

NATIONAL WATER PROGRAM

FY 2006 MID-YEAR PERFORMANCE REPORT

Office of Water
Environmental Protection Agency
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APPENDIX:

Slides of Program Activity Measures Including National/Regional FY 2006 Data

D) INTRODUCTION

The Environmental Protection Agency (EPA) published a new *Strategic Plan* in the Fall of 2003. In April 2005, the National Water Program published *National Water Program Guidance* describing how EPA, States, Tribes, and others would work together in FY 2006 to implement the water elements of the new *Strategic Plan*. This *FY 2006 Mid-Year Performance Report* describes the progress made at mid-year 2006 towards the goals and objectives described in the *Guidance* and the *EPA Strategic Plan*. *The Strategic Plan* and the *FY 2006 Guidance* are available on the Internet at www.epa.gov/water/waterplan), as is this *Report*.

This *FY 2006 Mid-Year Performance Report* is based on materials and analysis developed by teams of Headquarters and EPA Regional staff addressing each of ten subobjectives within the *EPA Strategic Plan* related to the National Water Program (see Table I, below). The briefing materials developed by these Subobjective Teams provide data concerning progress toward environmental and public health goals and accomplishment of key program activities along with recommendations for needed actions. 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 three key elements:

- performance overviews, highlights, and next steps for each subobjective;
- overall conclusions and recommendations; and
- an appendix of data for environmental and program related measures, including national, and in many cases EPA Region, data.

TABLE I
NATIONAL WATER PROGRAM – KEY SUBOBJECTIVES

- 1) Water Safe to Drink**
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II) MID-YEAR PERFORMANCE BY SUBOBJECTIVE: OVERVIEW, HIGHLIGHTS AND NEXT STEPS

This section provides a summary of the progress toward accomplishment of environmental and program goals described in the *National Water Program Guidance for FY 2006*.

Each subobjective report includes all of the following key information:

- a brief narrative summary of performance with respect to the outcome (i.e. environmental or public health goal) stated in the EPA *Strategic Plan*;
- a list of “Performance Highlights” with respect to program implementation, including both areas of success and areas needing attention; and
- “Needed Adjustments” identifying key next steps to strengthen implementation of the subobjective and improve performance for the future.

It is important to note that more detailed information concerning performance under each of the outcome and program measures is provided in the Appendix to this Report and is available on the Internet at www.epa.gov/water/waterplan.



1) SUBOBJECTIVE: WATER SAFE TO DRINK

Subobjective: Percent of the population served by community water systems (CWSs) that receive drinking water that meets all applicable health-based drinking-water standards through effective treatment and source water protection.

2002 Baseline: 93.6% 2006 Commitment: 90.9% 2008 Target: 95%
2003 Report: 89.6%
2004 Report: 90.0%
2005 Report: 88.5%
2006 Mid-Year: 88.4%

Strategic Target: Percent of the population served by community water systems in Indian country that receive drinking water that meets all applicable health-based drinking water standards.

2002 Baseline: 91.1% 2005 End-of-Year: 86.3%
2006 Commitment: 90% 2006 Mid-Year: 86.2%
2008 Target: 95%

Performance Overview

The percent of population served by community water systems in compliance drinking water standards by community water systems remains high at 88.4%. This number represents 12 months worth of data, including the last three quarters of FY 05 and the first quarter of FY 06. The overall compliance rate has not returned to the 2002 baseline rate of 93%. Attainment of the 2008 target of 95% compliance will be a major challenge.

Performance Highlights

Progress at mid-year includes:

- The program does not expect to meet the challenging FY 06 commitments for Strategic Targets due to a number of factors, most importantly (1) significant annual population impacts from the largest water systems (ongoing violations; turbidity violation by PR Metropolitan and failure to filter by NYC's Croton facility; and a few annual sporadic violations, often short of duration); (2) water systems serving fewer than 500,000 also have sporadic violations of microbial requirements which are hard to eliminate. These systems as a group are also experiencing challenges in implementing new microbial-disinfection byproduct rules.

- The national Drinking Water Program has made substantial strides forward in “drinking water meeting all standards” – going from 79% of the population in 1993 to current levels which are in the 90% range and include even more requirements to protect public health.
- Small systems are challenged by compliance with rules, and recruiting and retaining certified operators. Some of these problems may be magnified in Indian Country. While the program will most likely not achieve the target of reducing the number of households lacking access on Tribal land to safe drinking water to 30,800, EPA is working closely with other federal agencies to reduce by 50% the number of homes lacking access to safe drinking water by 2015.
- At mid-year 2006, EPA anticipates achieving FY 06 commitment levels for Class I, II and III Underground Injection Control wells. Class V wells identified in violation are less well-positioned to achieve the FY 06 commitment because the universe of violations is broader and often of lesser priority.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- EPA will improve and develop measures by:
 - working with Regions and States to account for duration of violations and collect lead action level data;
 - working to develop a waterborne disease measure; and
 - working with the NDWAC to develop water security metrics.
- EPA has greatly improved the quality of the data in SDWIS over the past few years. Work remains to complete this task (Web enable SIDWIS/State at intrastate level and incorporate all drinking water regulatory requirements into the system.)
- EPA is proposing that the national FY 2011 target for “Population served by Community Water Systems” be 91%. This target will move towards a more realistic level, not the “ideal” level of performance which has been set in the past.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.

