

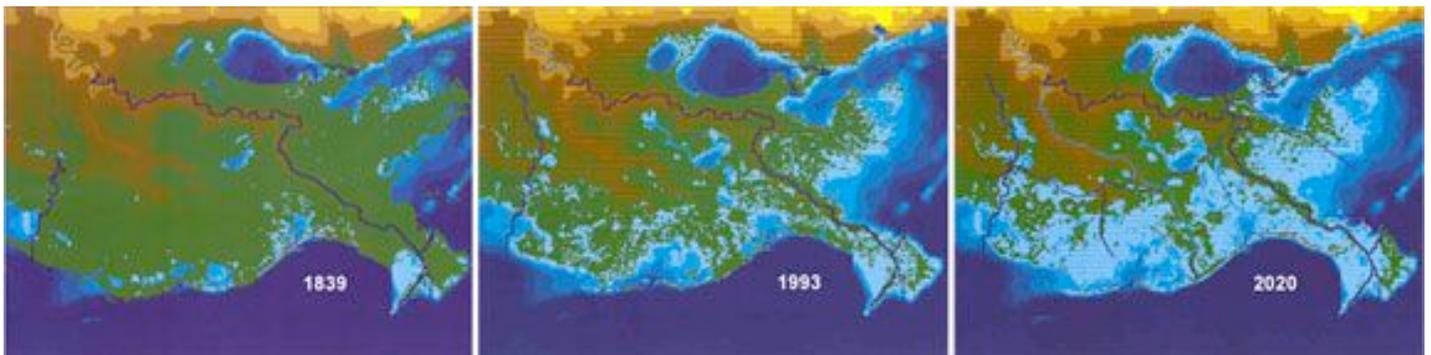


Welcome to the Bayou Bienvenue Wetland Triangle

The Barataria Preserve, Jean Lafitte National Historic Park

Fifty years ago, this area was a freshwater cypress swamp, part of the complex network of wetlands that stretched 30 miles from New Orleans to Lake Borgne. In the past, this wetland was a valuable asset to the Lower Ninth community, offering storm protection, recreation, and natural beauty. A century of levee construction and canal-building has converted the swamp into an open-water brackish marsh, with only cypress “ghosts” and some older residents’ memories to attest to its past.

The ocean is encroaching on New Orleans. An often-cited statistic is that Louisiana loses a football field of coastline every 40 minutes. The images below show southeastern Louisiana in 1839, 1993, and 2020, respectively. The lighter-shaded areas in the 1993 and 2020 images show land lost to open water.



Source: USGS

Several factors are contributing to this wetland loss:

Levee construction has disrupted natural processes such as seasonal flooding and the flow of run-off, starving the ecosystems behind the levees of nutrients, sediment and freshwater. As a result, sediment carried by the Mississippi, which could build new land, is now piped through the “bird’s foot” delta off the edge of the continental shelf, where it is lost. Swamps and marshes behind back-levees are left more vulnerable to saltwater encroachment.

Extensive canal-building, especially in the mid-twentieth century, has altered the natural hydrology of coastal wetlands, impounding some wetlands behind spoil banks, and exposing others to tides, increased salinities, and erosion.

When the **Mississippi River Gulf Outlet (MRGO)** channel was dredged in the early 1960s, it created an artificial connection to Breton Sound, leading to a reversal of tidal circulation in the area, and dramatic increases in salinity. This led to the destruction of tens of thousands of acres of wetlands east of New Orleans, including the triangle-shaped area visible from this platform. Historic air photos show the transition from cypress swamp to open water:



Aerial photos courtesy of: LSU Cartographic Information Center; New Orleans Public Library, TerraServer; & USGS

A healthy cypress swamp in the Bayou Bienvenue Wetland Triangle is essential to the long-term sustainability of the Lower Ninth Ward. Wetlands, especially cypress forests, act as “horizontal levees,” reducing the height and velocity of storm surges, and sheltering man-made levees from waves. During Katrina, many levees failed as a result of exposure to waves. No levees protected by wetlands or cypress failed.

A restored Bayou Bienvenue Wetland Triangle would be the closest cypress swamp to downtown New Orleans. It could serve an invaluable role in educating the public about Louisiana’s natural history and the value of wetlands, and could also draw business to the Lower Ninth.

Two current proposals aim to restore the Triangle:

- 1) Wastewater Assimilation:** Wastewater from the New Orleans Sewage and Water Board’s East Bank Treatment Plant (the blue building across the water), would be treated to a secondary standard, and then released into the Triangle. The relatively fresh, nutrient-rich water would enhance vegetation growth. This is currently working in other parts of Louisiana.
- 2) Sediment Diversion:** Currently, the water in the Triangle is too deep for cypress. To overcome this problem, the US Army Corps of Engineers has proposed adding sediment to the Triangle. This would entail a temporary pipeline to transport material from Lake Borgne or the Mississippi. If combined with wastewater assimilation, this could represent a sustainable approach to the restoration of this wetland. **This multimillion-dollar project is presently being evaluated against several other coastal restoration proposals, as part of the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA). A decision will occur late in 2008, and public support is critical!**

If you’re interested in lending support, or would like more information, please contact: uwnola@gmail.com

Prepared by students from the University of Wisconsin-Madison. Since 2007, UW students have been involved with the Triangle and the Lower Ninth Ward community. In collaboration with the Holy Cross Neighborhood Association (HCNA), Lower Ninth residents, and many other area stakeholders, and supported by funds from the McKnight Foundation and Louisiana’s Delta Chapter of the Sierra Club, the students have worked to characterize the wetland, determine its socio-environmental connections to the neighborhood, and assess possibilities for its restoration. This platform was designed and built by a landscape architecture group from the University of Colorado-Denver, and is maintained with help from the Common Ground Collective (www.commongroundrelief.org).