

US EPA ARCHIVE DOCUMENT

# National Water Program Best Practices and End of Year Performance Report

Fiscal Year 2010



This report is based primarily on materials and analysis developed in December 2010 and January 2011 by Headquarters and EPA regional staff working together on Subobjective Teams. These materials provided data concerning progress toward environmental and public health goals of key program activities, along with management challenges in meeting or not meeting program commitments. Much of this work is accomplished through grants, and this report serves as the Office of Water’s primary summary of progress under the Environmental Results Grants Order.

This report includes four key elements:

- Overview of performance for all FY 2010 National Water Program measures.
- Description of innovative approaches and best practices in program implementation.
- An appendix of FY 2010 national commitments and results for environmental and program-related measures.

Additional information concerning performance for each subobjective is available on the Internet at: <http://www.epa.gov/water/waterplan>, or by clicking on the subobjective titles in Table 1 below.

The Web page includes an overview of the National Water Program measure universe and a detailed appendix with historical data on national and regional commitments and results for all performance measures.

### Program Contacts

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**INTERNET ACCESS:** This *FY 2010 National Water Program Best Practices and End of Year Performance Report* and supporting documents are available at: <http://www.epa.gov/water/waterplan>.

Table 1: National Water Program—Goals, Objectives, and Subobjectives

#### Goal 2 Clean and Safe Water

##### Objective 2 .1 Protect Human Health

- Subobjective 2.1.1 [Water Safe to Drink](#)
- Subobjective 2.1.2 [Fish and Shellfish Safe to Eat](#)
- Subobjective 2.1.3 [Water Safe for Swimming](#)

##### Objective 2.2 Protect Water Quality

- Subobjective 2.2.1 [Restore and Improve Water Quality on a Watershed Basis](#)
- Subobjective 2.2.2 [Protect Coastal and Ocean Waters](#)

#### Goal 4 Healthy Communities and Ecosystems

##### Objective 4.2 Communities

- Subobjective 4.2.4 [Protect Mexico Border Water Quality](#)
- Subobjective 4.2.5 [Protect the Pacific Islands Waters](#)

##### Objective 4.3 Restore and Protect Critical Ecosystems

- Subobjective 4.3.1 [Protect Wetlands](#)
- Subobjective 4.3.3 [Protect the Great Lakes](#)
- Subobjective 4.3.4 [Protect and Restore the Chesapeake Bay](#)
- Subobjective 4.3.5 [Protect the Gulf of Mexico](#)
- Subobjective 4.3.6 [Protect the Long Island Sound](#)
- Subobjective 4.3.7 [Protect the South Florida Ecosystem](#)
- Subobjective 4.3.8 [Protect the Puget Sound Basin](#)
- Subobjective 4.3.9 [Protect the Columbia River Basin](#)

Access to performance information for each subobjective is available by clicking on the links above.

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# National Water Program FY 2010 Performance Results

## Executive Summary

### Overview

EPA met 70% of its commitments for all National Water Program performance measures in FY 2010. Twenty-four percent (24%) were not met; for 6%, not enough data were available to assess progress or no reporting was expected by the end of the fiscal year. The FY 2010 results represented an increase in the number of measures met from the FY 2009 results (68%). Other highlights include:

- Sixty-seven percent (67%) of the outcome-based Strategic Targets met their FY 2010 commitments. This was a slight increase over the percentage of Strategic Targets met in 2009 (66%).
- Seventy-four percent (74%) of the output-oriented Program Activity Measures (PAMs) met their commitments in 2010. After a gradual increase in the percentage of PAMs that met their commitments over the previous four years, this was a slight increase over the FY 2009 result of 71%.
- Sixty-eight percent (68%) of the Water Program commitments under Goal 2 and 74% under Goal 4 of the FY 2006 Strategic Plan were met in FY 2010. This was the first year that the geographic programs under Goal 4 outperformed the core water program elements under Goal 2.
- The Columbia River, Puget Sound, Gulf of Mexico, Safe Swimming, Wetlands, Long Island Sound, Chesapeake Bay, Drinking Water, and Oceans/Coastal subobjectives were most successful in meeting FY 2010 commitments.
- On average, 87% of performance commitments set by the EPA regional offices for activities in their geographic areas were met in 2010 while 13% of commitments were missed. This was a slight improvement over the FY 2009 results of 84% met.

### Protect Public Health

EPA met 80% of its commitments for all [drinking water](#) measures in 2010. Of these, the highlights were:

- Approximately 92% of the population was served by community water systems (CWSs) with drinking water that met all applicable health-based drinking water standards (commitment 89.9%).
- Ninety-one percent (91%) of the cumulative amount of Drinking Water State Revolving Funds available had loan agreements in place (commitment 85.7%). EPA has met its commitments for this measure for five years in a row.
- Ninety-six percent (96%) of Class I and 89% of Class II underground injection wells maintained their mechanical integrity, thereby reducing the impact of contaminants on underground sources of drinking water.

EPA did not meet 20% of its drinking water commitments in 2010. Challenges confronted by EPA and states include:

- Eighty-seven percent (87%) of community systems underwent a sanitary survey, which was just short of the Agency's national commitment of 88.6%. Conducting sanitary surveys is a resource-intensive effort, and EPA regions are working with their states to propose other resource options available under the Drinking Water State Revolving Fund (SRF) program.

EPA was successful in meeting three-fourths of its commitments under the [Water Safe for Swimming subobjective](#) in 2010. For coastal and Great Lakes beaches monitored by state-based beach safety programs, EPA found that 95% of days of the beach season were open and safe for swimming (FY 2010 commitment 95%). EPA has consistently met this commitment over the past five years.



## Restore and Improve Fresh Waters, Coastal Waters, and Wetlands

EPA and states met 59% of their commitments under the [Water Quality subobjective](#) in FY 2010 and fell short on 34%; data were not available for 7%. The percentage of commitments met dropped in FY 2010 after three years of steady increase. Highlights include:

- Over 2,900 of the waters listed as impaired in 2002 met water quality standards for all the identified impairments in FY 2010 (commitment 2,809). Out of a universe of 39,503 waterbodies, 7% were achieving attainment by the end of FY 2010.
- For the second year in a row, states and territories met regional commitments for submitting new or revised water quality criteria acceptable to EPA that reflect new scientific information.
- EPA approved 91% of water quality standards revisions submitted by states and territories (FY 2010 national commitment 85%).
- For the fourth consecutive year, EPA and states achieved the national goal of having current NPDES permits in place for 89.4% of non-tribal facilities (FY 2010 commitment 89%). In addition, EPA and authorized states have exceeded their annual commitments for issuing high priority permits for the past five years.
- EPA and states made significant gains in documenting the full or partial restoration of waterbodies that are impaired primarily by nonpoint sources. Nationally, EPA and states exceeded their commitment (188) with 215 waterbodies that were partially or fully restored.
- The Clean Water SRF utilization rate hit 100% for the first time in 2010. \$84.1 billion in funds available for projects through 2010 have been committed to approximately 28,190 loans. In 2010, project assistance reached \$10 billion, which funded 3,494 loans in a single year.



EPA faced several management challenges in restoring and improving freshwater quality in FY 2010. These include:

- As of 2010, 12 states and territories have adopted water quality criteria for nutrients, which was just below the national target of 13.
- In 2010, 2,262 total maximum daily loads (TMDLs)<sup>1</sup> were developed by states and approved by EPA. This was just short of the national commitment of 2,491, and seven of 10 regions met their commitments for this measure.

The 28 [National Estuary Programs \(NEPs\)](#) and their partners protected or restored almost 90,000 acres of habitat within the NEP study areas—10,000 short of EPA's goal of 100,000 acres. This is still a substantial accomplishment despite the fact that several Gulf NEPs diverted attention away from habitat protection to respond to the Deepwater Horizon oil spill. In FY 2010, the 28 NEPs played the primary role in directing nearly \$274 million in additional funds to on-the-ground activities (leveraged from approximately \$20 million from EPA funds), which is a ratio of \$14 raised for every \$1 provided by EPA.

EPA, in partnership with the U.S. Army Corps of Engineers, states, and tribes, was able to report "no net loss" of [wetlands](#) under the Clean Water Act Section 404 regulatory program. More than 130,000 acres have been restored and enhanced since 2002. As of FY 2010, 47 states and 22 tribes have built capacities in wetlands monitoring, regulation, restoration, water quality standards, mitigation compliance, and partnership building.

<sup>1</sup> A TMDL is a technical plan for reducing pollutants in order to attain water quality standards. The terms "approved" and "established" refer to the completion and approval of the TMDL itself.

## Improve Drinking Water and Water Quality on American Indian Lands

Safe drinking water and water quality on tribal lands continues to be a concern for the water program. Some key highlights and challenges include:

- For the first time in five years, EPA achieved its national target (82%) for the percentage of the population in Indian Country served by CWSs that receive drinking water meeting all applicable health-based standards (87%). This achievement is especially important considering that 93% of the population in Indian Country is served by small systems.
- For the fifth consecutive year, the National Water Program has been unable to meet its annual commitment to reduce by 50% by 2015 the number of homes provided access to safe drinking water. However, the number of homes lacking access to safe drinking water has decreased from a high of 43,437 homes in FY 2009 to a low of 34,187 homes in FY 2010.
- More than 25,700 homes still lack access to basic sanitation, which is short of the Agency's FY 2010 goal of a reduction to 18,985 homes. The shortfall is most likely attributable to an increased number of homes on tribal lands requesting access, loss of safe water and sewer access to some previously served homes due to changes in regulation, infrastructure breakdown, and maintenance problems.



## Improve the Health of Large Aquatic Ecosystems

EPA implements collaborative programs with other federal agencies, states, and local communities to improve the health of large aquatic ecosystems. Highlights and challenges for each program include:

- **U.S.–Mexico Border.** Construction delays in 2010 had a significant impact on the U.S.–Mexico Border Program's performance. EPA fell short of its commitment to remove 36 million pounds of biochemical oxygen demand (BOD) loadings from the U.S.–Mexico border area and ended the year with 18.7 million pounds removed. EPA provided access to safe drinking water for 21,650 additional homes on the U.S.–Mexico border, which was just short of its FY 2010 commitment of 21,899 additional homes. EPA provided adequate wastewater sanitation to an additional 75,175 homes over the past year but fell short of its FY 2010 commitment (190,720 additional homes).
- **U.S. Pacific Island Waters.** Fifty-two percent (52%) of sewage treatment plants in the U.S. Pacific Island Territories complied with permit limits for BOD and total suspended solids (TSS). This was below the FY 2010 commitment of 62%. Monitored beaches in the U.S. Pacific Island Territories were open and safe for swimming for 80% of the days of the beach season in FY 2010.
- **Great Lakes.** From a baseline score of 20 in 2002, the Great Lakes Index declined in 2010 from a score of 23.9 to 22.7 using a 40-point scale. Average long-term total PCB concentrations in whole Great Lakes top predator fish at sites on each Great Lake declined more than 43% annually between 2000 and 2008, meeting the target for declines in concentration trends. EPA, states, and other partners remediated 7.3 million cubic yards of contaminated sediments through 2009, including more than 1.3 million cubic yards for the most recent year reported.

- **Chesapeake Bay.** EPA's Chesapeake Bay Program made significant improvements over its FY 2009 results, meeting five of six (83%) of its commitments in FY 2010. For the second consecutive year, EPA met its annual goal for implementing phosphorus pollution control measures and came very close to meeting its annual goal for implementing nitrogen pollution control measures reduction practices. EPA expects enhanced implementation of nitrogen pollution control measures as a result of the TMDL that was established in December 2010.
- **Gulf of Mexico.** Although the Gulf Program ended the year ahead of its FY 2010 cumulative target (27,500 acres) and restored, protected, or enhanced an additional 200 acres of coastal and marine habitats (29,552 acres), this was significantly less than the approximately 4,000 acres restored in 2009. The size of the hypoxic, or "dead," zone in the Gulf of Mexico increased significantly from 3,000 square miles in 2009 to 8,000 square miles in 2010. There were a number of hydrological, climate, and monitoring factors that led to the large increase in the hypoxic zone over the past year.
- **Long Island Sound.** The Long Island Sound Program significantly exceeded its 2010 commitment (79 acres) by restoring or protecting 1,361 acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands. In 2010, the duration of hypoxia in Long Island Sound was 40 days and the area affected was 101 square miles, both well below average. This was an improvement over end-of-year hypoxic conditions in 2007, 2008, and 2009.
- **South Florida.** EPA's South Florida Program reported improvements in mean stony coral cover and the health and functionality of the sea grass beds in the Florida Keys Marine Sanctuary (FKNMS) in 2010. In addition, EPA and its partners were able to maintain the overall water quality of the near shore and coastal waters of the FKNMS. For the third consecutive year, however, the Agency did not see an improvement in water quality of the Everglades ecosystem as measured by total phosphorus.
- **Puget Sound Basin.** In 2010, EPA and its state, local, and tribal partners improved water quality in the Puget Sound Basin, which enabled the lifting of harvest restrictions in 4,453 acres of shellfish bed growing areas (cumulative from FY 2006). This significantly exceeded the FY 2010 commitment of 1,800 acres. Over 10,000 acres of tidally and seasonally influenced estuarine wetlands have been restored in the Puget Sound Basin since FY 2006. The program significantly exceeded its 2010 commitment due to the completion of a very large project that accounted for over 3,200 acres of habitat alone.
- **Columbia River Basin.** Working with EPA and other partners, the Lower Columbia River Estuary Partnership protected, enhanced, or restored an additional 6,000 acres of wetland and upland habitat in the Lower Columbia River watershed in FY 2010 for a total of 16,000 acres since FY 2006. Much of this progress is due to landowners embracing the benefits of wetland restoration on their property and greater access by restoration practitioners to multiple funding sources for nearly every project that was successfully implemented.



## Introduction

This *FY 2010 Best Practices and End of Year Performance Report* describes the progress made in 2010 by EPA, states, tribes, and others toward the objectives and subobjectives described in the *FY 2010 National Water Program Guidance* and EPA's *FY 2009–2014 Strategic Plan*. The *Strategic Plan* and the *FY 2010 Guidance* are available on the Internet at: <http://www.epa.gov/water/waterplan>.

EPA's *FY 2009–2014 Strategic Plan* is divided into five goals. The National Water Program is addressed in both Goal 2, "Clean and Safe Water," and Goal 4, "Healthy Communities and Ecosystems," of the Plan. Each goal is divided into objectives and subobjectives, which include a limited number of targeted areas, or "strategic targets," where the Agency believes new or significant changes in strategies or performance measurement are most critical in helping EPA to better achieve and measure environmental and human health. Each strategic target includes a long-range quantitative goal.

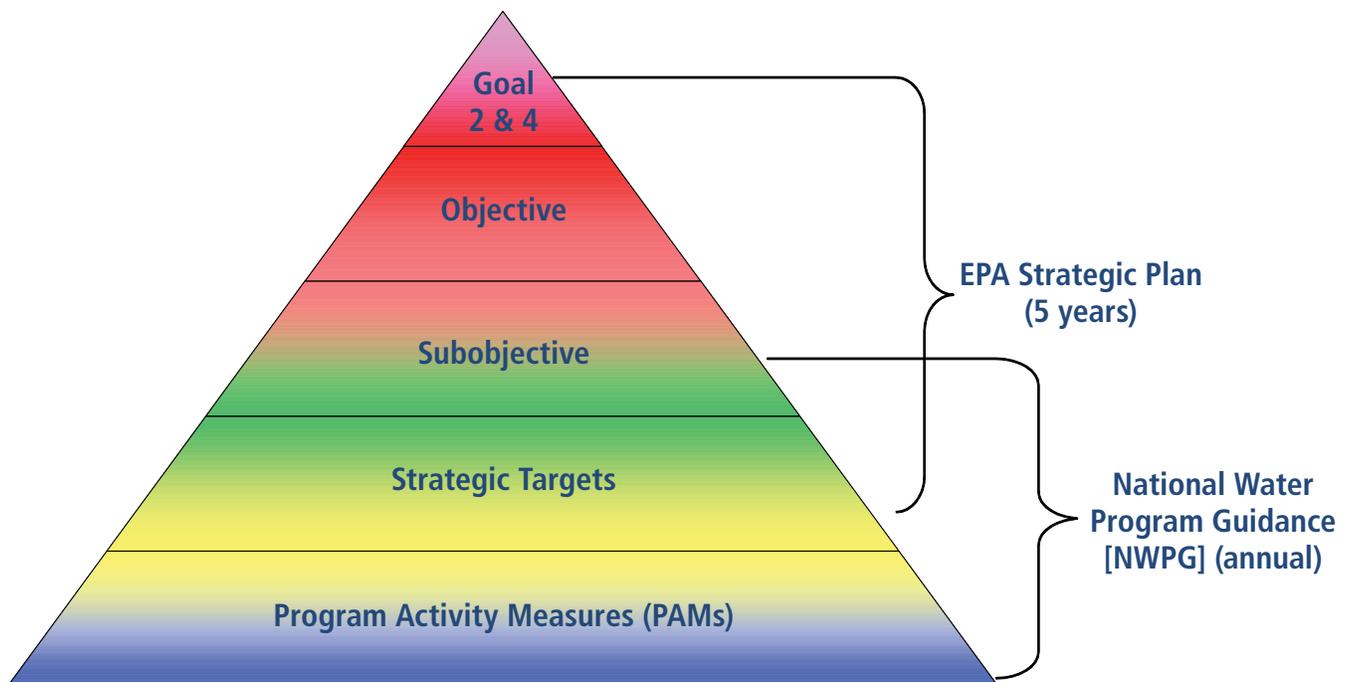
In April 2009, the National Water Program published guidance that described the program strategies to be used to implement the *FY 2009–2014 Strategic Plan* in FY 2010, including specific measures to be used to assess program



implementation. The *FY 2010 National Program Guidance* is divided into 15 subobjectives (see Table 1, National Water Program: Key Goals, Objectives, and Subobjectives) and includes strategic target measures and national Program Activity Measures (PAMs) to assess progress toward the goals in the *Strategic Plan*:

- **Strategic Target Measures:** Measures of environmental or public health changes (i.e., outcomes) that include long-range and, in most cases, annual commitments in the *FY 2010 National Water Program Guidance*.
- **National PAMs:** Core water PAMs (i.e., output measures) address activities implemented by EPA and by states/tribes that administer national programs. They are the basis for monitoring progress in implementing programs to accomplish the environmental goals in the Agency's *Strategic Plan*. Most of these measures had national and regional commitments for FY 2010.

