## Mississippi Closes Beaches Because of Toxic Algae Blooms

## By Christine Hauser

July 8, 2019

The relentless heavy rains in the Midwest continue to cause damage, this time in the form of vast, harmful algae blooms off the gulf coast that have forced Mississippi to close all of its beaches.

The increased flow of freshwater into the Gulf of Mexico has fed the thick blue-green algae, which can cause rashes, stomach cramps, nausea, diarrhea and vomiting in people and animals. It has already killed off the state's oyster beds, which could take years to recover, officials said.

Local tourism businesses, which were counting on a lucrative Fourth of July weekend, are comparing the economic hit to that of the Deepwater Horizon oil spill in 2010.

James Barney Foster, the owner of Life's a Beach water sports equipment rentals on the Mississippi coast, had prepared for a busy summer season this year by buying dozens of new Jet Skis.

But on Monday, after Mississippi closed the last of the state's beaches to swimming and other water recreation, he found himself standing on Biloxi Beach peddling umbrellas instead. He said he was now planning to haul some of the Jet Skis to Georgia to try to sell them there.

"It has killed it," Mr. Foster, 58, said of the holiday tourism business. "We are down here today trying to rent umbrellas, and we haven't made a dime."

The trouble started in late June, when the Mississippi Department of Environmental Quality announced that it was closing four beaches in Hancock County after the algae began to spread.

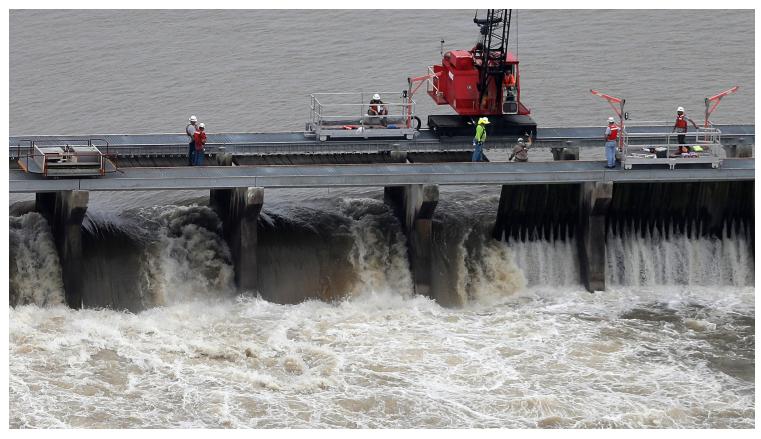
Over the next few weeks, the department closed more beaches, until Sunday, when the rest of the waters along the state's 40-mile-long coastline were sealed off.

Visitors can technically still use the sand of the beaches to play volleyball, sunbathe, build bonfires or, as some people did on the holiday, set off fireworks. Gov. Phil Bryant emphasized this on Monday.

"Seafood in restaurants are unaffected & the MS Gulf Coast remains open for business," he said on Twitter.

But those assurances were not enough to persuade many people to visit the Gulf of Mexico during what had promised to be a lucrative weekend, and the impact has already jolted the state's fisheries as well as its hotels and other tourism establishments.

"We didn't even make a hundred dollars," Mr. Foster said, referring to the four-day holiday weekend. "That is nothing compared to what we make on those days. Typically it is in the thousands."



Workers opening the Bonnet Carré Spillway on May 10. The spillway helps regulate the flow of the Mississippi River to relieve stress on levees protecting New Orleans. Gerald Herbert/Associated Press

Charles Loftis, the director of Sand Beach in Harrison County, estimated about 200 people were on the beach over the weekend. In the past, that figure would have been about a thousand, he said.

Linda Hornsby, the executive director of the Mississippi Hotel & Lodging Association, said the association's members account for 15,400 rooms in hotels and lodging establishments that stretch along the Gulf of Mexico.

In 2018, occupancy rates were 72 percent to 94 percent over the Fourth of July holiday period, up double digits compared with 2017. While Ms. Hornsby said data for current occupancy rates were not yet available, the rates were expected to fall below 2018's levels.

"This year the placement on the calendar was ideal for a banner weekend," she said, with the holiday falling on a Thursday. "And we certainly did not see that banner weekend."

Ms. Hornsby compared the potential damages of the closings to the 2010 oil spill, which sent about 200 million gallons of oil gushing into the Gulf of Mexico, taking a toll on tourism, the fishing industry and wildlife.

"I will be very surprised if we don't see a negative impact," she said.

The harmful algae bloom has been detected along the Mississippi coast by at least 20 beach-monitoring stations. It forms when the brackish water is inundated with freshwater carrying nutrients, such as nitrogen and phosphorus, and appears as foam, scum or mats on the surface of water.

The result can be a thick, soupy, clogged coastline.

"Like swimming in chocolate mousse," said John Lopez, a program director at the Lake Pontchartrain Basin Foundation, a nonprofit conservation organization that monitors water conditions along the gulf coast.

People or animals can get sick when they have contact with water or food contaminated with toxins in the algae, the Centers for Disease Control and Prevention said.

The heavy rainfall that has caused flooding in the Midwest this year has also caused the Mississippi River to rise. On May 10, the river rose six inches in a 24-hour period, the United States Army Corps of Engineers said.

So the corps began opening the Bonnet Carré Spillway, which helps regulate the flow of the river water to relieve stress on levees protecting New Orleans, which is about 20 miles downriver.

It was the first time that the spillway had been opened twice in one year.

The waters from the spillway empty into Lake Pontchartrain, which is part of the estuary connected to the Gulf of Mexico. The lake's brackish water is flushed with river water that then moves into the Mississippi Sound and on to the coastal region, Dr. Lopez said.

High water temperatures and other factors also contribute to the algae growth, he said.

Joe Spraggins, the executive director for the Mississippi Department of Marine Resources, said the influx of freshwater had killed off the state's oyster beds, which could take up to five years to bounce back. But so far, fish and crabs have not been affected by the carpets of algae.

"Once it starts, you have it growing over the Gulf, and it starts sucking more of the oxygen out of the water," Mr. Spraggins said, and aquatic life suffers. "They try to get away from it."

"A lot of people come here for the food and entertainment," he added. "That is going to be a big setback for us."

A version of this article appears in print on July 8, 2019, on Page A12 of the New York edition with the headline: Mississippi Closes Beaches After Deluge in Midwest Causes Toxic Algae Bloom