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NATIONAL WATER **PROGRAM**

FISCAL YEAR 2007 **GUIDANCE**











Office of Water **Environmental Protection Agency April 21, 2006**

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EXECUTIVE SUMMARY

I) PROGRAM OFFICE: NATIONAL WATER PROGRAM

This *National Water Program Guidance* for FY 2007 describes how EPA, States, Tribes and others will work together in FY 2007 to protect and improve the quality of the Nation's waters. The steps outlined in the *Guidance* are designed to accomplish the public health and environmental goals established in the Environmental Protection Agency *Strategic Plan*.

II) INTRODUCTION/CONTEXT

With the help of States, Tribes and other partners, EPA expects to make significant progress toward protecting human health and improving water quality by 2008 including:

- Water Safe to Drink: increase the rate of compliance with drinking water standards to 95%;
- **Fish Safe to Eat:** reduce pollution in waters with fish advisories so that consumption limits can be relaxed for 3% of contaminated waters;
- Water Safe for Swimming: restore polluted waters to allow swimming again in at least 5% of the waters where swimming was unsafe in 2000;
- **Healthy Waters:** restore an increasing percentage of the approximately 20,000 impaired waters across the Nation, with the goal of restoring 25 percent of these waters by 2012;
- **Healthy Coastal Waters:** show steady improvement in seven specific indicators of the health of each of the four major coastal ecosystems around the country; and
- **More Wetlands:** marshal the resources of Federal agencies and others to meet the President's goal to achieve an overall increase in the Nation's wetlands, including restoring, improving, and protecting three million acres of wetlands over five years (by 2009).

The *Strategic Plan* also identifies additional goals for environmental improvements by 2008 in critical waters including the Gulf of Mexico, the Great Lakes, the Chesapeake Bay, and the Mexico Border area.

III) WATER PRIORITIES

The key to the success of the National Water Program is solid execution of the program activities that Regions, States and Tribes identify as most likely to result in progress toward water quality goals. The Office of Water recognizes that Regions, States and Tribes need flexibility in determining the best allocation of resources for achieving environmental goals.

From a national perspective, however, special attention should be given in FY 2007 to the priority areas identified below. These priorities build on those described in the FY 2006 National Water Program Guidance, while increasing emphasis in key areas such as sustainable water infrastructure, promoting innovations such as water quality trading and watershed permitting, and working with States to develop and adopt nutrient criteria.

1) Support Sustainable Water Infrastructure: Much of the dramatic progress in improving water quality is directly attributable to investment in wastewater infrastructure—the pipes and facilities that treat the Nation's sewage.

EPA will work with States to ensure that the Nation's wastewater and drinking water infrastructure is maintained over time, giving special attention to the effective operation of the State Revolving Funds (see Program Activity Measures SDW-6 and WQ-24). EPA will also encourage adoption of proven management approaches, including environmental management systems and asset management, and work to enhance the market for water efficient products. EPA will participate in a collaborative strategy that will identify keys to success, innovations, and incentives to promote sustainability. In cooperation with the EPA Innovation Action Council, Regions will foster dialogues with stakeholders and promote key actions such as watershed permitting and pilot projects demonstrating community-based steps toward sustainable infrastructure.

2) Contribute to the President's Wetlands Goals: On Earth Day 2004, the President announced a new national goal of achieving an overall increase in the Nation's wetlands, including restoring, improving, and protecting at least three million acres of wetlands over five years (by 2009).

In FY 2007, EPA will play a leadership role in working other Federal agencies and States to marshal program resources to meet this goal. EPA has committed to contributing at least 12,000 acres toward the goal by 2009 (see Program Activity Measure WT-1). A key step in meeting this commitment is building the capacity of State and Tribal wetlands programs (see Program Activity Measure WT-2).

3) **Improve Monitoring:** Improving monitoring, reporting and environmental goal setting to keep the Nation's waters clean, safe and secure remains a top priority.

In FY 2007, EPA will support States in implementing monitoring strategies developed over the past several years (see Program Activity Measure WQ-7). A

key part of this effort is State participation in the "snapshot" of condition of lakes across the country. EPA will also work with States to make strong progress in submitting State integrated reports using the Assessment Database, or a compatible electronic format, because this data is critical to measuring progress toward water quality goals. EPA will also continue to support State efforts to strengthen water quality standards (see Program Activity Measure WQ-6).

- 4) Restore and Improve Water Quality on a Watershed Basis: The National Water Program is now working to match this success by building a nationwide capacity to restore and protect the health of aquatic systems on a waterbody and watershed basis. In FY 2007, EPA, States and Tribes should work together to deliver results on a waterbody and watershed basis giving priority to:
 - developing TMDLs for impaired waters "on pace" (see Program Activity Measure WQ-13);
 - organizing restoration plans on a waterbody basis (see Program Activity Measure WQ-33);
 - encouraging the use of water quality trading and watershed permitting (see Program Activity Measures WQ-30 and WQ-31);
 - working with States to develop nutrient criteria (see Program Activity Measure WQ-2);
 - assuring that high priority permits are current (see Program Activity Measure WQ-29);
 - tracking Permitting for Environmental Results program integrity follow-up actions (see Program Activity Measure WQ-17);

In support of this work, EPA will continue to give priority to collaborative efforts to protect key coastal waters. To protect the Chesapeake Bay, EPA will work with State, Federal, and local partners to implement nutrient management plans and advance promising efforts, such as restoration of streamside buffers and work to restore the Anacostia River. In the Great Lakes, EPA will continue support for the Interagency Task Force and give priority to sediment restoration. In the Gulf of Mexico, EPA will give priority to recovery from hurricanes Katrina and Rita, building alliances with States, and implementing the Hypoxia Action Plan.

5) Improve Compliance with Drinking Water Standards: The percent of the population served by community water systems that are in compliance with health-based standards is declining from the 2002 rate of 93.6%. Without

aggressive efforts by EPA and States, new regulated contaminants, aging infrastructure, and the challenges to small systems will make it difficult to attain the 2008 goal of 95% of the population served by systems in compliance.

In FY 2007, EPA, States, Tribes and local water systems must redouble efforts to maintain compliance with existing drinking water standards, promptly address cases of noncompliance, and improve the quality of data by which drinking water compliance is measured, including special attention to reporting under the Lead and Copper Rule. Conducting sanitary surveys is an effective way to help assure compliance (see Program Activity Measure SDW-1).

At the same time, EPA will continue to work with State and local partners to improve security at drinking water facilities through training and technical assistance and work with selected cities in a pilot program to develop surveillance and monitoring systems (see Program Activity Measure SDW-8).

EPA national program offices and Regions should also give special attention to actions that support State efforts in working with communities to develop source water protection programs and initiate enforcement actions to address violations (see Strategic Target F).

IV) IMPLEMENTATION STRATEGIES

The *National Water Program Guidance* describes, in general terms, the work that needs to be done in FY 2007 in order to reach the public health and water quality goals related to water that are identified in the EPA *Strategic Plan*. These public health and environmental goals are organized into ten key "subobjectives" and each of the ten subobjectives is supported by a specific strategy. Each of the ten Subobjective strategies includes some common elements (see below) that provide a conceptual framework for more detailed plans.

Common Elements of Subobjective Strategies

This *Guidance* presents ten strategies for accomplishing the improvements in public health and water quality called for in the EPA *Strategic Plan*. Detailed information is provided in Subobjective Implementation Plans and Regional Plans that are available on the Internet (http://www.epa.gov/water/waterplan). Common elements of the ten subobjective strategies are:

• Environmental/Public Health Results Expected: Each subobjective strategy begins with a brief review of national goals for improvements in environmental conditions or public health, including national "targets" for progress in FY 2007. For some subobjectives, each EPA Regional Office has also identified targets for progress in FY 2007 (see discussion below).

- **Key Strategies:** For each subobjective, the key strategies for accomplishing environmental goals are described. The role of core programs (e.g. State Revolving Funds, water quality standards, discharge permits, development of safe drinking water standards, source water protection, etc.) is discussed and a limited number of key program activity measures are identified (see *Appendix A*). Some of these activities are undertaken by EPA (e.g. development of drinking water standards) while others are carried out by States or Tribes.
- **FY 07 Targets for Key Program Activities:** For some of the program activities, EPA, States and Tribes will simply report progress accomplished in FY 2007. For other activities, each EPA Region has defined specific "targets" for progress in FY 2007 in this *Guidance* (see *Appendix A*). These targets are a point of reference for development of more binding commitments to measurable progress in State and Tribal workplans for FY 07.
- **Key Regional Strategies:** Subobjective strategies describe innovative programs or approaches developed by EPA Regions, States and Tribes to better address specific circumstances in the Region. Regions and States might choose to adopt an innovative idea from another Region or State.
- **Grant Assistance:** Each of the ten subobjective strategies includes a brief discussion of EPA grant assistance that supports the program activities identified in the strategy (see *Appendix B* for more information).

Region/State/Tribal Contributions to National *Guidance*:

In the Spring of 2006, EPA Regions will use this *Guidance* as they work with States and Tribes to develop annual grant workplans or Performance Partnership Agreements. The goal of this joint effort is to allocate available resources to those program activities that are likely to result in the best progress toward accomplishing water quality and public health goals for that State/Tribe (e.g. improved compliance with drinking water standards, improved water quality on a watershed basis) given the circumstances in the State/Region. By setting these outcome targets at the EPA Region level, EPA hopes to shift the focus of program managers from delivery of discrete program activities toward more integrated management of program tools with the aim of accomplishing a measurable improvement in public health or the environment.

Regional estimates of progress for drinking water and water quality goals, and the Regional targets for measures, are the starting point for discussions with States and Tribes. But, the more formal, State-specific commitments resulting from workplan discussions are intended to reflect environmental and financial circumstances in each State and to supplant the Regional targets in this *Guidance*. As Regions/States finalize commitments for FY 07 this summer, they will be entered into the Agency's Annual Commitment System (ACS). These State/Regional

commitments, taken together, form the national commitment. **The tailored, State/Tribal program commitments that result from this process define, in an operational sense, the "strategy" for the National Water Program.** The final Regional and national commitments will also be published in the Fall of 2006 as *Appendix C* of this *Guidance*.

V) TRACKING PROGRESS

As the strategies and programs described in this *Guidance* are implemented during FY 2007, EPA, States, and Tribes will evaluate progress toward the environmental and public health goals described in the EPA *Strategic Plan*. With this information, EPA will work with States and Tribes, using an "adaptive management" approach, to improve program performance.

The National Water Program will evaluate progress using three key tools:

- National Water Program Performance Reports: The Office of Water will use data provided by Regions, States, and Tribes to prepare performance reports for the National Water Program at the mid-point and end of each fiscal year.
- **EPA HQ/Regional Dialogues**: Each year, the Office of Water will visit up to four EPA Regional Offices and Great Waterbody Offices to conduct dialogues on program management, grant management, and performance.
- **Program-Specific Evaluations:** In addition to looking at the performance of the National Water Program at the national level and performance in each EPA Region, individual water programs will be evaluated periodically under the Program Assessment Rating Tool (PART) program managed by the Office of Management and Budget. Additional evaluations will be developed by other offices or agencies, including the EPA Inspector General and the Government Accountability Office.

VI) PROGRAM CONTACTS

For additional information concerning this *Guidance* and supporting measures contact:

- Michael Shapiro; Deputy Assistant Administrator for Water
- Tim Fontaine; Senior Budget Officer, Office of Water
- Jeff Peterson; Senior Policy Advisor, Office of Water
- Louise Kitamura; Associate Director, Resources Management Staff; Office of Water

INTERNET ACCESS: This *National Water Program Guidance* and supporting documents are available at (http://www.epa.gov/water/waterplan).

I INTRODUCTION

In October of 2003, EPA published a new *Strategic Plan* defining specific environmental and public health improvements to be accomplished by 2008. This *National Program Guidance* builds on the new *Strategic Plan* by defining the process for creating an operational plan for water programs for fiscal year 2007 (FY 07).

Some elements of the operational plan for FY 07 are included in this *Guidance* (e.g. key national program strategies and annual priorities). Additional elements of the FY 07 operational plan (i.e. program specific "commitments" for FY 07) will be developed over the coming months in discussions among EPA Regions, States, and Tribes following the process outlined in this *Guidance*. EPA will publish the final Regional and National "commitments" in a final Appendix to the *Guidance* in the Fall of 2006.