### Performance Measure Architecture

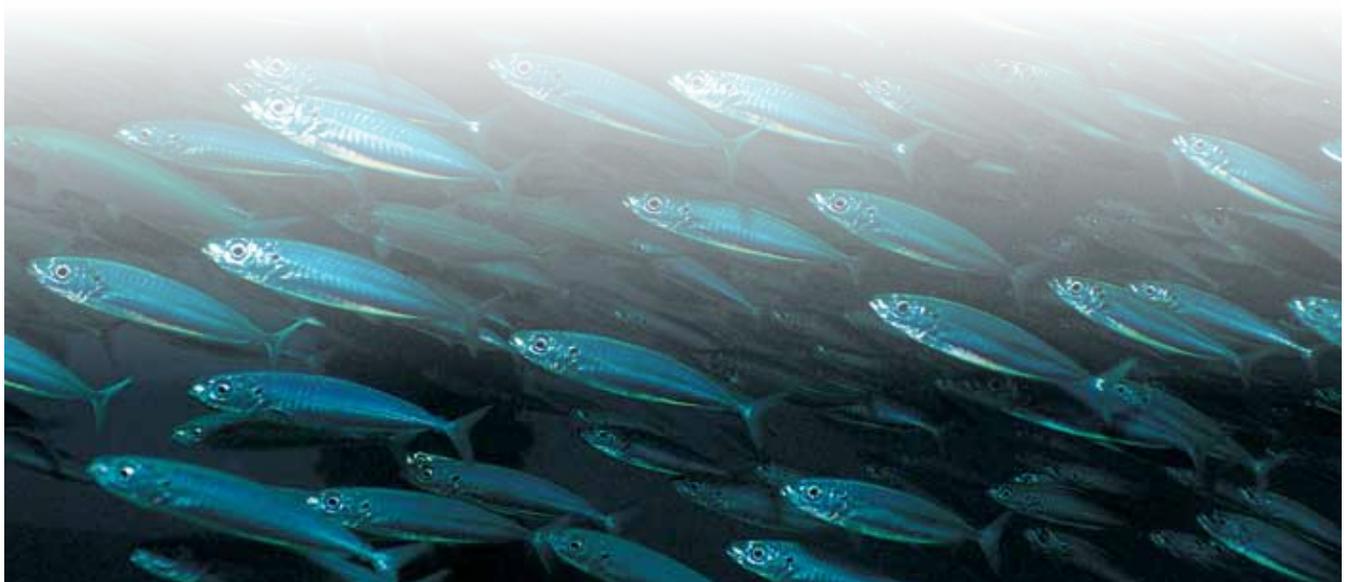
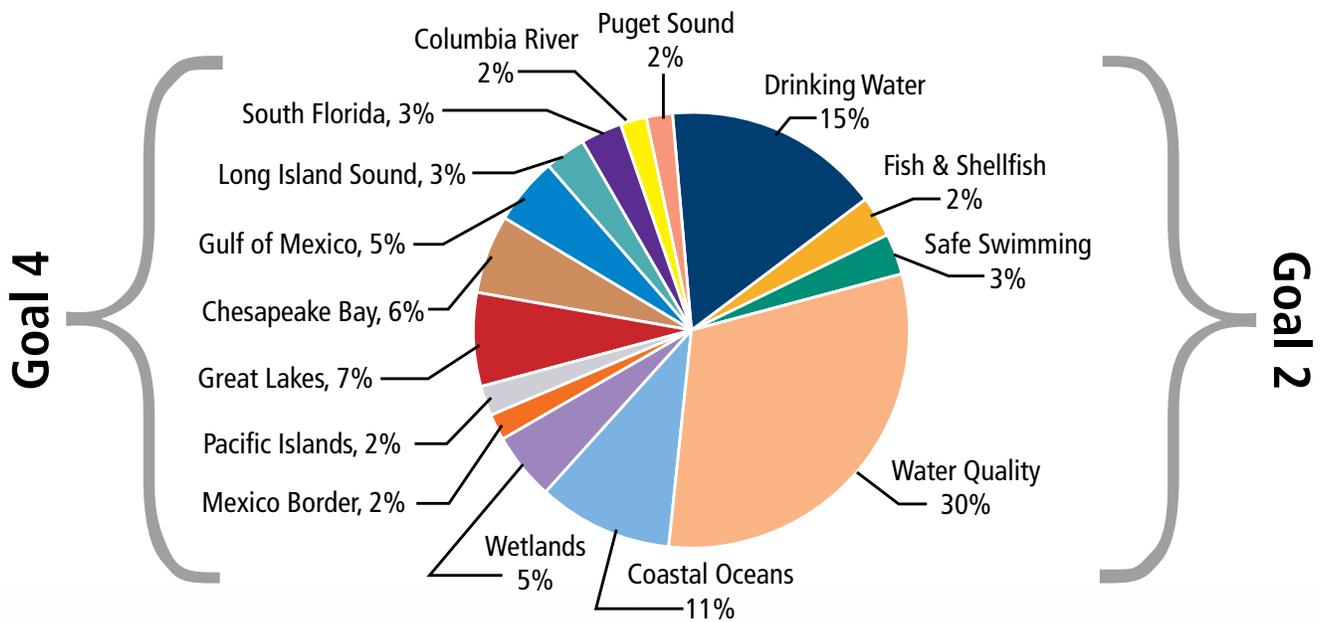


# Overview of 2010 Performance Results and Recent Trends

## Total Measures by Subobjective

Among the 15 subobjectives outlined in the *FY 2006–2009 Strategic Plan*, Water Quality had the largest share of performance measures (30%); Drinking Water was next with 15%; and Coastal and Ocean Protection was third with 11%. The remaining 44% of the measures were spread among the other 12 subobjectives (Figure 1).

Figure 1: Total Measures by Subobjective



## FY 2010 Total Commitment Measures Met and Not Met

Two-thirds (70%) of commitment measures in the National Water Program were met in FY 2010. Twenty-four percent (24%) were not met; for 6%, not enough data were available to assess progress or no reporting was expected for 2010 (Figure 2). This was a slight increase over the number of measures met in FY 2009 and the number of measures with data unavailable or not reporting over FY 2009. The percentage of commitment measures met has remained fairly consistent over the past five years, averaging about 63% (Figure 3).

Figure 2: FY 2010 Results—Commitment Measures Met and Not Met

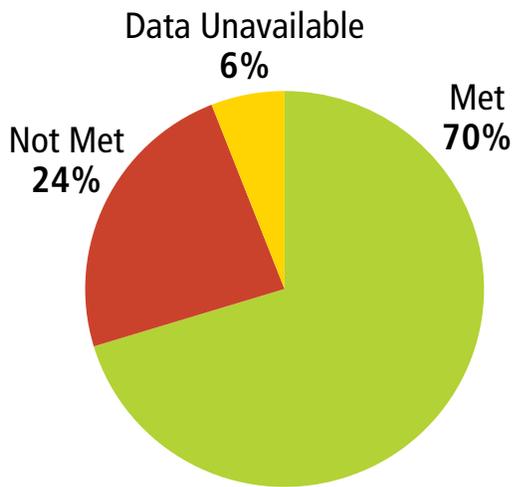
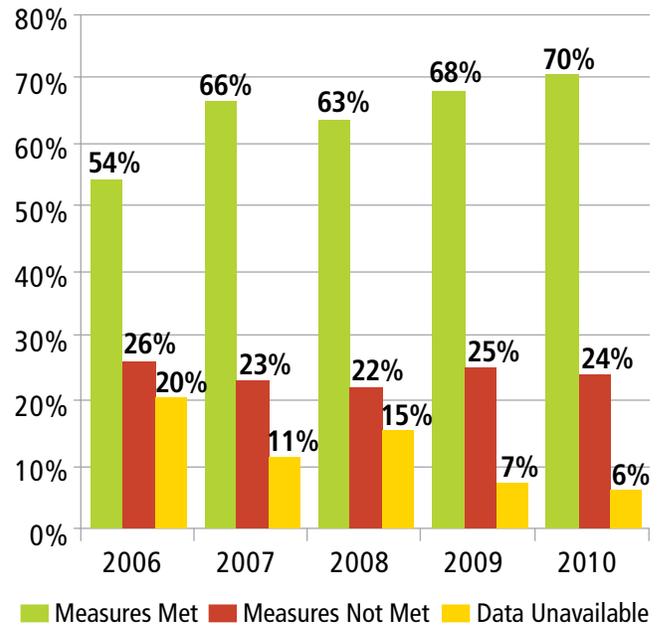


Figure 3: 2006–2010 Trend Data



## Measures With Changes in Performance Status From FY 2009 to FY 2010

Twenty-three of the 101 commitment measures changed their performance status between FY 2009 and FY 2010. Eleven measures changed from not meeting to meeting their annual commitment, whereas 12 measures changed from met to not met over the past year. The [Water Quality subobjective](#) saw the greatest change from met to not met (six measures) for annual commitments. The [South Florida](#) and [Chesapeake Bay](#) subobjectives saw the greatest improvement in performance, with a shift in status of three and two measures from not met to met, respectively (Table 2).

Table 2: Measures With Changes in Performance Status from FY 2009 to FY 2010

Subobjective	ACS Code	Measure Description	Performance Status	
			2009	2010
2.1.1. Water Safe to Drink	SP-3	Population served by CWSs Indian country	Not Met	Met
2.1.1. Water Safe to Drink	SDW-7c	Class III wells with mechanical integrity	Met	Not Met
2.1.3 Safe Swimming	SS-2	Public beaches monitored	Not Met	Met
2.2.1 Water Quality	SP-11	Remove causes of waterbody impairment	Met	Not Met
2.2.1 Water Quality	WQ-1b	States/territories on schedule to adopt nutrient criteria	Not Met	Met
2.2.1 Water Quality	WQ-5	States/territories adopted monitoring strategies	Met	Not Met
2.2.1 Water Quality	WQ-6a	Tribes implementing monitoring strategies	Met	Not Met
2.2.1 Water Quality	WQ-7	States/territories using Assessment Database (ADB)	Met	Not Met
2.2.1 Water Quality	WQ-8b	TMDLs developed by states	Met	Not Met
2.2.1 Water Quality	WQ-12b	Tribal permits current	Not Met	Met
2.2.1 Water Quality	WQ-14a	POTWs SIUs control mechanisms in place	Met	Not Met
2.2.2 Coastal/Oceans	SP-20	Ocean dumping sites acceptable conditions	Met	Not Met
2.2.2 Coastal/Oceans	4.3.2	NEP Acres habitat protected or restored	Met	Not Met
4.2.4 Mexico Border	SP-24	Safe drinking water homes Mexico Border	Met	Not Met
4.2.5 Pacific Islands	SP-27	Pacific Islands treatment plans w/ BOD limits	Met	Not Met
4.3.3 Great Lakes	4.3.3	Improve health—Great Lakes ecosystem	Met	Not Met
4.3.3 Great Lakes	GL-2	CSO permits consistent with national policy	Not Met	Met
4.3.4 Chesapeake Bay	SP-37	Bay sediment reduction	Not Met	Met
4.3.4 Chesapeake Bay	CB-1a	Bay point source nitrogen reduction	Not Met	Met
4.3.5 Gulf of Mexico	GM-1	Warning system to manage algal blooms	Not Met	Met
4.3.7 South Florida	SP-45	Achieve no net loss in South Florida stony coral	Not Met	Met
4.3.7 South Florida	SP-46	Maintain health of South Florida sea grass	Not Met	Met
4.3.7 South Florida	SP-47	Maintain South Florida coastal water quality	Not Met	Met

## The Most Successful Annual Commitment Measures for the Past Four or Five Years

About 61% of the annual commitment measures in the *FY 2010 National Water Program Guidance* have had annual commitments since FY 2006 or FY 2007. Of these so-called “legacy” measures, 29% have met their commitments 100% of the time over the past four or five years (see Table 3). The [Water Quality subobjective](#) has the most legacy measures that have met their commitments every year (eight of 27). Three of eight [Drinking Water](#), three of eight [Great Lakes](#), and one of six [Chesapeake Bay](#) subobjective legacy measures have met their commitments 100% of the time since FY 2006. The ability to consistently meet annual commitments year after year is mostly due to a combination of effective program management and a strategic approach to setting realistic commitments (Table 3).

**Table 3: The Most Successful Annual Commitment Measures for the Past Four or Five Years**

Subobjective	ACS Code	Measure Description	Total Yrs. Commitment Met
2.1.1. Water Safe to Drink	SP-4a	CWSs and source water protection	5
2.1.1. Water Safe to Drink	SDW-4	DWSRF fund utilization rate	5
2.1.1. Water Safe to Drink	SDW-5	DWSRF projects initiated	4
2.1.3 Safe Swimming	SP-9	Beach days safe for swimming	5
2.2.1 Water Quality	SP-10	Waterbodies water quality standards restored	5
2.2.1 Water Quality	WQ-3b	Tribes submitted water quality criteria	4
2.2.1 Water Quality	WQ-6b	Tribes providing water quality data	4
2.2.1 Water Quality	WQ-4a	States/territories water quality standards submissions	5
2.2.1 Water Quality	WQ-4b	Tribes water quality standards submissions	5
2.2.1 Water Quality	WQ-8a	Total TMDLs	5
2.2.1 Water Quality	WQ-17	CWSRF Fund utilization rate	5
2.2.1 Water Quality	WQ-19a	High priority state NPDES permits	5
2.2.2 Coastal/Oceans	2.2.2	Improve coastal aquatic system health	5
4.3.2 Wetlands	WT-1	Wetland acres restored and enhanced	5
4.3.3 Great Lakes	SP-30	Reduce PCBs in Great Lakes air	5
4.3.3 Great Lakes	SP-32	Remediate cubic yards of contaminated sediment	5
4.3.3 Great Lakes	GL-3	High priority—Great Lakes beaches	5
4.3.4 Chesapeake Bay	CB-1b	Bay point source phosphorus reduction	5

## Strategic Targets Met and Not Met

Strategic targets represent the highest level of performance measures in EPA's *Strategic Plan*. These measures usually track changes in environmental and public health outcomes associated with specific objectives and subobjectives. For example, this would include outcomes such as the number of community water systems meeting drinking water standards, the number of waterbodies attaining water quality standards, and the number of additional acres of habitat protected or restored. In the National Water Program's portions of Goals 2 and 4 of the Agency's *Strategic Plan*, 67% of the strategic targets met their FY 2010 commitments. Twenty-five percent (25%) were not met, and 8% had no data available or did not report (Figure 4). There was an increase in the percentage of strategic targets met in 2010 (67% compared with 66% in 2009). The National Water Program has averaged approximately 60% of targets met over the past five years (Figure 5).

