

US EPA ARCHIVE DOCUMENT

FY 2011 National Water Program End of Year Performance by Subobjective

The following chapters provide a summary of the progress made toward accomplishing environmental and program goals for each subobjective described in the *FY 2011 National Water Program Guidance*. Each subobjective chapter includes the following information:

- A brief summary of overall performance in 2011 and the previous four years for measures under each subobjective.
- A description of performance highlights, including what commitments were met and what factors contributed to success.
- A description of management challenges, if appropriate, identifying key factors that led to measures not being met and next steps to improve performance for the future.

Each subobjective section focuses primarily on measures with FY 2011 commitments. Indicator measures are discussed where trends significantly differ from previous year's results. Annual Commitment System (ACS) measure codes (e.g., SP-1) are provided in the text in parentheses.

Key for Reading Performance Measure Charts and Tables

For all charts with national trend results, commitments are reflected by blue trend lines and results by vertical bars. For charts with regional FY 2011 results, a dotted line (in orange) indicates the national FY 2011 commitment for that particular measure. Although regions use the national commitment as a point of reference in setting their annual commitments, regional commitments may vary based on specific conditions within each region. Green bars in both national and regional charts identify commitments met, and red bars identify measures not met. A purple bar indicates that the Agency did not set a commitment for that year.

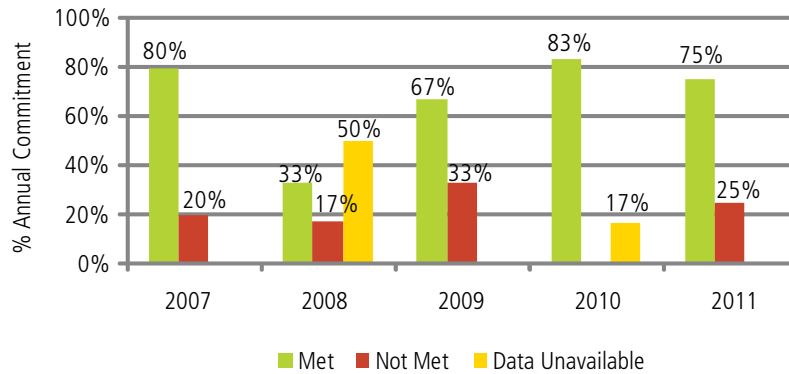
For the measure summary tables in each subobjective chapter, a green "up" arrow means that a measure met its FY 2011 commitment, and a red "down" arrow indicates that the annual commitment was not met. The letter "I" means that the measure is an indicator measure and did not have an annual commitment for FY 2011. Measures without data or not reporting in FY 2011 are indicated by "Data Unavailable." An "LT" symbol notes that the measure has a long-term goal and does not have an annual commitment. A gold star (★) in the past trends column highlights that the measure has met its annual commitment 100% of the time over the past four or five years. And finally, the appendix number represents the page in Appendix D (A-00) on the website where additional details about the measure can be found, and the figure number is the number of the chart in the chapter.



Subobjective: Gulf of Mexico

EPA met three of its four commitments for the Gulf of Mexico Program in FY 2011. EPA has continued to meet the majority of its commitments to protect the Gulf of Mexico for four of the past five years (Figure 56).

Figure 56: Gulf of Mexico Subobjective Five-Year Trend by Fiscal Year



FY 2011 ACS Code	Abbreviated Measure Description	Commitment Met/Not Met (I = Indicator) (Data Unavailable = No Data/Not Reporting) (LT = Long-Term Target)	Past Trends: # of Years Met	Appendix Page Number (D-0)/ Figure Number
Subobjective 4.3.5 Gulf of Mexico				
4.3.5	Improve health—Gulf of Mexico ecosystem	▼	1/5	D-60
SP-40	Reduces hypoxic zone Gulf of Mexico	I		D-61/Fig. 57
SP-38	Impaired water segments and habitat restored	▲	4/5	D-60
SP-39	Gulf acres restored or enhanced	▲	5/5 ★	D-61/Fig. 59
GM-1	Warning system to manage algal blooms	▲	4/5	D-62

