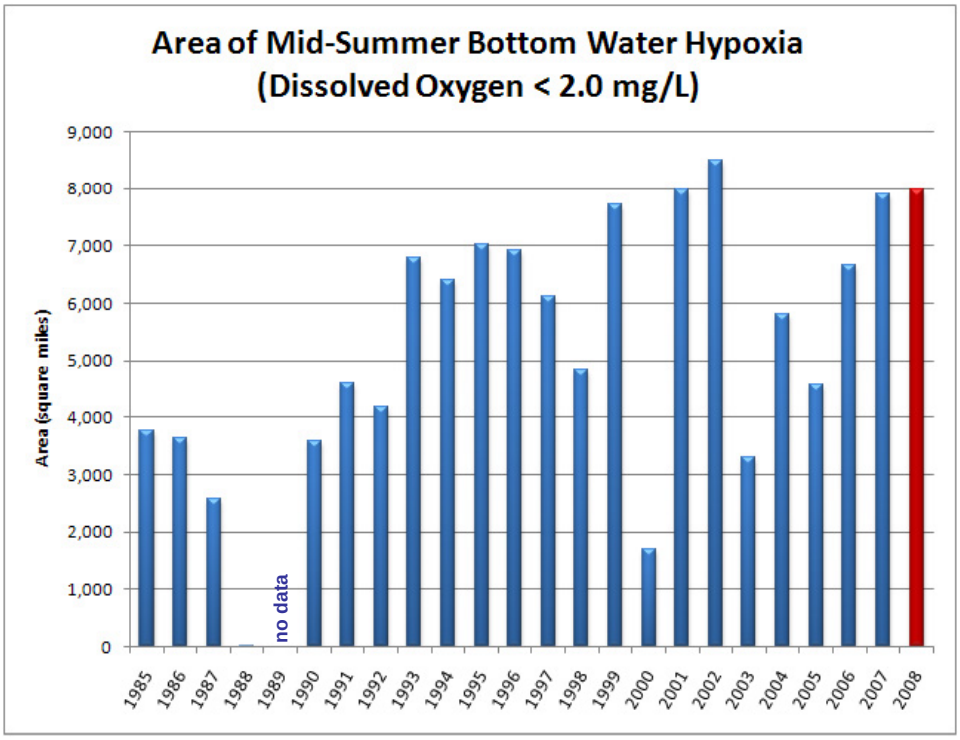
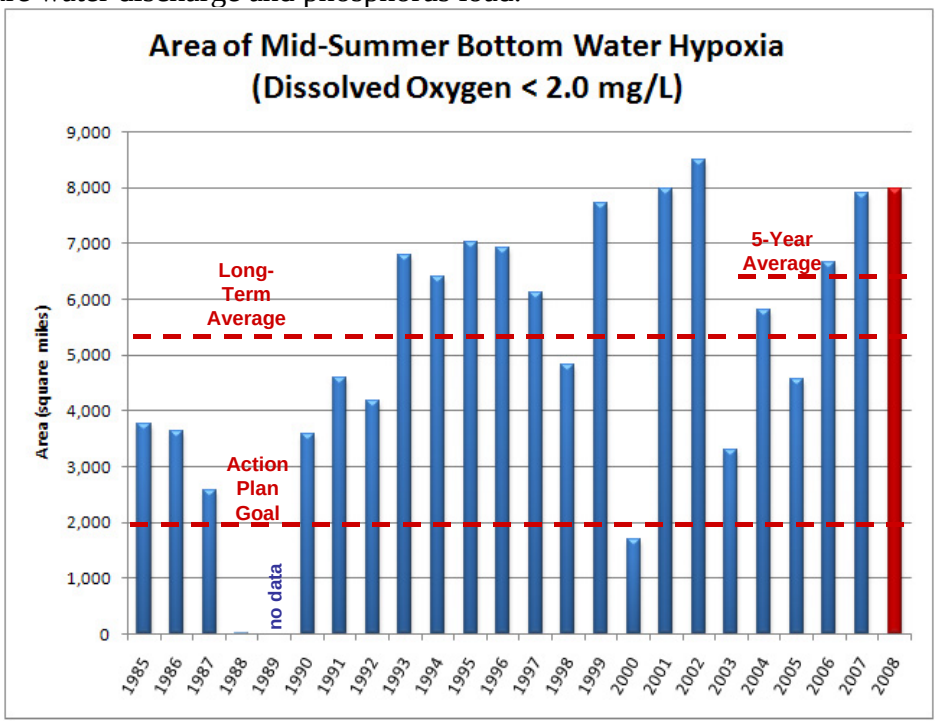


