## **Lessons Lost**

## Hurricane of 1947 Swamped New Suburbs and Tested Shelters, But There's No Pat Narrative

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Destructive hurricanes, like most complex historical events, tend to garner simplifying narratives in the historiography—that is, in our continually revised interpretations of history.

The hurricanes of 1856 and 1893, for example, are known for destroying the great pleasure resorts of the Louisiana coast, which is how many remember what Hurricane Camille did to the Mississippi Gulf Coast in 1969.

In New Orleans proper, the Great Storm of 1915 is often framed as the first to strike the modernized metropolis, while Hurricane Betsy in 1965 now tends to be viewed as a harbinger of Hurricane Katrina in 2005—and just about everybody has a Katrina narrative. Regarding the hurricane that struck sixteen years later, "As Katrina was to levees," read a *Times-Picayune* headline, "Ida is to electricity."

Such narratives are useful, and they exist for an important reason: for us to find order and meaning in the human experience.

But some experiences just don't lend themselves to simplifying narrative.

Take, for example, the Hurricane of 1947, which, in the 75 years since it struck, seems to defy a reductionist take-home message. Put another way, the hurricane and its effects have yielded multiple interpretations, some of them contradictory, none of them predominant, and most of them largely forgotten.



The storm initially formed in early September off the West African coast, and gained energy as equatorial currents pushed it across the warm South Atlantic. By the time it stalled over the Bahamas, winds hit 160 m.p.h., making it a Category 5 hurricane on the modern Saffir-Simpson scale.

Proceeding westward, the system made landfall in south Florida, where it killed eleven people, caused over \$31 million in damages, and became known as the "Fort Lauderdale Hurricane," this being before authorities began officially naming tropical storms. The system lost energy over Florida but re-grouped in the Gulf of Mexico and proceeded northwestwardly toward Louisiana as a borderline Category 2.

Given the nascent state of forecasting at the time, it was not until the vortex neared Louisiana's coast on September 18 that city dwellers were alerted of the threat. It had been 32 years since a major storm had struck New Orleans, and much had changed. Population had increased by half; modern highways and infrastructure now crisscrossed the metropolis; and suburban-style subdivisions had been built in recently drained swamps.

Those dewatered lowlands had since subsided below sea level, making them prone to flooding. But the city proper now had a reclaimed lakefront, shored up in the late 1920s to block lake surges, and most folks had prideful confidence in their levee system and drainage pumps, chief among them Mayor deLesseps "Chep" Morrison.

Mayor Morrison exuded his trademark aplomb in the face of the pending strike, closing schools "only as a precautionary measure" and not to imply any "impending danger," according to news reports. His confidence in the city's drainage system was echoed by A. Baldwin Wood, the famed local engineer who had invented the world's most powerful drainage pumps and now served as General Superintendent of the New Orleans Sewerage & Water Board. "All our wires are underground," Wood told a reporter. "I don't anticipate any great danger if the winds stay below 88 miles per hour."

Evacuating from New Orleans was all but unknown in this era; most people stayed home or took shelter in sturdy neighborhood schools. Only those living in coastal areas hit the road, and they usually headed into New Orleans, taking refuge behind its renowned levees.

The Fort Lauderdale Hurricane struck New Orleans 7:30 a.m. Friday, September 19, 1947, with winds approaching 100 m.p.h. and a width of 25 miles, spanning beyond the entire metropolis.

Its eye passed directly over downtown, giving huddled residents a moment of deceptive tranquility. "My dad took me down Marais Street to Canal, to survey [while] the eye passed over," recalled Del Hall, a resident of the Iberville Housing Projects who was twelve at the time. "The sky was perfectly clear, [calm] like a church, [and] there was very little damage to the Projects." Winds subsequently returned, this time blowing opposite, but the city held strong. Authorities seemed to be right, at least over the urban core.

But in outlying areas, conditions deteriorated. Surging lake waters overtopped levees in East Jefferson Parish, inundating Moisant Airport in Kenner.

They also spilled westward into Bucktown and Old Metairie from the overwhelmed 17<sup>th</sup> Street Outfall Canal, putting "vast areas...under a four-foot flood," wrote parish advocate Thomas Ewing Dabney, with "water in some Metairie houses [at] 5 feet deep."

According to a later congressional hearing, fully 33 of East Jefferson's 48 square miles went under water, and most of it remained impounded when seven of the eight pumps became inoperable.

Just a generation earlier, that same area was mostly uninhabited wetlands, and its inundation would not have registered as disastrous. But having been drained in the 1910s and partially developed with subdivisions and truck farms, it now had value—and stakeholders.