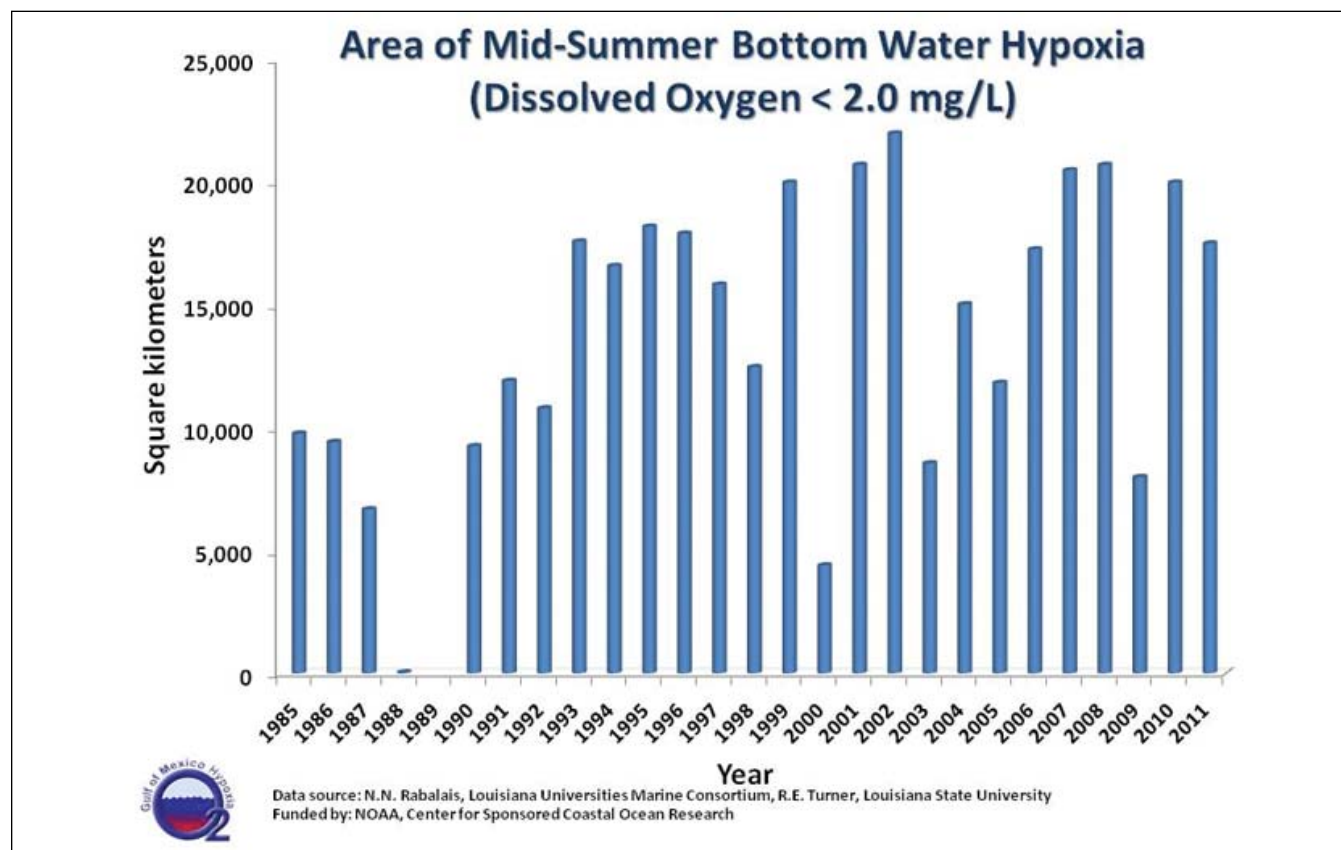
FY 2011 Performance Highlights and Management Challenges

The Gulf of Mexico basin has been called “America’s Watershed.” Its U.S. coastline encompasses 1,630 miles; it is fed by 33 major rivers; and it receives drainage from 31 states in addition to a similar drainage area from Mexico. One-sixth of the U.S. population now lives in Gulf Coast states, and the region is experiencing remarkably rapid population growth. In addition, the Gulf of Mexico yields approximately 40% of the nation’s commercial fishery landings. Gulf Coast wetlands comprise about half the national total and provide critical habitat for 75% of the migratory waterfowl traversing the United States.

The latest *National Coastal Condition Report* (NCCR IV) (2012) indicates that the overall aquatic ecosystem health of the coastal waters of the Gulf of Mexico is rated as fair, or 2.4 on a 5-point scale, in which 1 is poor and 5 is good (Subobjective 4.3.2). The NCCR IV assessment is based on environmental stressor and response data collected by the states of Florida, Alabama, Mississippi, Louisiana, and Texas from 2003 to 2006. The hurricanes of 2005 (Katrina and Rita) significantly affected the data collected; Alabama, Mississippi, and Louisiana did not collect data in 2005, except for water quality indicators in Mississippi. These factors influenced the overall condition score, which represents no significant change from the previous ratings in NCCR II and III.

The size of the hypoxic, or “dead,” zone¹⁷ in the Gulf of Mexico decreased from 20,000 km² (8,000 mi²) in 2010 to 17,520 km² (6,764 mi²) in FY 2011 (SP-40) (Figure 57). There are a number of hydrological, climate, and monitoring factors that impact the hypoxic zone from year to year (e.g., lower than average Mississippi River flow, timing of monitoring during weather events).¹⁸ The five-year running average is currently at 17,350 km² (6,680 mi²). The interagency Gulf of Mexico/Mississippi River Watershed Nutrient Task Force goal is to reduce the dead zone to a size of 5,000 km² (1,900 mi²) or less by 2015, based on a five-year running average (Figure 58).