Central Theme - Environmental and Public Health Results

The central theme of the EPA *Strategic Plan* is that the rate of progress toward a cleaner environment can be improved through clearer definition of the specific environmental improvements needed in the foreseeable future (e.g. 5 years). The *Strategic Plan* defines specific improvements in drinking water and surface water quality to be accomplished by 2008 and goes further to outline general strategies for accomplishing these improvements. Although the *Strategic Plan* promises environmental improvements, standing alone, it can't make these improvements a reality. Some of the additional steps that are needed, and are addressed in this *National Program Guidance*, are described below.

- Today, clean water and drinking water programs are too often delivered in discrete programs without the integration among programs that could improve environmental results. This *National Water Program Guidance* is organized around environmental results (i.e. "subobjectives" from the *Strategic Plan*) rather than traditional programs in an effort to encourage program managers at all levels to adopt an entrepreneurial spirit in using a diverse array of program tools to accomplish environmental improvements (e.g. compliance/enforcement, other EPA programs, programs of other Federal agencies).
- In the past, national program managers have asked Regions to commit to a pro-rated share of annual outputs and Regions have asked States to do the same. Under the new management system described in this *Guidance*, EPA Regions propose to the national program managers annual program output "targets" that make sense in that Region in a "bottom-up" process. This process allows Regions and States to shift program resources to best fit the environmental priorities in that Region on an annual basis while keeping a long-term national program target in mind.

• Once program commitments are made, it is critical that information on progress toward commitments be evaluated and used to make adaptive management decisions. The management system described in this *Guidance* provides for a comprehensive process to evaluate progress (see Section III below).

Organization of this Guidance

This *National Program Guidance* is divided into four major sections:

- strategies for attaining the ten key subobjectives related to water in the EPA *Strategic Plan* (see Table I);
- description of the program management system to be used by the EPA generally and the National Water Program more specifically (see Section III);
- slides of "program activity measures" addressing the measurement of program activities that most directly contribute to attaining objectives and subobjectives (See *Appendix A*); and
- background information on program grants to States, Tribes, and others that support program activities (see *Appendix B*).

Each of these sections is described briefly below:

I) Subobjective Strategies: The EPA *Strategic Plan* addresses water programs in Goal 2, (i.e. "Clean and Safe Water"), and Goal 4, (i.e. "Healthy Communities and Ecosystems"). Within these Goals, there are ten subobjectives that define specific environmental or public health results to be accomplished by 2008 (see Table I below).

TABLE I: NATIONAL WATER PROGRAM SUBOBJECTIVES

- 1) Water Safe to Drink
- 2) Fish and Shellfish Safe to Eat
- 3) Water Safe for Swimming
- 4) Restore and Improve Water Quality on a Watershed Basis
- 5) Protect Coastal and Ocean Waters/Estuaries
- 6) Protect Wetlands
- 7) Protect Mexico Border Water Quality
- 8) Protect the Chesapeake Bay
- 9) Protect the Great Lakes
- 10) Protect the Gulf of Mexico

EPA has developed Implementation Plans for each of the ten key subobjectives related to water. These Subobjective Implementation Plans were developed jointly by EPA Headquarters and Regional offices in 2005 and have been updated as needed. Copies of the revised plans are available on the Internet at (http://www.epa.gov/water/waterplan).

In addition the National Water Program is working with EPA's Innovation Action Council (IAC) to promote program innovations. The IAC has endorsed three priority innovations for full-scale implementation: the National Performance Track Program; Environmental Management Systems (EMS); and the Environmental Results Program. Details on these innovations are available at (http://www.epa.gov/innovation). Regions, States, and Tribes should use these innovative approaches in achievement of their program goals.

- **II) Water Program Management System:** Section III of this *Guidance* describes a three step process for management of water programs.
 - Step 1 is the development of this National Water Program *Guidance*.
 - Step 2 involves consultation among Regions, States, and Tribes to be conducted this Spring and Summer to define Regional and State priorities and develop State and Regional "commitments" to support each of the Subobjective Implementation Plans.

A key product of this consultation process is the conversion of "targets" for FY 07 activities provided in this *Guidance* into more binding "commitments" to be included in State/Tribal workplans and grant agreements (i.e., draft commitments in July and final commitments in September, to be published as *Appendix D* of this Guidance).

- Step 3 involves work to be done during FY 07 to track progress in program implementation and improve program performance.
- **III) Water Measures:** Two types of measures are used to manage water programs measures of environmental or health change and measures of program activity.
 - Measures of environmental or public health changes (i.e. outcomes) are described in the EPA Strategic Plan and include long-range targets for FY 2008. These measures, including interim FY 07 targets, are included in the EPA annual budget documents. These outcome measures for each subobjective are described in the opening section of each of the ten subobjective plan summaries in this Guidance.

- Program Activity Measures (i.e. output measures) address activities to be implemented by EPA and by States/Tribes that administer national programs and are provided in *Appendix A*. They are the basis for monitoring progress in implementing programs to accomplish the environmental improvements described in the new *Strategic Plan*. Some of the Program Activity Measures have national and Regional "targets" that serve as a point of reference as Regions and States/Tribes define more formal "commitments" in the Spring/Summer of 2006.
- EPA worked with the Office of Management and Budget to evaluate key water programs using the Program Assessment and Rating Tool (PART). This work included the identifying measures of progress for each program. Most of the measures identified in the PART process are included in this *Guidance*. *Appendix C* of this *Guidance* includes a list of PART measures not directly addressed by Program Activity Measures.
- **IV) Grant Management:** EPA provides a wide range of grant funding to States, Tribes, and others to implement clean water and drinking water programs and projects, including the program activity measures described above. As described in greater detail in *Appendix B*, the Office of Water places a high priority on effective grants management and is emphasizing three key areas:
 - standardizing the timing of issuance of guidance for categorical grants;
 - ensuring that a high priority is placed on effective grant management; and
 - linking grants to the achievement of environmental results as described in the *Strategic Plan* and *National Water Program Guidance*.

In FY 2007, EPA will begin using a standardized "template" for performance reporting under five key State grant programs:

- Water Pollution Control State and Interstate Program Support (106 grants);
- Public Water System Supervision (PWSS);
- State Underground Water Source Protection (UIC):
- Beach Monitoring and Notification Program Implementation Grants, and
- Nonpoint Source Implementation Grants (Section 319 grants).

The "templates" identify measures from this *Guidance* that are associated with each grant program. The "templates" are intended to provide clear linkages to the *Strategic Plan* and long-term and annual goals. Data reported for measures included in the "templates" will be for each State, rather than simply the Regional or national data provided for other measures in this *Guidance*. The "templates" are available at (http://www.epa.gov/ocfopage/npmguidance/template/htm) or (http://www.epa.gov/water/waterplan).

II STRATEGIES FOR PROTECTING PUBLIC HEALTH AND THE ENVIRONMENT

For each of the ten key subobjectives related to water addressed in the EPA *Strategic Plan*, EPA has worked with States and other stakeholders to define strategies for accomplishing the improvements in the environment or public health identified for the subobjective. The *Strategic Plan* includes general descriptions of strategies and programs that will apply over the 2004 - 2008 period.

This *National Program Guidance* draws from the *Strategic Plan* but describes plans and strategies at a more operational level and focuses on FY 2007. The text provided below is a summary of more detailed "Subobjective Implementation Plans" for each subobjective. These plans provide additional information concerning the subobjective and further explanation of proposed strategies and actions (see http://www.epa.gov/water/waterplan).

In addition, this *Guidance* refers to "Program Activity Measures" that define key program activities that support each subobjective (see Appendix A). Some of these Program Activity Measures include national and Regional targets for FY 2007 and FY 2008 that will guide discussions with States and Tribes leading to "commitments in the Agency's Annual Commitment System (ACS) by September.



1) Water Safe to Drink

For more than 30 years, protecting the Nation's public health through safe drinking water has been the shared responsibility of EPA, the States, and over 52,000 community water systems (CWSs)¹ nationwide that supply drinking water to more than 280 million Americans (approximately 90% of the U.S. population). Over this time, safety standards have been established and are being implemented for 91 microbial, chemical, and other contaminants. Forty-nine States have adopted primary authority for enforcing their drinking water programs. Additionally, CWS operators are better informed and trained on the variety of ways to both treat contaminants, and prevent them from entering the source of their drinking water supplies.

Although the Safe Drinking Water Act applies to 158,221 public water systems nationwide (as of December 2005), which include schools, hospitals, factories, campgrounds, motels, gas stations, etc. that have their own water system, this implementation plan focuses only on CWSs. A CWS is a public water system that provides water to the same population year-round. As of December 2005, there were 52,837 CWSs.

EPA, the States, and CWSs will build on their success in ensuring safe drinking water but also will work toward achieving a very ambitious goal:

By 2008, 95% of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection.

This goal reflects the fundamental public health protection mission of the national drinking water program. Health protection-based regulatory standards for drinking water quality are the cornerstone of the program. Water systems meet the national standards using "neighborhood solutions." The standards do not prescribe a specific treatment approach. Rather, individual systems decide how best to comply with any given standard based upon their own unique circumstances. Systems meet standards by employing various elements of what public health experts refer to as "multiple barriers of protection". The multiple barriers may include source water protection; various stages of treatment; proper operation and maintenance of the distribution and finished water storage system; and customer awareness.

A) Environmental/Health Results Expected

Environmental and public health results identified in the new EPA *Strategic Plan* related to safe drinking water nationwide by the year 2008 are described below, along with interim, 2007 targets:

1) 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%

2005 Actual: 88.5% **2007 Target: 90%**

2) Percent of the population served by CWS that receives drinking water that meets health-based standards for those requirements with which systems need to comply:

As of December 2001:

2002 Baseline: 93.6% 2006 Commitment: 92.5% 2008 Target: 95%

2004 Actual: 91% **2007 Target: 92%**

As of January 2002 or later:

2002 Baseline: N/A 2006 Commitment: 75% 2008 Target: 80%

2005 Actual: 96.3% **2007 Target: 82%**

3) Percent of CWSs that provide drinking water that meets health-based standards for those requirements with which systems need to comply:

As of December 2001:

2002 Baseline: 91.6% 2006 Commitment: 94% 2008 Target: 95%

2005 Actual: 91.7% **2007 Target: 91%**

As of January 2002 or later:

2002 Baseline: N/A 2006 Commitment: 75% 2008 Target: 80%

2005 Actual: 97.2% **2007 Target: 82%**

4) Percent of the population served by CWS in Indian country that receive drinking water that meets all applicable health-based standards.

2002 Baseline: 91.1% 2006 Commitment: 90% 2008 Target: 95%

2004 Actual: 86.3% **2007 Target: 87%**

Percent of source water areas (both surface and ground water) for community water systems that will achieve minimized risk to public health ("minimized risk" is achieved by the substantial implementation, as determined by the State of source water protection actions in a source water protection strategy).

2002 Baseline: 8 % 2006 Commitment: 20% 2008 Target: 50%

2005 Actual: 20% **2007 Target: 29%**

6) Number of homes on Tribal lands lacking access to safe drinking water:

2003 Baseline: 39,000 2006 Commitment: 30,800 2015 Target: 22,000 (12% of homes) 2007 Target: 30,500 (6% of homes)

B) Key National Strategies

The overall objective of the drinking water program is to protect public health by ensuring that the gains of the previous years' efforts are preserved and built upon. In doing so, drinking water systems of all types and of all sizes that are currently in compliance will remain in compliance. Systems that are not currently in compliance, will achieve compliance. And, all systems will be preparing to comply with the new regulations.

Making good decisions to allocate resources among various program areas requires that each Region first work with States to define goals for the program in public health (i.e. "outcome") terms. Table II describes estimates of progress under the key drinking water

measure describing the percent of the population served by community water systems that receive water that meets all health based drinking water standards.

TABLE II – FY 2007: Targets for Population Served by Systems Meeting Standards

EPA Region	2002 Baseline	2005 Actual	2006 Commitment	2007 Target
1	88%	92.5%	83%	89%
2	81%	55.3%	80%	75%
3	98%	93.2%	93%	94%
4	96%	93.0%	93%	91%
5	94%	94.1%	95%	94%
6	93%	87.8%	90%	87%
7	95%	91.2%	93%	93%
8	97%	94.7%	93%	94%
9	99%	94.6%	93%	95%
10	91%	94.8%	92%	90%
National Total	93.6%	88.5%	90.9%	90%

Although Regions should use the national 2007 target of the people served by community water systems receiving safe drinking water as a point of reference, Regional commitments to this outcome goal may vary based on differing conditions in each Region.