2) SUBOBJECTIVE: FISH AND SHELLFISH SAFE TO EAT



Subobjective (Part A): Improve the quality of water and sediments to allow for increased consumption of safe fish in a percentage of the river miles/lake acres identified by States or Tribes as having a fish consumption advisory in 2002.

2002 Baseline: 485,205 river miles and 11,277, 276 lake acres under advisory

2005 End-of-Year: Data unavailable

2006 Commitment: 1% of advisory waters improved

2006 Mid-Year: 0% of advisory waters improved

By 2008: 3% of advisory waters improved

Strategic Target: Increase the percentage of shellfish-growing acres monitored by States that are approved or conditionally approved for use.

1995 Baseline: 77% of 21.6 million acres open for use

2006 Commitment: 91% of acres open for use

2003 Report: 91% of acres open for use

2006 Mid-Year: 91% of acres open for use

By 2008: 85% of acres open for use

Performance Overview

An overall assessment of performance cannot be solidly determined at mid-year. EPA is not able to report results for measures related to fish consumption and shellfish acres due to limitations in data systems.

Performance Highlights

Progress at mid-year includes:

- EPA is continuing to work with States to help them adopt fish tissue monitoring and assessment guidelines that are consistent with national guidance.
- A total of 12 States have adopted the fish tissue criterion for mercury, published by EPA in January of 2001. Although EPA has not set a target for State adoption of the mercury criterion, EPA generally expects that States will adopt new criteria within 5 years. Many States, however, are awaiting EPA publication of supporting guidance for the mercury criterion.
- States continue to issue “safe eating guidelines.” States are increasingly issuing safe eating guidelines to inform the public that fish from specific

waterbodies or certain species of fish have been tested for chemical contaminants and have been shown to contain very low levels of contaminants. By issuing safe eating guidelines, the States are identifying monitored waters or species for the public where no restrictions on eating fish apply, as well as promoting enjoyment of recreational fishing.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- The Office of Water is developing guidance concerning the new mercury criterion and will expand efforts to assist States in adoption of this more scientifically sound criterion.
- The data for the measures with targets is obtained from state submittals and summarized annually in the National Listing of Fish Advisories. The annual report of the National Listing of Fish Advisories will be available in July. However, given that it is known that some key states had or were planning to issue state-wide advisories during the past year, an increase in the waters placed under advisory is expected.
- The measures under this Subobjective capture the changes in the quality of water, but not the impact or the performance of the advisory programs that comprise the Beach/Fish program project area. The new measures proposed under the new Strategic Plan improve EPA ability to capture the impacts of the advisory programs.

Additional information concerning performance under outcome measures and program activity measures is provided in FY 06 Mid-Year slides at the end of this report.



3) SUBOBJECTIVE: WATER SAFE FOR SWIMMING

Subobjective: Restore water quality to allow swimming in waters identified by States in 2000 as unsafe for swimming:

2000 Baseline: 90,000 stream miles/2.6 million lake acres

2006 Commitment: 3% of impaired waters restored

2006 Mid-Year: Data available 12/06

By 2008: 5% of impaired waters restored

Performance Overview

Although data concerning waters safe for swimming at mid-year 2006 is not yet available, the most recent data, from 2002 State reports, indicates that the number of lake acres and river miles unsafe for swimming is increasing, rather than decreasing. Lake acres identified as unsafe for swimming increased from about 2.6 million in 2000, to about 3.2 million in 2002. River miles unsafe for swimming increased slightly from 90,000 miles to about 92,000 miles. These increases may be partly attributable to increased beach monitoring and reporting.

Performance Highlights

Progress at mid-year includes:

- EPA has a long-term goal of increasing the number of days that beaches monitored under the BEACH Act are open for swimming from about 94% in 2002 to 96% in 2008. Data at mid-year indicates that EPA has exceeded its 2006 target at 96%.
- EPA is on track for percentage of CSO permits with schedules in place in permits or other enforceable mechanisms to implement approved Long Term Control Plans (LTCPs). Data indicates a 48% result at mid-year to a 2006 commitment of 55.5%.
- EPA is making limited progress in working with States to encourage the adoption of Voluntary Management Guidelines for on site/decentralized sewage treatment systems, increasing the number of States adopting guidelines from only 2 in 2002 to 6 at the mid-year. EPA expects that at least 8 States will have adopted the Guidelines by the end of the year.
- EPA and States committed in 2006 to monitoring and managing 100% of significant public beaches under the BEACH Act. Mid-year data indicates that EPA is at 95.7% of these beaches being monitored. Additional progress is expected since the beach season in some states has not begun, but the 100%

