

RESTORE

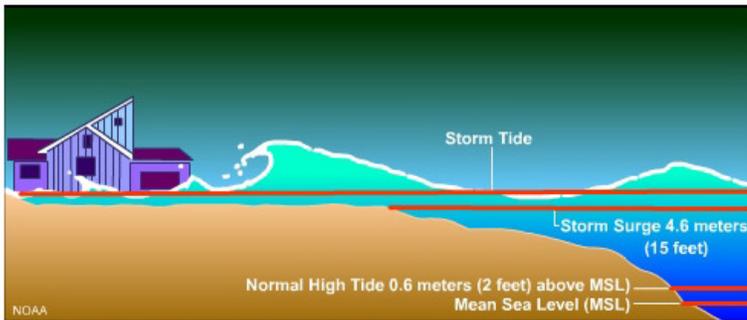
THE MISSISSIPPI RIVER DELTA

RECONNECTING THE RIVER WITH ITS DELTA TO PROTECT PEOPLE, WILDLIFE AND JOBS

mississippiriverdelta.org

Wetlands and barrier islands: Our communities' first line of defense

Strong tropical storms and hurricanes regularly bring heavy rain and violent winds to Louisiana's coast. **However, the biggest storm threat to communities, life and property is surge:** a bulge of water formed by wind and the low pressure core of a strong storm. As storm surge rolls ashore, driven by damaging waves, it piles up against natural and man-made features on land. The combination of surge and waves can push houses off their foundations, wash away bridges and blow earthen levees apart.



Storm surge is a large dome of water, often 50 to 100 miles wide, that sweeps across the coastline where a hurricane makes landfall. The storm tide is the combination of the storm surge and the astronomical tide.

Wetlands and barrier islands are Louisiana's first line of defense against storm surge and tropical-force winds.

Unfortunately, our natural storm protection system is disappearing. Largely because of man-made straitjacketing of the Mississippi River, Louisiana is losing a football field of land an hour. This catastrophic rate of land loss puts nearly 2 million people in the coastal zone at risk to more frequent and severe flooding.

PHOTO AT TOP: YUKI KOKUBO

HURRICANE PROTECTION TOOLBOX

Restore coastal wetlands and barrier islands

Aggressive action to restore coastal wetlands is one solution to mitigate the impacts of storm surge. River diversions, providing fresh water and sediment, allow coastal wetlands to build up vertically in response to global sea level rise.



Storm resilient actions

Other ways to increase community resiliency include healthier landscaping, elevation of structures and proper planning for evacuation.



Multiple Lines of Defense

A broader solution is to adopt the multiple lines of defense strategy that combines manmade protection with coastal restoration projects that are strategically placed to reduce surge in front of those levees.



Protecting New Orleans and other communities

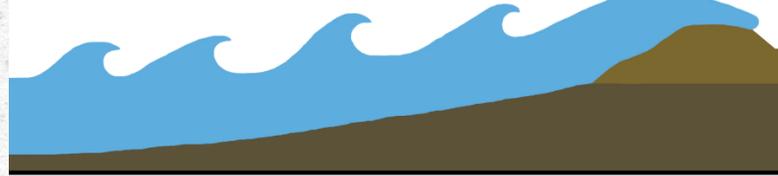
WETLANDS AS COASTAL BARRIERS

A levee exposed to open water—like the one lining the Mississippi River Gulf Outlet (MRGO)—is more likely to fail than a levee protected by wetlands. The MRGO levee catastrophically failed during Hurricane Katrina, increasing the flooding in communities in the New Orleans area. Although the U.S. Army Corps of Engineers is working to reduce future risks to communities by improving the levee system and building a surge barrier, **the coastal wetland buffer between New Orleans and the gulf is shrinking every day**. What remains is in poor condition, damaged by salt water, erosion, subsidence and sea level rise.

