

Making the Gulf Coast whole again

After the BP oil disaster, EDF built a powerful bipartisan coalition: Gulf state politicians, business leaders and local communities all helped launch the nation's biggest environmental restoration. Our secret weapon? The mighty Mississippi.



Scientists **Dr. John Lopez** of the Lake Pontchartrain Basin Foundation and EDF's **Dr. Angelina Freeman** have envisioned a way to restore hundreds of miles of coastline by reconnecting the Mississippi River to its wetlands.

In a willow swamp south of New Orleans, two scientists are ankle-deep in mud, watching the Mississippi River overflow its banks.

A big idea is taking shape here. EDF and local scientists are monitoring how the river builds up land by depositing sediment. Their goal is to harness the power of the Mississippi to restore

land that is critical to New Orleans' survival. "A river builds land at a scale that humans with bulldozers can't match," says EDF scientist Dr. Angelina Freeman.

Over the past century, the Army Corps of Engineers has turned the Mississippi into a walled canal that shoots hundreds of millions of tons of precious sediment into the Gulf of Mexico each year. Largely as a result, Louisiana loses 17 square miles of coastland annually,

Our joint plan to put the sediment-rich Mississippi River to work rebuilding wetlands will restore nearly half the land Louisiana has lost since the 1930s. Millions of people will benefit. So will wildlife like the roseate spoonbill (*opposite page*).

exposing the area to hurricanes and oil spills and threatening wildlife habitat, the nation's busiest port and a \$23 billion fishing industry.

"We've pushed the system to the edge," says EDF attorney James Tripp, who has worked on the Gulf for 35 years. "Now it's time to rebuild it."

After the BP Deepwater Horizon disaster, we and our partners worked with Senator Mary Landrieu (D-LA) on the RESTORE Act, a bill to dedicate 80% of any BP fines to Gulf restoration.

With our sister organization, Environmental Defense Action Fund, we engaged business-people, scientists and community leaders to help persuade Congress. With Duke University, we showed how coastal restoration will create thousands of jobs. "Our message to lawmakers was that prosperity depends on conservation," says our water program director Paul Harrison.



"EDF's national perspective and its support of science are helping realize our dream of reviving the Gulf Coast."

Dr. John Lopez
Executive Director
Lake Pontchartrain Basin Foundation





We worked across party lines, and our members sent more than 100,000 messages to Congress. In June 2012, the law passed by huge majorities: 373–52 in the House and 74–19 in the Senate. Senator Landrieu called EDF “absolutely instrumental” to the legislation’s success.

Depending on the final outcome of BP’s case, up to \$17 billion in fines could help repair the

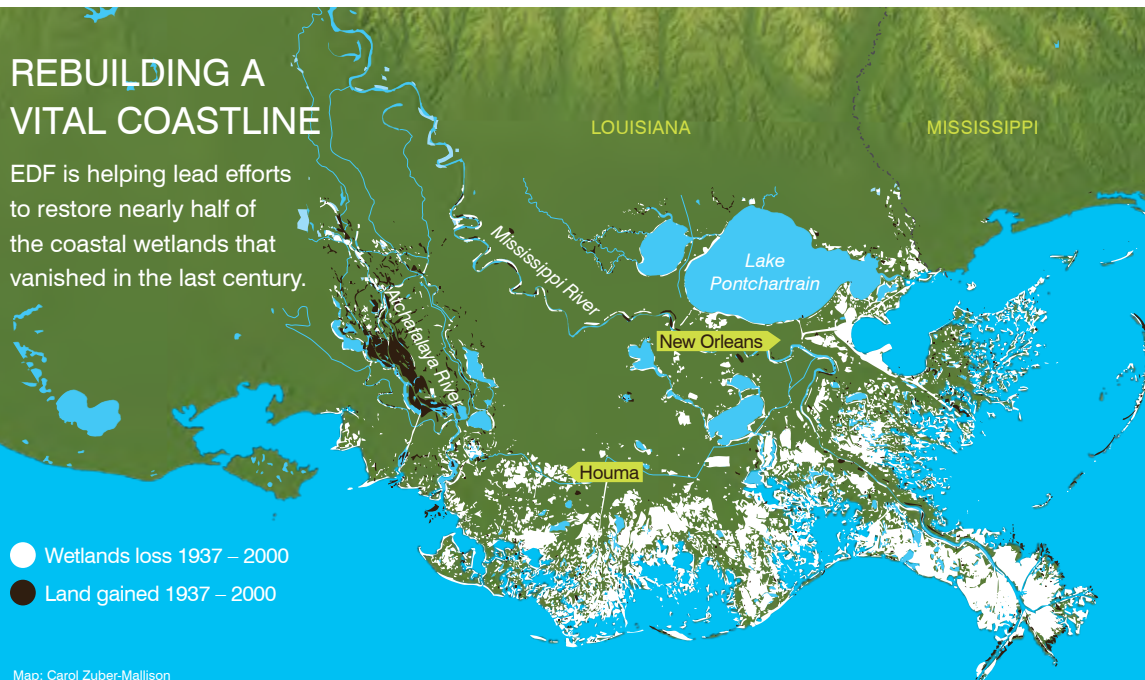
Gulf Coast and improve the lives of millions of people.

