

# Nitrogen and Phosphorus Sources and Delivery from the Mississippi/Atchafalaya River Basin: Updated USGS Study



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A USGS study has been released titled:

*Nitrogen and Phosphorus Sources and Delivery from the Mississippi/Atchafalaya River Basin: An Update Using 2012 SPARROW Models ("Study")*

The authors of the *Study* are Dale M. Robertson and David A. Saad.

The *Study* calculates total nitrogen and total phosphorus from catchments in the Mississippi/Atchafalaya River Basin ("MARB"). Both nitrogen and phosphorus originating in the MARB have been determined to be related to hypoxia and water quality issues in the Gulf of Mexico.

The *Study* addresses:

- Locations of nutrient sources within the MARB
- Relative importance in the MARB of different nutrient sources such as:
  - Fertilizer
  - Manure
  - Wastewater treatment plants
  - Atmospheric deposition

The *Study* utilized what it described as "refined" SPARROW model to address these questions. The SPARROW models are stated to have been developed with:

- Higher resolution basin delineation
- Updated (2012) source inputs
- Improved calibration (load) targets
- Additional statistical techniques than used in previous SPARROW models

A copy of the *Study* can be downloaded [here](#).