



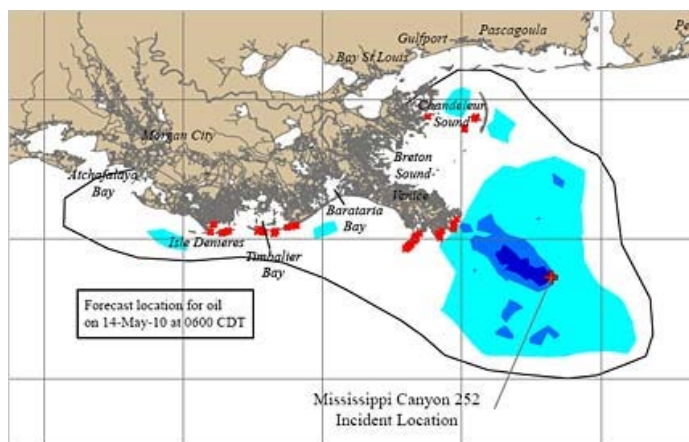
NATION

When the Oil Hits Land: 3 Bad-to-Worse Scenarios

(May 12) -- As you read this, the sweet crude from the [gulf oil spill](#) that is engulfing the Chandeleur Islands, the crescent chain of mangroves and sand providing the last flimsy barrier protecting southeast Louisiana from the sea, will be moving relentlessly beyond them toward the mainland.

The slick is expected to get there later this week, according to federal forecasters. Should those projections hold, the world will then get an answer to a grim question: Just how severe will the damage be?

Scientists have been predicting calamity for the Gulf Coast ever since the [Deepwater Horizon](#) oil rig blew up on April 20. But until the oil arrived at Louisiana's front door, the true potential of the disaster-in-the-making was difficult to gauge. Now, the possible outcomes for the area's delicate estuaries -- nursery to one of the most abundant fish, bird and animal populations in the world -- are coming into sharper focus. Even the best-case scenario is far from good.



This map shows the projected path of the massive oil slick if winds, as forecast, blow from the southeast throughout the week.

Ron Kendall, who heads the Department of Environmental Toxicology at Texas Tech University in Lubbock, calls what is about to occur "the biggest ecological toxicology experiment in the country's history."

Here are three ways it could play out.

The Bad-But-Less-Than-Doomsday Scenario

If there's a glimmer of hope for coastal Louisiana, it comes from test results on oil samples taken from the spill.

"The good news is that the oil appears to be relatively nontoxic," Irving Mendelsohn, a Louisiana State University professor who specializes in wetlands plants, told AOL News.

"So if this was a one-time event, if the oil went into the marsh once, I wouldn't expect much of an effect on the vegetation. The leaves and shoots will die, and new leaves and shoots will grow back," he said.

Denise Reed, interim director of the Pontchartrain Institute for Environmental Studies at the University of New Orleans, also sees some cause for optimism. "The wetlands have a remarkable ability to survive," she said.

But minimizing the marshes' exposure depends on [BP](#) quickly finding a way to stanch the flow of oil, [which of course is far from certain](#). And even if that were to happen, neither the fish, bivalves and wildlife that call the waters home, nor the men and women of Louisiana's \$2-billion-a-year commercial fishing industry, will be similarly spared.

The slick is hitting at the worst possible time of year. It's nesting season for

birds and animals and spawning season for fish.

What's more, while mildly oil-soaked plants can rebound, seafood has no such margin for error, as oysterman George Barisich knows all too well.

When Hurricane Katrina roared through in 2005, Barisich, 54, lost three of his boats and all but 40 of the nearly 400 acres leased from the state in St. Bernard Parish. He measures his financial loss in the past five years at \$750,000. By this spring, he'd rebuilt 160 acres for farming oysters. Now his beds are in the path of oil, and he figures he's on the edge of going out of business again.

"The quantity, concentration and duration of the oil will determine the mortality," Barisich told AOL News. "But basically, we're screwed."