Figure 4: Strategic Targets Met and Not Met

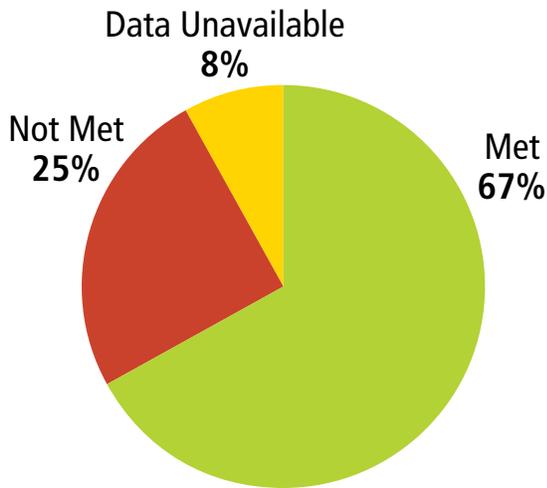
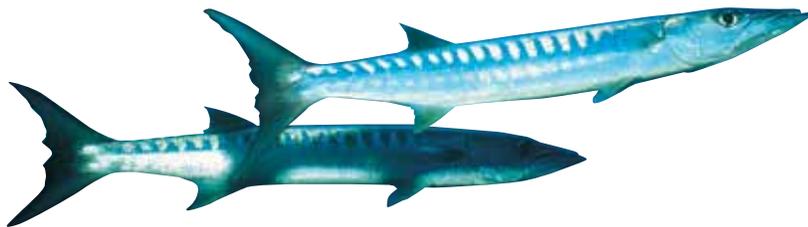
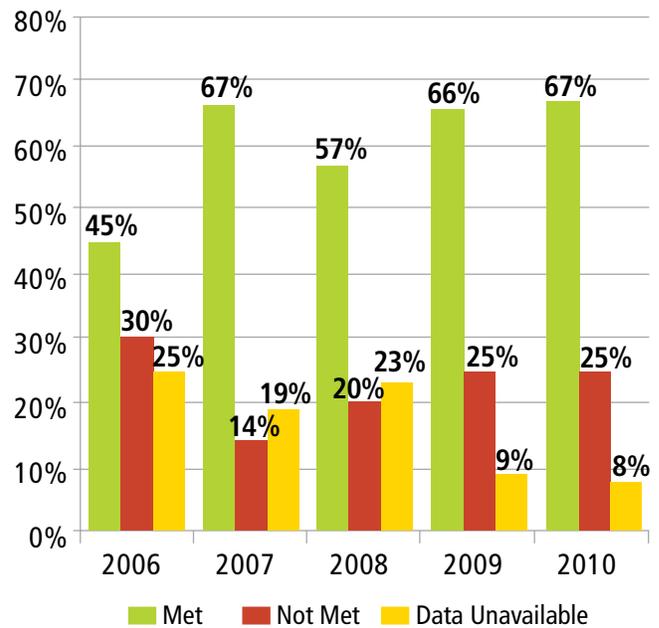


Figure 5: 2006–2010 Trend—Strategic Targets Met and Not Met



## Performance Activity Measures (PAMs) Met and Not Met

PAMs are measures of activities and outputs to implement core water program areas. For example, this would include outputs such as the number of SRF projects that initiated operations, the number of TMDLs established or approved by EPA, and the number of high-priority NPDES permits issued as scheduled. Approximately one-third of these measures are indicator measures that do not have annual commitments (63% are commitment measures; 37% are indicators). Seventy-four percent (74%) of PAMs met their commitments in 2010. Twenty-two percent (22%) did not meet their commitments, and 4% lacked sufficient data (Figure 6). After four years of gradual increases in measures met, 2010 presented a continued increase in performance (74% from 71% in 2009) and no significant change in the percentage of measures with data unavailable (4% in 2010 and 2009) (Figure 7).

Figure 6: PAMs Met and Not Met

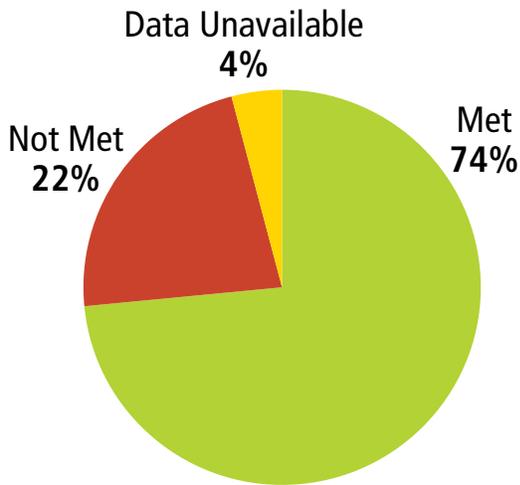
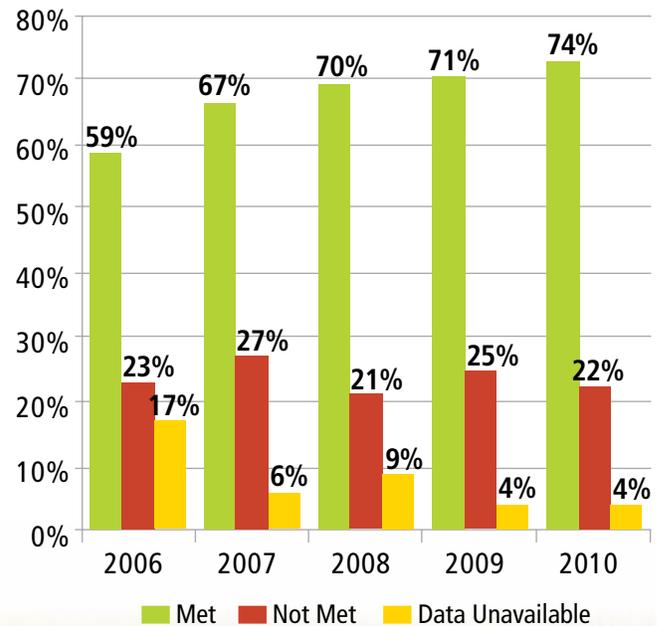


Figure 7: 2006–2010 Trend—PAMs Met and Not Met



## FY 2010 Commitment Measures Met and Not Met by Strategic Plan Goal

The National Water Program is spread across Goals 2 and 4 in EPA's *Strategic Plan*. To a large extent, Goal 2 represents the core drinking water and water quality programs and Goal 4 includes EPA's large aquatic ecosystem and geographic programs. For the first time since reporting began in FY 2008 on many of the aquatic ecosystems, the programs under Goal 4 were slightly more successful in meeting their commitments in FY 2010 than the core programs under Goal 2 (74% vs. 68%) (Figure 8). This continues a trend begun in 2009 and reflects an improvement in many of the large aquatic ecosystem programs in developing and striving to meet realistic commitments (Figure 9). The most successful programs under Goal 4 in meeting their FY 2010 commitments were the [Columbia River](#), [Gulf of Mexico](#), and [Long Island Sound](#) programs. Twenty-three percent (23%) of the commitments were not met and 3% were not reported under Goal 4. While 68% of the commitments under Goal 2 were met, 24% were not met, and 8% had no data available. It should be noted that although Goal 4 programs had more measures not met, they also had a higher percentage of measures with data reported.

Figure 8: FY 2010 Commitment Measures Met and Not Met by Goal

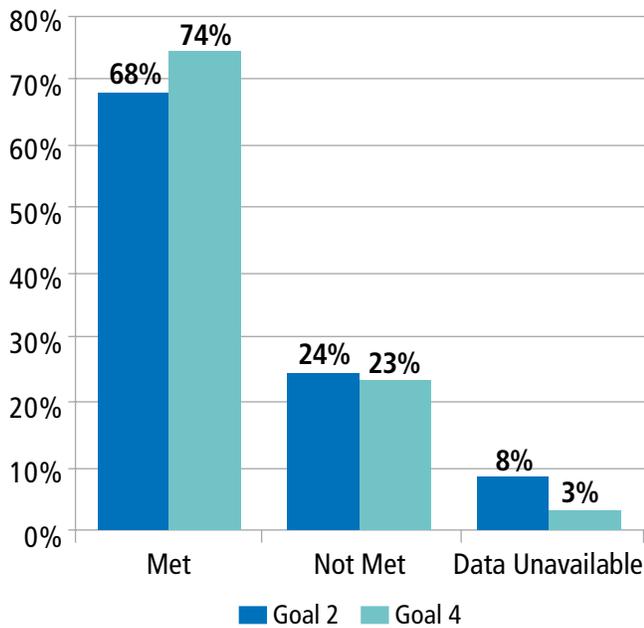
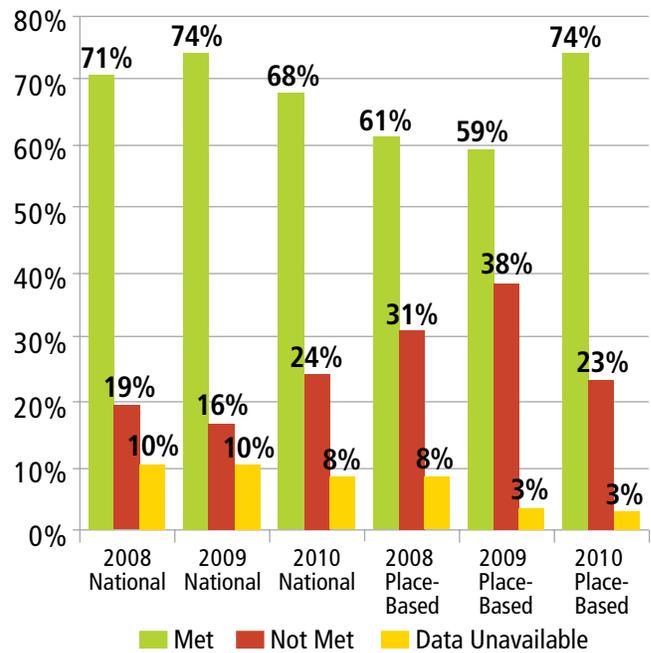


Figure 9: FY 2009 to FY 2010 Trend Results by Goal

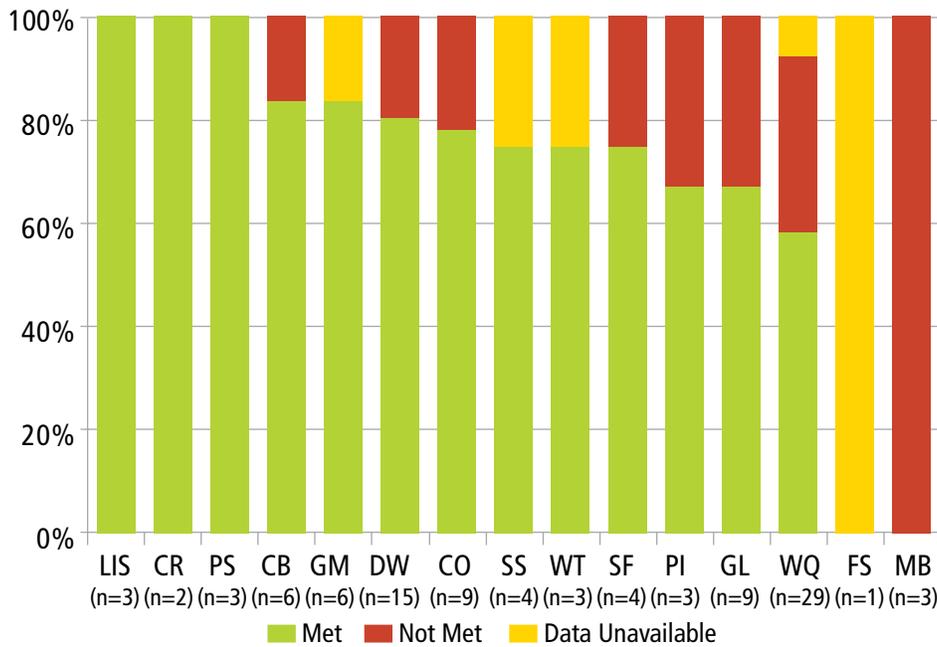


## FY 2010 Commitment Measures Met and Not Met by Subobjective

When the FY 2010 results are looked at by subobjective, the [Long Island Sound](#), [Columbia River](#), [Puget Sound](#), [Chesapeake Bay](#), [Gulf of Mexico](#), [Safe Drinking Water](#), [Coastal/Oceans](#), [Safe Swimming](#), and [Wetlands](#) subobjectives were most successful in meeting FY 2010 commitments (Figure 10). It should be noted, however, that some subobjectives have more performance measures than others. For example, the Gulf has six measures, and Pacific Islands and Columbia River each have three commitment measures. In contrast, Drinking Water has 15 and Water Quality has 29 measures. The [Mexico Border](#) (three commitments) and [Water Quality](#) (29 commitments) subobjectives had the most difficulty in meeting their commitments in FY 2010. The [Fish and Shellfish](#) had one commitment measure but has been unable to report data for the past two years (SP-6).

In looking at long-term trends over the past three years by subobjective, the [Oceans and Coastal Protection](#) (84%), [Drinking Water](#) (78%), and [Great Lakes](#) (71%) subobjectives have been the most successful in meeting their commitments (Figure 11). [Safe Swimming](#), [Chesapeake Bay](#), and [Gulf of Mexico](#) subobjectives showed the most improvement in 2010 over their FY 2009 results. The [Fish and Shellfish](#) subobjective continues to have the greatest problems with data availability. Not all subobjectives are included in the following chart, since five did not exist prior to 2008.

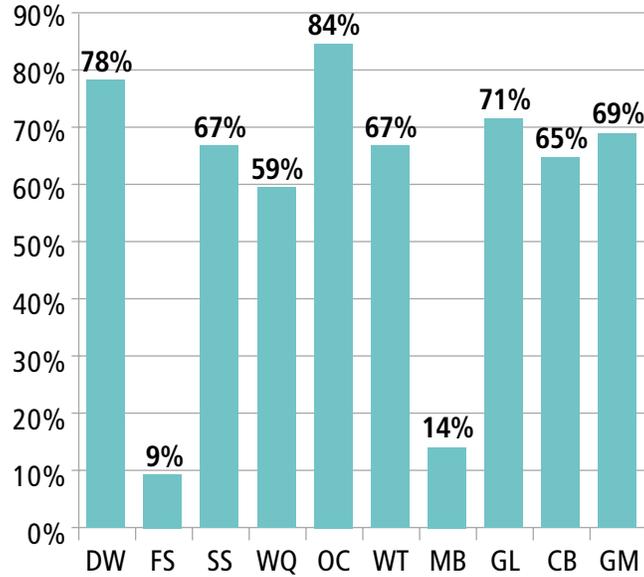
Figure 10: FY 2010 Commitment Measures Met and Not Met by Subobjective



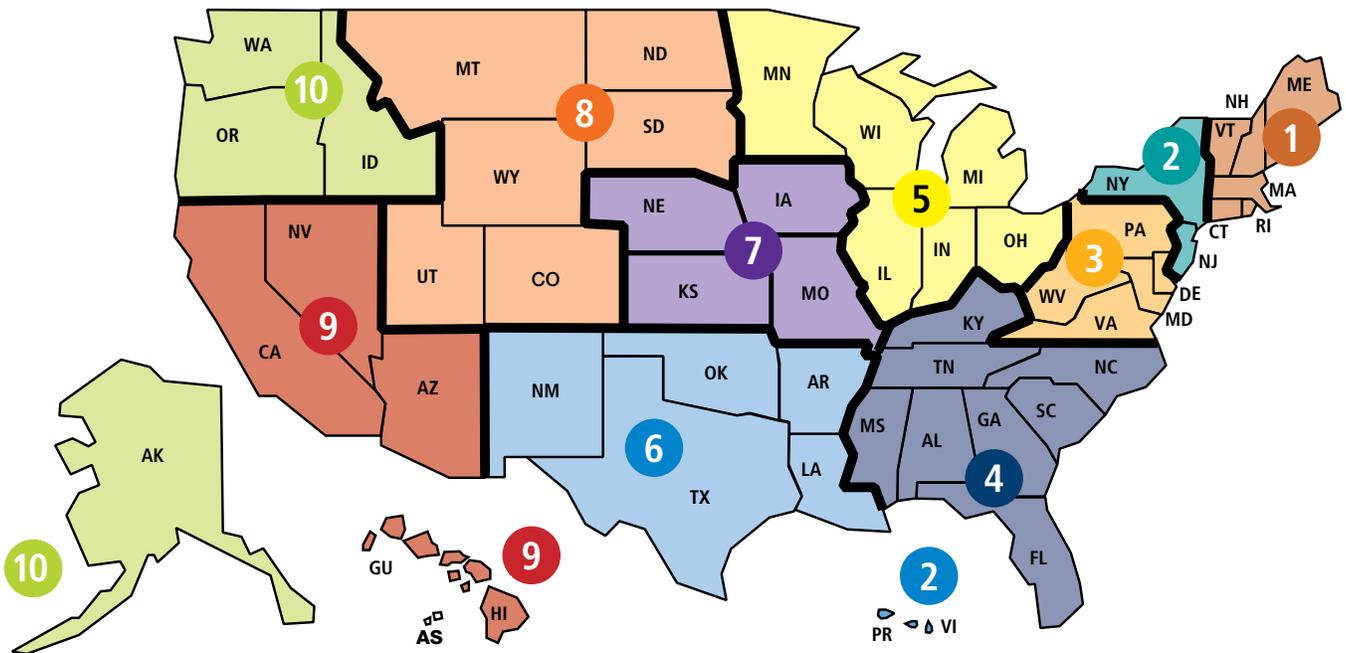
**Subobjective acronyms:**

- |                          |                      |                         |
|--------------------------|----------------------|-------------------------|
| CR = Columbia River      | CO = Coastal/Oceans  | GL = Great Lakes        |
| PS = Puget Sound         | SS = Safe Swimming   | LIS = Long Island Sound |
| CB = Chesapeake Bay      | WT = Wetlands        | WQ = Water Quality      |
| GM = Gulf of Mexico      | SF = South Florida   | FS = Fish and Shellfish |
| DW = Safe Drinking Water | PI = Pacific Islands | MB = Mexico Border      |

Figure 11: Average Percent Measures Met by Subobjective (2006–2010)



Map of EPA Regions



## FY 2010 Commitment Measures Met and Not Met by EPA Region

EPA is broken up into 10 geography-based regional offices (see map on page 14). EPA regions and states are primarily responsible for implementing the programs under the Clean Water and Safe Drinking Water Acts. On average, 87% of performance commitments set by the EPA regional offices for activities in their geographic areas were met in 2010, while 13% of commitments were missed. This was a 3% increase over the FY 2009 results of 84% met and 16% not met. Region 2 (96%) and Region 1 (95%) met the highest percentage of their commitments in 2010 (Figure 12).