EPA and States support the efforts of individual water systems by providing a national program framework that includes core programs delivered by EPA Regional offices and States. Core national program areas that are critical to ensuring safe drinking water are:

- Development or revision of drinking water standards;
- Implementation of drinking water standards and ensuring compliance;
- Community water system financing;
- Water security;
- Source water protection;
- Underground injection control; and
- Integration of programs to protect surface water that is a source of drinking water.

Collectively, these core areas of the national safe drinking water program comprise the multiple-barrier approach to protecting public health from unsafe drinking water. At the national level, implementation of this approach is expected to result in significant progress toward the public health goals described above. In each of these areas, specific Program Activity Measures

indicate progress being made and some measures include "targets" for FY 07 and 08. For these measures with targets, a national target and a target for each Region are provided in *Appendix A*.

1) Development or Revisions to Drinking Water Standards

During FY 2007 EPA will be working with States and other stakeholders on two revisions/reviews of existing drinking water regulations:

- Total Coliform Rule (TCR) Revisions: The TCR, which was promulgated in 1989, protects public health by specifying sampling requirements and maximum contaminant levels for bacteria in the distribution systems of public water supplies. EPA is evaluating revisions to the TCR to reduce the implementation burden and to address problems with drinking water distribution systems that may lead to contamination of drinking water. The Agency plans to initiate a stakeholder process and analyze forthcoming National Academy of Science recommendations.
- Lead and Copper Rule Review (LCR): EPA has reviewed national compliance and implementation of the LCR, which was issued in 1991 and underwent minor revisions in 2000, and identified issues that are affecting the effectiveness of its provisions, determined changes in guidance and/or training materials could help systems and States better implement the rule, and identified issues that will require a regulatory revision. EPA will propose short-term revisions and clarifications to the LCR in 2006 and will promulgate final changes in 2007.

EPA is evaluating the contaminants on the second drinking water Contaminant Candidate List (CCL) and preparing a preliminary determination to regulate or not regulate at least five contaminants. EPA will subsequently issue a final determination to regulate or not to regulate at least five contaminants. To prepare the Agency's third CCL, the Agency is evaluating a broad universe of chemical and microbial agents and identifying the contaminant candidates with a greater likelihood of occurring in drinking water supplies at levels that could affect human health. EPA will also assess data on health effects, occurrence, analytical methods, and treatment technologies for currently regulated contaminants and determine what revisions if any are appropriate to drinking water regulations as part of the second six year National Primary Drinking Water Rule Review required in 2008.

2) Implementation of Drinking Water Standards and Ensuring Compliance

In FY 2006, the Agency promulgated rules that address Cryptosporidium (Long Term 2 Enhanced Surface Water Treatment Rule) and disinfection (Stage 2 Disinfectants and Disinfection Byproducts Rule). EPA also plans to promulgate the Ground Water Rule. In order to facilitate compliance with these new rules, as well as existing rules, EPA will use the following tools in partnership with States:

- Sanitary Surveys: Sanitary surveys are on-site reviews of the water sources, facilities, equipment, operation, and maintenance of public water systems. States are to be in compliance with requirements under national surface water treatment rules to conduct sanitary surveys at community water systems once every three years starting in 2004 (see Program Activity Measure SDW-1). For systems determined by the State to have outstanding performance based on prior surveys, subsequent surveys may be conducted every five years. EPA will also conduct surveys at systems on tribal lands.
- Technical Assistance and Training: Reference materials for new regulations (i.e., ground water rule, surface water treatment rule, disinfection byproducts rule) will be developed. These materials will include technical guidance, rollout strategies, implementation guidance, and quick reference guides. EPA will also offer training sessions, both in person and satellite/webcast, on implementation of new regulations. For the new rules promulgated in December 2005, EPA will oversee early implementation activities and will carry out some aspects directly. EPA will also continue to provide technical assistance to help systems serving less than 3,300 people meet existing and new drinking water standards.
- Area-wide Optimization Program: In FY 2007, through EPA's voluntary Area-Wide Optimization Program (AWOP), drinking water systems and States will conduct comprehensive performance evaluations (CPEs) to assess the performance of filtration technology. AWOP can help water systems go beyond compliance to significantly reduce the human health risks associated with turbidity in finished drinking water. In FY 2007, EPA will expand this tool to address disinfection byproducts in distribution systems.
- Data Access, Quality and Reliability: The Safe Drinking Water Information System (SDWIS) serves as the primary source of national information on compliance with all health-based regulatory requirements of SDWA. EPA will incorporate new drinking water program requirements into SDWIS to help States (and those Tribes having access to SDWIS) monitor and report drinking water data and will continue to work with States on the use of SDWIS/State because of its compatibility and ease of reporting with the national SDWIS.

To improve SDWIS data quality, EPA will continue to work with States to implement the recommendations of the Agency's Data Reliability Action Plan that are based on results of data verification audits conducted by the Agency. Starting in FY 2007, EPA will report annually the percent of data concerning health-based violations that is complete and accurate (see Program Activity Measure SDW-2).

EPA will also monitor lead and copper rule action level data for community water systems serving greater than 3,300 people to ensure that it is complete (see

Program Activity Measure SDW-3). In addition, EPA will monitor the percent of community water systems and non-transient systems that are at or below the lead action level (see Program Activity Measure SDW-4).

• Coordination with Enforcement: Finally, the Office of Water will also work with the Office of Enforcement and Compliance Assurance to identify instances of actual or expected noncompliance that pose risk to public health and to take appropriate actions as necessary.

In addition, in order to better evaluate the extent and seriousness of noncompliance with health-based standards, EPA will track the duration of noncompliance events using a new measure of the percent of "person months" during which community water systems provide water meeting health based standards (i.e. the population served by community water systems times 12) (see Program Activity Measure SDW-5). The 2005 baseline for this measure is over 95 percent of person months in compliance.

3) Water System Financing

The Drinking Water State Revolving Fund (DWSRF), established under the Safe Drinking Water Act, enables States to offer low interest loans to help public water systems across the nation make improvements and upgrades to their water infrastructure, or other activities that build system capacity. As of the end of FY 2005, EPA has made available \$7.5 billion to finance about 4,400 infrastructure improvement projects nationwide

EPA will work with States to increase the DWSRF fund utilization rate (cumulative dollar amount of loan agreements divided by cumulative funds available for projects from a 2002 level of 75% to 86% in 2008 (see Program Activity Measure SDW-6). EPA will also work with States to monitor the number of projects that have initiated operations (see Program Activity Measure SDW-7). For FY 2007, EPA will also ask States to report the number of projects funded that will assist in returning a community water system to compliance with drinking water standards.

In addition, in FY 2007, EPA will work in partnership with States, the water utility industry, and other stakeholders to ensure sustainability of water and wastewater systems. This initiative is to identify and promote new and better ways of doing business in the water and wastewater industry. EPA will work with the water industry to identify best practices that have helped many of the Nation's utilities address their own internal gap and extend their use to a greater number of utilities.

4) Water System Security

EPA will provide tools, training and technical assistance that protects the Nation's critical water infrastructure from terrorist threats. Reducing risk in the water sector requires a multi-step approach to: determine risk through vulnerability assessments, reduce risk through security enhancements, and prepare to respond effectively to incidents. Homeland Security Presidential Directives (HSPDs) 7 and 9 direct EPA to help the water sector implement protective measures and develop a comprehensive water surveillance and monitoring program respectively.

As outlined in HSPD 7, the water sector must be provided tools and information to prevent, detect, and respond to a terrorist or other intentional attack. EPA will, in FY 2007, implement prevention, detection, response, and recovery activities for the water sector in collaboration with DHS and States' homeland security and water officials. As part of this effort, EPA and stakeholders will work to clarify measures recommended by the National Drinking Water Advisory Council in 2005 and develop a mechanism to voluntarily assess whether systems have adopted active and effective security programs that reduce risk to the public to be implemented in FY 2008.

Also in FY 2007, EPA will develop surveillance and monitoring systems in select pilot cities. These pilots will provide opportunities to evaluate operational experience of different water systems (see Program Activity Measure SDW-8). The Agency will also provide training and technical assistance to water systems on monitoring devices, sampling protocols, analytical methods, consequence management, and reporting results to the Department of Homeland Security.

5) Protecting Sources of Drinking Water

EPA will promote the concept of a multiple barrier approach to drinking water program management and will work with States to track the development and implementation of source water protection strategies. EPA has set a goal of increasing the number of community water systems with minimized risk to public health through development and implementation of protection strategies for source water areas (counted by States at the community water system level) from an estimated baseline of 20% of all areas in FY 2005 to 29% in FY 2007 and 50% in FY 2008 (see Strategic Target F).

EPA will continue to work with a broad range of stakeholders through the Agency's participation in a voluntary collaborative of national organizations established in FY 2006 to improve protection of sources of drinking water. EPA will also leverage programs within the federal government, such as the Clean Water Act and Underground Storage Tank Programs, to increase source water protection efforts in source water areas for community water systems.

6) Underground Injection Control

EPA works with States to control injection of hazardous substances and other waste to prevent contamination of underground sources of drinking water. In 2007, EPA and States will continue to implement the program for Classes I, II, III, IV, and V wells, including addressing wells identified in significant violation (see Program Activity Measure SDW-9); and ensuring mechanical integrity is maintained (see Program Activity Measure SDW-11).

EPA and States will also work to address Class V wells identified in violation (see Program Activity Measure SDW-9) and to implement requirements for Class V motor vehicle waste disposal wells to be closed or permitted (see Program Activity Measure SDW-10). EPA will also monitor the number and percent of high priority Class V wells identified in ground water-based community water system source water areas that are closed or permitted (see Program Activity Measure SDW-12).

Other underground injection control program activities include efforts to address emerging challenges related to carbon capture and storage and drinking water treatment residuals disposal.

7) Protecting Surface Water that is a Source of Drinking Water

In addition to implementing programs authorized by the Safe Drinking Water Act, EPA is encouraging States and communities to expand source water protection to use the resources of other programs to protect drinking water supplies, such as water quality standards and watershed restoration under the Clean Water Act and land stewardship authorities of the Forest Service.

As a key step in this effort EPA will continue to develop National Recommended Water Quality Criteria for high risk drinking water contaminants found in surface waters. These criteria are used by States to develop water quality standards for surface waters and are the foundation for implementing the Clean Water Act programs to protect public drinking water sources.

State water quality standards set the benchmarks for water quality including that of drinking water sources. EPA will review state water quality standards that address the drinking water use (SDW-13), source waters assessed for the drinking water use (SDW-14) and the progress in restoring waters that are impaired for the drinking water use (SDW-15).

EPA urges public water system operators to coordinate their ambient monitoring activities with the Clean Water Act programs in their State and to share any ambient water quality monitoring data they collect with the Clean Water Act program so those data can be considered in the State's ongoing water quality assessment decisions.

C) Grant Program Resources

EPA has several program grants to the States, authorized under the Safe Drinking Water Act, that support work towards the drinking water strategic goals including the Public Water System Supervision (PWSS), Drinking Water State Revolving Fund (DWSRF), Underground Injection Control (UIC), and water security grants. For additional information concerning these grants, see the grant program guidance website at (http://www.epa.gov/water/waterplan).

The PWSS grants to the States support the States' primacy activities (e.g. enforcement and compliance with drinking water regulations). PWSS grant guidance issued for FY 2005 will continue to apply in FY 2007. Of the FY 07 President's Budget request of \$99.1 million, approximately \$6 million will go to support implementation of the Tribal Drinking Water Programs. EPA Regions directly implement the PWSS program in Indian country and will be targeting funds towards the same priority activities as the States.

The DWSRF program provides significant resources for States to use in protecting public health. In FY 2005, the DWSRF program as a whole provided almost \$1.5 billion in assistance and States reserved over \$128 million in set-asides to support key drinking water programs. In FY 2006, Congress appropriated over \$830 million for the DWSRF program. EPA is emphasizing the importance of targeting DWSRF resources to achieve water system compliance with health-based requirements.

Tribal drinking water systems and Alaska Native Village water systems face the challenge of improving access to safe drinking water for the populations they serve. Funding for development of infrastructure to address public health goals related to access to safe drinking water comes from several sources within EPA and from other Federal agencies. In FY 2006, about \$12.5 million of the DWSRF funds was available for grants for Tribal and Alaska Native Village drinking water projects, including upgrading of community water systems and improving access through construction of new systems. EPA also administers a grant program for water and wastewater projects in Alaska Native Villages. Additional funding is available from other Federal agencies, including the Indian Health Service.

