

The Great Storm of 1915

WWI-era storm hit a modernizing metropolis still buffered by healthy wetlands

by Richard Campanella, *published September 11, 2015 in the New Orleans Times-Picayune*

In an odd historical coincidence, these weeks mark anniversaries of four major New Orleans hurricanes: 10 years since Katrina and Rita, 50 years since Betsy, and 100 years since The Great Storm of 1915. Most New Orleanians recall all too well some or all of the first three, but the 1915 hurricane, with hardly any living witnesses, has been largely forgotten. That World War I-era tempest is worth remembering because it struck at a time when the modernizing metropolis had not yet suffered the sort of geophysical deterioration that would exacerbate our more recent disasters.

Summer 1915 had already proven tragic for the Gulf Coast. An August hurricane had killed 400 people in Galveston, despite the new seawall erected by the Texas city in the aftermath of its horrific catastrophe of 1900, the deadliest natural disaster in American history. Just six years earlier, in 1909, a major hurricane destroyed Grand Isle and flooded the lowlands in New Orleans as well.

Now, on September 22, 1915, sailors reported a new system brewing in the Lesser Antilles. Over the next week, it wended between the Yucatan Peninsula and Cuba, evading cooler land surfaces while drawing energy from the warm sea. The vortex strengthened.

Tracking the reports in New Orleans was famed meteorologist Isaac M. Cline, a pivotal figure of the Galveston Hurricane of 1900 and, by 1915, probably the most qualified storm forecaster in the nation. Stationed in the Weather Bureau office in the recently opened U.S. Post Office (today's Fifth Circuit Court of Appeals Building), Cline analyzed incoming data and realized that a direct hit on New Orleans was imminent. On Tuesday morning September 28, he noted an ominous "cirrus veil" clouding city skies, following a "faint brick-dust" sunset. The outermost feeder bands arrived that night, each one accompanied by sporadic gusty rain.

New Orleanians took shelter at home or in sturdy neighborhood buildings; evacuation was neither a possibility nor a recommendation. If anything, coastal denizens fled into the city to join their urban compatriots in the relative safety of the metropolis. Cline sent out messages to outlying communities to do exactly that, pronto.

The eye struck Grand Isle around midnight and veered to position New Orleans in the system's dangerous northeastern quadrant. At dawn on September 29, what would become known as the Great Storm of 1915 arrived at the city, and, just like Katrina 90 years later, it would take one full excruciating day to wreak its havoc.

Low barometric pressure plus 100-m.p.h winds swelled Gulf waters by 15-20 feet, while Lake Pontchartrain rose by 5 feet, the highest recorded to date. That was enough to overtop the meager lakefront levees and, as during Katrina, penetrate the adjoining London Avenue, Orleans and 17th Street outfall canals.

More seawater entered city limits via the circa-1830s New Basin Canal (now the West End Boulevard-Interstate 10 corridor) and the circa-1790s Old Basin Canal (now the Lafitte Greenway), which connected with Bayou St. John and the lake. "The overflow from these sources, [plus] about 7¼ inches of rainfall, was a most discouraging feature of this day's development," understated a Sewerage and Water Board engineer.

Salt water began to impound in low spots in present-day Lakeview and Broadmoor, which were still largely uninhabited at the time. "Over that portion of the city lying between the Old Basin Canal and Broadway and from Claiborne Avenue out to Lake Pontchartrain," wrote Cline, "the water depth driven in by the storm ranged from 1 to 8 feet."

Next came the levee failures, or "crevasses," as francophone New Orleanians called them. The Florida Avenue rear protection levee breached in a number of spots, allowing Bayou Bienvenue to pour into the lightly populated rears of the Seventh, Eighth, and Ninth wards. (The Industrial Canal was not yet dug, so there was no distinguishing an upper and lower Ninth Ward).

Flooding was worse in St. Bernard and Plaquemines parishes, in part because, as during Katrina, the swollen Mississippi spilled laterally over the riverfront levees and swept across the low country.

Back in New Orleans, gales gusted until 6:35 p.m., when they abated and reversed directions as the eye of the 300-mile-wide system passed 12 miles west of downtown. That evening, a *Times-Picayune* reporter described "a peculiar lightening...flaring up in sheets not unlike the fire coming out of the mouths of serpents," as the storm proceeded into Tangipahoa and St. Tammany parishes.