Over the past three years, Regions 2, 4, 1, and 6 have had the highest percentages of commitments met (Figure 13).

Figure 12: 2010 Commitment Measures Met and Not Met by Region

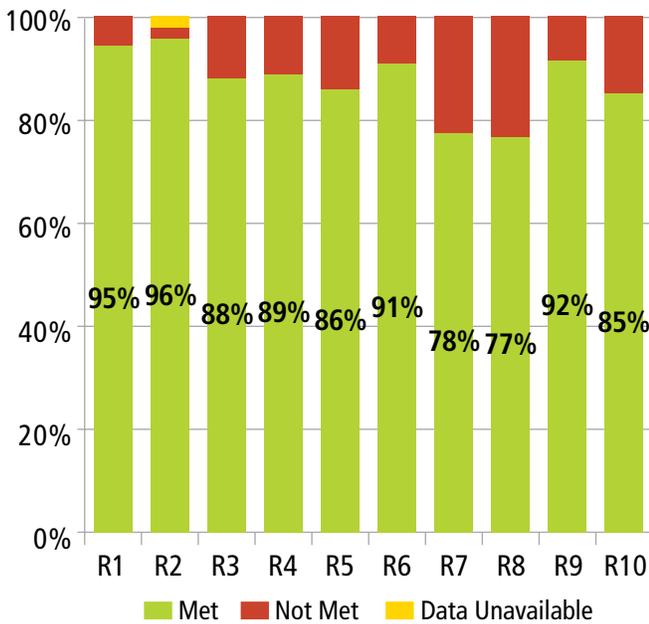
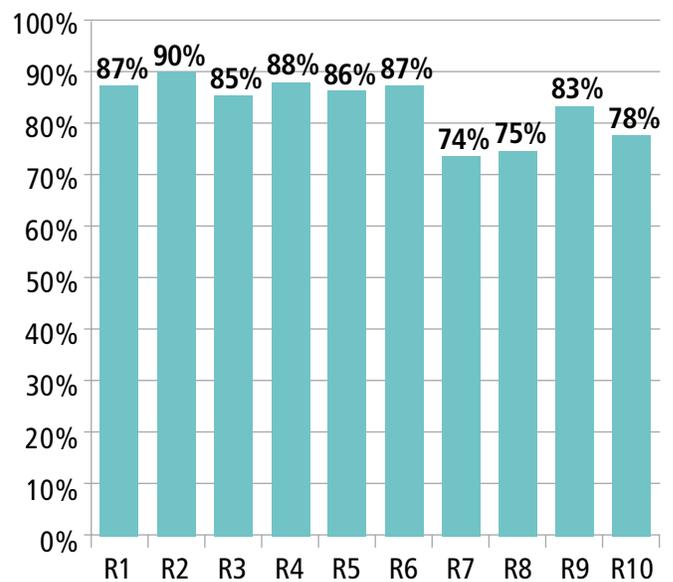


Figure 13: Average Percent Commitment Measures Met by Region (2007–2010)



A trend analysis of regional performance reveals that EPA Regions 9 and 1 exhibited the most improvement in meeting their annual commitments between FY 2007 and FY 2010. Region 9 increased its performance by 18% (74% to 92% commitments met; see Figure 14) and Region 1 saw a 16% increase in the number of commitments met between FY 2007 and FY 2010 (79% to 95%; see Figure 15). Region 10 also saw an improvement in performance, with an increase of 15% in commitments met over the past four years.

EPA Regions 5, 7, and 8 showed the greatest decline in commitments met between FY 2007 and FY 2010. Region 7 dropped by 6% (84% to 78%; see Figure 16), and Regions 5 and 8 decreased by 5% (91% to 86% and 82% to 77%; see Figure 17). Region 7 saw the greatest range in percent commitments met (20%) over the past four years. Regions 8, 9, and 1 had a variability of 19%, 18%, and 18%, respectively. **It should be noted that these regional trend analyses do not factor in ambitiousness of individual regional commitments, which may or may not contribute to success and decline.**

Figure 14: Region 9 Percent Commitment Measures Met Trend

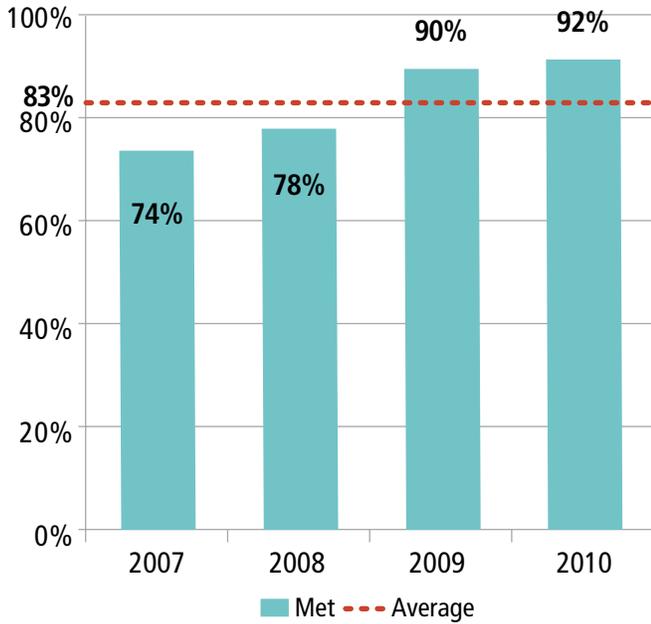


Figure 15: Region 1 Percent Commitment Measures Met Trend

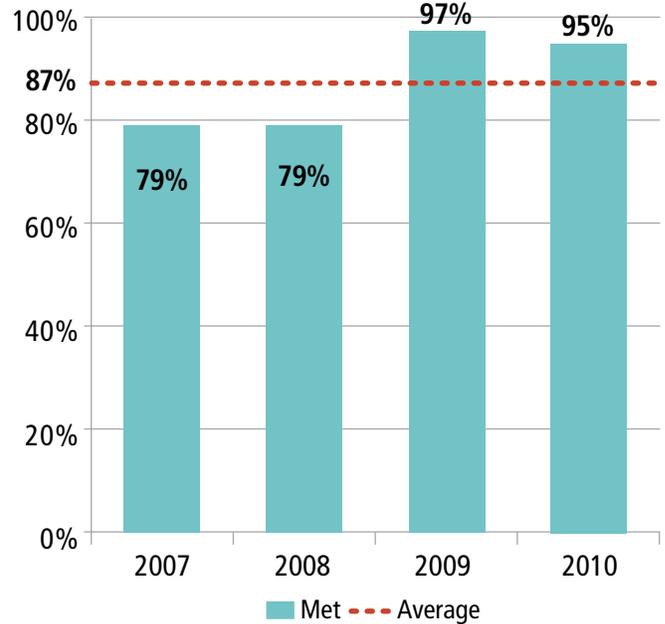


Figure 16: Region 7 Percent Commitment Measures Met Trend

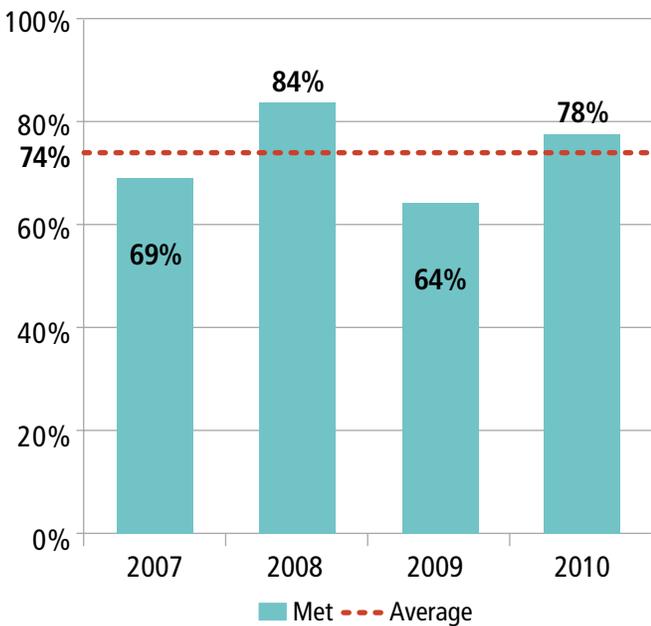
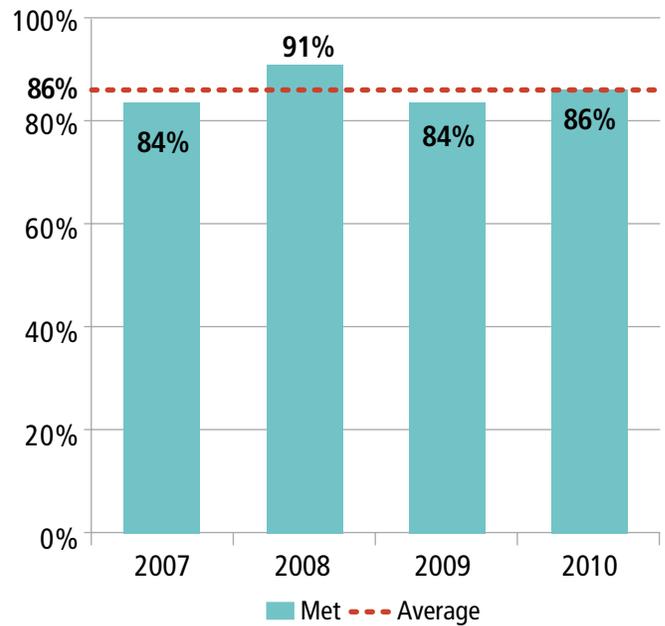


Figure 17: Region 5 Percent Commitment Measures Met Trend



## FY 2010 Tribal Commitment Measures Met and Not Met

Ten of the National Water Program measures focus specifically on public health and environmental outcomes on American Indian lands. The Agency reduced the number of tribal commitments in FY 2010 from 13 to 10. There was a slight drop in the commitments met (six) and not met (four) in 2010 (Figure 18). These results indicate that water quality on tribal lands continues to be a concern for the water program. For more information on tribal performance results, see the chapter on “[American Indian Drinking Water and Water Quality FY 2010 Performance](http://water.epa.gov/aboutow/goals_objectives/waterplan/National-Water-Program-Performance-Results.cfm)” on EPA’s Water Program Performance Page [http://water.epa.gov/aboutow/goals\\_objectives/waterplan/National-Water-Program-Performance-Results.cfm](http://water.epa.gov/aboutow/goals_objectives/waterplan/National-Water-Program-Performance-Results.cfm).

## FY 2010 Mid-Year Versus End of the Year Results

The National Water Program reports twice a year on performance, at mid-year and end of the fiscal year. Of the sixty-two (62) measures reported at mid-year, 82% (51) were on track to meet their annual commitments and 13% (8) were not on track. Of the 102 commitment measures reported at the end of the year, 70% (71) of measures were met and 24% (24) were not met (Figure 19). Several measures that were on track at mid-year were not met at the end of the year.

Figure 18: Tribal Results by Year

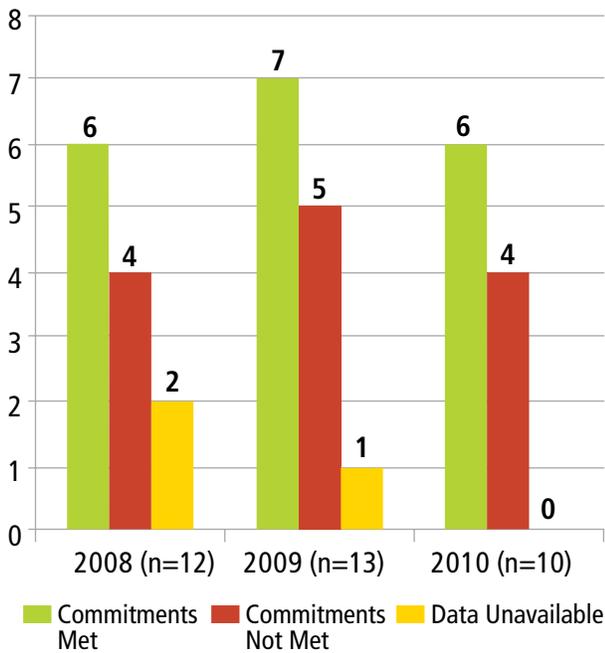
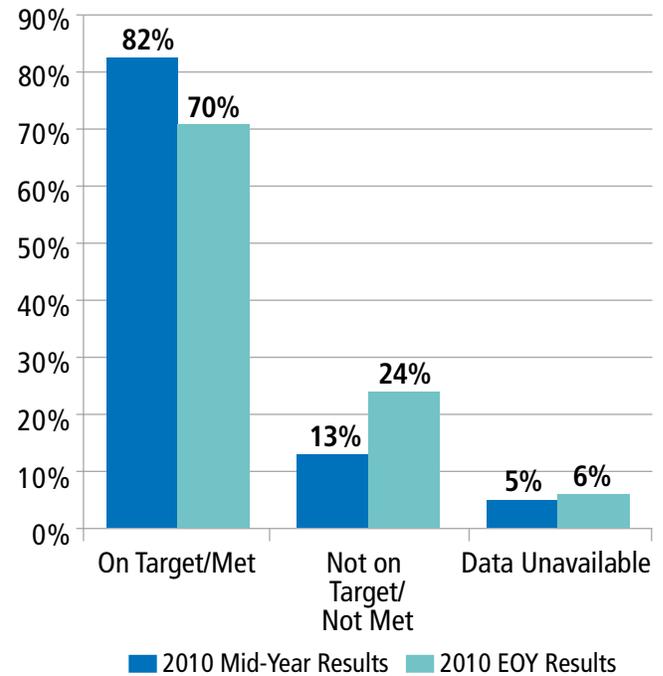


Figure 19: FY 2010 Mid-Year vs. EOY Results



# National Water Program FY 2010 Best Practices

## Introduction

Achieving continuous improvement in programmatic activities and environmental outcomes requires a process of planning, implementation, measurement, and analysis. This section highlights a number of best practices that have resulted in success in drinking water, surface water quality, wetlands, coastal, and large aquatic ecosystem programs. A best practice is defined as a process or methodology that consistently produces superior or innovative results. To propagate their impact widely and encourage their adoption, it is important to identify and analyze these approaches.

The seven best practices highlighted in this section were selected from proposals submitted by the Office of Water Headquarters offices and water divisions in EPA's regional offices. The proposals were assessed according to the following criteria:

- **Success Within the Program:** How has the activity resulted in improvements? Are the activity results clear? Does the activity have a direct or catalytic impact on program success?
- **Innovation:** How does the activity differ from existing approaches?
- **Replicability:** Can the activity be adopted by other regions/offices/states? Does it have the potential for expansion?

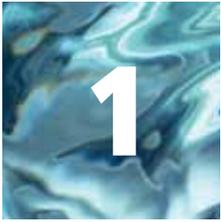
- **Direct Relation to the Administrator's Priorities:** See "Seven Priorities for EPA's Future at <http://blog.epa.gov/administrator/2010/01/12/seven-priorities-for-epas-future/>.

The selected best practices do not represent a comprehensive list of the innovative activities that are being implemented. Rather, the selection is intended to provide examples of different types of activities taking place in different regions addressing different subobjectives. In selecting these best practices, special emphasis was placed on identifying activities or approaches that have resulted in measurable successful outcomes.

The vision for this section is to promote the widespread use of these successful activities and scale up the benefits of their implementation by sharing information on them among the program and regional offices.

Further activities will be identified and analyzed on a biannual basis. Furthermore, activities that have been selected will continue to be monitored to study their long-term effectiveness. This is part of a continuous learning process that is expected to yield even more innovation and successful outcomes.





