FY 2010 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 2010 *National Water Program Guidance*. Each subobjective chapter includes the following information:

- A brief summary of overall performance in 2010 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 2010 commitments. Indicator measures are discussed where trends significantly differ from previous year's results. Annual Commitment System (ACS) measure codes are provided in the text in parentheses.

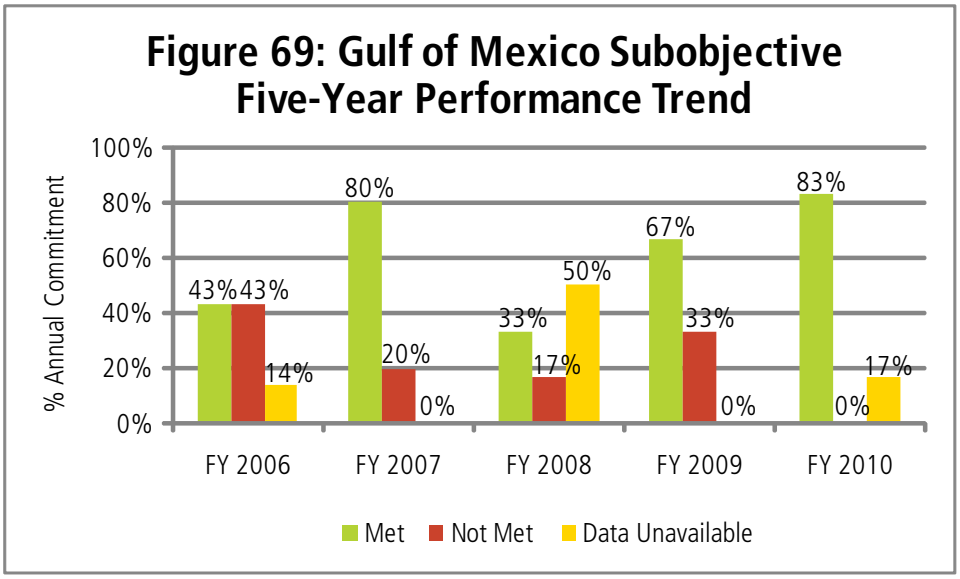
Key for Reading Performance Measure Charts and Tables

For all charts with national trend results, commitments are reflected by trend lines and results by vertical bars. For charts with regional FY 2010 results, a dotted line indicates the national FY 2010 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 different conditions. Green bars in both national and regional charts identify commitments met, and red bars identify measures not met.

For the measure summary tables in each subobjective chapter, a green "up" arrow means that a measure met its FY 2010 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 2010. Measures without data or not reporting in FY 2010 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 (D-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 five of its commitments and was unable to report on one commitment in FY 2010. EPA has continued to meet the majority of its commitments to protect the Gulf of Mexico for three of the past four years. (Figure 69)



FY 2010 ACS Code	Measure Description	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	Data Unavailable	1/3	D-53
SP-40	Reduces hypoxic zone Gulf of Mexico	LT		D-54
SP-38	Impaired water segments and habitat restored	▲	4/5	D-53
SP-39	Gulf Acres restored or enhanced	▲	4/5	D-54/Fig. 71
GM-1	Warning system to manage algal blooms	▲	4/5	D-55
GM-3a	Gulf near-term actions on track	▲	3/3	D-55
GM-3b	Gulf near-term actions completed	▲	3/3	D-56

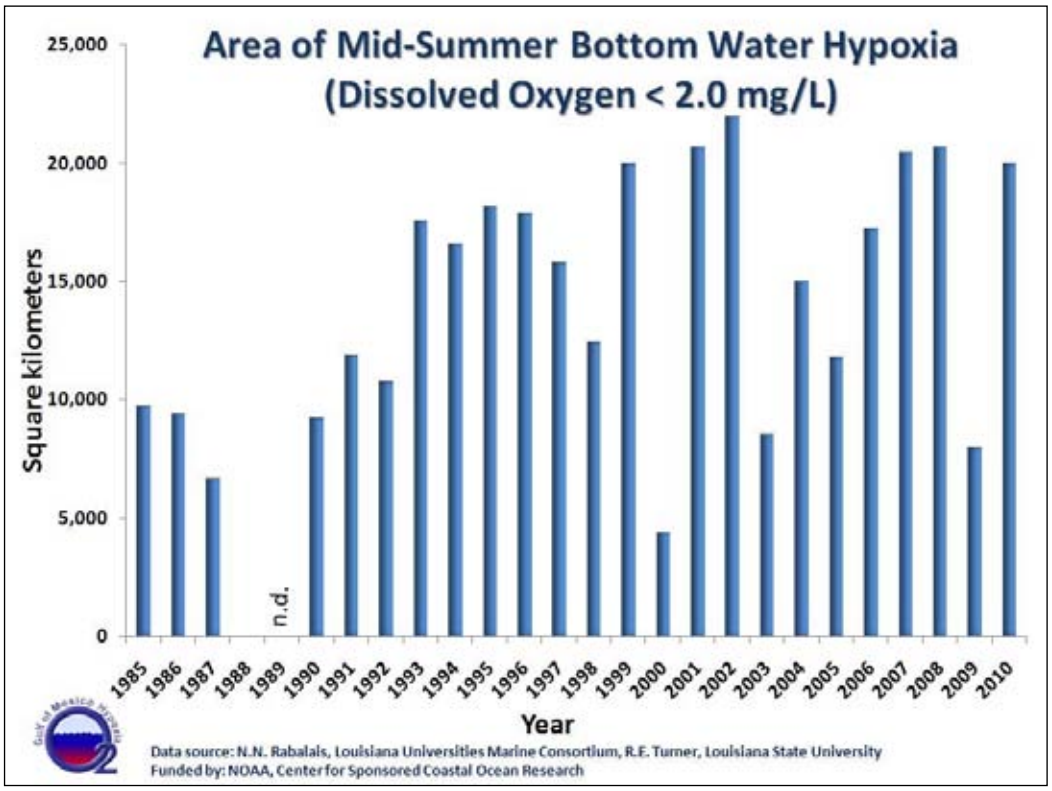
FY 2010 Performance Highlights and Management Challenges