At dusk, New Orleanians peered out their windows and surveyed their circumstances. "CITY CUT OFF FROM REST OF WORLD," read a worried headline in that evening's *Item*.

Folks had it much worse in the Rigolets, that vulnerable land bridge in far eastern Orleans Parish. As the storm approached, Cline made a point of calling the Anglers' Club, a popular getaway whose patrons were apparently unaware of the impending threat. Cline later recorded the tense telephone exchange he had with one Manuel Marquez, the club's 51-year-old black Creole caretaker who lived there with his family.

With the storm raging in the background, Cline urged Marquez to flag down the very next train bound for New Orleans:

"[T]he train [will] not stop for [us]," Marquez countered, as if experienced in this rejection.

"[Then] put a cross tie on the track" and force them to stop, Cline retorted.

"They will put me in jail," Marquez groused.

"You would be better off in jail than where you are now and for God's sake stop that train at all hazards and come to New Orleans[!]"

Moments later, the *Mobile Limited* steamed tenuously through the turbulent surf. Marquez frantically flagged it down and, to his surprise, the locomotive ground to a halt. As anxious passengers gaped through rain-splattered windows, Marquez pleaded with the engineer for time to gather everyone at the club. But "the rising tide was jeopardizing the passengers on the train," Cline later wrote in his report, "which could not wait until the people could be collected from the houses."

Fatefully, the train departed. "[W]hen the storm was over," wrote Cline, Manuel's "lifeless body, with 23 others...were found strewn over the marshes," among them his wife, sister, and nine children and grandchildren. In terms of physical damage, the scenario that played out on the narrow land bridge in 1915 recurred in 2005, when nearly every camp was destroyed and some residents were drowned.



Storm damage to old St. Louis Hotel in the French Quarter, seen here in 1916 during demolition

By Thursday morning, sun shined over the Crescent City. Residents were stunned by the effects of the wind: over 25,000 structures suffered serious structural damage, among them 11 major churches which lost their steeples. French Market pavilions were leveled; the Old French Opera House was damaged; and the famous St. Louis Hotel, Horticultural Hall in Audubon Park, and Leland University on St. Charles Avenue were all so battered they were subsequently demolished.

As for the floodwaters, they receded everywhere except within levee-encircled areas, where the pumps from the recently installed municipal drainage system took four days to eject them into adjacent water bodies.

Damages exceeded \$13 million, with roughly half in New Orleans proper. At least 275 Louisianians perished, including at least 43 in the Rigolets and Lake Catherine. Isaac Cline described the storm as “the most intense hurricane of which we have record in history of the Mexican Gulf coast and probably in the United States.”

In retrospect, the marvel of the Great Storm of 1915 was the ferocity of its wind damage—yet also the limit of its water damage. “*STORM PROOF! The Record Shows New Orleans,*” crowed the *Item* the day after. That was gross overstatement, but compared to Betsy, Katrina, Rita, Gustav and other hurricanes, the 1915 storm arrived stronger and better positioned to devastate New Orleans utterly. Four reasons explain why it did not.

Firstly, nearly 1900 additional square miles of marsh and swamp surrounded the city and region, acting as terrestrial friction against Gulf surges.

Secondly, no major navigation canals allowed Gulf waters to penetrate into the city’s eastern flanks.

Thirdly, the newly installed municipal drainage system had not yet had enough time to dry out the lakeside lowlands and allow them to subside—but nonetheless served to pump out the water that did become impounded.



Finally, urbanization and population of lakeside and outlying environs had barely begun by 1915, and most New Orleanians remained on the higher ground closer to the Mississippi River.

Since the Great Storm of 1915, we've lost those 1900 square miles of wetlands; we dug two big funnel-forming navigation canals in the eastern marshes, not to mention thousands of miles of oil and gas canals; we allowed our topography to sink into below-sea-level bowls; and we encouraged development to sprawl out broadly as if none of these things mattered.

The rest, as they say, is history.

But it was no coincidence.

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Below: Wind damage in New Orleans from the Great Storm of 1915, courtesy AccuWeather