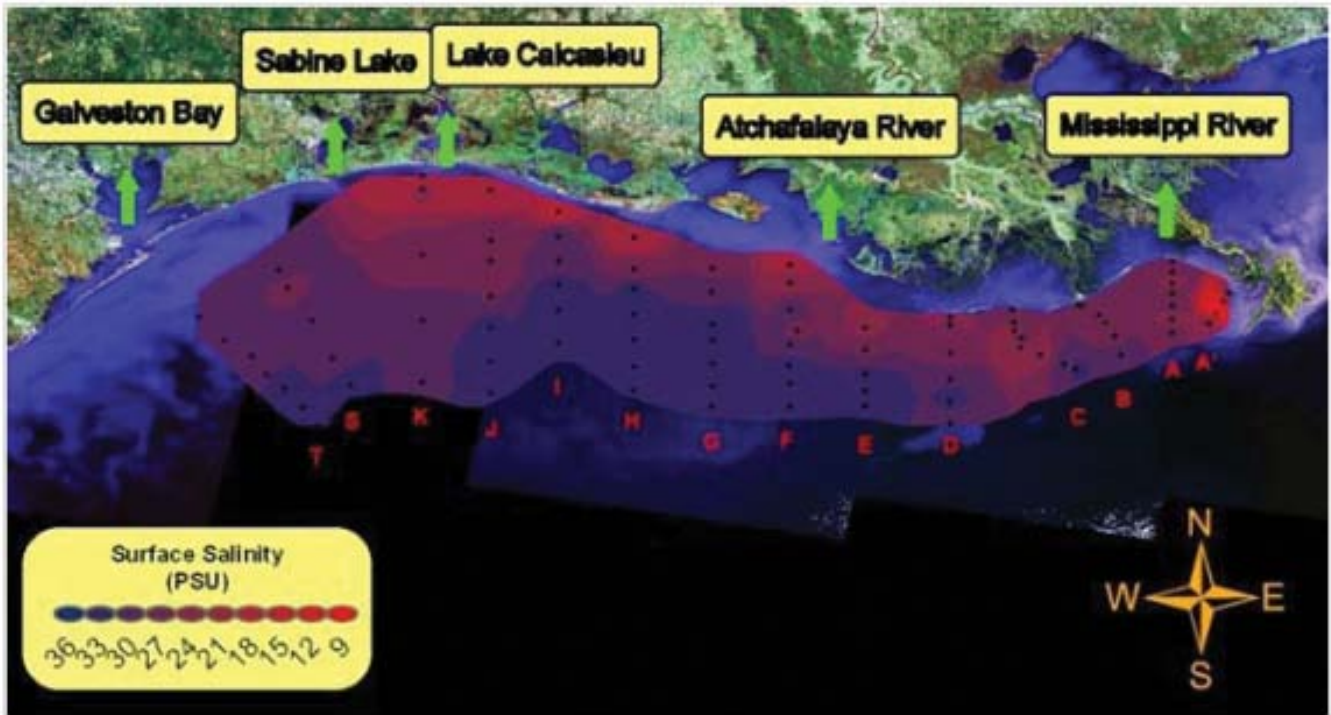
Figure 57: Size of Hypoxic Zone in Gulf of Mexico



¹⁷ The dead zone is an area of oxygen-starved water, also known as hypoxia. It is fueled by nitrogen and phosphorus runoff, principally from agricultural activity in the Mississippi River watershed, which stimulates an overgrowth of algae that sinks, decomposes, and consumes most of the life-giving oxygen supply in the water.

¹⁸ For more information on causes of the size of the hypoxic zone, visit: http://www.cop.noaa.gov/stressors/extremeevents/hab/features/hypoxiafs_report1206.html.

Figure 58: Hypoxic Zone Reduction Goal



Acres of Habitat Restored: The Gulf of Mexico Program ended the year slightly ahead of its FY 2011 cumulative target to restore, protect, or enhance 30,000 acres of coastal and marine habitats. Regional collaboration through coordinated efforts helped restore about 500 acres in 2011. Although the past two years have seen less than approximately 4,000 acres restored, the program has restored, enhanced, or protected a total of 30,052 acres in the states of Florida, Mississippi, Alabama, Louisiana, and Texas since 2006 (SP-39) (Figure 59). This is an 88% improvement over the FY 2005 baseline of 16,000 acres. Slightly less than 1% of the total universe of habitat acres, however, has been restored to date (Figure 60).

Figure 59: Gulf of Mexico Acres Restored or Enhanced Trend by Fiscal Year (SP-39)

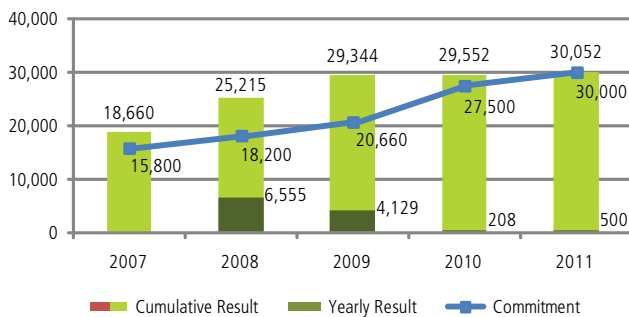


Figure 60: Percent Toward Universe and Baseline (SP-39)