## Oregon Pesticide Stewardship Partnership Projects in the Columbia River Basin

### Brief Description:

The Oregon Pesticide Stewardship Partnership Projects use monitoring data to drive collaborative implementation and focus technical assistance for BMPs to reduce the presence of current use pesticides in rivers and streams. The types of BMPs that have been implemented include:

- Spray drift reduction trainings and practices
- Installation of weather stations
- Use of biological controls (e.g., mating disruption)
- Integrated pest management training and technical assistance
- Use of less toxic pesticides
- Buffer strips and minimization of spraying near streams

The Oregon DEQ, in coordination with EPA, Soil and Water Conservation Districts, OSU Extension Service, Oregon Department of Agriculture, watershed councils and grower groups organizes legacy pesticide collection events to reduce legacy toxics and exposure to toxics in the watersheds. There have been six legacy pesticide collection events since 2006 that are associated with the Pesticide Stewardship Partnerships, plus two in the Southern Willamette River Basin.

The Oregon DEQ has established an informal Pesticide Stewardship Partnership working group in each watershed that meets periodically to review data and plan monitoring and BMP needs for the coming year. The DEQ provides some grant money to watershed councils or SWCDs to collect samples and help with outreach work.

### Current Status:

The Oregon Pesticide Stewardship Partnership Projects are expanding to incorporate new watersheds and track new current use pesticides. In 2009, the Oregon DEQ, in partnership with the Oregon Department of Forestry and the Grand Ronde Tribe, expanded the Yamhill River Pesticide Stewardship Partnership to include three new monitoring locations

### *Subobjective:*

#### **Water Quality**

#### *Type:*

#### **Partnership**

### *Highlights:*

- **What:** The Oregon Pesticide Stewardship Partnership Projects organize legacy pesticide collection events and use monitoring data to drive collaborative implementation of best management practices (BMPs) to reduce the presence and concentrations of legacy and current use pesticides in rivers and streams in the Columbia River Basin.
- **Who:** The Oregon Department of Environmental Quality (ODEQ) is working in partnership with the agricultural community, Oregon State University (OSU) Extension Service, tribes, watershed councils, soil and water conservation districts (SWCD), the Oregon Departments of Agriculture and Forestry, and EPA.
- **Why:** This project was implemented to reduce pesticides in Oregon waters to protect human health and aquatic life. There are water quality impairments and CWA 303(d) listings in many Columbia River Basin watersheds for pesticides, including organophosphates which bioaccumulate in fish that are consumed. ODEQ and its partners are addressing these listings through collaborative work efforts with the agricultural community to reduce these pesticides in fish and in water.

in managed forest areas of the South Yamhill watershed to determine if forest use herbicides are a problem. In addition, the Long Tom Watershed Council received a foundation grant to work with DEQ and others on a Pesticide Stewardship Partnership in the City of Eugene (Amazon Creek) and agricultural areas just outside of the city limits. Monitoring will begin in the watershed in 2011. Three Pesticide Stewardship Partnerships are planned for 2011: two in the Clackamas

River Sub-basin (where surface water is a drinking water source) and one on Sauvie Island, northwest of Portland.

**Outcomes:**

DEQ and its partners (e.g., EPA, EWEB, ODA, SWCDs, watershed councils) collected over 100,000 pounds of agricultural pesticides, including over 1,000 pounds of DDT, since 2006 through seven grant-funded agricultural collection projects. Recent monitoring in the Walla Walla River Basin indicates that there has been a greater than 70% reduction of the insecticide chlorpyrifos in water column sampling between 2006 and 2008. Two of the areas that experienced reductions soon after the Pesticide Stewardship Partnership launched its collection efforts are dominated by one agricultural land use (tree fruit). The Partnership shared the monitoring data with the grower groups representing this agricultural sector. As a result, decreases in pesticides concentrations followed in subsequent years after outreach and BMP efforts were initiated for this agricultural sector.

**Lessons Learned/Recommendations:**

The Oregon Pesticide Stewardship Partnership Projects are innovative and successful because of the commitment of the partners to work together to increase awareness of and reduce toxics in the ecosystem. Oregon DEQ recommends, as a first step, identifying all of the key stakeholders in a watershed of concern that can assist in developing and implementing a pesticide stewardship type of program, and determining their level of interest. It is critical that the state or EPA not be seen as the sole driving force behind the project. The objective should be to have the local groups (growers, Extension agents, SWCDs) take ownership over the project and invest in the outcomes.

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## Building Water Monitoring Capacity for Underserved Communities in Mexico

### Brief Description:

This project develops water monitoring capacity and installation of best management practices (BMPs) for underserved populations among farmers, educators, students, and community groups in the state of Veracruz, Mexico. The project has already completed the first half of its three-year effort, with over 150 water quality monitors having been certified, including 60 students. Additionally, the curriculum *Exploring Alabama's Living Streams* has been adapted and translated into Spanish and titled *Explorando Nuestros Ríos Vivientes* (ENRV) for use by GWW in Mexico.

The first ENRV workshops were held in Coatepec and Xalapa, Mexico, for 50 educators in September 2009 and February 2010. These educators have in turn worked with hundreds of students on water quality hands-on training, and at least one group of educators (PASEVIC experiential education in science) has been working with disabled children. EPA staff participated in the graduation ceremony at C.E.T.-MAR (Center for the Technological Study of the Sea No. 7) for 30 students who had completed water quality monitoring certification. (This graduation was highlighted on the school's April 15, 2010, Facebook page: <http://www.facebook.com/pages/CET-MAR-07-VERACRUZ/330552933150>).

Agricultural producers (primarily cattle and trout) are currently being certified as water monitors to determine their stream water quality before and after BMP implementation in the la Antigua and Actopan watersheds. These BMPs will help eliminate infectious bacteria and excess nutrients from entering local streams. There is at least one public treatment works that has already modified its operation based on some of the water monitoring results. This project directly supports the State Governors' Gulf of Mexico Alliance priorities.

### Current Status:

This partnership in Veracruz, Mexico, is developing rapidly and being expanded to other impacted watersheds in Mexico.

### Subobjective:

**Gulf of Mexico**

### Type:

**Water Quality Monitoring**

### Highlights:

- **What:** A binational partnership that develops water monitoring capacity among underserved farmers, students, and community volunteers in Veracruz, Mexico. The project is in large part based on the knowledge and success of the EPA-funded Alabama Water Watch Program (<http://www.aces.edu/dept/fisheries/aww/aww/>).
- **Who:** Global Water Watch (GWW)—Auburn University, Primary Partners: SAGARPA (Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food), SEP (Secretariat of Public Education), SEV (Secretariat of Education of Veracruz), PASEVIC (Application Program of Experiential Education Systems and Science Inquiry), and SENDAS (Hiking and Meeting for Sustainable Self-Development).
- **Why:** Underserved populations in impacted watersheds in Veracruz, Mexico, are affected by bacterial and excess nutrient contamination of local streams. There is a lack of trained and certified water monitors in the underserved community in those impacted watersheds to help work toward solutions.



**Outcomes:**

Underserved community water monitors certified by GWW are now actively testing the waters in their communities and working with local landowners, leaders, and agencies to decrease bacterial, nutrient, and toxic impacts to streams. For example, the Tatahuicapan Agroforestry Cooperative has been able to successfully use its monitoring data to negotiate more funds for soil and water conservation management and to promote environmental services payment as a watershed conservation strategy in an area heavily dominated by cattle and farming. Additionally, in Coatepec, the Friends of the Pixquiac River have been very active in detecting point source discharges and working with the local community to help improve these discharges.

**Lessons Learned/Recommendations:**

There is a strong interest among farmers, educators, and the general public in Mexico to address water quality issues and Gulf of Mexico conservation. The ability to expand the capability of limited resources along with working long hours on some days to ensure project success gives the effort in Mexico a “fail-proof” attitude. Future expansion of monitoring activities into new areas in Mexico will need long-term resource consideration. Strong local partnerships have been vital for the success of the project.

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Troy Pierce, EPA Gulf of Mexico Program, 228-688-3658





## Enhanced Watershed Improvement Tracking Through Simultaneous Segment Analysis (SSA)

### Brief Description:

The EPA Region 6 Surface Water Center supports efforts to track the progress of watershed improvement goals (SP-12). Impaired segments of water bodies may be counted by assessing the impairments one at a time through spatial analysis, despite the spatial connection of multiple impairments to many watersheds. As a result, when these segments are improved, their full impact for meeting the objectives of measure SP-12 tends to be undercounted. Region 6 developed a user friendly analytical tool that allows for a rapid assessment of a restored segment's impacts on multiple watersheds, thereby fully accounting for improved watersheds. To achieve this, a comprehensive collection of the region's 2002 baseline 303(d) segments and their associated 12-digit hydrological units (HU) were spatially related through GIS, expanding the database to allow a single segment to be associated with multiple watersheds. The resulting image was then exported as a high resolution, large (92" × 92") PDF image with removable and searchable labels for all impaired segments and their associated HU. The PDF image allows a novice to visually analyze the map and quickly associate impaired segments with all related watersheds to assess improvement efforts. Although exporting GIS products as PDFs is common for producing printable maps, this best practice transforms the purpose of the PDF from a static image to a comprehensive, reusable, and analytical tool.

### Current Status:

Prior to this tool, reporting "improved" watersheds required a skilled GIS user to acquire necessary data from online databases, import and analyze data in the GIS software, and create a single use map to be included in the report. This highly inefficient process had to be repeated for every report, representing a serious commitment of staff time. Furthermore, as the number of improved segments increases, the number of reports and staff time commitment would also increase using the previous approach. Thus, the Simultaneous Segment Analysis (SSA) tool requires little expertise with GIS and saves processing time when evaluating watershed restoration efforts.

### *Subobjective:*

#### Water Quality

### *Type:*

#### Information Technology

### *Highlights:*

- **What:** Increasing the efficiency of watershed restoration assessment by formatting GIS analytical results into a searchable Portable Document Format (PDF) file.
- **Who:** Region 6.
- **Why:** Although GIS can be a powerful tool in creating and analyzing data relationships, it can require expensive licenses and extensive technical knowledge for proper use. Providing a product that is usable by a larger and more generalized audience increases the distribution and implementation of what would otherwise be inaccessible data and analysis.

### Outcomes:

The ability to prioritize and effectively identify improved watersheds has enabled EPA Region 6 to almost double its cumulative number of restored watersheds under SP-12, from nine in FY 2009 to 17 in FY 2010. Furthermore, Region 6 expects to again double its SP-12 achievements for FY 2011. Although it required approximately 40 staff hours to develop, the investment returns an estimated average savings of seven hours per report. Not only is less time spent per report, but each report produces higher returns, requiring fewer reports to meet measure goals. The PDF also allows for easier distribution so that a much wider audience, those without GIS experience or software and with specific knowledge of the reported content, can independently access and utilize information that would otherwise be difficult to obtain. Region 6 hopes to expand reporting capabilities beyond its own staff to state and tribal entities. This change in practice only

utilized resources already within the Water Quality Protection Division, requiring no additional financial support or license purchases.

**Lessons Learned/Recommendations:**

Previous attempts to count watershed improvement often fell short because of inefficient reporting practices. Using available GIS and PDF resources, all HUCs (watersheds) that are associated with impaired segments are identified. This allows for simultaneous accounting of an improved segment's impact on adjoining watersheds, far increasing the overall count of improved watersheds. By changing how resources

already available to the Division are utilized, Region 6 was able to recognize the full extent of its achievements, produce more thorough reports of improvements, and lower costs. With minimal modifications to their current practice and a modest investment of resources already present in Region 6, any region can develop its own SSA tool.

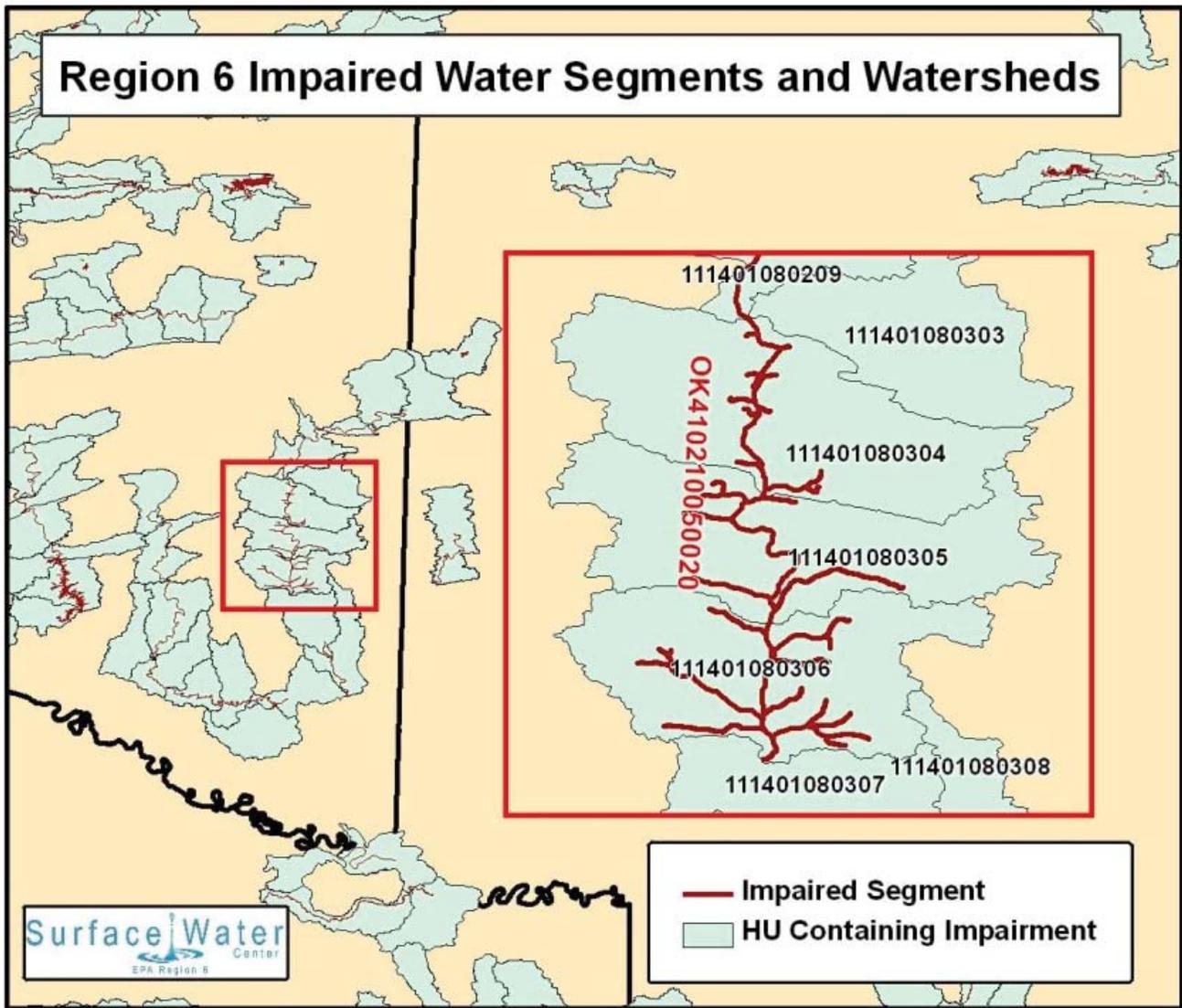
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<http://www.epa.gov/region6/water/swc/index.html>

US EPA ARCHIVE DOCUMENT





## Town of Bladensburg, Maryland, Green Streets and Green Jobs Charrette and Design Guidebook

### Brief Description:

Green Streets and Green Jobs are the focus of an exciting new initiative of Region 3, Office of State and Watershed Partnerships. Green Streets—urban transportation right-of-ways integrated with green techniques—achieve multiple benefits, such as improved water quality and more livable communities, through the integration of stormwater treatment techniques that use natural processes and landscaping. (For more information, see <http://www.lowimpactdevelopment.org/greenstreets/background.htm> or [http://www.epa.gov/npdes/pubs/gj\\_munichandbook\\_green\\_streets.pdf](http://www.epa.gov/npdes/pubs/gj_munichandbook_green_streets.pdf).)

As the first official project of the Chesapeake Bay/Anacostia Watershed *Green Streets–Green Jobs Initiative*, EPA and the Town of Bladensburg, Maryland, held a design charrette on October 25, 2010. A charrette is an intensive planning session in which citizens, designers, and others collaborate on a vision for development. It provides a forum for ideas and offers the unique advantage of giving immediate feedback to the designers. More importantly, it allows everyone who participates to be a mutual author of the plan. The Bladensburg charrette brought local and regional experts and decision makers together to plan and design a Green Streets project. Led by the mayor of Bladensburg, Walter Lee James, Jr., and Dominique Lueckenhoff of EPA, the charrette provided insight and support from both town and regional leaders such as Town Council members, the Town Administrator, and Congresswoman Donna F. Edwards.

