

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.

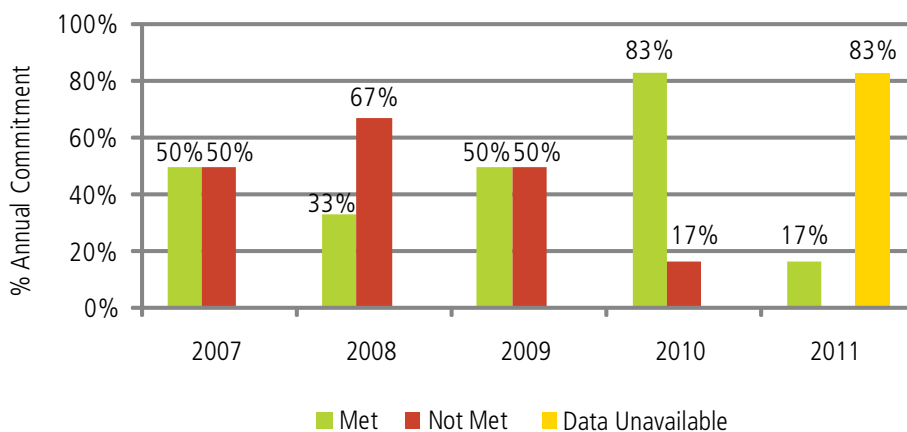
For the measure summary tables in each subobjective chapter, a green "up" arrow means that a measure met its FY 2011 commitment, and a red "down" arrow indicates that the annual commitment was not met. The letter "I" means that the measure is an indicator measure and did not have an annual commitment 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: Chesapeake Bay**

EPA's Chesapeake Bay Program was unable to report on five of its six commitments (83%) in FY 2011. Performance measure language and the FY 2011 commitments are no longer applicable due to changes in the calculation of annual results following the establishment of a new Total Maximum Daily Load (TMDL) for the Chesapeake Bay watershed in December 2010 (Figure 54).

**Figure 54: Chesapeake Bay 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 4.3.4 Chesapeake Bay				
SP-33	Chesapeake Bay SAV restored	LT		D-55
SP-34	Chesapeake Bay dissolved oxygen attained	LT		D-55
SP-35	Bay nitrogen reduction practices implemented	No Longer Reporting	0/5	D-56
SP-36	Bay phosphorus reduction practices implemented	No Longer Reporting	2/5	D-57
SP-37	Bay sediment reduction practices implemented	No Longer Reporting	2/5	D-58
CB-1a	Bay point source nitrogen reduction	No Longer Reporting	1/5	D-58
CB-1b	Bay point source phosphorus reduction	No Longer Reporting	4/5	D-59
CB-2	Bay forest buffer planting goal achieved	▲	3/5	D-59

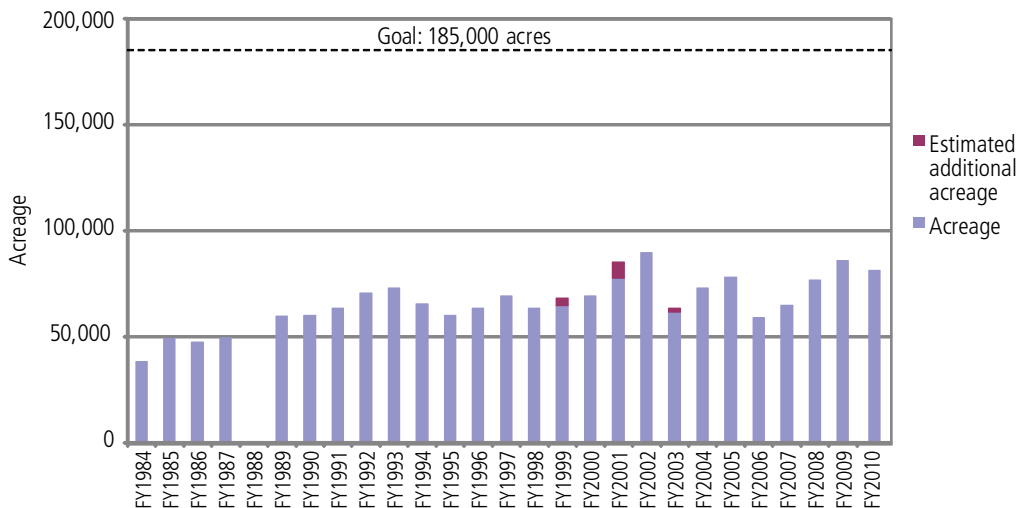
Note: SAV = submerged aquatic vegetation

