actual distance traversed by the bridge over water is only about 25 km. Now the Lake Pontchartrain Causeway is the "longest bridge over water continuous " while the Jiaozhou Bay bridge is the "longest bridge over water aggregate. The Causeway is actually two parallel bridges of 24 miles each with an aggregate length of 48 miles. The Jiaozhou Bay bridge will however lose theirs once the Hong Kongâ€Žuhaiâ€ŽMacau Bridge opens, possibly in , but it can be as late as The new bridge which will connect Hong Kong, Macau and Zhuhai, will have an aggregate length of over 50 km over water. At least, the title will stay with China. Yan Runbo Lake Pontchartrain Causeway.

## Chapter 4 : Lake Pontchartrain Causeway | Accident Data Center

*Learn about the Causeway bridge fare schedule and contact information for the toll tag offices. Menu. Lake Pontchartrain. Causeway Bridge For each trip on the.*

This section needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed. August Learn how and when to remove this template message The idea of a bridge spanning Lake Pontchartrain dates back to the early 19th century and Bernard de Marigny , the founder of Mandeville. He started a ferry service that continued to operate into the mids. In the s, a proposal called for the creation of artificial islands that would then be linked by a series of bridges. The financing for this plan would come from selling home sites on the islands. The modern Causeway started to take form in when Ernest M. Due to his lobbying and vision, the Louisiana Legislature created what is now the Causeway Commission. This included not just the bridge, but three approach roads on the north end and a long stretch of road on the south end. Until , tolls were collected from traffic going in each direction. To alleviate congestion on the south shore, toll collections were eliminated on the northbound span. In , the toll was raised to fund safety improvements on the bridge. Prior to the Causeway, residents of St. Tammany Parish used either the Maestri Bridge on U. Route 11 or the Rigolets Bridge on U. Route 90 , both near Slidell, Louisiana ; or on the west side, via U. Route 51 through Manchac, Louisiana. The storm surge was not as high under the Causeway as it was near the I Twin Span Bridge , and damage was mostly limited to the turnarounds. The causeways have never sustained major damage of any sort from hurricanes or other natural occurrences, a rarity among causeways. The existing fiber optic cable plant was blown out of its tray but remained intact per optical time domain reflectometer OTDR analysis. With the I Twin Span Bridge severely damaged, the Causeway was used as a major route for recovery teams staying in lands to the north to get into New Orleans. The Causeway reopened first to emergency traffic and then to the general public “ with tolls suspended “ on September 19, Tolls were reinstated by mid-October of that year. The Maestri Bridge comes close, but runs short by two-tenths of a mile at roughly 4. The Jiaozhou Bay Bridge spans water for only However Guinness World Records using the criteria of measurement that included aggregate structures, such as land bridges on the ends and an under-sea tunnel stated that the Jiaozhou Bay Bridge is Lake Pontchartrain Causeway then became the longest bridge over water continuous [3] while Jiaozhou Bay Bridge became the longest bridge over water aggregate.

## Chapter 5 : New Orleans - HISTORY

*Louisiana's Lake Pontchartrain Causeway is one of the world's longest drives over a body of water and is an absolute must-drive when you visit New Orleans.*

## Chapter 6 : Causeway Bridge | Lake Pontchartrain, Louisiana

*Lake Pontchartrain Causeway then became the longest bridge over water (continuous) while Jiaozhou Bay Bridge the longest bridge over water (aggregate).The bridges are supported by 9, concrete pilings.*

## Chapter 7 : Homepage - Fishing reports from St. Tammany Parish

*An unnumbered route, the Lake Pontchartrain Causeway holds the distinction as the longest over-water highway in the world. The mile long bridge spans 1/10th of the earth's circumference on its trek between Metairie and Mandeville.*

## Chapter 8 : Lake Pontchartrain Causeway - Wikipedia

*Consisting of parallel, mile-long spans, the Lake Pontchartrain Causeway is the world's longest verwater highway bridge*

*and one of the oldest prestressed concrete bridges built in the United States.*

## Chapter 9 : Lake Pontchartrain - Wikipedia

*The Lake Pontchartrain Causeway, sometimes only the Causeway, is a fixed link composed of two parallel bridges crossing Lake Pontchartrain in southern Louisi.*