The Even-Scarier Scenario

The risks to the Louisiana shoreline are compounded by the shape they were in before the Deepwater disaster. The state has 40 percent of the coastal wetlands in the continental U.S., according to the [National Oceanic Atmospheric Administration](#), but they are disappearing at a rate of 25 square miles a year. Hurricanes Katrina and Rita alone took out 200 square miles in 2005, notes Reed. Tiny marsh islands in Terrebonne Bay and Barataria Bay have vanished so recently that they still appear on navigation charts. Barisich said islands that he used to anchor on he now catches oysters on. They're five feet underwater.

NOAA forecasters had hoped the oil would keep to the east of the Mississippi River, held back by the strong river current emptying into the gulf. Instead, the oil is creeping steadily into areas that have suffered nearly 60 percent of the coastal land loss.

"If a marsh is healthy, it will bounce back," Reed said. "But where some marshes are already stressed, this could be the last straw that pushes it over the edge. Once you lose the vegetation, it's gone. Gone to open water."

The longer it takes BP to shut off the oil, the more marshland subjected to that fate.

Full Oil Spill Coverage



Liz Condo, Pool / AP

"If this oil spill keeps going, you could get multiple coatings of shoots and leaves. If this happens two or three times, then the total plant will die, and there will be no regeneration," said Mendelssohn. And when marsh grass dies, there's nothing left to hold the soil together.

"We've never had this kind of event that I'm aware of, where we've had 21 days of oil release like this. This creates a whole new playing field," he said.

The So-Bad-It-Will-Be-Felt-for-Generations Scenario

In less than three weeks, a new, unpredictable and potentially ruinous variable will be added to that field when [hurricane season](#) officially begins June 1.

Texas Tech's Kendall puts it plainly: "If a hurricane rolls up the gulf, we'll be sweeping oil out of downtown New Orleans."

Southeast of the city, Barisich thinks, it could take even less to swamp low-lying St. Bernard Parish with [tar balls](#). "I pray to God we can stop it. But if we get a storm surge -- it doesn't have to be a hurricane -- this oil is going to go over the marsh and go way inland. Once it gets up into Shell Beach on Lake Borgne, we're done."

As of this afternoon, the oil was still a long way from that tiny fishing community, but plenty close enough to inspire dread.

At Breton Sound Marina, which overlooks Bayou la Loutre near Hopedale, owner Glenn Sanchez keeps a before-and-after map at his desk showing what the area suffered at the hands of Katrina. "Whenever I go through my little spiel, people just can't believe what we've lost," he said. He thinks the damage from the oil spill will be even worse.

"Depending on how bad it comes in, it could be from five to 20 years. This will destroy a whole culture," he said. "I might be out of business. I'm 55 years old. I don't have any idea where I'd go to try and find a job."

Louis Molero Jr., 47, a third-generation fisherman, lives in the 100-year-old cypress house his grandfather bought in 1916. Until last month, he was a shrimper. Now he lays boom for BP and waits.

"My son told me the other day, This could go into duck hunting season. I'm not thinking that far ahead. What I'm thinking now is: How am I gonna pay my bills?"

"I'm used to dealing with hurricanes," Molero added. "They come. They're gone. This is a totally different thing. What is the long-term effect? Is it going to kill the fish and the oysters and the shrimp? Are we out for years?"

Travis Holeman, a fishing guide and charter captain, thinks that may be what will happen. "Fishing stocks take a long time to recover," he said. He has already started scouting out new places to guide his clients -- in Argentina.

"You'll have third-, fourth- and fifth-generation fishermen who will have been thrust into poverty for the rest of their lives," he said. "Most of the people in their 50s will never see this in its heyday again. They've already had their prime fishing time. It's over."

[When the Oil Hits Land](#)

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[Panel: Key Safety Device Failed](#)

[The Threat of the Bad-News Spillover](#)

[Ideas for Mopping Up Spill](#)

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