goal may not be achieved. Some Tier I beaches in Mississippi and Louisiana may remain closed due to Hurricane Katrina and may not be monitored.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- In order to assist in identifying prospective states that will be eligible for adoption of the management guidelines and better target future EPA's efforts, OWM is considering the feasibility of conducting a review of state on-site wastewater programs in FY 07 or FY 08. This review will be a multi-year effort and the ability to conduct the review is dependent on available resources.
- Continued progress has been made on the development of a new measure on waterborne disease outbreaks attributable to swimming or other recreational contact. During 2005, ORD and CDC analyzed the historical outbreak data baseline of outbreaks related only to recreational water covered by the CWA.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.

4) SUBOBJECTIVE: PROTECT WATER QUALITY ON A WATERSHED BASIS



Subobjective: Use both pollution prevention and restoration approaches to increase the number of watersheds where water quality standards are met in at least 80% of the assessed water segments:

2002 Baseline: 453 watersheds of the total 2,262 USGS cataloguing unit scale watersheds across the Nation.

2005 End-of-Year: 2 (annual), 450 (cumulative)

2006 Commitment: 458

2006 Mid-Year: 172

2008 Target: 600

Strategic Measure: Restore a percentage of those water bodies identified in 2000 as not attaining standards.

2000 Baseline: 21,632 waterbodies

2005 End-of-Year: 1,955 (9.0%)

2006 Commitment: 2,235 (10.3%)

2006 Mid-Year: 2,427 (11%)

2012 Target: 25%

(NOTE: Measures relating to improvement in water quality on Tribal lands and reduction in homes on Tribal lands lacking access to basic sanitation were not reported at the mid-year but will be reported at the end of the year.)

Performance Overview

EPA is evaluating data from States concerning progress toward restoration of impaired waterbodies on a watershed basis. Existing data indicate that goal of 600 watersheds having greater than 80% of assessed waters meeting standards by 2008 is unlikely to be met.

Although improvement of water quality on a watershed scale is proceeding more slowly than expected, restoration of individual impaired waters is on track. Regions and States have significantly exceeded the goal of restoring 2% of the 21,632 waters listed as impaired in 2000 at the end of 2005 with 9% (1,955) impaired waterbodies restored at the end-of-year. The commitment for FY 2006 is to increase this number to 2,235 or 10.3%. At the mid-year, however, Regions reported a total of 11% of impaired waters restored or 2,427 impaired waters restored. Because the end of year commitment for 2006 is already exceeded, EPA is hopeful that continued progress can be made over the remainder of FY 2006 toward the goal of restoring 25% of impaired waters by 2012.

Performance Highlights

Progress at mid-year includes:

- States are making good progress in the development of schedules for adoption of nutrient criteria (41 States had schedules at the mid year with an annual commitment of 42 States by the end of 2006). In addition, 22 States had adopted biological criteria into water quality standards at the mid-year, exceeding the FY 2006 end-of-year target of 20 States.
- States and Territories are continuing to improve monitoring and reporting, with 40 States adopting the integrated reporting approaches recommended by EPA and 50 States on implementing monitoring strategies on established schedules.
- All of the NPDES discharge permit programs have been assessed under the Permitting for Environmental Results (PER) program and 97% of the approximately 300 follow-up actions called for in assessment reports are being implemented.
- The FY 2006 commitment for the number of watershed-based management plans supported by State grants under section 319 of the Clean Water Act is 69 and States are on track to meet this commitment with a reported 62 plans substantially implemented.
- States report that as of the mid-point of FY 2006, restoration planning (e.g. the completion of all needed TMDLs) is complete for a total of 6,886 impaired waters around the country.
- The rate of issuance of NPDES permits at the mid-year of FY 2006 was 86.7%, or just below the end of year commitment of target of 88%. EPA expects that the 88% commitment can be attained.
- The percentage of categorical industrial users (CIUs) and significant industrial users (SIUs) of publicly owned treatment works that have individual control mechanisms in place to implement pretreatment requirement continues to rise. CIUs with control mechanisms in place rose from 97.2% at the end of FY 2005 to 98.4% at the mid-point in FY 2006. SIUs with control mechanisms in place rose from 88.7% at the end of FY 2005 to 95.2% at the mid-point of FY 2006.
- A number of EPA Regions have adopted the practice of “partial approval” of water quality standards submitted by States. This partial approval process is important because State standards do not become effective until EPA approves them. In addition, several Regions have developed team approaches