EPA also awards grants to States to carry out primary enforcement (primacy) responsibilities for implementing regulations associated with Classes I, II, III, IV and V underground injection control wells. In addition, emphasis is directed to activities that address shallow wells (Class V) in source water protection areas.

Water security grants will continue to maintain the States' efforts in coordinating their critical water infrastructure protection activities with other homeland security responsibilities.

Finally, grants under Section 106 of the Clean Water Act are available to support State ground water protection programs. EPA recommends that States continue to direct Section 106 funding for source water protection actions to protect ground water and drinking water.



2) Fish and Shellfish Safe to Eat

Across the country, States and Tribes have issued fish consumption advisories for a range of contaminants covering 840,000 stream miles and over 14 million lake acres. In addition about 10 percent of the 15 million valuable shellfishing acres managed by States are not open for use.

A) Environmental and Health Results Expected

The new EPA *Strategic Plan* calls for improving the quality of water and sediments to allow increased consumption of fish and shellfish:

1) 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 Actual: 0%

2006 Commitment: 1% of advisory waters improved

2007 Target: 2% 2008 Target: 3%

2) 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

2003 Actual: 91%

2006 Commitment: 91%

2007 Target: 91% 2008 Target: 91%

B) Key National Strategies

EPA's national approach to meeting safe fish and shellfish goals is described below.

1) Safe Fish

EPA's approach to making fish safer to eat includes several key elements:

reduce air deposition of mercury;

- implement pollution control programs to address specific impaired waters;
- use the Superfund program, where feasible, to restore the condition of aquatic sediment, focusing on PCBs; and
- improve public information and notification of fish consumption risks.

Most of the fish advisories are for mercury and a critical element of the strategy to reduce mercury in fish is reducing emissions of mercury from combustion sources in the United States. On a nationwide basis, by 2010, federal regulatory programs are expected to reduce electric-generating unit emissions of mercury from their 2000 level (see Goal 1: Clean Air, Sub-objective 1.1.2: Reduced Risk from Toxic Air Pollutants).

By using *Mercury Maps* (http://www.epa.gov/waterscience/mercurymaps) it is possible to reasonably predict the benefits of air emission reductions or control of other sources for a specific waterbody. This tool can also be used to target watershed level efforts to address mercury contamination through water quality standards, TMDL, and wastewater permitting programs. EPA will use this tool to identify priority areas where the combined effect of reduced air emissions and control of other sources of mercury could improve the safety of fish.

Another key element of the strategy to make fish safer to eat is to expand and improve information and notification of the risks of fish consumption. As part of this work, EPA will encourage States and Tribes to adopt the new fish tissue criterion for mercury (see Program Activity Measure FS-1).

The second most frequent cause of fish consumption advisories is PCBs. Based on the historical phase-out of PCB manufacture, EPA expects that the most likely current source of PCBs is sediment release. For this reason, sediment remediation under the Superfund program and sediment remediation in the Great Lakes (see Section 8 of this *Guidance*) are important actions for reducing the extent of current fish advisories.

EPA is also actively monitoring the development of fish consumption advisories and working with States to improve monitoring to support this effort. By 2008, EPA expects that fish tissues will be assessed to support waterbody-specific or regional consumption advisories for at least 40% of lake acres and 28% of river miles (see Program Activity Measure FS-2). EPA has also worked to encourage increased numbers of States and Tribes to monitor fish tissue based on national guidance and expects that most States will be doing this work by the end of 2006.

2) Safe Shellfish

Shellfish safety is managed through the Interstate Shellfish Sanitation Conference (ISSC), a partnership of the U.S. Food and Drug Administration (FDA), the State shellfish control agencies, the National Oceanic and Atmospheric Administration (NOAA), and the EPA. The State shellfish control agencies monitor shellfishing waters and can prohibit or restrict harvesting if the waters from which shellfish are taken are considered unsafe.

Success in achieving the shellfish goals relies on implementation of Clean Water Act programs that are focused on sources causing shellfish acres to be closed. Important new technologies include pathogen source tracking, new indicators of pathogen contamination and predictive correlations between environmental stressors and their effects. Once critical areas and sources are identified, core program authorities, including expanded monitoring, development of TMDLs, and revision of discharge permit limits can be applied to improve conditions.

In addition, a wide range of clean water programs that apply throughout the country will generally reduce pathogen levels in key waters. For example, work to control Combined Sewer Overflows, to reduce discharges from Concentrated Animal Feeding Operations, to reduce storm water runoff, and to reduce nonpoint pollution will contribute to restoration of shellfish uses.

Finally, success in achieving the shellfish goal also depends on improving the availability of State shellfish information. For example, EPA along with the National Oceanic and Atmospheric Administration and the Food and Drug Administration, are encouraging States to participate in the Interstate Shellfish Sanitation Conference and report shellfish information. EPA is also working to enter shellfish program monitoring data into the EPA water monitoring system (e.g., STORET) and improve data concerning location of shellfishing areas.

C) Grant Program Resources

Grant resources supporting this goal include the State program grant under Section 106 of the Clean Water Act, other water grants identified in the Grant Program Resources section of Subobjective 4, and grants from the Great Lakes National Program Office (see grant guidance website for more information (http://www.epa.gov/water/waterplan)) as well as funding under the Superfund Program. Grant and Legacy Act guidance from the Great Lakes National program Office is available from (http://www.epa.gov/grtlakes/fund/glf.html).



3) Water Safe for Swimming

The Nation's waters, especially beaches in coastal areas and the Great Lakes, provide recreational opportunities for millions of Americans. Swimming in some recreational waters, however, can pose a risk of illness as a result of exposure to microbial pathogens. By "recreational waters" EPA means waters officially recognized for primary contact recreation use or similar full body contact use by States, authorized Tribes, and Territories.

A) Environmental/Health Results Expected

Environmental and public health results identified in the EPA *Strategic Plan* related to safe swimming waters are:

1) 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:

2002 Actual: TBD

2006 Commitment: 3% of impaired water restored

2007 Target: 4% 2008 Target: 5%

2) Percent of days of the beach season that coastal and Great Lakes beaches monitored by State beach safety programs will be open and safe for swimming:

2002 Baseline: 94% 2006 Commitment: 94%

2005 Actual: 96% **2007 Target: 92%** 2008 Target: 96%

B) Key National Strategies

For FY 2007, EPA's national strategy for improving the safety of recreational waters will include four key elements:

- establish a new generation of pathogen indicators based on sound science;
- identify unsafe recreational waters and begin restoration;
- reduce pathogens levels in all recreational waters; and
- improve beach monitoring and public notification.

1) Establish Pathogen Indicators Based on Sound Science

EPA is working with States and Tribes throughout the country to implement the adoption of the most recent (i.e., 1986) scientific indicators of unsafe pathogens in all recreational waters.

In FY 2007, EPA will continue to place attention on the development of a new generation of pathogen criteria, to be published in 2008, and will begin work with States to adopt the most current criteria for all recreational waters (see Program Activity Measure SS-1).

2) Identify Unsafe Recreational Waters and Begin Restoration

A key component of the strategy to restore waters unsafe for swimming is to identify the specific waters that are unsafe and develop plans to accomplish the needed restoration. A key part of this work is to maintain strong progress toward development of Total Maximum Daily Loads (TMDLs) based on the schedules established by States in conjunction with EPA. Program Activity Measure WQ-13 indicates that most EPA Regions expect to maintain schedules providing for completion of TMDLs within 13 years of listing).

In a related effort, the Office of Water will work in a new partnership with the Office of Enforcement and Compliance Assurance (OECA) to better focus compliance and enforcement resources to unsafe recreational waters. In addition, wet weather discharges, which are a major source of pathogens, are one of OECA's national priorities for FY 2005 through 2007.

3) Reduce Pathogen Levels in Recreational Waters Generally

In addition to focusing on waters that are unsafe for swimming today, EPA, States and Tribes will work in FY 2007 to reduce the overall level of pathogens discharged to recreational waters using three key approaches:

- reduce pollution from Combined Sewer Overflows (CSOs);
- address other sources discharging pathogens under the permit program; and
- encourage improved management of septic systems.

Overflows from combined storm and sanitary sewers in urban areas can result in high levels of pathogens being released during storm events. Because urban areas are often upstream of recreational waters, these overflows are a significant source of unsafe levels of pathogens. EPA is working with States and local governments to fully implement the CSO Policy providing for the development and implementation of Long Term Control Plans (LTCPs) for CSOs. EPA expects that 65% of the 829 CSO permits

will have schedules in place to implement approved LTCPs in FY 2007; the FY 2008 goal is 75% of permits with schedules in place (see Program Activity Measure SS-2).

Other key sources of pathogens to the Nation's waters are discharges from Concentrated Animal Feeding Operations (CAFOs) and municipal storm sewer systems and industrial facilities. Program Activity Measure WQ-20 indicates that EPA expects to work with States to assure that these facilities are covered by permits. Program Activity Measure WQ-19 indicates the percentage of storm water permits that are current.

Finally, there is growing evidence that ineffective septic systems are adversely impacting water resources. EPA will work with State and local governments to develop voluntary approaches to improving management of these systems, including design of decentralized treatment systems. Program Activity Measure SS-3 addresses the number of States that have adopted Voluntary Management Guidelines for On-site/Decentralized Wastewater Treatment Systems published by EPA.

4) Improve Beach Monitoring and Public Notification

Another important element of the strategy for improving the safety of recreational waters is improving monitoring of public beaches and notifying the public of unsafe conditions. EPA is working with States to implement the Beaches Environmental Assessment and Coastal Health Act and expects to make available grant funding of almost \$10 million to States to carry out this work.

Program Activity Measure SS-4 indicates that EPA expects that 99 percent of "significant" public beaches will be monitored in accordance with BEACH Act requirements. Significant public beaches are those identified by States as "Tier 1" in their Beach monitoring and notification programs. Finally, EPA will continue to receive and display State information on beach notifications through the eBeaches system and will look to increase voluntary participation of inland States. EPA will also continue to develop information systems for beach safety (http://www.epa.gov/beaches/).

C) Grant Program Resources

Grant resources supporting this goal include the Clean Water Act Section 106 grant to States, nonpoint source program implementation grants (Section 319 grants), and the BEACH Act grant program grants. For additional information concerning these grants, see the grant program guidance website at (http://www.epa.gov.water/waterplan).



4) Restore and Improve Water Quality on a Watershed Basis

A large share of the resources available to the National Water Program directly support efforts to restore and improve the quality of rivers, lakes, and streams. Over the next several years, EPA will work with States to assure the continued effective implementation of core clean water programs (including applying core programs on a watershed basis), to accelerate watershed protection, and to use an adaptive management framework to refine our ability to restore and protect water quality.

A) Environmental/Health Results Expected

Environmental and public health results identified in the new EPA *Strategic Plan* related to improved water quality on a watershed basis are:

- 1) Use both pollution prevention and restoration approaches to increase:
 - The number of watersheds where water quality standards are met in at least 80 percent of the assessed water segments (of the total 2,262 USGS cataloguing unit scale watersheds across the Nation):

2002 Baseline: 453 watersheds 2005 Actual: 450 2006 Commitment: 458 2007 Target: 450

2008 Target: 600

- The number of watersheds where all assessed water segments maintain their quality and at least 20 percent of assessed water segments show improvement above conditions as of 2002.

2002 Baseline: 0 USGS cataloging unit scale watersheds:

2006 Commitment: N/A

2007 Target: N/A 2008 Target: 200

2) Percent of those waterbodies identified in 2000 as not attaining standards where water quality standards are restored.

2000 Baseline: 21,632 impaired waterbodies

2005 Actual: 9% restored

2006 Commitment: 9.7% (2006 Adjusted: 10.3%) 2007 Target: 13.2% 2012 Target: 25% (5,408) 3) Show improvement of at least 10% in each of four key parameters at a number of the 900 water monitoring stations in tribal waters:

2002 Baseline: 0 stations 2006 Commitment: 50

2005 Actual: 0 **2007 Target: 70** 2008 Target: 90

4) Reduce the number of homes on tribal lands lacking access to basic sanitation.