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FY 2011 Performance Highlights and Management Challenges

Submerged Aquatic Vegetation (SAV) and Water Quality in the Bay: The overriding goal of EPA’s Chesapeake Bay Program Office is to work with its federal, state, and local partners to improve the health of the Chesapeake Bay ecosystem. Two of the most important indicators for measuring the health of the Chesapeake Bay are acres of SAV (SP-33) and levels of dissolved oxygen (DO) (SP-34). Based on annual monitoring from the prior year, the Chesapeake Bay Program reported 79,550 acres of SAV in the bay. This represents approximately 43% of the program’s long-term goal of 185,000 acres, which is the amount necessary to achieve Chesapeake Bay water quality standards (Figure 55). Monitoring data from the previous three years indicate that about 38% of the combined volume of open-water, deep-water, and deep-channel water of the bay and its tidal tributaries met DO standards during the summer months. The goal is for 100% of the tidal tributaries and the Chesapeake Bay to meet Clean Water Act standards for DO. In order to achieve SAV and DO goals, program partners are implementing pollution control measures throughout the bay watershed to reduce nitrogen, phosphorus, and sediment loads to the bay.

Figure 55: Underwater Bay Grass Abundance



Reducing Nitrogen, Phosphorus, and Sediment Runoff to the Bay: In December 2010, EPA established the Chesapeake Bay TMDL, a comprehensive “pollution diet” with rigorous accountability measures to initiate sweeping actions to restore clean water in the Chesapeake Bay and the region’s streams, creeks, and rivers. The District of Columbia, Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia developed Phase I Watershed Implementation Plans (WIPs) to identify how much pollution would need to be reduced from each source sector in order to meet water quality standards in the Chesapeake Bay, and how these reductions would be achieved and maintained. In 2011 and 2012, jurisdictions are working with their local stakeholders to develop Phase II WIPs that will help key partners better understand what they need to do to improve water quality in the rivers and streams flowing to the Chesapeake Bay.

Although EPA expects enhanced implementation of nutrient pollution control measures as a result of the TMDL established in December 2010, EPA is unable to report on the Chesapeake Bay Program’s nitrogen, phosphorus, and sediment point and nonpoint source measures in FY 2011 (SP-35, SP-36, SP-37, CB-1a, and CB-1b). The commitments and language for these measures were published in the *FY 2011 National Water Program Guidance* in April 2010. This was prior to the development of the TMDL and the new model for tracking nitrogen and phosphorus results. Furthermore, the commitments and language for these measures were established using an obsolete model for estimating loadings to the watershed. In addition, the baseline, long-term goal, and deadline have changed as a result of the TMDL established in 2010. The Agency has developed new measures to capture the progress in implementing nutrient pollution reduction actions in the Bay watershed. The Agency reported on these new measures for the first time in the *FY 2011 Annual Performance Report (APR)* (see Table 2).

Table 2: New Chesapeake Bay Measures

ACS Code	Measure Language	Budget Targets	APR Results
SP-35	Percent of goal achieved for implementing nitrogen pollution reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.	1%	8%
SP-36	Percent of goal achieved for implementing phosphorus pollution reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.	1%	1%
SP-37	Percent of goal achieved for implementing sediment pollution reduction actions to achieve final TMDL allocations, as measured through the phase 5.3 watershed model.	1%	11%

Restoring Forest Buffers: State and federal efforts to accelerate forest buffer planting resulted in planting 337 miles of forest buffers in FY 2011. A total of 7,229 miles have been planted since FY 1997, achieving 72% of the long-term goal to plant 10,000 miles of forest buffer (CB-2). Future challenges for planting forest buffers include the high price of crop commodities; a shortage of technical assistants (this is likely to continue due to the impact of the economy on agency staffing levels); uninformed landowners; and the tendency of the agricultural community to plant grass buffers.

