## **History Of Tampa Bay Hurricanes**



Tampa Bay has been fortunate since recollections and as far back as data accounts for since the 19<sup>th</sup> century in terms of hurricane history. This city has been spared the worst thanks to specific tracks in hurricanes as they churn across the Gulf and take specific paths that end up missing the bay area in terms of direct hits.

Here's a fun fact - given Tampa's location and frequency of hurricanes, one would expect the recurrence to be higher over the span of a few years per decade; however, statistically the probability of a direct hit to Tampa in any given year is only 1.14%. In other words, only a 1 in 88% chance of that happening.

Tampa's direct hurricane history includes two notable major hurricanes: the "1848 Great Gale Hurricane" and the 1921 Tampa Bay Hurricane – both of which made direct landfall causing considerable damage.



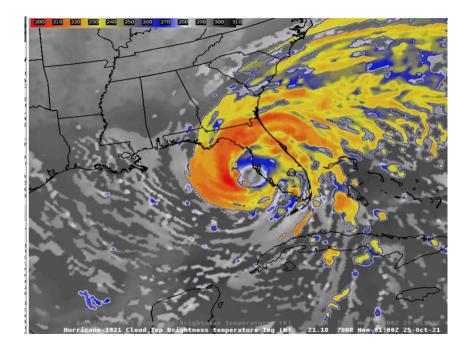
## The 1848 Great Gale

Image courtesy of Tampa Pix

On September 25th, 1848, a hurricane made direct landfall to the Tampa Bay region. Given its recorded maximum winds from just enough data, we're able to quantify it as a Category 4 making it a major hurricane. It formed in what was originally the Gulf of Mexico several days prior and given the favorable upper air pattern, it yielded an ideal track displayed in the image above.

This hurricane, also known as "The 1848 Great Gale," struck the region with an estimated 15foot storm surge – the highest ever recorded in Tampa Bay history! Statistically, the minimum pressure recorded was 954mb in now modern downtown Tampa. Landfall occurred in Clearwater just north of the Bay, which given its counterclockwise flow – it ushered in devastating flooding where 5-6 foot waves were even crashing as far as Ybor city.

This storm significantly altered the coastal geography of Tampa Bay creating new inlets, altering bays and cuts of the coast to the extent where navigational charts were useless. Certain keys such as Passage Key and Anna Maria were destroyed along with the lighthouse at Egmont Key. Overall, this was the first recorded direct hit on Tampa setting a historical benchmark for hurricane preparedness.



## The 1921 Tampa Bay Hurricane

Image courtesy of National Weather Service

On October 25, 1921, the Tampa Bay region suffered the most destructive hurricane to hit the area since the 1848 hurricane. A storm surge of up to 11 feet damaged and destroyed a significant amount of the structures along coastal locations from Pasco county south through southwest Florida. The highest storm surge inundated areas in downtown Tampa and Tarpon Springs.

Numerous structures near the coast sustained heavy damage from being washed out by the storm surge. The highest recorded winds were estimated at 120 mph near the landfall point in Tarpon Springs. Infrastructure to this point such as power poles, rooves, and windows of houses were blown out or heavily damaged.

Agriculture, including mainly the citrus industry in conjunction with entire crop fields were heavily obliterated from the winds and the surge. What exacerbated it was due to the salt water that had infiltrated into the soils which prevented some crops from being able to return in future seasons. There were eight confirmed fatalities mainly from drowning as the storm surge inundated near shore locations, and others from the hazards of the fallen debris.

During the early 20<sup>th</sup> century, the tools then such as radars, satellites, computer model guidance, and mathematical models were not even near the capability that we observe today. This meant that forecasting this storm or any storm at the time was solely done on climatological data from a small sample size along with sparse land and marine observations.

There've been dozens of "close calls" and hurricanes since 2000 that have passed within proximity of the Tampa Bay area which caused damaged indirectly from outer rainbands, storm surge, and some wind. The most recent near miss was hurricane Milton (2024) making landfall near Siesta Key which did cause notable damage, but still by technical definition did not make landfall in Tampa Bay continuing an uncanny streak.

## **Conclusion: A City That Defies the Odds**

Have you ever wondered why Tampa seems to dodge hurricanes? What could this be and why? We'll have to first bring up a "hurricane bubble" myth. It's believed that Native Americans – the Tocobaga Tribe who lived in the area for centuries, blessed the land to protect the Bay from hurricanes. History has revealed that they built mounds to provide supernatural protection against storms. This then became a "local legend" to the native people because for over 100 years Tampa never received a direct hit.

The reality stems from mainly a few factors: its geographical position makes it unique as shallow waters nearing the bay and position of the city has nearby unique land masses that influence the track. Also, certain wind patterns during the time hurricanes are close make it favorable to divert storms. Another factor is likely media coverage and preparedness since the city is densely populated, so attention becomes highly aware.

As data shows that the city has only been hit by two hurricanes in the last 200 years makes it statistically known there's a very small chance of it occurring in any year. So, despite the "Tampa Paradox", it should be noted that it only takes one to cause devastation especially now where

infrastructure is blooming, and the population is the highest it has ever been. As we continue to see defying odds, it's wise to know that luck isn't a strategy, and all residents should be prepared every hurricane season. Based on historical frequency and probability of hurricanes, any location that goes on a "streak" is statistically more likely to experience a direct hit.