We are working with the MRGO Must Go Coalition to advocate for ecosystem restoration in the area affected by the MRGO. After Katrina, Congress ordered the Army Corps to undertake a comprehensive study of MRGO and plan for restoration. That plan is near completion. Additionally, Louisiana's 2012 Coastal Master Plan highlights major restoration features in the MRGO ecosystem. As these plans move toward implementation, the community voice is more critical than ever. Restoration and conservation of habitat impacted by the MRGO will help protect communities such as the Lower Ninth Ward, New Orleans East and Chalmette.

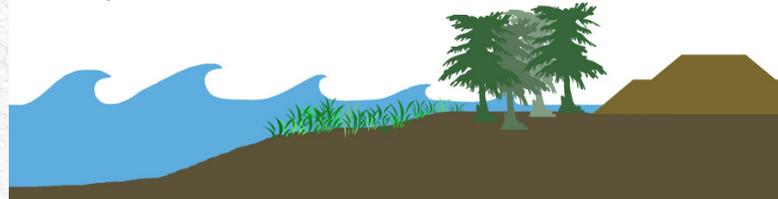
Levee With No Natural Buffer

When a levee is next to open water, the face and the crest of the levee are vulnerable to wave attack. Surge can also overtop the levee, increasing the chance of a levee breach.

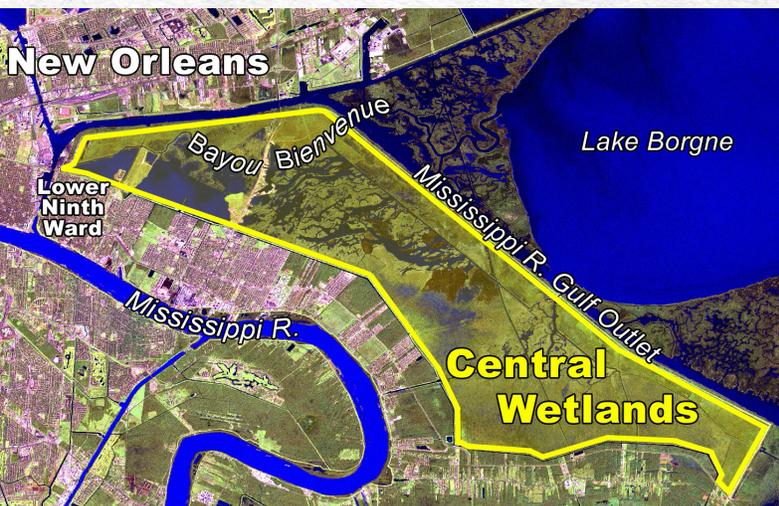


Levee Protected by Coastal Wetlands

Waves and surge encounter resistance when they move over marshes and through cypress. This resistance reduces the height of surge and waves and slows the movement of water toward communities. Cypress forests also knock down waves by blocking wind. **The wider the wetland buffer, the higher the level of protection.**



For more information, call the National Wildlife Federation at 504.273.4838 or visit mississippiriverdelta.org



WHAT CAN YOU DO TO HELP?

- Tell the U.S. Army Corps of Engineers to restore the wetlands devastated by the MRGO. Get a free yard sign or bumper sticker and write a letter to decision-makers at www.MRGOmustgo.org.
- Contact the State of Louisiana and your elected officials. The Louisiana Coastal Protection and Restoration Authority is currently planning major restoration projects across the coast. Ensure your voice is heard and strong coastal projects are being implemented.
- Stay connected. Learn about events and other opportunities to take action by joining our fan page on Facebook: "MRGO Must Go" or "Restore the Mississippi River Delta."
- Tell a friend! This is a national effort to save a national treasure. Please ask your friends and families to take part.

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WHO WE ARE The Mississippi River Delta Restoration Campaign is a coalition of Environmental Defense Fund, National Audubon Society, National Wildlife Federation, Coalition to Restore Coastal Louisiana and Lake Pontchartrain Basin Foundation. Made up of scientists, engineers, policy experts and outreach professionals, we work to advance long-term sustainable solutions for the delta's communities and wildlife.

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