Technical experts provided presentations on green technology and approaches in the areas of stormwater management (Tom Lipton, Portland, Oregon; Neil Weinstein, LID Center), renewable energy and energy conservation (Andrew Kreider, EPA), Green Construction (Mary Hunt, EPA), Green Financing and Green Jobs (Dan Nees, Chesapeake Funds/Forest Trends; Allan Hance, Chesapeake Bay Trust). These presenters highlighted the information provided in the Bladensburg Green Street Design Guidebook, which is intended as a take home booklet that introduces how green technology can be

### *Subobjective:*

#### Water Quality

#### *Type:*

#### Partnership

### *Highlights:*

- Review design options and provide design recommendations for the Bladensburg, Maryland, Green Streets Project, with the goal of moving Bladensburg towards its green community vision, incorporating a town center plan, holding a centennial celebration, and encouraging green job creation and green business incubation.
- Provide a “take-home” booklet that highlights how various green technologies can be brought together to create a holistic green street.
- Report of charrette findings and recommendations—to be used in future design of Bladensburg Green Streets.
- Documentation of charrette as a National and/or Chesapeake Bay Case Study—as a best management practice/tool for use by other communities.

used to create a green street. The Guidebook, while formatted for a general audience, provides technical details to make an informed decision and includes the following:

- A brief introduction to Bladensburg and its regional connections.
- A description of the Port Towns Partnership and the *Green Streets–Green Jobs Initiative*.
- An introduction to going green, including why it makes sense, what makes a green street, and definitions and background information on green technologies and approaches. These technologies focus on achieving watershed protection through green infrastructure and LID techniques, renewable energy, green construction, and

- recycled materials use. Information will also be provided on green financing, green jobs, and green business incubation.
- A description of the anatomy of a green street and where each of the described LID or green infrastructure elements can be implemented on a typical street section.
- An explanation of the Maryland State Highway Administration's role in implementing green streets along route 450/ Annapolis Road, funding sources, and grant information.
- A glossary of terms, appendices, and additional resources, including case studies and links to additional information.

The 40 plus participants, including key officials in the town, citizens groups, union officials, and business representatives, utilized the information provided to brainstorm key issues and recommendations in the design and direction of Bladensburg Green Streets.

**Current Status:**

The charrette summary, findings, and recommendations report is being drafted for review by the participants. A partnering meeting to discuss the next steps in the Green Streets development process will be held by the Maryland State Highway Administration on December 13, 2010.

**Outcomes:**

- Unified support at all levels of government and the community for the *Green Streets–Green Jobs Initiative*.
- Identification of key issues of concerns and recommended actions for the Annapolis Road Green Streets Project.

- Financial support of the Maryland State Highway Administration for design and construction of the green streets.
- Street upgrades, which will include not only safety and transportation improvements, but also environmental and community improvements.

**Lessons Learned/Recommendations:**

The charrette process provides a focused, yet inclusive way to bring stakeholders together, aimed at creating energy and synergy around an issue. It was important to have a “place” on the agenda for technical experts and to gain political buy-in from local, state, and federal partners.

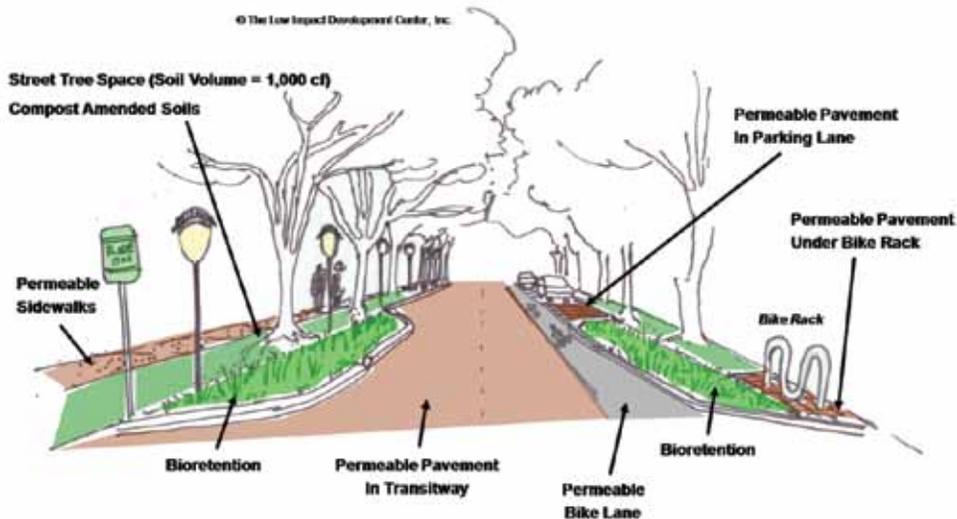
The outcomes of the charrette will serve as a strategy to be used with our new grantees in the Anacostia watershed as they move forward with their own green streets/green jobs design work.

In addition, Bladensburg and the first Anacostia Green Streets–Green Jobs project, Edmonston, Maryland, will be included in Region 3's Green Streets–Green Jobs Academy and Forum, to be launched in the spring of 2011.

We recommend that this process, with refinements, be replicated throughout the Anacostia watershed as we implement the *Green Streets–Green Jobs Initiative* and continue to fund technical assistance and training to ensure successful demonstration green streets projects.

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## Escalation Process to Achieve Timely Award and/or Liquidation of Special Appropriation Act Project (SAAP) Grants

### Brief Description:

The escalation process developed by Region 3 includes prepared response letters to a series of commonly encountered areas of delay in the award of new grants and the close-out of existing grants. The letters address: follow-up to pre-application meetings in which key dates and commitments are confirmed; lack of application and lack of local share funding; lack of progress midway through the grant period and lack of progress at the conclusion of the grant period; intent to terminate; and termination of the grant. Since initiating the letters, Region 3 grant project officers are seeing attention directed to the grant projects, and efforts have been made to take action so as not to lose federal funding. Our partners in the process are the state agencies, which oversee SAAP construction, and the Region 3 Office of State and Congressional Relations.

### Current Status:

Region 3 is implementing its SAAP escalation process. The Region 3 process and templates were included in a draft Agency SAAP Management Plan that will be published in March 2011.

### Outcomes:

Implementation of the EPA Region 3 SAAP escalation process has resulted in a reduction in unliquidated balances within the region. For example, EPA awarded a grant to the Brooke County Public Service District in West Virginia. After several time extensions and missed project milestones due to a legal dispute involving two municipalities, EPA sent a Notice to Terminate letter to the District. The letter and the potential loss of federal funds prompted a resolution; the parties resolved the differences and EPA was notified that the grantee was ready to proceed to construction. In another matter, EPA awarded a grant to the town of Delbarton, West Virginia. Five years after the award, the lack of a required local match resulted in minimal grant drawdown and EPA issued a Notice to Terminate letter. The town responded that it had secured all of the financing for the project and was ready to proceed to advertise the project for bids. And finally, after EPA issued a grant to Forward Township, there was little in the way of

### Subobjective:

All

### Type:

Financial Process

### Highlights:

- **What:** EPA Region 3 developed an escalation process for reducing the amount of unliquidated obligations and unobligated balances for Special Appropriations Act Projects (SAAPs) by using a series of letters/templates prompting action from pre-award to grant close out.
- **Who:** EPA Region 3 Office of Infrastructure and Assistance.
- **Why:** The Agency was criticized in an Inspector General report for the lack of a plan or process to guide unawarded SAAPs to award or awarded SAAPs to construction completion. The Region 3 Escalation Process is helping to achieve the goals of the Unliquidated Obligation Policy effective October 1, 2010.

construction progress. EPA sent a letter to the township stating that a decision must be made to either continue supporting the project or deobligate the funds and return the money to the U.S. Treasury. Since the township was not able to demonstrate its ability to proceed with the grant process, the grant was terminated.

The Region 3 SAAP Escalation Process is easily and readily transferable to other regions since SAAPs are similar from region to region, the oversight and management (i.e., application of the federal grant and procurement requirements and policies) is the same, and the problems causing project delays are common.

### Lessons Learned/Recommendations:

Proactive management and direction of SAAPs achieves desired results. Explaining the grant process and communicating

expectations in writing prompts action. Informing grantees that SAAP funding does not last indefinitely, and that they run the risk of rescission unless action is taken, gets a project moving. Terminating funds that are not being used serves as a motivator to other communities.

Setting up and drafting the escalation process was the hardest and most time-consuming part. Now that templates are prepared, sending the letters is quick and easy.

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## Moving Community Water Utilities Toward Sustainability Through Energy Management

### Brief Description:

In the past, EPA Region 7 tried wholesale marketing of EPA's *Energy Management Guidebook for Wastewater and Water Utilities* ([http://www.epa.gov/owm/waterinfrastructure/pdfs/guidebook\\_si\\_energymangement.pdf](http://www.epa.gov/owm/waterinfrastructure/pdfs/guidebook_si_energymangement.pdf)), distributing it and encouraging communities to use it as a planning tool with little success. As a result, Region 7 determined from the outset that it would need partners with skills and resources beyond those available internally to achieve results. The Missouri Department of Natural Resources, MS&T, and the Siemens Corporation all responded to the opportunity to work collaboratively with EPA to find ways of providing leadership for community innovation. The group became the Missouri Water Utilities Partnership (MOWUP), an informal partnership. Eight mid-sized communities were invited to participate in the first Missouri Energy Management Initiative for Water and Wastewater Utilities. During the Initiative, partners assisted communities in creating and tracking their individual energy use, prioritizing energy saving opportunities, identifying funding options, developing communication networks, evaluating renewable energy options, and developing near and long-term plans for energy management. This work was accomplished during a series of four workshops facilitated by the University using EPA's *Energy Management Guidebook*, and through direct technical assistance by one or more of the partners.

By the time Energy Management Plans were complete, each community had identified at least one project that would improve energy efficiency by 15% and secured financing for that project. Projects ranged from installation of new pumps, motors, or drives to an upgrade of a digester complex to increase methane gas utilization for electricity production. Several communities had also decided to concurrently address energy efficiency at all of their municipally owned facilities and engaged local organizations in the process. In July 2010, the partnership held a press conference with mayors to showcase the initiative and anticipated results. These communities are now sharing their experiences at professional meetings and serving as consultants to other communities.

### Subobjective:

**Water Safe to Drink and Water Quality**

### Type:

**Partnership**

### Highlights:

- **What:** An initiative to help eight pilot communities in Missouri reduce energy use at water and wastewater utilities, save money, and improve the environment through greenhouse gas emission reductions.
- **Who:** EPA Region 7 and the Missouri Department of Natural Resources, the Missouri University of Science and Technology (MS&T), and the Siemens Corporation.
- **Why:** In the Midwest, where the price of energy is still relatively low, few communities have come to terms with the cost and environmental impacts of the energy they are using to treat and distribute water, although many are trying to find ways to reduce costs and become more sustainable. Region 7 and partners decided to use a community-based approach in Missouri as a way to encourage communities to use energy efficiency as a stepping stone to sustainable community development.

### Current Status:

All eight communities are currently implementing projects while Region 7 is continuing to work with MS&T to develop case studies, which will be shared beginning in spring 2011. As a result of the success of the MOWUP Initiative, Region 7 and a similar partnership, MOWUP2, have started work with another group of Missouri communities. The next pilot group will focus on developing plans for communities to become more sustainable through both energy and water efficiency.

### Outcomes:

The eight Energy Management Initiative communities will collectively reduce electricity use in Missouri by more than

8 million kilowatt hours per year and reduce greenhouse gas production by 16 million pounds per year. Each community is also projecting substantial cost savings. Additionally, each community has developed a stronger bond among stakeholders in clean water—citizens, elected officials, other departments in city government, and civic organizations. Participants have said that they can now use the same plan-do-check-act and stakeholder engagement tools that they learned through MOWUP to tackle other challenges in sustainable development.

**Lessons Learned/Recommendations:**

The innovation in this initiative was a “retail approach” characterized by good marketing, continuous technical assistance through an active public-private partnership, and helping customers (communities) meet their own sustainable development goals through cost reductions and environmental

improvements. Because every water utility is different and because water managers have so many challenges facing them on a daily basis, a key success in this initiative was establishing a class or group to work through the energy planning process together. Through the workshops and exercises, they were able to learn from one another and from partners and speakers. Now these participants are far more credible than any of the partners individually at convincing other communities that energy and money can be saved while improving the environment—even in the Midwest.

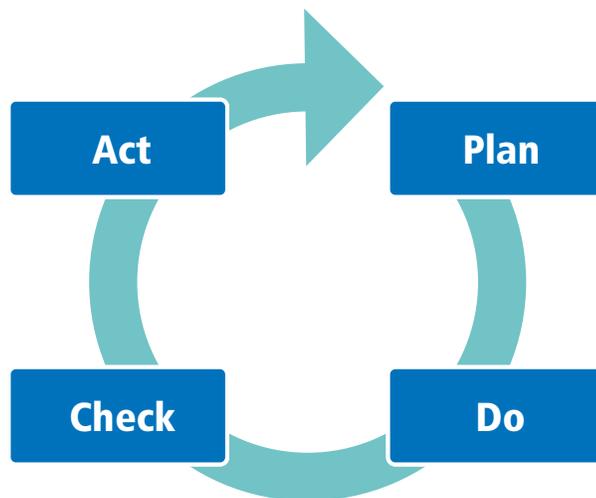
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<http://www.epa.gov/region07/water/si.htm>

- Continue monitoring and recording
- Participate in Workshop 4
- Share Energy Management Plans
- Share Energy/Water Project Plans
- Participate in celebration with mayors
- Begin implementation of plans and construction of projects

- Begin a new cycle of planning
- What next for continuous improvement?

- Create Energy Team
- Participate in Workshop 1
- Conduct Energy Assessment
- Develop Energy Policy and Goals
- Determine energy baseline
- Create inventory of energy and water use



- Continue monitoring and recording energy use
- Participate in Workshop 3
- Share project plans
- Consider financing options, corrective action steps, water conservation practices
- Update city council on progress
- Develop long term action plan

- Continue monitoring and recording of energy use
- Participate in Workshop 2
- Begin development of Energy Plan
- Learn about energy contracting
- Identify potential near-term projects
- Conduct presentation to stakeholders



## Advancing Green Jobs for the Drinking Water Sector

### Brief Description:

The predicted shortfall of certified operators prompted EPA Region 1 and state public/private partners to implement a drinking water work force development strategy. These New England efforts promoted opportunities for students in vocational technical high schools to learn sustainable environmental principles and the drinking water operator trade. Key efforts included development of teacher tool kits, and educational programs and internships in environmental justice areas, as described below:

### Teacher Tools for Water Operator Training:

- EPA Teacher's Resource Guide: Environmental Science Curriculum—a quick reference guide for teachers interested in using environment-related teaching materials available on EPA websites.
- EPA's Drinking Water Operator Training Modules—components of an operator's curriculum, which include lesson plans, activities, and training resources to prepare for certification exams.
- EPA's Drinking Water Operator Teacher's Toolkit—a menu of resources available for teachers and students to order as reference materials for drinking water operator certification training courses.

### Water Sector Green Jobs Training Programs:

- Water Boot Camp for high school students in Bridgeport, Connecticut, an urban environmental justice showcase community. With support from EPA, the Connecticut Section of the American Water Works Association partnered with the Water and People Program and Aquarion Water Company to raise awareness about careers in the water industry. These two one-week water boot camps included classroom learning and hands-on activities (e.g., water quality analyses, stormwater stenciling).
- Environmental Placement Partnership Internship Program—the New England Water Works Association, in

### Highlights:

- **What:** In 2010, EPA Region 1 and partners advanced the Green Jobs for Safe Water Initiative to open up pathways for drinking water operations and other green jobs training in the water sector, with an emphasis on environmental justice areas.
- **Who:** EPA Region 1, Office of Environmental Justice, Office of Water, State Drinking Water Programs in Massachusetts and Connecticut, Massachusetts Water Works Association (MWWA), Connecticut Section of the American Water Works Association (CT AWWA), New England Water Works Association (NEWWA), the Water and People Program, and water utilities.
- **Why:** According to national and regional studies, more than 50% of the certified drinking water operators in the country will be eligible to retire over the next five to 10 years. Without committed and trained operators, there cannot be sustainable communities. To advance green economies and sustainability, EPA Region 1 and partners were particularly interested in providing pathways to these critical careers for students in underserved communities.

partnership with the CT AWWA and MWWA, is developing internship programs addressing the aging water operator work force. This effort will bolster the existing student drinking water operator training programs by placing students in jobs in the water sector. These internship programs will be designed to build green jobs capacity in environmental justice communities in Connecticut and Massachusetts.

### Current Status:

Two drinking water career videos recently produced in New England: OW/OGWDW's "Water You Waiting For?" (<http://www.epa.gov/safewater/operatorcertification/wateryouwaitingfor>) and CT AWWA/Water and People Program's "Water Boot Camp" (<http://ctawwa.org/Water&People/index.htm>).