2000 Baseline: 71,000 homes 2006 Commitment: 59,250

2005 Actual: 46,728 **2007 Target: 40,631** 2015: 35,000

B) Key National Strategies

Developing a plan that addresses this complex subobjective requires implementing a new approach that integrates numerous water program elements at a watershed level, employs multiscale water quality data, applies innovative ideas, and engages diverse Federal, State and local stakeholders in problem solving. These objectives can best be met using a three part strategy:

- planning and implementing core clean water programs on a watershed basis to protect and restore water quality;
- accelerate watershed protection by supporting local watershed protection efforts and initiating or strengthening protection of critical watersheds/waterbodies; and
- apply an adaptive management framework to make this process work.

Regions should take the lead in working with national programs and States/Tribes to allocate resources so that coordinated actions lead to achieving national water quality improvement goals in a manner that is best suited to the conditions and needs within the Region. These Regional allocation decisions are expressed as "Regional Targets" included in this *National Water Program Guidance* and will become more refined "Regional Commitments" within the Agency's Annual Commitment System (ACS) by September 2006.

1) Implement Core Clean Water Programs to Protect All Waters Nationwide

In FY 2007, EPA and the States need to continue to effectively implement programs established under the Clean Water Act to protect, improve and restore water quality on a watershed basis. Key tasks for FY 2007:

- strengthen the water quality standards program;
- improve water quality monitoring and assessment;
- develop Total Maximum Daily Loads (TMDLs) and related plans;

- implement practices to reduce pollution from all nonpoint sources;
- strengthen the NPDES permit program; and
- support sustainable wastewater infrastructure.

Priorities for FY 2007 in each of these program areas are described below.

A) Strengthen Water Quality Standards: Water Quality Standards are the regulatory and scientific foundation of water quality protection programs under the Clean Water Act. Under the Act, States and authorized Tribes establish water quality standards that define the goals and limits for waters within their jurisdictions. They are used to determine which waters must be cleaned up, how much may be discharged, and what is needed for protection.

To help achieve strategic targets, EPA will continue to review and approve or disapprove State and Tribal water quality standards and promulgate replacement standards where needed; develop water quality criteria, information, methods, models and policies to ensure that each waterbody in the United States has a clear, comprehensive suite of standards that define the highest attainable uses; and as needed, provide technical and scientific support to States, Territories and authorized Tribes in the development of their standards. EPA will also continue implementation of the *Strategy for Water Quality Standards and Criteria* (EPA, August 2003), which identifies highest priority actions for strengthening the policy and scientific foundation of state and tribal water quality programs.

A high priority is to support State and Territory development of nutrient criteria --water quality criteria to help target reductions in excess nutrients that can cause eutrophication and other problems in lakes, estuaries, rivers, and streams. EPA will work with States and Territories as they develop and implement mutually-agreed upon plans for developing nutrient criteria and will provide technical tools and guidance to assist them (see Program Activity Measure WQ-2).

EPA will also develop pollutant criteria documents for high priority surface water pollutants posing the greatest risk (see Program Activity Measure WQ-1) and State incorporation of biological criteria into their water quality programs (see Program Activity Measure WQ-3).

In a related effort, EPA will encourage and support Tribes to obtain approval to administer water quality standards programs and to develop water quality standards (see Program Activity Measure WQ-4).

EPA will also work with States and Tribes to ensure the effective operation of the standards program, including working with States in keeping their water quality criteria up to date with the latest scientific information (see Program Activity

Measure WQ-5) and working with States and Tribes to facilitate adoption of standards that EPA can approve (see Program Activity Measure WQ-6).

B) Improve Water Quality Monitoring: Over the next 5 years, EPA will work with States and Tribes in providing information to make good watershed protection decisions and tracking changes in the Nation's water quality over time.

A top priority for the past several years is State development of monitoring strategies consistent with national guidance published in 2003, including State participation in efforts to develop statistically valid monitoring networks and State support of the national STORET water quality database. In FY 2007, EPA will work with States and Territories to help implement monitoring strategies on established schedules (see Program Activity Measure WQ-7). EPA will also assist Tribes in developing monitoring strategies appropriate to their water quality programs (see Program Activity Measure WQ-8) based on new guidance.

EPA and States will also continue efforts to take a statistically valid "snapshot" of water quality in key waterbody types, starting in FY 2006 with wadeable streams and extending in future years to other waterbody types, including lakes and rivers (see Program Activity Measures WQ-9).

In a related effort, EPA will work with States and Territories to develop integrated assessments of water conditions, including reports under Section 305(b) of the Clean Water Act and lists of impaired waters under Section 303(d) of the Act. EPA has issued new Integrated Reporting Guidance and, for FY 07, has a goal of most States/Territories providing integrated assessments in 2007 (see Program Activity Measure WQ-10).

In support of this integrated reporting, and to improve State capability to report on environmental progress in a geo-referenced format, EPA is asking States/Territories to report their use of the Assessment Database or a compatible system (see Program Activity Measure WQ-11). Because water quality data are critical to measuring progress toward commitments to restore and improve water quality, EPA expects all States to submit integrated reports using the Assessment Database version 2.0 or a compatible electronic format in 2008. Where needed, Regions and States should make strong progress towards this goal in 2007.

Finally, EPA will continue to approve new analytical methods for biological and chemical pollutants (see Program Activity Measure WQ-12).

C) TMDLs and Related Plans: Development of Total Maximum Daily Loads or "TMDLs" for an impaired waterbody is a critical tool for meeting water restoration goals. TMDLs focus on clearly defined environmental goals and

establish a pollutant budget, which is then implemented via permit requirements and through local, State, and Federal watershed plans/programs.

EPA will track the degree to which States develop TMDLs on approved schedules, based on a goal of being between 80 and 100 percent on pace each year to meet State schedules or straight-line rates that ensure that the national policy of TMDL completion within 13 years of listing is met (see Program Activity Measure WQ-13).

As noted below, EPA is encouraging States to organize schedules for TMDLs to address all pollutants on an impaired segment (see Program Activity Measure WQ-34) and to organize efforts so that segment level restorations are clustered together to provide improvements on a watershed basis.

Finally, EPA will work with both States and Tribes to increase the participation of Tribes in development of TMDLs or related watershed plans to protect impaired waterbodies that affect Tribal waters (see Program Activity Measure WQ-14).

D) Control Nonpoint Source Pollution: Polluted runoff from sources such as agricultural lands, forestry sites, and urban areas is the largest single remaining cause of water pollution. EPA and States are working with local governments, watershed groups, property owners, Tribes, and others to implement programs and management practices to control polluted runoff throughout the country.

EPA provides grant funds to States under Section 319 of the Clean Water Act to implement comprehensive programs to control nonpoint pollution, including reduction in runoff of nitrogen, phosphorus, and sediment. EPA will monitor progress in reducing loadings of these key pollutants (see Program Activity Measure WQ-15). In addition, EPA estimates that some 5,967 waterbodies are primarily impaired by nonpoint sources and will track progress in restoring these waters (see Program Activity Measure WQ-16) nationwide.

As described in more detail in Section 2 below, EPA is encouraging States to use the 319 program to support a more comprehensive, watershed approach to protecting and restoring water quality. EPA first published in FY 2003 new grant guidelines for the Section 319 program to require the use of at least \$100 million for developing and implementing comprehensive watershed plans. These plans are geared towards restoring impaired waters on a watershed basis while still protecting high quality and threatened waters as necessary. EPA has a goal of substantially implementing many of these plans by 2008. State CWSRF funds are also available to support efforts to control pollution from nonpoint sources.

E) Strengthen NPDES Permit Program: The NPDES program requires point sources discharging to water bodies to have permits and pretreatment programs to control discharges from industrial facilities to sewage treatment plants.

In FY 2003, EPA worked with States to develop the "Permitting for Environmental Results Strategy" to address concerns about the backlog in issuing permits and the health of State NPDES programs. The strategy focuses limited resources on the most critical environmental problems and addresses program efficiency and integrity. In FY 2004 and 2005, EPA worked with States to assess NPDES program integrity. In FY 2005 and 2006, EPA developed a commitment and tracking system to ensure that NPDES programs implement follow-up actions resulting from assessments. In FY 2007, EPA will continue to emphasize the importance of these follow-up actions (see Program Activity Measure WQ-17).

EPA is also working with States to structure the permit program to better support comprehensive protection of water quality on a watershed basis. Some key elements of this effort (described in more detail in Section 2 below) include:

- **High Priority Permits:** permits that can help implement TMDLs, watershed plans, effluent guidelines, or other environmental needs will be identified as high priority (see Program Activity Measure WQ-29);
- Watershed Trading: permits are an effective mechanism to facilitate cost-effective pollution reduction through watershed trading (see Program Activity Measure WQ-30).
- Watershed Permits: organizing permits on a watershed basis can improve the effectiveness and efficiency of the program (see Program Activity Measure WQ-31).

EPA will continue to work with States to set targets for the percentage of permits that are considered current, with the goal of assuring that not less than 90% of all permits are current by the end of 2007 (see Program Activity Measure WQ-18). In addition, EPA is working with States to expedite reviews of permit renewals and modifications for NPDES permits held by Performance Track facilities.

EPA is also working with States, Tribes, and other interested parties to strengthen the permit program in addressing Concentrated Animal Feeding Operations (i.e., CAFOs). In FY 2005 and 2006, EPA worked with States to update State regulations/statutes where necessary to reflect CAFO requirements based on the 2003 CAFO rule revisions. In FY 2007, EPA and States will work toward a goal of re-scoping the CAFO NPDES permitting programs to address changes required

under the February 2005 *Waterkeeper* court decision while continuing to assure that CAFOs that need NPDES permit coverage receive permits.

In a related effort, EPA will work with States to assure that industrial, construction, and MS4 facilities are covered by current Phase I and Phase II stormwater permits (see Program Activity Measure WQ-19) and to monitor the number of facilities covered by storm water and CAFO permits (see Program Activity Measure WQ-20).

EPA and States will monitor the percentage of significant industrial facilities that have control mechanisms in place to implement applicable pretreatment requirements prior to discharging to publicly owned treatment works. EPA will also monitor the percentage of categorical industrial facilities in non-pretreatment POTWs that have control mechanisms in place to implement applicable pretreatment requirements (see Program Activity Measure WQ-21).

Finally, EPA will track and report on key measures of compliance with discharge permits including the percent of major dischargers and the percent of major sewage treatment plants (POTWs) in significant noncompliance (see Program Activity Measures WQ-22 and WQ-23).

F) Support Sustainable Water Infrastructure: Much of the dramatic progress in improving water quality is directly attributable to investment in drinking water and wastewater infrastructure -- the pipes and facilities that treat the Nation's sewage. But the job is far from over. Communities are challenged to find the fiscal resources to replace aging infrastructure, meet growing infrastructure demands fueled by population growth, and secure their infrastructure against threats. If these challenges are not met, water pollution levels could be similar to those observed in the mid-1970's, thus erasing the gains in water quality that the Nation has achieved.

Today's challenges require a multi-faceted approach to managing infrastructure assets. The Nation must embrace a fundamental change in the way we manage, value, and invest in infrastructure. EPA is developing a Sustainable Infrastructure Strategy, organized around four principles, or "pillars":

- **Better Management** work with utilities and communities to change the paradigm from managing for compliance to managing for sustainability.
- Water Efficiency promote wise water use by consumers and utilities through market enhancement programs for water efficient products, partnerships, and public education.

- Full Cost Pricing help utilities and communities recognize the full
 cost of providing services and implement pricing structures that
 recover these costs.
- The Watershed Approach to help utilities and other stakeholders use watershed approaches to optimize infrastructure management and investment.

In pursuing actions under each of these pillars, EPA will be guided by several cross-cutting themes such as innovation, collaboration with partners, use of new technology, and research focuses on new tools and techniques. Performance measurement will be an integral part of this Strategy. In FY 2007, EPA will work with various stakeholders to identify a series of measures to gauge progress under each of the Pillars and seek ways to incorporate these measures into EPA's *Strategic Plan* in the future (see Program Activity Measure WQ-26).

Also important to the implementation of the Sustainable Infrastructure Strategy are the Clean Water State Revolving Funds (CWSRFs) that provide low interest loans to help finance wastewater treatment facilities and other water quality projects. Recognizing the substantial remaining need for wastewater infrastructure, EPA expects to continue to provide significant annual capitalization to CWSRFs for the foreseeable future. EPA will work with States to assure the effective operation of SRFs including monitoring the fund utilization rate (see Program Activity Measure WQ-24). EPA will also work with facilities receiving loans to monitor progress in the restoration, improvement, and protection of waters (see Program Activity Measure WQ-25).