Likewise, in the former swamplands of New Orleans proper, which had been drained in the 1900s and subsequently urbanized, the hurricane pushed lake water over the meager earthen levees of the London Avenue Drainage Outfall Canal and Industrial Canal, substantially flooding Gentilly. To the east, surge from Lake Pontchartrain and Lake Borgne covered most of eastern Orleans Parish, while eastern St. Bernard Parish endured the powerful northeastern quadrant of the storm.

All the while, the S&WB kept generating power, and Wood's pumps kept discharging whatever water they could. "The Gentilly and lakefront area, which appeared to be the worst flooded section in town, is rapidly being drained of the heavy floodwaters," Wood calmly told the *States* as the storm raged. Pumps "were working satisfactorily, although taxed to capacity in all sections."

Around that time, surge from Lake Borgne worked its way up the Florida Avenue Canal along the rear of the Lower Ninth Ward. Pressure increased on the rear levee—which really just the raised track bed of the Southern Railroad—and when it ruptured, floodwaters poured into people's homes and put Pumping Station #5 out of commission. A similar scenario played out in the rear of the Upper Ninth Ward.

As skies cleared Saturday morning, 4000 workers waded through the deluge and toiled until they finally sandbagged the breaches. Pumps were restarted, floodwaters were ejected, and people slogged back to their homes to clean up.

Whereas wind caused most damage during the Great Storm of 1915, the Hurricane of 1947 was mostly a flooding disaster. Ninety percent of damages in Louisiana came from water, including 1600 houses destroyed, 25,000 houses damaged, \$100 million in repair costs, and 51 fatalities. Importantly, the damages were not evenly distributed. They were worse in the suburban periphery, and less in the urban core.

The high costs of this moderate hurricane can be explained by understanding the notions of hazard and exposure, and how they had changed in the decades prior.

The drainage outfall canals (dug in the 1870s), the Industrial Canal (dug during 1918 to 1922) and the Gulf Intracoastal Waterway (opened in 1943), not to mention an intricate coastal network of oil and gas extraction canals, all conspired to allow the hazard of storm surge to intrude farther inland.

Meanwhile, within the metropolis, new residential subdivisions had been built in former swamplands, which by now had sunk below sea level, thus increasing human exposure to the mounting hazard.

Those who lived in the older, higher urban core had geography on their side, and saw little flooding. But those in the newly drained, low-lying periphery had minimal defenses and maximal exposure—and ended up with water on their side. Buoyed by a postwar sense of confidence, civic optimism prevailed in the aftermath of the 1947 hurricane. Historian Nicolle Youngerman noted how Mayor Morrison "downplay[ed] its effects on New Orleans's outlying areas and recently developed suburbs, and focusing instead on older parts of the city that were not so badly damaged."

A newspaper headline declared "Toll of Hurricane Surprisingly Low," and a reporter predicted "soon living will return to normal." One advocacy group went nation with the message, spending \$10,000 to run "a dozen half-page advertisements," according to *New Orleans States*, "emblazoned [with] the words 'HURRICANE? NEW ORLEANS BREEZED THROUGH IT."

To others, the Hurricane of 1947, followed by an intense rainfall flood in Metairie in March 1948 and another storm in September, motivated a call for massive levee improvements along the Lake Pontchartrain shore.

Sheriff Frank J. Clancy made no bones about what was happening. "Eastern Jefferson Parish must live like a walled town," he admonished residents, "with high earthworks thrown up on all its borders, because over 26,000 acres are below the 5 foot contour, 13,000 of which are below sea level.... [Our] drainage scheme had worked so well the water table had been reduced and in some places the surface of the land had sunk lower still."

What was needed, Clancy and others said, was a massive lakefront bulwark.

Working with congressional representatives in Washington, parish leaders secured \$5.1 million from the U.S. Army Corps of Engineers for lakefront storm protection.

In 1948, dredges tore up the lake bottom and pumped muck between two concrete retaining walls from the Orleans to St. Charles parish line, building the foundation for today's lakefront levee. More federal support came in 1950, and the project was completed in 1953.



The effort marked a new federal/local partnership for storm surge protection, a commitment that would become formal in 1955 and augment massively following Hurricane Betsy in 1965—but would fall far short of what was actually needed, as we infamously learned after Katrina in 2005.

Today, we utterly depend on that federal/local partnership, and it's largely traceable to the Hurricane of 1947.

For that and other reasons, hindsight casts the 1947 disaster in nuanced light, and perhaps it has failed to garner a clear narrative because it does not warrant one.

There were elements of wisdom as well as folly in the decades-long backstory to the disaster. There were examples of success and failure in how the disaster played out. And both needed interventions and missed opportunities occurred in the aftermath.

Indeed, maybe the lesson of the multi-interpretational Hurricane of 1947 is to beware of pat narratives.

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