to review of State standards and several regions are expanding pre submission technical assistance to States and Tribes.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- Progress in encouraging States to report monitoring information using the Assessment Database (ADB) or comparable formats is slower than expected. The commitment for FY 2006 is 40 States adopting the ADB formats, while at the mid-year, only 28 States had taken this step. EPA Regions will renew efforts to encourage States to adopt ADB formats and highlight this as a priority in State grant agreement discussions.
- Progress in the development of TMDLs for impaired waters is also lagging behind expected schedules. Of the 3,524 TMDLs EPA committed to establish or approve in FY 2006, 1,306, or 36% had been completed as of the mid-year. EPA senior managers addressed this issue at a meeting of EPA Regional water division directors in Boston in late May of this year.
- EPA and States have committed to issue 95% of high priority permits in FY 2006, but as of the mid-year, only 25.4% of these permits had been issued. EPA found in past years that many high priority permits are finally issued late in the fiscal year and expects the commitment of 95% issuance of these permits to be met. This issue was also addressed at the May meeting of Water Division Directors.
- The rate of issuance of NPDES discharge permits for Tribal waters lands is of concern. As of the mid year of FY 2006, only 5.6% of high priority tribal permits had been issued and the percent of all Tribal NPDES permits considered current was 57%.
- Although restoration planning is now complete for a significant number of impaired waters (6,886 impaired waters of the total of 21,632) many of these waters are in several EPA Regions while very few waters are reported as having “planning complete” in other Regions. EPA will work with States to standardize the reporting of “planning complete” in order to improve the completeness of reporting for the end of FY 2006.
- The State of Michigan recently established a \$40 million program to fund 90% of the cost of planning and design work for projects that will go on to receive infrastructure funding from the Michigan Clean Water State Revolving Loan Fund. This innovative approach to community outreach will accelerate the completion of important wastewater treatment projects. For

more information, go to: http://www.michigan.gov/deq/0,1607,7-135-3307_3515_4143-132144--,00.html .

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.



5) SUBOBJECTIVE: PROTECT COASTAL WATERS

Subobjective: Improve national and regional coastal aquatic ecosystem health on the “good/fair/poor” scale of the National Coastal Condition Report. (Rating is a 5-point system in which 1 is poor and 5 is good.)

2002 Baseline: “fair/poor” or 2.4

2006 Commitment: 2.7

2005 End-of-Year: 2.7

2006 Mid-year: 2.7

2008 Target: 2.6

Performance Overview

The second edition of the National Coastal Condition Report (NCCR II), published in 2005 and describing conditions in 2004 and 2005 includes an overall assessment of coastal water quality conditions. Based on these indicators, the overall health of the Nation’s coastal waters is fair. This is essentially the same as the findings from the first NCCR issued in 2001 (2.3 rather than 2.4 on a five point scale). The next NCCR (NCCR III) will not be released until late FY 07 or early FY 08.

From a regional perspective, the condition of the coastal waters in the Southeast, Gulf of Mexico, and Great Lakes has improved since the first NCCR, while the Northeast and West coasts remain the same.

Among the key indicators, coastal habitat condition, sediment quality, and benthic condition rank the lowest; whereas, individual components of water quality, including dissolved oxygen and dissolved inorganic nitrogen, rank slightly better.

{Note that the NCCR II used improved methods for assessment. When the original report scores are adjusted to reflect the improved methods, the adjusted national score is 2.0 rather than 2.4. Comparing the original corrected score of 2.0 to the new score of 2.3 shows a slight improvement in conditions. The indicator showing the greatest improvement in corrected scores is water quality (1.5 to 3.2) followed by benthic quality (1.5 to 2.0). Sediment quality and fish tissue score both declined slightly while the coastal habitat index remained essentially the same.}

Performance Highlights

Progress at mid-year includes:

- At mid-year 2006, the overall performance was on track to meet all of the FY 06 national targets. The NEP CCR is on schedule for release in 2006, as the NEPs continue to produce an extremely high (approximately 10:1) leveraging ratio using Section 320 funds. The OSV BOLD had been used to monitor 15 ocean dump sites at mid-year. In addition, it is scheduled to spend 89 days during FY 06 in support of Gulf of Mexico hypoxia surveys. At mid-year, there was also the release of two major Guidances: the “National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs” and “Developing Rapid Response Plans for Aquatic Invasive Species.”
- Reporting by the Corps of Engineers of the beneficial use of dredged material is not yet established.
- EPA is on target at mid-year 2006 for working with the Coast Guard and other nations at effectively managing discharge of ballast water.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team are:

- NEPs are generally strong and effective. In addition, the NEP triennial implementation reviews are an effective means to implement adaptive management and technology exchange in the NEP programs.
- The Regions are shifting away from project-specific dredged material management plans in favor of a more holistic, long-term planning approach on a regional basis.
- Current measures need to be expanded to reflect the PART review progress, such as instead of basing strategic targets on each of the ecological parameters of the NCCR, in FY 07, the strategic targets will break out the NCCR scores on a regional basis.
- EPA will make a connection with core water programs/watersheds by adding two new coastal watershed program activity measures in FY 07.
- EPA will drop future NEP CCRs due to funding constraints.
- EPA needs to continue a strong NEP program by requiring support for Strategic Plan goals/reporting in NEP grants and developing Implementation Review reports to identify issues/actions needed to improve performance.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.