In a related effort, EPA will work with other Federal agencies to improve access to basic sanitation. The 2002 World Summit in Johannesburg adopted the goal of reducing the number of people lacking access to safe drinking water and basic sanitation by 50% by 2015. EPA will contribute to this work through its support for development of sanitation facilities in Indian country, Alaskan Native villages, and Pacific Island communities using funds set aside from the CWSRF and targeted grants. Other Federal agencies, such as the Department of Interior, U.S. Department of Agriculture, and Department of Housing and Urban Development also play key roles in this area and are working with EPA in this effort. EPA is also working to improve access to drinking water and wastewater treatment in the Mexico Border area (see Section 7 of this *Guidance*).

2) Accelerate Watershed Protection

Strong implementation of core Clean Water Act programs is essential to improving water quality but, by themselves, these efforts are not sufficient to accomplish

the water quality improvements called for in the Agency's *Strategic Plan*. Today's water quality problems are often caused by many different and diffuse sources resulting in an accumulation of problems in a watershed. Addressing these complex problems demands an approach that actively seeks broad public involvement and focuses multi-stakeholder and multi program efforts within hydrologically-defined boundaries to protect, restore and improve water quality.

The National Water Program has sustained and positive experience using a watershed protection approach to focus core program activities and to promote and support accelerated efforts in key watersheds. At the largest hydrologic scales, EPA and its partners operate successful programs addressing the Chesapeake Bay, Great Lakes, and Gulf of Mexico, Lake Champlain, Long Island Sound, Lake Pontchartrain, and National Estuary Program watersheds. Many States, EPA Regions, and their partners have also undertaken important efforts to protect, improve and restore watersheds at other hydrologic scales. Together, these projects provide strong evidence of the value of a comprehensive approach to assessing water quality, defining problems, integrating management of diverse pollution controls, and defining financing of needed projects.

EPA is significantly expanding its work with stakeholders and partners to restore and protect water quality on a watershed basis using innovative financing approaches and strategies beyond those available under the Clean Water Act. These efforts include:

- A) Supporting Local Watershed Protection Efforts: Over the past decade, EPA has witnessed a groundswell of locally-driven watershed protection and restoration efforts. Watershed stakeholders, such as citizen groups, governments, non-profit organizations, and businesses, have come together and created long-term goals and innovative solutions to clean up their watersheds and promote more sustainable uses of their water resources. EPA estimates that there are approximately 6,000 local watershed groups active nationwide.
 - In FY 07, EPA will continue to develop national tools, training, and technical assistance to help community partnerships be more effective at improving watershed health. EPA will help local groups design watershed monitoring, plans and implementation measures. EPA will also support the Community Action for Renewed Environment (CARE) program work with communities to protect watersheds and improve water quality.
- B) Issuing Targeted Watershed Grants: In 2002, EPA began a program to encourage collaborative, community-driven approaches to meet clean water goals. The Agency awarded \$15 million in grants in FY 2003 and 2004 and \$18 million in 2005. An additional \$16 million has been appropriated for FY 2006. Throughout this program EPA will continue to

- support innovative watershed projects to foster targeted watershed protection and restoration activities in an effort to meet the goals of the *Strategic Plan*.
- C) Strengthening Federal Agency Partnerships: EPA is also working at the national level to develop partnerships with other Federal agencies to encourage their participation in watershed protection and to promote delivery of their programs on a watershed basis. For example, EPA will work with USDA to promote coordinated use of Federal resources, including grants under Section 319 and Farm Bill funds.

As described in Section 1 above, EPA is also realigning its core program work to achieve water quality results on a watershed basis. These efforts include:

- A) Watershed Projects to Reduce Nonpoint Pollution: In FY 2003, EPA issued new grant guidelines for the Section 319 program requiring that at least \$100 million be reserved for developing and implementing comprehensive watershed plans. These plans are geared toward restoring impaired waters on a watershed basis while still protecting high quality but threatened waters as necessary. EPA will monitor implementation of these plans (see Program Activity Measure WQ-27)
- B) Tribal Watershed Plans: EPA will work with Tribes to support development of watershed plans by Tribes (see Program Activity Measure WQ-28).
- C) High Priority Permits: Each year, EPA and States define a subset of permits that have high environmental priority, including permits needed to support TMDLs and watershed plans. EPA has asked States to develop schedules for issuing these permits and assure that 95% of the permits are current as scheduled (see Program Activity Measure WQ-29).
- D) Watershed Trading: Implementing core programs at the watershed level is an important first step toward creating a framework for trading of pollution control responsibility among sources in order to reduce the overall cost of attaining water quality goals (see EPA Trading Policy at (http://www.epa.gov/owow/watershed/trading). EPA will set goals for increasing the number of discharge permits providing for trading and monitor the number that actually carry out trades (see Program Activity Measure WQ-30). EPA will also encourage States to adopt provisions in nutrient TMDLs to enable trading.

E) Watershed Permits: Development of discharge permits as part of a larger watershed planning process can result in more efficient management of the permit program and cost-effective control of pollution sources. In FY 07, EPA will continue to encourage development of watershed-based NPDES permits (see Program Activity Measure WQ-31).

Finally, it is important to note that EPA will begin working with States and Tribes in FY 2007 to identify specific watersheds where water quality improvement can be made on a watershed basis (see Program Activity Measure WQ-32).

3) Apply and Adaptive Management Framework

The best way to achieve progress in improving and protecting waters and watersheds is to apply challenging but realistic goals, and address opportunities associated with developing programs and building partnerships at the watershed level. Over the next five years, EPA expects to use this adaptive management framework to manage both core programs and accelerated watershed protection efforts in order to accomplish the five-year goals for watershed and water quality improvement expressed in the *Strategic Plan*. Without this adaptive management process, progress toward measurable improvements in the Nation's waters will occur in a haphazard and unpredictable manner.

Regional Watershed Game Plans

National initiatives to foster watershed management are important, but significantly expanding the level of watershed management will require expanded efforts by Regions and States to develop and implement protection plans for specific watersheds. In planning for FY 07, EPA Regions have developed "Watershed Game Plans" for watershed restoration using a common set of key elements. The Game Plans help Regions identify key activities that Regions should undertake to improve progress in meeting and measuring water quality goals. In developing its "Watershed Game Plan" each Region considered the following questions:

- **Inventorying/Measuring/Accounting**: How will we address data management, identify current actions, and develop tracking systems?
- **Targeting:** Where are we working or want to work, where can we make a difference for water quality? Where is the greatest bang for buck— across all programs and funding? Could we develop more documented approaches?
- **Directing**: What resources, financial, technical assistance, programmatic assistance, leveraged assistance, etc, can we bring to bear on these areas we plan to target and emphasize? Can grant guidance help?

• **Engaging**: Who do we need to bring along to make things happen on the ground and get the desired results? What capacity to we need to be building for watershed work that will be sustainable?

Regions are encouraged to use some or all of the following strategies in marshaling resources to support Watershed Game Plans:

- realign water programs and resources as needed, including proposal of reductions in allocations among core water program implementation as reflected in commitments to annual program activity measure targets;
- coordinate Regional Watershed Game Plans with Targeted Watershed Grants;
- coordinate the Regional Watershed Game Plan with Section 319 funds reserved for development of watershed plans;
- make effective use of water quality planning funds provided under Section 604(b) of the Clean Water Act;
- make effective use of Regional Geographic Initiative Funds in the Region;
- leverage resources available from other Federal agencies, including the US Department of Agriculture; and
- apply funds appropriated by Congress for watershed or related projects.

Defining Waterbody Restoration Goals

EPA recognizes that each EPA Region and each State needs to identify the mix of watershed approaches that best suits its needs. Regardless of the specific mix of watershed approaches adopted, however, each Region and State should commit to accelerating implementation of core programs on a watershed basis, expanding support for local watershed protection, and expanding watershed protection in key watersheds.

In the same way that each Region should work with States to define the best mix of watershed approaches, Regions and States should also work together to define the extent to which implementation of watershed approaches can be accelerated over the next five years. In defining the rate of acceleration of watershed approaches, Regions and States should use both the waterbody and watershed restoration and improvement goals in the EPA *Strategic Plan* as a point of reference while taking into account the extent of pollution problems and restoration work already underway.

In 2000, States identified some 21,632 specific waterbodies as impaired (i.e. not attaining State water quality standards) on lists required under Section 303(d) of the Clean Water (see Section A.2 on page 21). Although core programs contribute to improving these impaired waters, success in restoring the health of impaired waterbodies requires a waterbody specific focus to define the problem and implement specific steps needed to reduce pollution. In addition, success in restoring a significant percentage of impaired waterbodies requires setting interim and long-term goals to guide this work.

Nationally, EPA has adopted a goal of restoring 25% of those waters identified as impaired by 2012 or 5,408 waters. This goal is included in the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) *Strategic Plan*. Table III below provides information about the distribution of impaired waters across EPA Regions.

TABLE III: Water Segment Restoration Targets by Region/Nation (Measure L)						
Region	Impaired Waters (2000)	FY 2005 Actual Restoration	FY 2006 Commitment (cumulative)1	FY 2007 Target cumulative/ annual	Proportional Share of FY 2012 Goal (cumulative)	
1	1,909	67	72	278/206	477	
2	1,866	137	137	137/0	466	
3	3,321	210	210	475/265	830	
4	3,808	419	419	500/81	952	
5	2,761	419	500	500/0	690	
6	1,241	97	97	120/23	310	
7	1,555	337	404	404/0	389	
8	1,075	192	241	241/0	269	
9	673	9	40	52/12	168	
10	3,423	68	115	162/47	856	
Totals	21,632	1955 (9%)	2,235 (10.3%)	2,869 (13.2%) 634(2.9%)	5,408 (25%)	

^{1:} NOTE: In some Regions, actual results at the end of FY 2005 exceeded the expected FY 2006 commitment. This column reflects the higher of the 05 end-of-year result or the expected 06 commitment

In addition, States and Regions have indicated that the time-frame for full restoration of impaired waters can be long and that the significant program efforts to put plans in place to restore waters need to be better recognized. Recognizing this issue, EPA will work with States to report the number of impaired water segments where restoration planning will be complete by the end of FY 07 (see Program Activity Measure WQ-33). The completion of planning is an essential, intermediate step toward full restoration of a waterbody and can be documented more quickly and easily than actual waterbody improvement. In general, planning for restoration is complete when all the pollutant specific Total Maximum Daily Loads (TMDLs) for the waterbody are approved by EPA, or a watershed restoration plan that is an acceptable substitute for a TMDL, is complete.

In identifying segments for which planning is complete, or will be complete in FY 07, Regions and States should give priority to these segments where a coordinated effort to address multiple segments is likely to result in progress on a larger, watershed basis. EPA encourages States to develop TMDLs or related segment plans on a watershed basis wherever possible.

Commitments developed over the Summer of 2006 based on this *Guidance* should be the best effort by the Regions and States to restore impaired waters based on an affirmative effort to redesign and refocus program priorities and delivery methods where this is necessary to meet or exceed water restoration targets. In the event that a Region finds that existing program delivery and alignment is not likely to result in a significant contribution to national goals, the Region should use the process of developing the Watershed Game Plan as an opportunity to work with States to rethink and redesign the delivery of clean water programs to more effectively protect, improve and restore waterbodies and watersheds.

C) Grant Program Resources

Key program grants that support this subobjective are:

- the Clean Water Act Section 106 Water Pollution Control State Program grants;
- the Clean Water Act Section 319 State program grant for nonpoint pollution control, including set-aside for Tribal programs;
- Targeted Watershed Assistance grants;
- Alaska Native Village Water and Wastewater Infrastructure grants;
- Clean Water State Revolving Fund capitalization grants, including set-asides for planning under Section 604(b) of the Clean Water Act and for grants to Tribes for wastewater treatment infrastructure.

For additional information concerning these grants, see the grant program guidance website at (http://www.epa.gov/water/waterplan).



5) Protect Coastal and Ocean Waters

Estuaries and coastal waters are among the most productive ecosystems on Earth, providing numerous ecological, economic, cultural, and aesthetic benefits and services. They are also among the most threatened ecosystems, largely as a result of rapidly increasing growth and development. About half of the U.S. population now lives in coastal areas and coastal counties are growing three times faster than counties elsewhere in the Nation. Overuse of resources and poor land use practices have resulted in a host of human health and natural resource problems.

A) Environmental/Health Results Expected

Environmental results identified in the EPA *Strategic Plan* related to protecting coastal and ocean waters are:

1) 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 used in periodic reports in 2001, 2005, and 2007.