The Gulf of Mexico basin has been called "America's Watershed." Its U.S. coastline is 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) (2008) indicates that the overall aquatic ecosystem health of the coastal waters of the Gulf of Mexico is 2.2 on a five-point scale, in which 1 is poor and 5 is good (Subobjective 4.3.2). Data will not be available again on ecosystem health for the Gulf until the next publication of the NCCR in FY 2011.

The size of the hypoxic, or "dead," zone,[1] in the Gulf of Mexico increased significantly from 8,000 square kilometers (km^2) (3,000 square miles [mi^2]) in 2009 to 20,000 km^2 (8,000 mi^2) in 2010 (SP-40) (Figure 70). There were a number of hydrological, climate, and monitoring factors that led to the large increase in the hypoxic zone over the past year (e.g., lower than average Mississippi River flow, timing of monitoring during weather events).[2] The five-year running average is currently at 17,300 km^2 (6,680 mi^2). The interagency Gulf of Mexico/Mississippi River Watershed Nutrient Task Force goal is to reduce the dead zone to a size of 5,000 km^2 (1,900 mi^2) or less by 2015, based on a five-year running average.

Figure 70



[1] 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.

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

Acres Habitat Restored. The Gulf of Mexico Program ended the year ahead of its FY 2010 cumulative target (27,500 acres) to restore, protect, or enhance coastal and marine habitats. Regional collaboration through coordinated efforts helped restore about 200 acres in 2010. Although this was less than the approximately 4,000 acres restored in 2009, the program has restored, enhanced, or protected a total of 29,522 acres in the states of Florida, Mississippi, Alabama, Louisiana, and Texas since 2006 (SP-39) (Figure 71). The program is expected to meet its 2014 target of 32,600 acres in FY 2011. Slightly less than 1% of the total universe of habitat acres has been restored (Figure 72).

Figure 71: Gulf of Mexico Acres Restored or Enhanced by Fiscal Year (SP-39)

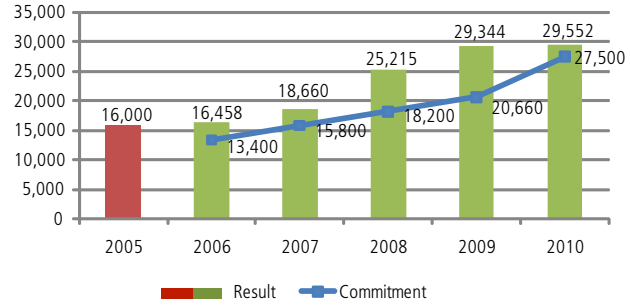
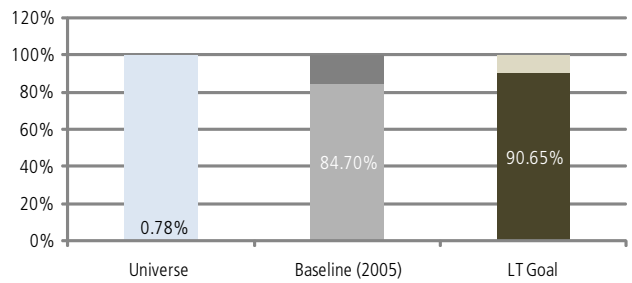


Figure 72: Percent of Universe, Above Baseline, and Toward Long-Term Goal (SP-39)



Percent Impaired Segments Restored. With the support of numerous federal, state, local, and private partners, EPA restored water and habitat quality to 170 impaired waterbodies in 13 priority coastal areas of the Gulf of Mexico. This exceeded the 2010 goal of 96 impaired waterbodies (SP-38) and was an increase of 39 segments restored over FY 2009.