



Image: Stratfor 2016

# Moving Forward on Gulf Hypoxia

## Governor's Advisory Commission on Coastal Restoration & Protection

March 5, 2026

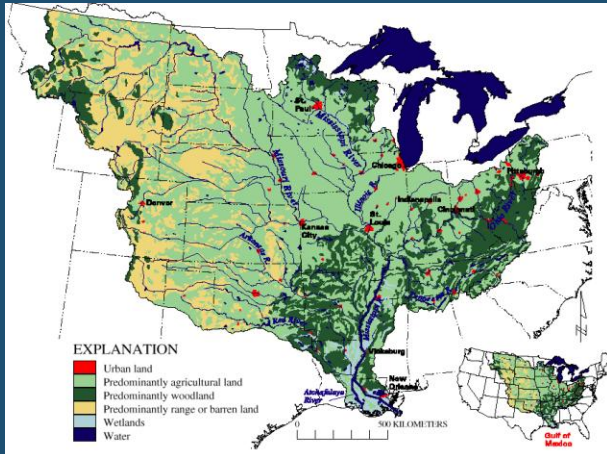
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Doug Daigle

Louisiana Hypoxia Working Group

<https://www.facebook.com/p/Louisiana-Hypoxia-Working-Group-100069905961640/>

# Mississippi River - Gulf of Mexico Ecosystem Continuum



Effects are more far reaching than suspended sediment plume, esp. N & somewhat P

dominant wind direction



Source: N. Rabalais, LUMCON

# Louisiana Hypoxia Working Group

- An open forum dedicated to promoting and supporting the Gulf of America Hypoxia Action Plan in Louisiana (and upstream)
- We've met monthly since 2003
- The LHWG remains the only ongoing and open public outreach effort on the Gulf Hypoxia issue in Louisiana - all interested participants are welcome
- My comments reflect long-standing discussions of the group, but are my own perspective from 27 years of involvement with the Gulf Hypoxia issue

# Gulf of America Hypoxia Action Plan

The Gulf Hypoxia Task Force, formed in 1998, joins 12 States along the Mississippi and Ohio Rivers, key federal partner agencies, Land Grant Universities, and stakeholders

The Gulf Hypoxia Action Plan (2001, 2008, 2015) is a cooperative effort focused on voluntary, cost-effective actions to reduce the growth of the Gulf Hypoxic Zone

Two basic kinds of actions: 1) reduce nutrients going into the river basin and Gulf; 2) remove nutrients from the rivers



# *Action Plan*

for Reducing, Mitigating, and Controlling Hypoxia  
in the Northern Gulf of Mexico

Mississippi River/Gulf of Mexico Watershed Nutrient Task Force

*January 2001*

# Gulf Hypoxia Action Plan 2008

for Reducing, Mitigating, and Controlling Hypoxia  
in the Northern Gulf of Mexico and Improving  
Water Quality in the Mississippi River Basin



 Mississippi River  
Gulf of Mexico  
Watershed Nutrient  
Task Force

# Action Plan Goal 2015

- “An Interim Target of a 20% reduction of nitrogen and phosphorus loading [from the Mississippi-Atchafalaya River Basin to the Gulf by 2025] is a milestone for immediate planning and implementation actions...
- “We strive to reduce the five-year running average areal extent of the Gulf of Mexico hypoxic zone to less than 5,000 square kilometers by the year 2035.” (An average annual size over 5 years)
- The 5000 sq. km./1950 sq. mile goal was originally set in 2000 for 2015, then had its timeline revised in 2015.

# Key Considerations I

- These timelines are the core components of the commitments made by agencies and states – including Louisiana – under the Action Plan
- A key reason that the 2015 goal was not reached was lack of adequate funding for the Action Plan, which continues to be a major limitation

## Key Considerations II

- During the previous state administration, Louisiana was a passive and largely silent member of the Hypoxia Task Force
- Our representatives on the HTF took no action to gain new funding for the Action Plan, to make achieving its goals a priority, or to indicate that the hypoxia issue was an important one
- To the degree that the Gulf hypoxia issue was important, it was as an opportunity to promote the MBSD

# Key Considerations III

- A basic problem with that policy: the MBSD doesn't exist - Diversions have no effects per hypoxia, good or bad, until they're operational
- It also reflects confusion about the role of diversions in relation to the Hypoxia Action Plan:
  - 1) Diversions have long been part of the Coastal Restoration/Master Plan, but their timelines haven't aligned with those of the Hypoxia Action Plan
  - 2) The Davis Pond Project has been the only new diversion constructed and operated over the life of the Hypoxia Action Plan

## Key Considerations IV

- 3) Diversions in the Master Plan have different primary goals than the Hypoxia Action Plan: land-building and salinity changes, with nutrient processing a secondary effect
- 4) The Diversions in the Master Plan vary greatly based on design, size, and location of their receiving basins
- 5) The near-term effect of a Coastal Diversion on the Gulf Hypoxia problem is that they take a portion of the river flow and nutrient load out of the mainstem so that it doesn't enter the Gulf from the Mississippi/Atchafalaya mouths – what happens in the receiving basin or waterbody is a separate issue