6) SUBOBJECTIVE: PROTECT WETLANDS

Subobjective: Working with partners, achieve a net increase of acres of wetlands with additional focus on biological and functional measures.

2002 Baseline: annual net loss of an estimated 58,500 acres.

2005 End-of-Year: 32,000/year gain

2006 Commitment: 200,000 acres

2006 Mid-Year: 32,000/year gain

2008 Target: 400,000 acres

Performance Overview

Although data concerning the goal in the EPA *Strategic Plan* concerning the creation of 100,000 acres of wetlands per year is not available, information describing progress toward broader wetlands goals, identified by the President after the publication of the *Strategic Plan*, is available. Additionally, the President called for creating, improving and protecting a total of three million acres of wetlands over five years. The wetlands data, provided in a report, titled *Preserving America's Wetlands, Implementing the President's Goal* (SEQ., April 2005), indicates that since April 2004, 832,000 acres have been restored, created, protected or improved including:

- 328,000 acres restored or created;
- 154,000 acres improved; and
- 350,000 protected.

Performance Highlights

Progress at mid-year includes:

- At mid-year, EPA was making good progress with 23 States that had built capacities in wetland monitoring, regulation, restoration, water quality standards, mitigation compliance and partnership building.
- As a result of working with the measures, there has been a sharper focus on what is measureable now and what to seek in the longer term: 1. wetland acres in near term, wetland function and condition in the longer term, 2. State and Triba wetland program capacity, 3. Recent focus on mitigation – return to emphasis on avoidance and minimization.
- At mid-year, the nation was entering a period of annual net gain of wetland acres for some classes of wetlands. Although the FWS NWI Status and Trends report shows an overall gain, this gain is primarily attributable to an

increase in unvegetated freshwater ponds, some of which may not function as wetland.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- The focus on national wetland acreage provides incentive for accelerated USFWS reports and a new Army Corps of Engineers database.
- The wetlands program will continue to work to improve data with respect to wetlands gains and losses in function and the ability to reflect wetlands condition.
- EPA will work with the states to help them prepare for the Office of Wetlands, Oceans, and Watersheds probabilistic assessment of biological function and condition slated for 2013.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.

- A project prioritization system has been put in place to address the critical need for potable water supply and wastewater collection and treatment systems. The second round of prioritization is currently underway with public hearings and solicitation of candidates for the FY07-08 project approvals cycle. Currently, EPA participation is at about 35 cents per dollar of project costs for projects that would not otherwise be feasible.

Next Steps

A key next step and needed adjustment identified by the Subobjective Team includes:

- A preliminary baseline will be created from the 24 significant U.S. water quality segments that have been identified under Section 303. EPA expects the Mexican segments to be identified by the end of FY 06.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.



8) SUBOBJECTIVE: GREAT LAKES

Subobjective: Prevent water pollution and improve the overall aquatic ecosystem health of the Great Lakes using the Great Lakes 40-point scale:

2002 Baseline: 20 points

2005 End-of-Year: 21.9 points

2006 Commitment: 21 points

2008 Target: 22

2006 Mid-Year: 21.9 points

Performance Overview

The Great Lakes index has improved at mid-year 2006 from the 2002 baseline of 20 to 21.9 out of a possible score of 40, well on track towards approaching the 2008 goal of 22. Indices for coastal wetlands, drinking water, and air toxics deposition are improving. A key concern is the increased level of phosphorus in Lake Erie, believed to be the result of invasive species, and the growth in the size of the dead zone in the Lake.

Performance Highlights

Progress at mid-year include:

- In 2006, EPA and partners remediated over 246,600 (per reporting through 5/23/06) cubic yards of contaminated sediment from 6 U.S. sites in the Great Lakes Basin – 3 were Great Lakes Legacy Act sites.
- With assistance from EPA and other programs, a Legacy Act rule, guiding project selection was published May 1, 2006 pursuant to direction from OMB. A Legacy Act Implementation Plan was delivered to Appropriators in early May pursuant to their request.
- Consistent permitting (CSO and NPDES discharges) are all on target at mid-year towards the FY 06 commitment.
- The FY06 mid-year data shows a 6% annual rate of decline in the average percentage concentrations of PCBs in whole lake trout and walleye. This is consistent with what was reported at FY 05 end-of-year. The February 2005 review of the Great Lakes Fish Monitoring Program (GLFMP) re-evaluated the program's data quality objective, determining that small annual changes in concentration are not considered statistically significant and that a longer time period (ex. 10 years) was necessary. A second program review is being planned in order to (i) revise the Data Quality Objectives to reflect the current levels of contaminants in fish and allow continuation of the GLFMP's 30+ year trend line and (ii) evaluate the representativeness of the fish data for the whole lake.