### Outcomes:

Eighteen high school students graduated from the 2010 Water Boot Camps held in Bridgeport, Connecticut. All boot camp graduates and parents expressed excitement about furthering their new knowledge of public health and the environment (see video above). Many student interns made lasting connections, including some with long-term job commitments from local water utilities. A number of students expressed interest in furthering their education in fields associated with the water profession.

The Environmental Placement Partnership Internship Program is designed for interns who have working knowledge or have participated in instructional/certificate programs for drinking water operations. Through this program, six students will be hired. The EPA teacher resource guides will be available to a growing number of interested vocational high schools and community colleges throughout New England. Based on the early successes of the outreach and training programs, all New England partners, including EPA Region 1, state drinking water programs, water associations, and utilities, are committed to carrying on the Green Jobs for Safe Water Initiative, with additional efforts for student operator training and tool development planned for 2011.

### Lessons Learned/Recommendations:

Programs like the Water Boot Camp are needed in environmental justice communities because often students in these communities are not afforded the same educational resources that exist in other communities. The key to catching the interest of urban students to participate in rewarding opportunities like this is not only to demonstrate a great purpose, but also to provide incentives. Upon completion of the program,

participants in the Water Boot Camp were given stipends by a non-profit organization. Students not only walked away with the reward of an expanded horizon of more career opportunities, but also with a financial reward. The incentive does not always have to be financial. Nonfinancial rewards like community service hours needed for high school graduation can also be used. EPA Region 1 staff also recommends that programs like the Water Boot Camp be hands-on. Keeping the students engaged with hands-on activities proved much more rewarding for the students.

Finding students genuinely interested in green jobs programs may also be difficult. It is important to seek help from teachers and non-profit job training programs to direct students to your programs and to also create an application and interview process. Students who had some environmental science knowledge and had positive attitudes were prime candidates.

Teachers and students are excited about learning what sustains their world and what environmental challenges may lie ahead. All it takes to make something happen is a local champion (e.g., Dave Kuzminski of the Water and People Program) and a utility host (e.g., Aquarion Water Company), commitment from the community, and a dash of interest and support from EPA and the states. There are tremendous opportunities to connect green jobs training to environmental justice areas, while at the same time building capacity for a sustainable water sector work force.

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## Appendix A: FY 2010 End-of-Year NPM Guidance Measure Commitments and Results

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.1.1: Water Safe to Drink</b>					
2.1.1	2.1.1	Percent of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.	89.9%	92%	▲
2.1.1	SP-1	Percent of community water systems that meet all applicable health-based standards through approaches that include effective treatment and source water protection.	87.0%	89.6%	▲
2.1.1	SP-2	Percent of "person months" (i.e. all persons served by community water systems times 12 months) during which community water systems provide drinking water that meets all applicable health-based drinking water standards.	94.7%	97.3%	▲
2.1.1	SP-3	Percent of the population in Indian country served by community water systems that receive drinking water that meets all applicable health-based drinking water standards.	82.2%	87.2%	▲
2.1.1	SP-4a	Percent of community water systems where risk to public health is minimized through source water protection.	35.4%	37%	▲
2.1.1	SP-4b	Percent of the population served by community water systems where risk to public health is minimized through source water protection.	52.4%	58%	▲
2.1.1	SP-5	Number of homes on tribal lands lacking access to safe drinking water.	27,367	34,187	▼
2.1.1	SDW-1a	Percent of community water systems (CWSs) that have undergone a sanitary survey within the past three years (five years for outstanding performers) as required under the Interim Enhanced and Long-Term I Surface Water Treatment Rules.	88.6%	87%	▼
2.1.1	SDW-1b	Number of tribal community water systems (CWSs) that have undergone a sanitary survey within the past three years (five years for outstanding performers) as required under the Interim Enhanced and Long-Term I Surface Water Treatment Rules.	55	63	▲
2.1.1	SDW-2	Percent of the data for violations of health-based standards at public water systems that is accurate and complete in SDWIS-FED for all maximum contaminant level and treatment technique rules (excluding the Lead and Copper Rule).	Indicator	68%	Indicator

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US EPA ARCHIVE DOCUMENT

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.1.1: Water Safe to Drink</b>					
2.1.1	SDW-3	Percent of the Lead action level data for the Lead and Copper Rule, for community water systems serving over 3,300 people, that is complete in SDWIS-FED.	Indicator	Data unavailable	Indicator
2.1.1	SDW-4	Fund utilization rate [cumulative dollar amount of loan agreements divided by cumulative funds available for projects] for the Drinking Water State Revolving Fund (DWSRF).	85.7%	91.3%	▲
2.1.1	SDW-5	Number of Drinking Water State Revolving Fund (DWSRF) projects that have initiated operations. a	4,424	5,236	▲
2.1.1	SDW-7a	Percent of deep injection wells that are used to inject industrial, municipal, or hazardous waste (Class I) that lose mechanical integrity and are returned to compliance within 180 days thereby reducing the potential to endanger underground sources of drinking water.	89%	96%	▲
2.1.1	SDW-7b	Percent of deep injection wells that are used to enhance oil recovery or that are used for the disposal or storage of other oil production related activities (Class II) that lose mechanical integrity and are returned to compliance within 180 days thereby reducing the potential to endanger underground sources of drinking water.	85%	89%	▲
2.1.1	SDW-7c	Percent of deep injection wells that are used for salt solution mining (Class III) that lose mechanical integrity and are returned to compliance within 180 days thereby reducing the potential to endanger underground sources of drinking water.	90%	75%	▼
2.1.1	SDW-8	Percent of high priority Class V wells identified in sensitive ground water protection areas that are closed or permitted.a [Measure will still set targets and commitments and report results in both % and #.]	71%	91%	▲
2.1.1	SDW-9	Percent of community water system intakes for which source water was assessed for drinking water use during the most recent reporting cycle.	Indicator	Data unavailable	Indicator
2.1.1	SDW-10a	Percent of waterbody impairments identified by States in 2002, in which there is a community water system intake and the impairment cause is for either a drinking water use or a pollutant that is regulated as a drinking water contaminant, for which there is a TMDL.	Indicator	Data unavailable	Indicator
2.1.1	SDW-10b	Percent of waterbody impairments identified by States in 2002, in which there is a community water system intake and the impairment cause is for either a drinking water use or a pollutant that is regulated as a drinking water contaminant, for which the waterbody impairments have been restored.	Indicator	Data unavailable	Indicator

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.1.2 Fish and Shellfish Safe to Eat</b>					
2.1.2	SP-6	Percent of women of childbearing age having mercury levels in blood above the level of concern.	5.10%	Data unavailable	Data unavailable
2.1.2	FS-1a	Percent of river miles where fish tissue will be assessed to support waterbody-specific or regional consumption advisories or a determination that no consumption advice is necessary. (Great Lakes measured separately; AK not included.)	Indicator	Data unavailable	Indicator
2.1.2	FS-1b	Percent of lake acres where fish tissue will be assessed to support waterbody-specific or regional consumption advisories or a determination that no consumption advice is necessary. (Great Lakes measured separately; AK not included.)	Indicator	Data unavailable	Indicator
<b>Subobjective 2.1.3 Water Safe for Swimming</b>					
2.1.3	SP-8	Number of waterborne disease outbreaks attributable to swimming in or other recreational contact with coastal and Great Lakes waters, measured as a 5-year average.	2	Data unavailable	Data unavailable
2.1.3	SP-9	Percent of days of the beach season that coastal and Great Lakes beaches monitored by state beach safety programs are open and safe for swimming.	95%	95%	▲
2.1.3	SS-1	Number and national percent, using a constant denominator, of Combined Sewer Overflow (CSO) permits with a schedule incorporated into an appropriate enforceable mechanism, including a permit or enforcement order, with specific dates and milestones, including a completion date consistent with Agency guidance, which requires: 1) Implementation of a Long Term Control Plan (LTCP) which will result in compliance with the technology and water quality-based requirements of the Clean Water Act; or 2) implementation of any other acceptable CSO control measures consistent with the 1994 CSO Control Policy; or 3) completion of separation after the baseline date. (cumulative)	702	724	▲
2.1.3	SS-2	Percent of all Tier I (significant) public beaches that are monitored and managed under the BEACH Act program.	97%	99%	▲
<b>Subobjective 2.2.1 Improve Water Quality on a Watershed Basis</b>					
2.2.1	SP-10	Number of waterbodies identified in 2002 as not attaining water quality standards where standards are now fully attained. (cumulative)	2,809	2,909	▲
2.2.1	SP-11	Remove the specific causes of waterbody impairment identified by states in 2002. (cumulative)	8,512	8,446	▼
2.2.1	SP-12	Improve water quality conditions in impaired watersheds nationwide using the watershed approach. (cumulative)	141	168	▲

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US EPA ARCHIVE DOCUMENT

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.2.1 Improve Water Quality on a Watershed Basis</b>					
2.2.1	SP-13	Ensure that the condition of the Nation's wadeable streams does not degrade (i.e., there is no statistically significant increase in the percent of streams rated "poor" and no statistically significant decrease in the streams rated "good").	Data unavailable (not reporting until 2010)	Data unavailable	Long-term
2.2.1	SP-14	Improve water quality in Indian country at monitoring stations in tribal waters (i.e., show improvement in one or more of seven key parameters: dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, and turbidity). (cumulative)	Data unavailable (not reporting until 2010)	Data unavailable	Long-term
2.2.1	SP-15	By 2015, in coordination with other federal agencies, reduce by 50 percent the number of homes on tribal lands lacking access to basic sanitation. (cumulative)	18,985	25,737	▼
2.2.1	WQ-1a	Number of States and Territories that have adopted EPA approved nutrient criteria into their water quality standards. (cumulative)	13	12	▼
2.2.1	WQ-1b	Number of States and Territories that are on schedule with a mutually agreed-upon plan to adopt nutrient criteria into their water quality standards. (annual)	32	32	▲
2.2.1	WQ-2	Number of Tribes that have water quality standards approved by EPA. (cumulative)	38	35	▼
2.2.1	WQ-3a	Number, and national percent, of States and Territories that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other resources not considered in the previous standards.	37	38	▲
2.2.1	WQ-3b	Number, and national percent of Tribes that within the preceding three year period, submitted new or revised water quality criteria acceptable to EPA that reflect new scientific information from EPA or other resources not considered in the previous standards.	16	18	▲
2.2.1	WQ-4a	Percentage of submissions of new or revised water quality standards from States and Territories that are approved by EPA.	85.0%	90.9%	▲
2.2.1	WQ-4b	Percentage of submissions of new or revised water quality standards from authorized Tribes that are approved by EPA.	71.8%	80%	▲
2.2.1	WQ-5	Number of States and Territories that have adopted and are implementing their monitoring strategies in keeping with established schedules.	56	55	▼
2.2.1	WQ-6a	Number of Tribes that currently receive funding under Section 106 of the Clean Water Act that have developed and begun implementing monitoring strategies that are appropriate to their water quality program consistent with EPA Guidance. (cumulative)	162	161	▼

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.2.1 Improve Water Quality on a Watershed Basis</b>					
2.2.1	WQ-6b	Number of Tribes that are providing water quality data in a format accessible for storage in EPA's data system. (cumulative)	99	107	▲
2.2.1	WQ-7	Number of States and Territories that provide electronic information using the Assessment Database version 2 or later (or compatible system) and geo-reference the information to facilitate the integrated reporting of assessment data. (cumulative)	45	44	▼
2.2.1	WQ-8a	Number, and national percent, of TMDLs that are established or approved by EPA [Total TMDLs] on a schedule consistent with national policy.  Note: A TMDL is a technical plan for reducing pollutants in order to attain water quality standards. The terms 'approved' and 'established' refer to the completion and approval of the TMDL itself.	2,592 (77%)	4,951	▲
2.2.1	WQ-8b	Number, and national percent, of approved TMDLs, that are established by States and approved by EPA [State TMDLs] on a schedule consistent with national policy.  Note: A TMDL is a technical plan for reducing pollutants in order to attain water quality standards. The terms 'approved' and 'established' refer to the completion and approval of the TMDL itself.	2,491 (76%)	2,262	▼
2.2.1	WQ-9a	Estimated annual reduction in million pounds of nitrogen from nonpoint sources to waterbodies (Section 319 funded projects only).	8.5 million lbs	9.7 million lbs	▲
2.2.1	WQ-9b	Estimated annual reduction in million pounds of phosphorus from nonpoint sources to waterbodies (Section 319 funded projects only).	4.5 million lbs	2.6 million lbs	▼
2.2.1	WQ-9c	Estimated annual reduction in million tons of sediment from nonpoint sources to waterbodies (Section 319 funded projects only).	700,000 tons	2.1 million lbs	▲
2.2.1	WQ-10	Number of waterbodies identified by States (in 1998/2000 or subsequent years) as being primarily nonpoint source (NPS)-impaired that are partially or fully restored. (cumulative)	188	215	▲
2.2.1	WQ-11	Number, and national percent, of follow-up actions that are completed by assessed NPDES (National Pollutant Discharge Elimination System) programs. (cumulative)	Indicator	253	Indicator
2.2.1	WQ-12a	Percent of facilities covered by NPDES permits that are considered current. a [Measure will still set targets and commitments and report results in both % and #.]	89.00%	89%	▲

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US EPA ARCHIVE DOCUMENT

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.2.1 Improve Water Quality on a Watershed Basis</b>					
2.2.1	WQ-12b	Percent of tribal facilities covered by NPDES permits that are considered current. a [Measure will still set targets and commitments and report results in both % and #.]	86%	88%	▲
2.2.1	WQ-13a	Number, and national percent, of facilities covered under either an individual or general MS-4 permit.	Indicator	6,919	Indicator
2.2.1	WQ-13b	Number, and national percent, of facilities covered under either an individual or general industrial storm water permit.	Indicator	88,788	Indicator
2.2.1	WQ-13c	Number of facilities covered under either an individual or general construction storm water site permit.	Indicator	186,874	Indicator
2.2.1	WQ-13d	Number of facilities covered under either an individual or general CAFO permit.	Indicator	7,882	Indicator
2.2.1	WQ-14a	Number, and national percent, of Significant Industrial Users (SIUs) in POTWs with Pretreatment Programs that have control mechanisms in place that implement applicable pretreatment requirements.	21,298	17,948	▼
2.2.1	WQ-14b	Number, and national percent, of Categorical Industrial Users (CIUs) in non-pretreatment POTWs that have control mechanisms in place that implement applicable pretreatment requirements.	Indicator	1,241	Indicator
2.2.1	WQ-15a	Percent of major dischargers in Significant Noncompliance (SNC) at any time during the fiscal year.	<22.5%	Data unavailable	Data unavailable
2.2.1	WQ-15b	Of the major dischargers in Significant Noncompliance (SNC) at any time during the fiscal year, the number, and national percent, discharging pollutant(s) of concern on impaired waters.	Indicator	Data unavailable	Indicator
2.2.1	WQ-16	Number, and national percent, of all major publicly-owned treatment works (POTWs) that comply with their permitted wastewater discharge standards. (i.e. POTWs that are not in significant non-compliance)	4,256 (86%)	Data unavailable	Data unavailable
2.2.1	WQ-17	Fund utilization rate [cumulative loan agreement dollars to the cumulative funds available for projects] for the Clean Water State Revolving Fund (CWSRF).	94.5%	100%	▲
2.2.1	WQ-19a	Number, and national percent, of high priority state NPDES permits that are issued as scheduled.	710	1,008 (142%)	▲
2.2.1	WQ-19b	Number, and national percent, of high priority state and EPA (including tribal) NPDES permits, that are issued as scheduled.a	792	1,063 (138%)	▲
2.2.1	WQ-20	Number of facilities that have traded at least once plus all facilities covered by an overlay permit that incorporates trading provisions with an enforceable cap.	Indicator	442	Indicator

Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.2.1 Improve Water Quality on a Watershed Basis</b>					
2.2.1	WQ-21	Number of water segments identified as impaired in 2002 for which States and EPA agree that initial restoration planning is complete (i.e., EPA has approved all needed TMDLs for pollutants causing impairments to the waterbody or has approved a 303(d) list that recognizes that the waterbody is covered by a Watershed Plan [i.e., Category 4b or Category 5m]). (cumulative)	Indicator	13,932	Indicator
<b>Subobjective 2.2.2 Improve Coastal and Ocean Waters</b>					
2.2.2	2.2.2	Prevent water pollution and protect coastal and ocean systems to improve national and regional coastal aquatic system health on the 'good/fair/poor' scale of the National Coastal Condition Report.	2.8	2.8	▲
2.2.2	SP-16	Maintain aquatic ecosystem health on the 'good/fair/poor' scale of the National Coastal Condition Report in the Northeast Region.	2.4	2.4	▲
2.2.2	SP-17	Maintain aquatic ecosystem health on the 'good/fair/poor' scale of the National Coastal Condition Report in the Southeast Region.	3.6	3.6	▲
2.2.2	SP-18	Maintain aquatic ecosystem health on the 'good/fair/poor' scale of the National Coastal Condition Report in the West Coast Region.	2.4	2.4	▲
2.2.2	SP-19	Maintain aquatic ecosystem health on the 'good/fair/poor' scale of the National Coastal Condition Report in Puerto Rico.	1.7	1.7	▲
2.2.2	SP-20	Percent of active dredged material ocean dumping sites that will have achieved environmentally acceptable conditions (as reflected in each site's management plan and measured through on-site monitoring programs).	98%	90%	▼
2.2.2	4.3.2	Working with partners, protect or restore additional acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program (NEP).	100,000	89,985	▼
2.2.2	CO-1	Number of coastal waterbodies identified in 2002 as not attaining water quality standards where standards are now fully attained.	Indicator	Data unavailable	Indicator
2.2.2	CO-2	Total coastal and non-coastal acres protected from vessel sewage by 'no discharge zone(s)'.a	Indicator	53,635	Indicator
2.2.2	CO-3	Number of National Estuary Program priority actions in Comprehensive Conservation and Management Plans (CCMPs) that have been completed. (cumulative)	Indicator	365	Indicator
2.2.2	CO-4	Rate of return on Federal investment for the National Estuary Programs [dollar value of 'primary' leveraged resources (cash or in-kind) divided by Section 320 funds].	Indicator	\$274.30	Indicator
2.2.2	CO-5	Number of dredged material management plans that are in place for major ports and harbors.	Indicator	37	Indicator

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<b>Goal 2: Clean and Safe Water</b>					
<b>Subobjective 2.2.2 Improve Coastal and Ocean Waters</b>					
2.2.2	CO-6	Number of active dredged material ocean dumping sites that are monitored in the reporting year.	Indicator	33	Indicator
2.2.2	CO-7	Maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Hawaii Region.	4.5	4.5	▲
2.2.2	CO-8	Maintain aquatic ecosystem health on the "good/fair/poor" scale of the national Coastal Condition Report in the Central Alaska Region.	5	5	▲
<b>Goal 4</b>					
<b>Subobjective 4.3.1 Increase Wetlands</b>					
4.3.1	SP-21	Working with partners, achieve a net increase of acres of wetlands per year with additional focus on biological and functional measures and assessment of wetland condition.a	Data unavailable (not reporting in 2010)	Data unavailable	Data unavailable
4.3.1	SP-22	In partnership with the U.S. Army Corps of Engineers, states and tribes, achieve 'no net loss' of wetlands each year under the Clean Water Act Section 404 regulatory program.	No net loss	No net loss	▲
4.3.1	WT-1	Number of acres restored and improved, under the President's 2004 Earth Day Initiative (cumulative).	96,000	130,000	▲
4.3.1	WT-2a	Number of States that have built capacities in wetland monitoring, regulation, restoration, water quality standards, mitigation compliance, and partnership building.	Indicator	47	Indicator
4.3.1	WT-2b	Number of Tribes that have built capacities in wetland monitoring, regulation, restoration, water quality standards, mitigation compliance, and partnership building.	Indicator	27	Indicator
4.3.1	WT-3	Percent of Clean Water Act Section 404 standard permits, upon which EPA coordinated with the permitting authority (i.e., Corps or State), where a final permit decision in FY 08 documents requirements for greater environmental protection than originally proposed.	Indicator	Data unavailable	Indicator
4.3.1	WT-4	Number of states measuring baseline wetland condition - with plans to assess trends in wetland condition - as defined through condition indicators and assessments (cumulative). a	21	22	▲
<b>Subobjective 4.2.4 Sustain and Restore the U.S.–Mexico Border Environmental Health</b>					
4.2.4	SP-23	Loading of biochemical oxygen demand (BOD) removed (cumulative million pounds/year) from the U.S.–Mexico Border area since 2003.	36 million pounds	18.7 million pounds	▼
4.2.4	SP-24	Number of additional homes provided safe drinking water in the U.S.–Mexico border area that lacked access to safe drinking water in 2003. a	21,899	21,650	▼
4.2.4	SP-25	Number of additional homes provided adequate wastewater sanitation in the U.S.–Mexico border area that lacked access to wastewater sanitation in 2003. a	190,720	75,175	▼

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<b>Goal 4</b>					
<b>Subobjective 4.2.5 Sustain and Restore Pacific Island Territories</b>					
4.2.5	SP-26	Percent of the population served by community water systems in the U.S. Pacific Island Territories that receive continuous drinking water that meets all applicable health-based drinking water standards.	73%	82%	▲
4.2.5	SP-27	Percent of the time that the sewage treatment plants in the U.S. Pacific Island Territories comply with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS).	62%	52%	▼
4.2.5	SP-28	Percent of days of the beach season that beaches in each of the U.S. Pacific Island Territories monitored under the Beach Safety Program will be open and safe for swimming.	80%	80%	▲
<b>Subobjective 4.3.3 Improve the Health of the Great Lakes</b>					
4.3.3	4.3.3	Improve the overall ecosystem health of the Great Lakes by preventing water pollution and protecting aquatic ecosystems.	23.0	22.7	▼
4.3.3	SP-29	Average annual percentage decline for the long-term trend in concentrations of PCBs in whole lake trout and walleye samples.	5%	6%	▲
4.3.3	SP-30	Average annual percentage decline for the long-term trend in concentrations of PCBs in the air in the Great Lakes basin.	7%	7%	▲
4.3.3	SP-31	Number of Areas of Concern in the Great Lakes Basin which are restored and de-listed.	3	1	▼
4.3.3	SP-32	Cubic yards of contaminated sediments remediated (cumulative) in the Great Lakes.	6.4 million	7.3	▲
4.3.3	GL-1	Number, and percent of all NPDES permitted discharges to the Lakes or major tributaries that have permit limits that reflect the Guidance's water quality standards, where applicable.	2,815 (96%)	2,767 (98%)	▲
4.3.3	GL-2	Number, and Great Lakes percent, using a constant denominator, of Combined Sewer Overflow (CSO) permits with a schedule incorporated into an appropriate enforceable mechanism, including a permit or enforcement order, with specific dates and milestones, including a completion date consistent with Agency guidance, which requires: 1) Implementation of a Long Term Control Plan (LTCP) which will result in compliance with the technology and water quality-based requirements of the Clean Water Act; or 2) implementation of any other acceptable CSO control measures consistent with the 1994 CSO Control Policy; or 3) completion of separation after the baseline date. (cumulative)	135	138	▲
4.3.3	GL-3	Percent of high priority Tier 1 (significant) Great Lakes beaches where States and local agencies have put into place water quality monitoring and public notification programs that comply with the U.S. EPA National Beaches Guidance.	100%	100%	▲

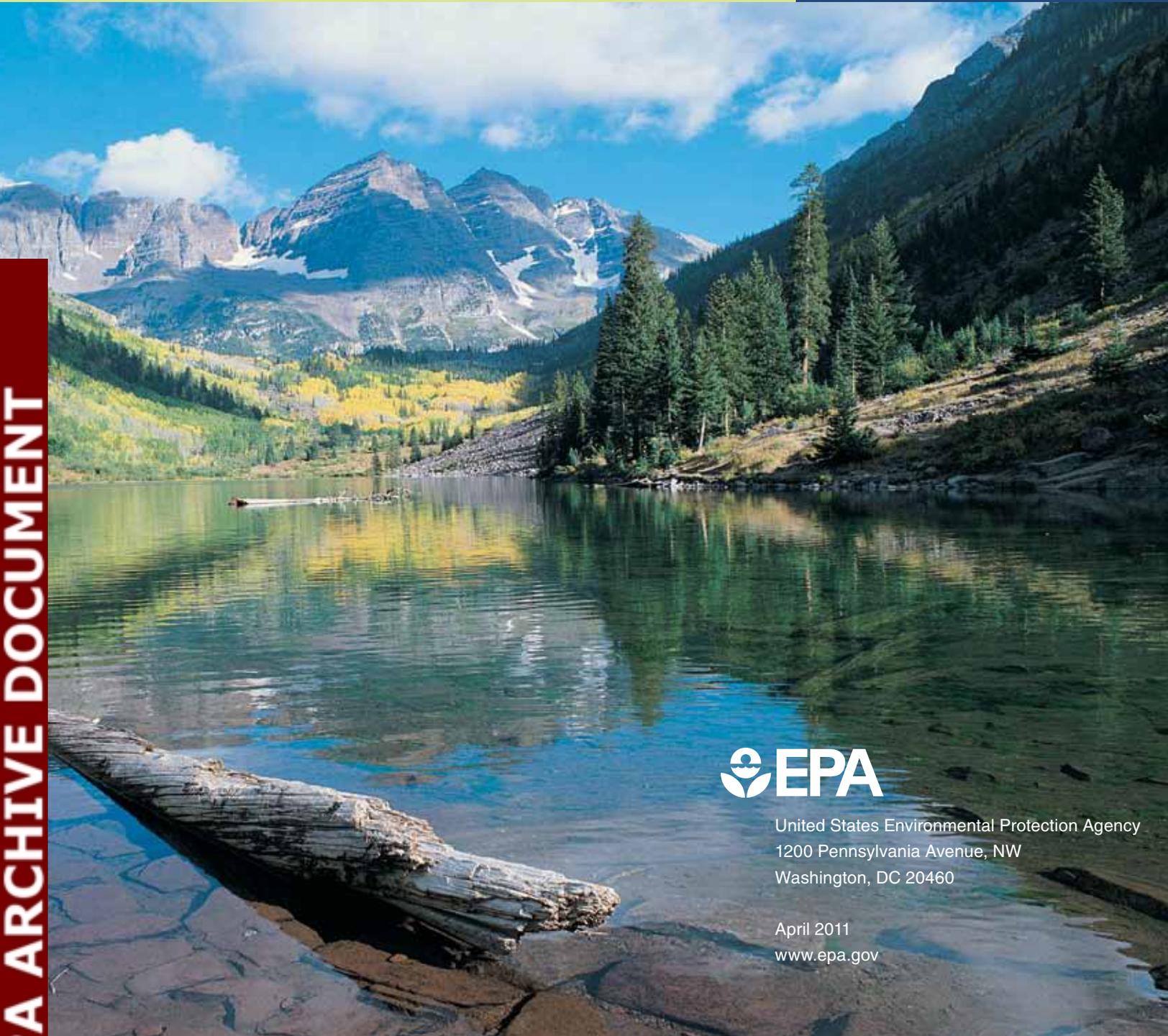
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Goal/ Objective/ Subobjective	ACS Code	FY 2010 National Water Program Guidance Measure Text	FY 2010 National Commitment	FY 2010 National End-of- Year Result	FY 2010 Performance Status
<b>Goal 4</b>					
<b>Subobjective 4.3.3 Improve the Health of the Great Lakes</b>					
4.3.3	GL-4a	Number of near term Great Lakes Actions on track.a	Indicator	Data unavailable	Indicator
4.3.3	GL-5	Number of Beneficial Use Impairments removed within Areas of Concern. [New measure for FY 09]	26	12	▼
<b>Subobjective 4.3.4 Improve the Health of the Chesapeake Bay Ecosystem</b>					
4.3.4	SP-33	Percent of Submerged Aquatic Vegetation goal of 185,000 acres achieved, based on annual monitoring from prior year.	Long-term	46%	Long-term
4.3.4	SP-34	Percent of Dissolved Oxygen goal of 100% standards attainment achieved, based on annual monitoring from the previous calendar year and the preceding 2 years.	Long-term	12%	Long-term
4.3.4	SP-35	Percent of goal achieved for implementation of nitrogen reduction practices (expressed as progress meeting the nitrogen reduction goal of 162.5 million pounds reduced).	52% (84.44 M lbs)	51%	▼
4.3.4	SP-36	Percent of goal achieved for implementation of phosphorus reduction practices (expressed as progress meeting the phosphorus reduction goal of 14.36 million pounds).	66% (9.48 M lbs)	67%	▲
4.3.4	SP-37	Percent of goal achieved for implementation of sediment reduction practices (expressed as progress meeting the sediment reduction goal of 1.69 million tons reduced).	67% (1.13 M tons)	69%	▲
4.3.4	CB-1a	Percent of point source nitrogen reduction goal of 49.9 million pounds achieved.	74% (36.92 M lbs)	78%	▲
4.3.4	CB-1b	Percent of point source phosphorus reduction goal of 6.16 million pounds achieved.	96% (5.92 M lbs)	99%	▲
4.3.4	CB-2	Percent of forest buffer planting goal of 10,000 miles achieved.	65% (1,522 M lbs)	69%	▲
<b>Subobjective 4.3.5 Improve the Health of the Gulf of Mexico</b>					
4.3.5	4.3.5	Improve the overall health of coastal waters of the Gulf of Mexico on the "good/fair/poor" scale of the National Coastal Condition Report.	2.5	Data unavailable	Data unavailable
4.3.5	SP-38	Restore water and habitat quality to meet water quality standards in impaired segments in 13 priority areas. (cumulative starting in FY 07)	96	170	▲
4.3.5	SP-39	Restore, enhance, or protect a cumulative number of acres of important coastal and marine habitats. (cumulative starting in FY 07)	27,500	29,552	▲
4.3.5	SP-40	Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico, as measured by the 5-year running average of the size of the zone.	Commitment deferred	20,000km2	Long-term

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<b>Goal 4</b>					
<b>Subobjective 4.3.5 Improve the Health of the Gulf of Mexico</b>					
4.3.5	GM-1	Implement integrated bi-national (U.S. and Mexican Border States) early-warning system to support State and coastal community efforts to manage harmful algal blooms (HABs).	Expand operations in Campeche, MX	Completion in Campeche	▲
4.3.5	GM-3a	Number of near term actions in the Gulf of Mexico Alliance Governors' Action Plan that are on track. a	15	84	▲
4.3.5	GM-3b	Number of near term actions in the Gulf of Mexico Alliance Governors' Action Plan that are completed. a	5	6	▲
<b>Subobjective 4.3.6 Restore and Protect Long Island Sound</b>					
4.3.6	SP-41	Reduce point source nitrogen discharges to Long Island Sound as measured by the Long Island Sound Nitrogen Total Maximum Daily Load (TMDL).	52%	70%	▲
4.3.6	SP-42	Reduce the size of the hypoxic area in Long Island Sound (i.e., defined as the area in which the long-term average maximum July-September dissolved oxygen level is <3mg/l b; reduce the average duration of the maximum hypoxic event)	Commitment deferred	40 days, 101 sq miles	Long-term
4.3.6	SP-43	Restore or protect acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands.	33% (79 acres)	740% (1,361 acres)	▲
4.3.6	SP-44	Reopen miles of river and stream corridor to anadromous fish passage through removal of dams and barriers or installations of by-pass structures such as fishways. (cumulative starting in FY 06)	33% (17 miles)	72% (13 miles)	▲
<b>Subobjective 4.3.7 Restore and Protect the South Florida Ecosystem</b>					
4.3.7	SP-45	Achieve 'no net loss' of stony coral cover (mean percent stony coral cover) in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida, working with all stakeholders (federal, state, regional, tribal, and local).	No net loss	No net loss	▲
4.3.7	SP-46	Annually maintain the overall health and functionality of sea grass beds in the FKNMS as measured by the long-term sea grass monitoring project that addresses composition and abundance, productivity, and nutrient availability.	Maintain base-line	Maintained	▲
4.3.7	SP-47	Annually maintain the overall water quality of the near shore and coastal waters of the FKNMS.	Maintain base-line	Maintained	▲
4.3.7	SP-48	Improve the water quality of the Everglades ecosystem as measured by total phosphorus, including meeting the 10 parts per billion (ppb) total phosphorus criterion throughout the Everglades Protection Area marsh and the effluent limits to be established for discharges from stormwater treatment areas.	Maintain base-line and meet discharge limits	Not maintained	▼

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<b>Goal 4</b>					
<b>Subobjective 4.3.8 Restore and Protect the Puget Sound Basin</b>					
4.3.8	SP-49	Improve water quality and enable the lifting of harvest restrictions in acres of shellfish bed growing areas impacted by degraded or declining water quality. (cumulative starting in FY 06)	1,800	4,453	▲
4.3.8	SP-50	Remediate acres of prioritized contaminated sediments. (cumulative starting in FY 06)	123	123	▲
4.3.8	SP-51	Restore acres of tidally- and seasonally-influenced estuarine wetlands. (cumulative starting in FY 06)	6,500	10,062	▲
<b>Subobjective 4.3.9 Restore and Protect the Columbia River Basin</b>					
4.3.9	SP-52	Protect, enhance, or restore acres of wetland habitat and acres of upland habitat in the Lower Columbia River watershed. (cumulative starting in FY 05)	16,000	16,000	▲
4.3.9	SP-53	Clean up acres of known contaminated sediments. (cumulative starting in FY 06)	20	20	▲
4.3.9	SP-54	Demonstrate a reduction in mean concentration of contaminants of concern found in water and fish tissue. (cumulative starting in FY 06)	Commitment deferred until 2012	Data unavailable	Long-term



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