# Key Considerations V

- 5) Hypoxia is driven by N and P loading – the Action Plan provided a window to reduce their levels in the river before a new Diversion was opened, and alleviate at least some concerns
- 6) N and P can fuel hypoxia and harmful algal blooms (HABs) in receiving basins, even with vegetation growth – numerous studies: Barataria Bay, D Pond, MBSD
- 7) Other water quality concerns are separate from N/P and hypoxia – examples: Lower Barataria Bay impaired by Enterococcus, MR from BR to Head of Passes impaired by Hexachlorobenzene (2026 LDEQ Integrated Report Rationale)

# Conclusion – Moving Forward

We are in the critical window to take the actions needed to reach the 2035 Action Plan Goal

Continuing and increasing current funding streams should be the main priority

Our partners upriver (UMRBA) and our Congressional Delegation are supportive

The first Trump administration was very supportive of the HTF and Action Plan

Louisiana didn't take advantage of that opportunity – but we can do so now

# Thank you

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**Lower Mississippi River Sub-basin Committee on Gulf Hypoxia**  
Agricultural Cooperative

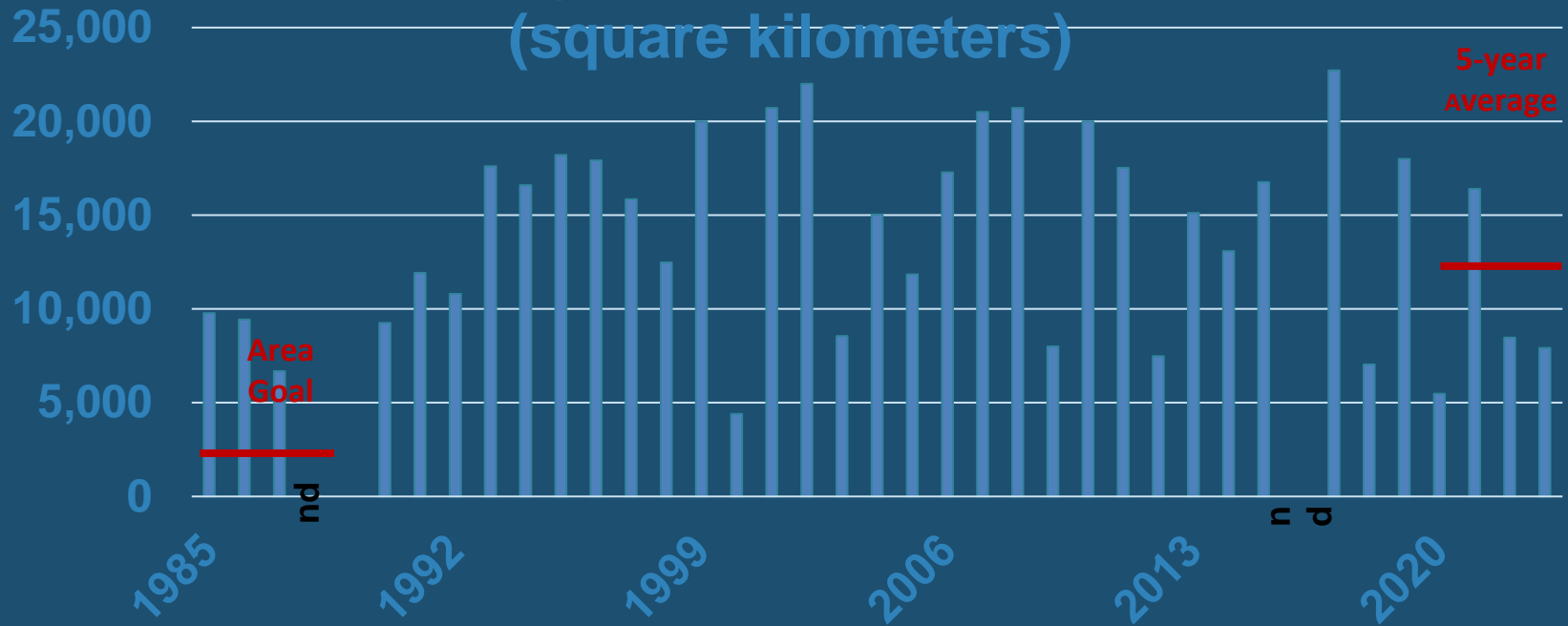
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# Mid-Summer Area of Bottom-Water Hypoxia, 1985-2023 (square kilometers)



The size of the area of bottom-water hypoxia (dissolved oxygen less than 2 mg l<sup>-1</sup>) for 1985-2023 in square kilometers. “nd” indicates no data—a year without a completely mapped area or no mid-summer shelf wide cruise (1989 & 2016). The area for 1988 is minimal and not visible on the graph.