Next Steps

A key next step and needed adjustment identified by the Subobjective Team is:

- Progress in delisting Areas of Concern (AOCs) is slow. Zero AOCs were de-listed by year end, rather than the targeted 3. EPA is, however, on target for the longer-term goal of de-listing 10 AOCs by 2010. The delay is the result of the environmental complexities of problems in the AOCs (contaminated sediments, inadequate wastewater infrastructure). The Great Lakes Legacy Act and the unprecedented cooperation taking place under the Great Lakes Regional Collaboration's AOC/Sediments Strategy Group will substantially support future delisting progress.
 - The Oswego River, New York AOC remains on target for first-ever U.S. de-listing in summer FY 06.
 - Torch Lake, Michigan AOC is no longer on target for de-listing this year. Monitoring may have identified additional contamination.
 - By the end of May, States have been asked to verify or add to a list of projections for AOC delisting. States have also been asked to project future de-listings in 5-year grant workplans.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-year slides at the end of this report.



9) SUBOBJECTIVE: CHESAPEAKE BAY

Subobjective: Prevent water pollution and protect aquatic systems so that overall aquatic system health of the Chesapeake Bay is improved and acres of submerged aquatic vegetation increase.

2002 Baseline: 85,252 acres

2005 End-of-Year: 72,935 acres

2006 Commitment: 90,000 acres

2006 Mid-Year: 72,935 acres

2008 Target: 120,000 acres

Performance Overview

The chief goal of Bay water quality restoration is protection of living resources and aquatic habitat. While the Program uses many indicators, a key measure of success in achieving improved Bay water quality will be the restoration of submerged aquatic vegetation (SAV). The Chesapeake Bay Program's long-term goal for SAV restoration in the Bay is 185,000 acres. To achieve the long-term goal, Bay watershed models estimate that annual total nitrogen loadings must be reduced by 162.5 million pounds, phosphorus reduced by 14.36 million pounds, and sediment reduced by 1.69 million tons per year from 1985 levels.

A key strategy to reduce nutrient loads is the implementation of advanced wastewater treatment. The long-term goals for nutrient reduction from significant wastewater dischargers ("point sources") in the Bay watershed are to achieve a 49.9 million pound per year reduction in nitrogen and a 6.16 million pound per year reduction in phosphorus loads from 1985 levels. Another key strategy to reduce nitrogen, phosphorus, and sediment loadings is the restoration and protection of riparian forests that prevent sediment and nutrient pollution from entering waterways from the land. The long-term goal for forest buffer planting in the watershed is 10,000 miles. Implementing agricultural best management practices to reduce nutrients and sediment is also key to achieving Bay goals, and requires close cooperation with U.S. Department of Agriculture.

Performance Highlights

Progress at mid-year include:

- Since new data were not available at the time, FY 06 mid-year results for the following measures are based on FY 05 performance:
 - o 39% achievement of the SAV restoration goal, compared to 21% in 1984.
 - o 41% achievement of the total nitrogen reduction goal; 58% achievement of the total phosphorus reduction goal, 54% achievement of the sediment

- goal, all three based on average rainfall simulations and compared to 0% in 1985.
 - 61% achievement of point source nitrogen reduction goal; 80% achievement of point source phosphorus reduction from 1985 levels, both compared to 0% in 1985.
- 46% achievement of the forest buffer planting goal, compared to 0.1% in 1996.
- 100% achievement of the wetlands restoration goal. Note: when the “acres of wetlands restored” measure was proposed for FY 06 reporting, the Bay Program included restoration and enhancement projects in the tally of progress towards meeting the long-term 25,000 acre restoration goal. When this progress was updated last spring, it appeared that the 25,000 acreage goal was achieved ahead of schedule (52,977 acres included 44,000 acres of enhancement projects). Since that time, the Program has re-evaluated what qualifies as “restoration” and now excludes enhancement projects in the tally. The revised tally under this new accounting system is 9,997 acres restored (or 40% achievement of the 25,000 acre goal.)
- 47% achievement of long-term goal of 22.9 million acres of watershed management plans developed and being implemented.
- The Chesapeake Bay Program has shown how Federal agencies and States can work together collaboratively. The greatest success in the last four years has been the water quality initiative which has resulted in new water quality standards for the Bay and its tidal tributaries that protect living resources and are both more attainable and more valid scientifically, incorporating innovative features such as habitat zoning and adoption of area-specific submerged aquatic vegetation acreage targets; adoption of nutrient and sediment allocations for all parts of the watershed, to meet the new standards, which reflect a consensus of all six basin States, the District of Columbia and EPA; tributary-specific pollution reduction and habitat restoration plans (“tributary strategies”) which spell out the treatment technologies, best management practices (BMPs) and restoration goals for riparian forest buffers and wetlands which must be employed to achieve the allocations; and a common NPDES permitting approach for all significant wastewater treatment facilities that unites both upstream and downstream States in the enforcement of the new water quality standards and allocations, including implementation of watershed permitting and trading.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Teams include:

- The current pace of nutrient and sediment load reductions is not sufficient and needs to be accelerated to restore water quality by the Chesapeake 2000 goal of 2010.
- EPA remains firmly committed to the 2010 goal and will work with other Bay Program partners to identify additional opportunities to accelerate progress and ensure that water quality objectives are achieved as soon as possible.
- The partnership will work to make the most cost-effective use of available regulatory, incentive, and voluntary tools and to find new economies and innovations to pick up the pace dramatically.