2002 Baseline: "fair/poor" or 2.4 2006 Commitment: 2.7

2005 Actual: 2.7 **2007 Target: 2.8** 2008 Target: 2.6*

2) Maintain water clarity and dissolved oxygen in coastal waters at the national levels reported in the 2002 National Coastal Condition Report.

2002 Baseline: 4.3 for water clarity; 4.5 for dissolved oxygen 2005 Actual: 2.6 for water clarity and 4.6 for dissolved oxygen

2006Target: Maintain clarity; DO to 4.6

2007 Target: 3.4 for clarity and 4.6 for dissolved oxygen

2008 Target: Maintain*

- 3) Improve ratings reported on the national "good/fair/poor" scale of the National Coastal Condition Report for:
 - Coastal wetlands loss:

2002 Baseline: 1.4 2006 Commitment: 1.7

2005 Actual: 1.7 **2007 Target: 1.8** 2008 Target: 1.6*

• Contamination of sediments:

2002 Baseline: 1.3 2006 Commitment: 2.1

2005 Actual: 2.1 **2007 Target: 2.2** 2008 Target: 1.5*

• Benthic quality:

2002 Baseline: 1.4 2006 Commitment: 2.0

2005 Actual: 2.0 **2007 Target: 2.1** 2008 Target: 1.6*

• Eutrophic conditions:

2002 Baseline: 1.7 2006 Commitment 3.0

2005 Actual: 3.0 **2007 Target: 3.1** 2008 Target: 1.9*

4) Working with National Estuary Program partners, protect or restore additional acres of habitat within the study areas for the 28 estuaries that are part of the NEP.

2002 Baseline: 0 acres restored 2005 Actual: 449,242 (cumulative)

2006 Commitment: 26,358 (annual addition)

2007 Target: 75,000 (annual addition; Regional targets under review)

2008 Target: 250,000 * (cumulative)

B) Key National Strategies

For Fiscal Year 2007, EPA's national strategy for improving the condition of coastal and ocean waters will include key elements identified below:

- improve coastal monitoring and assessment;
- support State programs for coastal protection;
- implement the National Estuary Program; and
- protect ocean resources.

1) Coastal Monitoring and Assessment

EPA has made improved monitoring of water conditions a top priority for coastal as well as inland waters. In FY 2007, the National Water Program will work with the EPA Office of Research and Development to develop the third national Coastal Condition Report describing the health of the major marine eco-regions around the United States (see Program Activity Measure CO-1). This report will build on past Reports in 2002 and 2005 and will allow for valid trend assessment. These assessments are the basis for the environmental measures of progress used in the EPA *Strategic Plan*.

Starting in FY 2007, EPA will monitor changes in the condition of coastal waters that States have identified as not meeting State water quality standards under the Clean Water Act and track progress in the restoration of these waters (see Program Activity Measure CO-2). In a complementary effort, EPA will also monitor restoration of impaired waters within National Estuary Program (NEP) study areas (see Program Activity Measure (CO-4).

^{* 2008} Target fixed in EPA Strategic Plan; to be revised FY 07

EPA has also recently acquired a new Ocean Survey Vessel (OSV), the *OSV Bold*, to replace the *OSV Peter W. Anderson*. The *Bold* is larger and more versatile than the *Anderson*, and has greatly increased the diversity of monitoring activities that EPA will undertake.

2) State Coastal Programs

States play a critical role in protection of coastal waters through the implementation of core Clean Water Act programs, ranging from permit programs to financing of wastewater treatment plants. States also lead the implementation of efforts to assure the high quality of the Nation's swimming beaches, including implementation of the BEACH Act (see the Water Safe for Swimming Subobjective).

In addition, States work with both EPA and the National Oceanic and Atmospheric Administration (NOAA) in the implementation of programs to reduce nonpoint pollution in coastal areas. In FY 2007, EPA will continue work with States to assist in the full approval of coastal nonpoint control programs in all coastal States.

Starting in FY 2007, EPA will expand efforts to work with States to identify coastal areas which might benefit from the adoption of "no discharge zones" to control sewage discharges from vessels and will monitor the number of miles of shoreline protected by "no discharge zones" (see Program Activity Measure CO-3).

3) Implement the National Estuary Program

The National Estuary Program (NEP) provides inclusive, community-based planning and action at the watershed level, through a collaborative system of 28 nationally significant estuaries. The NEP is a highly visible program that plays a critical role in conserving the Nation's most valuable coastal and ocean resources.

A top priority for FY 2007 is to continue supporting the efforts of all 28 NEP estuaries to implement their Comprehensive Conservation and Management Plans (CCMPs). One measure of NEP success is the number of priority actions in these plans that have been initiated and the number that have been completed. EPA tracks the number of these priority actions initiated and completed (see Program Activity Measure CO-5). EPA also tracks the cumulative dollar amount of the resources leveraged by EPA grant funds (see Program Activity Measure CO-6).

The health of the nation's estuarine ecosystems also depends on the maintenance of high-quality habitat. As a result, one of the environmental outcome measures under the Ocean/Coastal Subobjective (see A.4 above) is protecting or restoring additional habitat acres within the NEP study areas. For FY 2007, EPA has set a goal of protecting or restoring an additional 75,000 acres of habitat within the NEPs.

Starting in FY 2007, EPA will also monitor changes in the condition of National Estuary Program waters that States have identified as not meeting State water quality standards under the Clean Water Act and track progress in the restoration of these waters (see Program Activity Measure CO-4).

4) Ocean Protection Programs

Several hundred million cubic yards of sediment are dredged from waterways, ports, and harbors every year to maintain the Nation's navigation system. All of this sediment must be disposed of safely. EPA and the U.S. Army Corps of Engineers (COE) share responsibility for regulating how and where the disposal of sediment occurs.

EPA and COE will focus on improving how disposal of dredged material is managed, including designating and monitoring disposal sites and involving local stakeholders in planning to reduce the need for dredging (see Program Activity Measure CO-7). EPA will use the capability provided by the OSV Bold to monitor compliance with environmental requirements at ocean disposal sites (see Program Activity Measures CO-8 and CO-9).

One of the greatest threats to U.S. ocean waters and ecosystems is the uncontrolled spread of invasive species. Invasive species commonly enter U.S. waters through the discharge of ballast water from ships. In FY 2007, EPA will assist the U.S. Coast Guard in its efforts to develop ballast water exchange requirements and discharge standards and will work with other nations for effective international management of ballast.

C) Grant Program Resources

Grant resources directly supporting this work include the National Estuary Program grants and coastal nonpoint pollution control grants under the Coastal Nonpoint Pollution Control Program administered jointly by EPA and the National Oceanic and Atmospheric Administration (Section 6217 grant program). In addition, clean water program grants identified under the watershed subobjective support this work. For more information, see the grant guidance website (http://www.epa.gov/water/waterplan).



6) Protect Wetlands

Wetlands are among our Nation's most critical and productive natural resources. They provide a variety of benefits, such as water quality improvements, flood protection, shoreline erosion control, and ground water exchange. Wetlands are the primary habitat for fish, waterfowl, and wildlife, and as such, provide numerous opportunities for education, recreation, and research. EPA recognizes that the challenges the Nation faces to conserve our wetland heritage are daunting and that many partners must work together for this effort to succeed.

Over the years, the United States has lost more than 115 million acres of wetlands to development, agriculture, and other uses. Today, the Nation may be entering a period of annual net gain of wetlands acres for some wetland classes. Still, many wetlands in the U.S. are in less than pristine condition and many created wetlands, while beneficial, fail to replace the diverse plant and animal communities of wetlands lost.

The 2006 National Wetlands Inventory Status and Trends Report, released by the U.S. Fish and Wildlife Service (FWS), reports the quantity and type of wetlands in the conterminous United States. Although the report shows that overall gains in wetland acres exceeded overall losses from 1998 through 2004, this gain is primarily attributable to an increase in unvegetated freshwater ponds, some of which (such as aquaculture ponds) may not function as wetlands and others of which may have varying functional value. The report notes the following trends in other wetland categories: freshwater vegetated wetlands declined by 0.5%, a smaller rate of loss than in preceding years; and estuarine vegetated wetlands declined by 0.7%, an increased rate of loss from the preceding years. The report does not assess the quality or condition of wetlands. EPA will work with FWS and other Federal agencies to refine the methodology used in preparing future reports to assess the status and trends of both the quantity and quality of the Nation's wetlands.

A) Environmental/Health Results Expected

Environmental and public health results identified in the EPA *Strategic Plan* related to protection of wetlands are:

1) Working with partners, achieve a net increase of acres of wetlands per year with additional focus on biological and functional measures.

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

2004 Actual: 32,000 acres annual net gain 2006 Commitment: 200,000 (cumulative)

2007 Target: 100,000 per year (300,000 cumulative)

2008 Target: 100,000 per year (400,000 cumulative)

Data Source: Fish and Wildlife Service Wetland Status and Trends Report, 1998-

2004 (see above discussion)

2) Annually, beginning in FY 2004, work with the U.S. Army Corps of Engineers (COE) and other partners to achieve no net loss of wetlands under Section 404 of the Clean Water Act regulatory program.

2006 Commitment: No net loss 2007 Target: No net loss 2008 Target: No net loss

Data Source: Corps of Engineers ORM database.

The President's Earth Day 2004 Wetlands Initiative announced a performance-based goal to restore, enhance, and protect at least three million wetland acres over the next five years. In support of this goal, EPA and other Federal agencies will work closely with Federal, State, Tribal, local, and private entities to implement a coordinated program to protect wetlands.

B) Key National Strategies

EPA's Wetlands Program combines technical and financial assistance to state, tribal and local partners with outreach and education and wetlands regulation under Section 404 of the Clean Water Act for the purpose of restoring, improving and protecting wetlands in the U.S. Objectives of EPA's strategy include helping states and tribes build wetlands protection program capacity and integrating wetlands and watershed protection.

- Net Gain Goal: Meeting the "net gain" element of the wetland goal will be primarily accomplished by other Federal programs (Farm Bill agriculture incentive programs and wetlands acquisition and restoration programs, including those administered by Fish and Wildlife Service) and non-federal programs. EPA will improve levels of wetland protection by States and other Federal programs through actions that include:
 - working with and integrating wetlands protection into other EPA programs such as Clean Water Act Section 319, State Revolving Fund, National Estuary Program, and Brownfields;
 - providing grants and technical assistance to State, tribal or local organizations; and
 - developing information, education and outreach tools.
- No Net Loss: EPA contributes to achieving no overall net loss of wetlands through the Wetlands regulatory program established under Section 404 of the Clean Water Act (CWA). The U.S. Army Corps of Engineers and EPA jointly administer the Section 404 program which regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

EPA will continue to work with the US Army Corps of Engineers to ensure application of the 404(b)(1) guidelines which require that discharges of dredged or fill material into waters of the U.S. be avoided and minimized to the extent practicable and unavoidable impacts are compensated. Each Region will also identify opportunities to partner with the Corps in meeting performance measures for compensatory mitigation. At a minimum, these include:

- participation in joint impact and mitigation site inspections;
- participation on Mitigation Bank Review Team activities;
- assistance on development of mitigation site performance standards and monitoring protocols; and
- enhanced coordination on resolution of enforcement cases.

For FY 2007, EPA expects to track the following key activities for accomplishing its wetland goals:

President's Initiative – Among the several federal agencies working to meet the President's wetlands goal, EPA's commitment is to achieve an increase of at least 6,000 acres of restored wetlands and 6,000 acres of enhanced wetlands over the five-year period (1,200 acres per year in each category). EPA will track this commitment as a sub-set of the overall net gain goal and will track and report the results separately under Program Activity Measure WT-1. These acres may include those supported by Wetland Five-Star Restoration Grants, the National Estuary Program, Section 319 nonpoint source grants, Brownfield grants, or EPA's Great Waterbody Programs, and other EPA program. This does not include enforcement or mitigation acres.

State/Tribal Programs: A key activity is building the capacity of States and Tribes in wetland monitoring, regulation, restoration, water quality standards, mitigation compliance and partnership building. Program Activity Measure WT-2 is meant to reflect EPA's goal of increasing State and Tribal capacity in wetlands protection. In reporting progress under the measure, EPA will be looking for substantial progress toward the state or tribe's wetland program development in three of the six elements of the measure (i.e. monitoring, regulation, restoration, water quality standards, mitigation compliance, and partnership building) during the last three years.