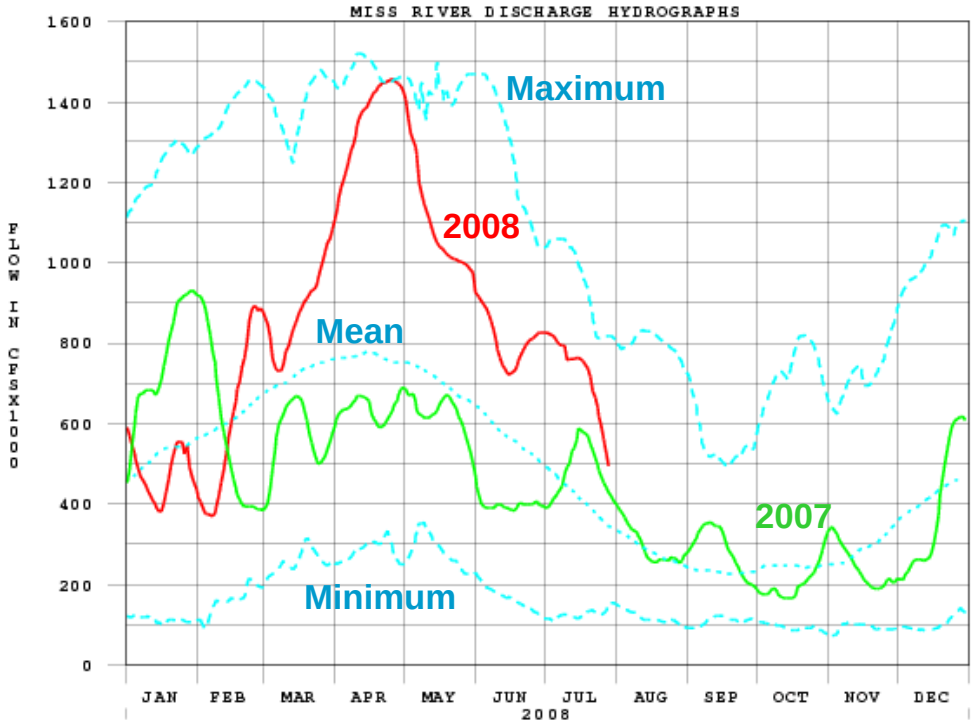
Source: N. Rabalais, LUMCON

Comparison of 2008 hypoxia size to previous years. Data source : N. Rabalais, Louisiana Universities Marine Consortium. The size of the northern Gulf of Mexico bottom-area of low oxygen waters (hypoxia) is most closely correlated with the nitrate-nitrogen load from the Mississippi River in May preceding the mapping cruise (plus a year term). Also related, but not as closely, are water discharge and phosphorus load.



Source: N. Rabalais, LUMCON

The average size of the Dead Zone over the past 5 years has been 6,600 square miles, much larger than the interagency Gulf of Mexico/Mississippi River Watershed Nutrient Task Force goal of 2,000 square miles. The long-term average is 5,300 square miles.



Mississippi River discharge (cubic feet per second ×1000) at Tarbert Landing, MS from 1930 to 20 July 2008 [http://www.mvn.usace.army.mil/eng/edhd/tar.gif]. The 2008 Mississippi River discharge began its climb to a near record high since 1930 in February and reached its peak in April. Discharge declined steadily to June but was still well above average. The recent floods in the mid West contributed to the smaller peak in June/July discharge. The fresh water and nutrients that led to the formation of hypoxia early in 2008 occurred earlier in the year, and the subsequent high flow and nutrient loads aggravated the already worsening hypoxia situation.

Another peak of fresh water will crest at St. Louis at the end of July, but is not expected to manifest in any substantial increase in overall discharge. The Mississippi River discharge at the end of July is approaching the long-term average.