

Forecast predicts biggest Gulf dead zone ever

June 15 2011, By CAIN BURDEAU , Associated Press

Scientists predict this year's "dead zone" of low-oxygen water in the northern Gulf of Mexico will be the largest in history - about the size of Lake Erie - because of more runoff from the flooded Mississippi River valley.

Each year when the nutrient-rich freshwater from the Mississippi and Atchafalaya rivers pours into the Gulf, it spawns massive [algae blooms](#). In turn, the algae consume the oxygen in the Gulf, creating the low oxygen conditions. Fish, shrimp and many other species must escape the dead zone or face dying.

Federal and university scientists predict this year's zone will be between 8,500 square miles and about 9,400 square miles. The actual size of the dead zone will be measured over the summer.

The largest recorded dead zone was found in 2002 when 8,400 square miles of the Gulf was found to lacking sufficient oxygen for most marine life.

The forecasts on the size of the [hypoxic zone](#) are usually close to the mark, although hurricanes have chopped them up in the past.

Eugene Turner, an [oceanographer](#) at Louisiana State University, said the dead zone has continued to get larger since it was first noticed and measured in the 1970s. He said the dead zone is getting worse with time.

The biggest contributor is the amount of fertilizer - and the nitrates and

phosphates in them - that wind up in the [Mississippi River](#) each spring and get flushed out to the Gulf.

"The nitrogen is fertilizing the waters offshore," Turner said. He said little progress has been made in recent years to reduce the nutrient load into the Gulf.

The federal government and states in the Mississippi valley are attempting to reduce runoff from farms, lawns and cities, but those efforts have not curbed the problem.

This year, for instance, the U.S. Geological Survey said the nitrogen load that reached the Gulf was 35 percent higher than the average amount flushed into the Gulf each May over the past 32 years. The Mississippi and Atchafalaya rivers dumped nearly twice as much water than normal in May, officials said.

"As usual, the size of the low oxygen offshore is driven by both the freshwater and nitrogen levels in the Mississippi, so this year we have had floods and we have had more nitrate coming into the system," said Nancy Rabalais, the executive director of the Louisiana Universities Marine Consortium. Rabalais is a lead researcher into the dead zone.

She expected the dead zone to extend more to the west toward Texas and farther offshore than in past years.

Scientists said the large dead zone will complicate the Gulf's recovery from last year's massive oil spill. After the Deepwater Horizon drilling rig exploded on April 20, 2010, an out-of-control well owned by BP PLC. spewed about 206 million gallons of oil - 19 times more than the Exxon Valdez spilled.

"This is an additional stressor," Rabalais said. "It's our chronic stressor."

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