The road map for restoration is the Louisiana Coastal Master Plan, which EDF helped shape. The plan envisions reviving 860 square miles of coastal land, contingent on funding, and the Army Corps is using our models to plan the first restorations. “Soon,” says Harrison, “the river will once again revitalize coastal land for generations to come.”

EDF also is ensuring that local communities and businesses benefit from the restoration. For example, we’re helping the area’s oyster industry, on which 200,000 jobs depend, adapt to a changing coastline. “With EDF involved, we are moving forward,” says Mike Voisin of Motivati Seafoods in Houma, Louisiana.

REBUILDING A VITAL COASTLINE

EDF is helping lead efforts to restore nearly half of the coastal wetlands that vanished in the last century.



Map: Carol Zuber-Mallison

ECOSYSTEMS GOALS

Reverse wetland loss

Conserve wildlife by helping landowners profit from protecting habitat

Secure clean water for America

Spur demand for climate-friendly farming



“Farms could become havens for wildlife, and farmers could be stewards of clean water, fresh air and a healthy climate. They will need to be, if our planet is to sustain a growing population.”

David Festa
VP Land, Water and Wildlife



100,000 miles of America's rivers and streams have poor water quality. The reason? Nutrient pollution.

FROM FARM TO MARKET, THE GREENER WAY

EDF is partnering with farmers and others who manage two-thirds of U.S. lands. The results: less pollution and more and better habitat for wildlife.

America's farmers are the world's most productive, but this has come at a significant environmental cost. EDF is transforming that equation, enabling farmers to enhance clean air, water and wildlife habitat while maintaining or increasing productivity.

Across the Corn Belt, crops have replaced native grasses and wetlands. Without these natural filters, excess fertilizer runs off fields into the huge Mississippi River Basin, contaminating water supplies with an overload of nutrients.

Runoff plagues waters like the Gulf of Mexico, Chesapeake Bay and Lake Erie, where algae blooms threaten drinking water for 11 million people. Excess fertilizer also leads to nitrous oxide emissions, worsening climate change.

To cut fertilizer use, EDF has built networks of farmers across ten states from Minnesota to North Carolina. In partnership with universities and farm groups, we're showing farmers how to determine the precise amount of fertilizer their crops need. Reducing the excess saves them money and cuts pollution.

A powerful way to drive change is to partner with companies that have a huge impact on the supply chain. Working with Walmart and other food buyers, we aim to cut fertilizer use among the top 20% of corn farmers, who produce half the nation's corn. Corn covers 90 million acres and is the largest source of excess nitrogen.

In 2012, EDF also worked to ensure that the next Farm Bill contains strong incentives for farmers to restore wetlands and plant buffers alongside streams. Among the projects we're participating in: Bloomington, Illinois, will create wildlife-friendly wetlands to reduce nitrogen levels in the city water supply, eliminating the need for a \$2 million water treatment plant.

"Our goal is to spur a green revolution in agriculture so farmers can feed the planet while nurturing healthy ecosystems that are more resilient to floods and drought," says EDF project director Suzy Friedman.

FINDING COMMON GROUND FOR PEOPLE AND WILDLIFE

Across the country, EDF is seeking ways to resolve old water and land conflicts and ensure sufficient resources for people and wildlife. For the Colorado River, whose already overallocated supply of water will be further strained by climate change and population growth, we worked with the Bureau of Reclamation to shape a study on how to efficiently move water among multiple users so there's enough for both people and nature.



In the Texas Hill Country, we pioneered a way to protect the endangered golden-cheeked warbler. Developers pay landowners to create habitat in the bird's sole breeding grounds. With local populations of the bird rebounding, Texas is adopting the program for other rare wildlife, and EDF is proposing it as a national model.



EDF DONOR DIANE EDGERTON MILLER

GIVING BACK TO THE DELTA

After Hurricane Katrina, Diane Miller saw the dire need—and opportunity—to restore the devastated Mississippi Delta and the city of New Orleans, a region that is doubly threatened by land loss and sea level rise.

Her foundation, the blue moon fund, was founded with assets that originally came from the Delta. She says, “We realized we had an enormous debt to the region as a result of the extensive extraction of gas and oil and the subsequent wealth that had accrued.

“The disaster presented an opportunity to perhaps get it right,” she says, “by taking a holistic look at a culture, an ecosystem and its economics.” An architect by training, Miller is a problem solver. She saw the chance to rebuild the natural and physical resources that sustain the people and their culture and help make the community resilient.

“I credit EDF’s water director Paul Harrison and his team with bringing together everyone from the Houma First Nation peoples to shrimp fishermen and communities in the Ninth Ward. Without this integration of effort, the RESTORE Act never would have succeeded. This is a home run.”