Additional information concerning performance under outcome and program activity measures is provided in the FY 06 Mid-Year slides at the end of this report.



10) SUBOBJECTIVE: GULF OF MEXICO

Subobjective (Part A): Prevent water pollution and improve the overall aquatic ecosystem health of coastal waters of the Gulf of Mexico by 0.2 on the “good/fair/poor” scale of the National Coastal Condition Report, a 5-point system in which 1 is poor and 5 is good:

2002 Baseline: fair/poor or 1.9

2006 Target: 2.4

2006 Mid-Year: 2.4

2008 Target: 2.1

Subobjective (Part B): Reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico:

Baseline: 1996-2000 running average size is 14,128 km²

2006 Target: 14,128 km²

2006 Mid-Year: Data not available

2015 Target: less than 5,000 km²

Performance Overview

The second edition of National Coastal Condition Assessment (NCCA II) indicates significant progress in improving conditions in the Gulf of Mexico. The original baseline score for the Gulf, using a range of indicators, was 1.9, or “fair to poor” on the 5 point scale, but the 2004 score rises to 2.4. The NCCR III with FY 06 Mid-Year data will not be released until late FY 07 or early FY 08.

Data is not now available to determine progress toward the goal of reducing the size of the hypoxic zone in the Gulf of Mexico.

Performance Highlights

Progress at mid-year includes:

- The Gulf of Mexico program has already exceeded the FY 2006 commitment of 13,400 acres of coastal and marine habitat restored, enhanced, or protected. Total acres achieved at mid-year are 16,457 toward the 2008 target of 20,000. The substantial progress in this area is largely due to the success of strategic partnerships with NOAA, The Nature Conservancy, National Fish and Wildlife Foundation, Corporate Wetlands Restoration Partnership, and Shell Marine Habitat Program.

- The Gulf Program is on target for reducing the rate of shellfish-borne *Vibrio vulnificus* illnesses. The mid-year result is at 0.09 with an FY 06 commitment of 0.16. Achievements in this goal are attributable to broadened high risk consumer outreach and education efforts throughout strategically targeted consumer groups.
- The Gulf Program established the Lower Mississippi River sub-Basin Committee and watershed demonstration projects have been developed, already exceeding the 2006 commitment.
- The Gulf of Mexico program served as co-lead for a Federal Workgroup helping Gulf States in identification and implementation of priority actions incorporated in the Governors’ Action Plan, which was released at the Gulf Summit in March 2006.

Next Steps

Key next steps and needed adjustments identified by the Subobjective Team include:

- The Gulf Program will continue support for the identification and prioritization of the “100 Highest Opportunity Watersheds” in State performance partnership agreements which focus on nutrient reduction beginning in FY 07.
- Phase II is underway of data assessment to perform a scientifically-derived characterization and assessment/analysis of estuarine ecosystems in the North Central Gulf as they relate to nutrient concentrations. This will determine the applicability of the findings of a Nutrient Pilot Study to all Gulf Coast estuarine and near-coastal water resources.
- The Gulf Program will participate with the Interagency Working Group on Methylmercury in the development of a mercury research strategy for the Gulf of Mexico.

Additional information concerning performance under outcome measures and program activity measures is provided in the FY 06 Mid-Year slides of this report.

III) CONCLUSIONS AND RECOMMENDATIONS

Overall conclusions concerning the performance of the National Water Program - based on consideration of the subobjective-specific assessments as well as other evaluation projects summarized in the Appendix of this Report – are described below. Recommendations for follow-up actions based on these conclusions are provided where appropriate and supplement the “next step” actions described in the preceding section of the report.

- 1) **Strong Mid-Year Program Performance:** Although mid-year data is not available for all measures of program performance, available data generally show sufficient progress at the mid-year to suggest that most end-of-year commitments will be accomplished. In some cases, performance is well ahead of expected “mid-year” progress. In a few cases, significant shortfalls from expected performance are being addressed.
- 2) **Consistent Regional Performance:** The assessments of performance under each subobjective do not directly address the performance of individual Regions. At the same time, review of program performance data generally does not suggest that any Region has significantly under-performed with respect to FY 06 commitments.

Meetings of national program managers and Region 4 staff in March 2006 and Region 8 staff in June 2006, respectively, to review program performance (part of the National Water Program’s ongoing review of Regional offices) identified program strengths as well as suggested follow-up actions. For information on these Regional evaluations, see www.epa.gov/water/waterplan.

- 3) **Improved Water Program Integration:** A common theme of subobjective assessments of progress is the ongoing effort to increase integration of the implementation of water programs.

For example, national program managers reinforced efforts to complete critical work to improve integration of source water protection and water quality standards that is expected to significantly benefit both programs in the next several years.

In addition, the implementation of the water quality subobjective is now substantially driven at the Regional level by “Watershed Game Plans” developed by each Region. These Watershed Game Plans describe the water quality/watershed outcome goals in the Region, and define how the range of clean water programs (e.g. standards, planning, permits, financing) will be used to accomplish needed improvements in specific waterbodies and watersheds.

- 4) **Expanded Outreach to Other Programs/Agencies:** The implementation of several key subobjectives is benefiting from an expanded effort to coordinate water program implementation with the work of other programs or agencies.

For example, the nonpoint source program at the national level and in several Regions, has expanded cooperation with USDA programs to better focus a range of resources on priority areas. The drinking water program is making progress in working with the Centers for Disease Control to improve measurement of waterborne disease outbreaks.

- 5) **Tribal Water Program Implementation:** Tribal program activities measures are included in a number of different subobjectives. For a majority of the measures related to Tribes, data is either lacking or showing less than expected mid-year performance.

Recommendation: In response to this position, the Office of Water should convene a meeting of EPA HQ and Regional tribal program managers and the program managers for tribal measures to identify steps needed to improve the program by the end of the fiscal year. The next steps to improve water program performance relating to Tribes will be described in a memorandum to the DAA for Water and to the National Water Program Office Directors and Regional Water Division Directors.

- 6) **Coordination with Compliance and Enforcement:** Although program managers at the national and Regional levels work closely with compliance and enforcement program staff, expanding the coordination of program planning could improve success in accomplishing key water outcome measures.

Recommendation: The Office of Water should work with the Office of Enforcement and Compliance Assurance to define more formal program planning and coordination mechanisms, including procedures for sharing of program data and development of common criteria for definition of priority geographic areas.

- 7) **Mercury and Water Issues:** Issues related to mercury in water and fish are important to success under several subobjectives, including fish safe to eat, water quality, coastal water, and the Great Lakes. Progress toward reducing the limits on fish consumption depends to a large extent on reduction of mercury in air emissions. The expected increases in the number of waters listed as impaired because of violation of mercury criteria is an important consideration for setting targets for future waterbody restoration. Mercury is a factor in fish contamination in coastal waters reported in the National Coastal Condition Reports and plays a role in reducing the overall progress toward healthier coastal waters.

Recommendation: The Office of Water should review options for the presentation of data concerning mercury that would allow for water quality impacts attributable to mercury to be clearly identified as part of impairments as a

whole and for EPA to be able to account for and report water quality impairments and improvements specifically associated with mercury.

- 8) **Reduce Data Lags:** A common problem in the management of programs and the measurement of program toward outcome goals is the length of time between a reporting period and the availability of data from the reporting period. In general, the quicker the turn-around time between the completion of a reporting period and the compilation of data, the more useful the data is. Measures of progress for the national water program have data response times ranging from virtually real time to as long as four years.

Recommendation: The existing Office of Water Information Steering Committee should conduct a review of data system response times with the goal of identifying means to reduce response times. Where reduction of response times requires investments, these investments should be ranked and scored along with other possible information system investments.

- 9) **Water Program Performance Assessment:** The National Water Program is making a significant investment in program planning, including the development of water elements of the Agency *Strategic Plan* and implementation of the *Plan* through annual National program guidance. In addition, the National Water Program is increasing investment in assessment of program performance, including assessment of progress under the *Strategic Plan* as well as under the Program Assessment and Rating Tool (PART) and other efforts (e.g. Permitting for Environmental Results, Drinking Water Key Indicators, Environmental Results Order). {Note that a strong score under the PART process is more likely where a program can show consistent assessment of performance by internal and external parties; see PART questions 2.6 and 4.5.} At the same time, other parties, including the Inspector General and the Government Accountability Office, assess aspects of the water program.

Recommendation: The National Water Program should respond to the growing importance of performance assessment (distinct from program planning) by increasing management attention to program performance. The Program should consider a range of options to increase coordination of water program performance activities (ranging from assessments under measures in the *Strategic Plan*, to program specific evaluations, to Regional office reviews). The Program should also work to improve coordination of evaluations of specific water programs by outside parties including the Office of Management and Budget PART process and studies by the EPA Inspector General and the Government Accountability Office. A goal of this effort should be to develop periodic reports to water managers providing an overall assessment of both program performance and needed management actions.