Watershed Protection: EPA will continue to support state and tribal watershed based wetlands and stream corridor projects. Program Activity Measure WT-3 tracks projects which EPA has provided significant financial or technical assistance to the development or implementation of watershed based wetlands and stream corridor projects. This measure is reported cumulatively and states and tribes will be tracked separately.

Wetland Monitoring: In March 2003, EPA released guidance to States outlining the Elements of a State Water Monitoring and Assessment Program that recommended including wetlands as part of that program. This was followed in April of 2006 by release of an "Elements" document specific to wetlands to help EPA and State program managers plan and implement a wetland monitoring and assessment program within their water monitoring and assessment programs.

EPA will continue to work with States and Tribes to build the capability to monitor trends in wetland condition as defined through biological metrics and assessments and has the goal of at least fourteen states using these methods by 2008. Program Activity Measure WT-4 is meant to put a spotlight on the further development of state wetland monitoring and assessment activities. The target is that by 2008 at least fourteen States will have measured and reported on the trend in wetland condition in the state using biological metrics and assessments. The target is meant to reflect cumulative achievements expected by 2008. States are counted as meeting this measure where they have generated baseline wetland condition, ideally for at least 20% of the State, and are on track to resurvey and report any change in that condition by 2008. Baseline condition may be established using landscape assessment (Tier I).

Regions and States are encouraged to be as creative and rigorous as possible in conducting these wetland assessments, resources permitting. The monitoring design should include some Tier 2 (Rapid Assessment) and/or Tier 3 (Intensive Site Assessment) monitoring to ground truth and calibrate the Tier 1 (Landscape Assessment) method. There is a high degree of flexibility in designing the assessment protocols, however all assessment approaches must be well documented and defensible and ultimately provide a systematic method for reporting on wetland condition.

C) Grant Program Resources

Examples of grant resources supporting this work include the Wetland Program Development Grants, Five Star Restoration Grants, the Clean Water Act Section 319 Grants, the Brownfields grants, and the National Estuary Program Grants. For additional information concerning these grants see the grant program guidance website at (http://www.epa.gov.water/waterplan).



7) Protect Mexico Border Water Quality

The United States and Mexico have a long-standing commitment to protect the environment and public health in the U.S.-Mexico Border Region. The U.S.-Mexico Border 2012 Program, a joint effort between the U.S. and Mexican governments, will work with the 10 border States and with border communities to improve the region's environmental health.

A) Environmental/Health Results Expected

Environmental and public health results identified in the new EPA *Strategic Plan* related to water quality along the Mexico Border are:

1) Achieve a majority of currently exceeded water quality standards in impaired reaches or segments of significant shared and transboundary surface waters.

2003 Baseline: 42 water quality impairments/sources identified for 19 reaches or

segments of significant shared and transboundary surface waters.

2006 Commitment: N/A

2007 Target: N/A 2012 Target: Achieve 21 impairments/sources

2) Increase the number of homes connected to potable water supply a wastewater collection and treatment systems.

2002 Baseline: 790,000 2005 Target: 1.5 M

2005 Actual: 1.163 M

NOTE: Tracking of this measure ended in 2005. EPA is proposing to include new measures relating to access to safe drinking water and basic sanitation in the new Agency strategic plan to be adopted in October of 2006. This FY 2007 *Guidance* includes the same measures as Program Activity Measures. EPA will track progress under the measures in FY 2007, without setting a target, and track progress against targets in FY 2008 and subsequent years.)

B) Key Strategies

The basic approach to improving the environment and public health in the U.S. Mexico Border Region is the Border 2012 Plan. Under this Plan, EPA expects to take the following key Actions to improve water quality and protect public health.

- 1) Core Program Implementation: EPA will continue to implement core programs under the Clean Water Act and related authorities, ranging from discharge permit issuance, to watershed restoration, to nonpoint pollution control.
- Wastewater Treatment Financing: Federal, State, and local institutions participate in border area efforts to improve water quality through the construction of infrastructure and development of pretreatment programs. Specifically, Mexico's National Water Commission (CNA) and EPA provide funding and technical assistance for project planning and construction of infrastructure.

Congress has provided \$725 million for Border infrastructure from 1995 to 2004. The International Boundary and Water Commission (IBWC) also provided assistance in the development of infrastructure facilities. For FY 2007, EPA expects to be able to provide approximately \$25 million for these projects. EPA will continue working with all its partners to leverage available resources to meet priority needs.

Build Partnerships: Partnerships are critical to the success of efforts to improve the environment and public health in the Border Region. Since 1995, the NAFTA-created institutions, the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADB), have had the primary role in working with communities to develop and construct infrastructure projects. BECC supports efforts to evaluate, plan, and implement financially and operationally sustainable water and wastewater projects; NADB helps project sponsors develop the appropriate financial package. EPA will continue to support these institutions.

In FY 2007, EPA will establish a workgroup with Mexico to develop a workplan to define specific steps needed to accomplish the water quality improvement goals expressed in the Border 2012 Plan.

4) Improve Measures of Progress: During FY 2007, EPA will work with Mexico, States, Tribes, and other institutions to improve measures of progress toward water quality and public health goals.

C) Grant Program Resources

A range of program grants are used by States to implement core programs in the U.S. Mexico Border Region. Allocations of the funding available for infrastructure projects are not provided through guidance, but through a collaborative and public prioritization process.



8) Protect the Great Lakes

As the largest surface freshwater system on the face of the earth, the Great Lakes ecosystem holds the key to the quality of life and economic prosperity for tens of millions of people. While significant progress has been made to restore the environmental health of the Great Lakes, much work remains to be done.

A) Environmental/Health Results Expected

Environmental and public health results identified in EPA's *Strategic Plan* related to the Great Lakes are:

1) 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 2006 Commitment: 21

2005 Actual 21.9 **2007 Target: 21** 2008 Target: 22

2) Reduce the average concentrations of PCBs in whole lake trout and walleye samples from 2000 levels (average long term decline):

2005 Actual: 6.2% 2006 Commitment: 5%

2007 Target: 5% decline 2008 Target: 25% (cumulative)

Reduce the average concentrations of toxic chemicals (PCBs) in the air in the Great Lakes basin from 2000 levels (average long term decline):

2005 Actual: 7% 2006 Commitment: 7% decline **2007 Target: 7%** 2008 Target: 30% (cumulative)

4) Restore and de-list Areas of Concern within the Great Lakes basin:

2002 Baseline: 0 AOCs restored 2006 Commitment: 2

2005 Actual: 0 **2007 Target: 3** 2010 Target: 10

5) Remediate cubic yards of contaminated sediment in the Great Lakes:

2002 Baseline: 2.1 million 2006 Commitment: 4 2008 Target: 3.3

2005 Actual: 3.7 **2007 Target: 4.5**

B) Key Strategies

In May 2004, President Bush signed a Presidential Executive Order recognizing the Great Lakes as a national treasure, calling for the creation of a "Regional Collaboration of National Significance" and a cabinet-level interagency Task Force. The President's May 2004 Executive Order established the EPA Administrator as the chair of a ten-member Great Lakes Interagency Task Force, one purpose of which is to ensure that their programs are funding effective, coordinated, and environmentally sound activities in the Great Lakes system.

More than 1,500 people representing Federal, State, local and tribal governments; nongovernmental entities; and private citizens participated in the Great Lakes Regional Collaboration (GLRC) on eight issue-specific Strategy Teams to develop a *Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes*, presented in December, 2005. Teams focused on:

- Aquatic Invasive Species
- Habitat/Species
- Coastal Health
- Areas of Concern/Sediments
- Nonpoint Source
- Toxic Pollutants
- Indicators and Information
- Sustainable Development

EPA, and the Interagency Task Force, is using the *Strategy* as a guide for Great Lakes protection and restoration. The Administration has committed to begin implementing 48 near term activities that address issues in all eight of the priority areas identified in the Strategy. Highlights from among those activities include:

- fully implementing the Great Lakes Legacy Act to remediate contaminates sediments in Great Lakes Areas of Concern (see Program Activity Measure GL-3);
- establishing a communication network among Federal agencies to coordinate response to newly identified aquatic invasive species in response to requests for assistance from State or local authorities, including rapid assessment of needed actions and prompt determination of who has the resources and expertise to assist in taking action;
- developing a system to track and report on the GLRC wetlands goal to enhance and
 protect 200,000 acres of wetlands in the Great Lakes basin, including activities such as
 an inventory of potential restoration sites, developing performance measures for
 prioritizing actions, applying the performance measures to the actions in an inventory,
 and identifying existing programs that could potentially implement the actions);
- developing a standardized sanitary survey form for use by the State and local governments, including support for implementation pilots using the new survey form in FY 2007;

- improved policy guidance on managing peak flows at sanitary sewer plants to reduce overflows;
- surveillance for emerging chemicals of concern; and
- work with the Army Corps of Engineers to expedite the processing and review of permits for projects to restore wetlands and other aquatic habitat.

Progress under the *Great Lakes Strategy* is dependent on continued work to implement core Clean Water Act programs. These programs provide a foundation of water pollution control that is critical to the success of efforts to restore and protect the Great Lakes. While the Great Lakes face a range of unique pollution problems (extensive sediment contamination) they also face problems common to most other waterbodies around the country. Effective implementation of core programs such as discharge permits, nonpoint pollution controls, wastewater treatment, wetlands protection, and appropriate designation of uses and criteria must be fully and effectively implemented throughout the Great Lakes Basin.

In addition, for the Great Lakes Basin, EPA will focus on two key measures of core program implementation -- improving the quality of major discharge permits and implementing the national Combined Sewer Overflow (CSO) Policy.

In the case of discharge permits, EPA has a goal of assuring that 100% of the major, permitted discharges to the Lakes or major tributaries have permits that reflect the most current standards by 2008. This is an increase from the 2002 baseline of about 37%. The FY 2007 target for this measure is 91% of permits (see Program Activity Measure GL-1).

In the case of the CSO Policy, EPA has a goal of 100% of permits being consistent with the Policy. The 2002 baseline is 83% of permits consistent with the Policy and the FY 2007 target is 91% of permits (see Program Activity Measure GL-2).

Making recreational waters of the Great Lakes safe for swimming is a common goal of the EPA *Strategic Plan* and other EPA Regional and Great Lakes plans. In FY 2007, EPA will work with States to both improve the State water quality standards for bacteria in recreational waters and to implement the BEACH Act (see Section 3 of this *Guidance*). EPA has a goal of assuring that 100% of high priority beaches around the Great Lakes are served by water quality monitoring and public notification programs consistent with the BEACH Act guidance (see Program Activity Measure GL-4). EPA's Great Lakes National Program Office will continue to work with Regions and States to make and track progress toward a goal of 90% of monitored, high priority Great Lakes beaches meeting bacteria standards more than 95% of the swimming season.

C) Grant Program Resources:

The Great Lakes National Program Office negotiates grants resources with States and Tribes, focusing on joint priorities for Lakewide Management Plans and Remedial Action Plans. The Great Lakes National Program Office also issues solicitations for projects furthering

protection and clean up of the Great Lakes ecosystem. Priorities are expected to include Contaminated Sediments, Pollution Prevention and Toxics Reduction, Habitat (Ecological) Protection and Restoration, Invasive Species, Strategic or Emerging Issues, and specific Lakewide Management Plan or Remedial Action Plan (LaMP/RAP) Priorities (http://www.epa.gov/glnpo/fund). Additional information concerning these resources is provided in the grant program guidance website (http://www.epa.gov/water/waterplan).



9) Protect and Restore Chesapeake Bay

The Chesapeake Bay is the largest estuary in the United States and a water resource of tremendous ecological and economic importance. For over twenty years, efforts to protect and restore the Bay have been led by the Chesapeake Executive Council (CEC) made up of Bay area governors, the mayor of the District of Columbia, the EPA Administrator, and the chair of the Chesapeake Bay Commission, a tri-state legislative body. This regional partnership has defined environmental improvements needed in the Bay and developed a strategy that blends regulatory, voluntary, and incentive processes under its current agreement, *Chesapeake 2000*.

The Chesapeake Bay Program (CBP) 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 nutrient trading.

A) Environmental and Health Results Expected

The chief goal of Bay water quality restoration is protection of living resources and aquatic habitat. While the Program uses many indicators, two key measures of success in achieving improved Bay water quality will be the restoration of submerged aquatic vegetation (SAV) and the attainment of dissolved oxygen (DO) standards.

- The Chesapeake Bay Program's long-term goal for SAV restoration in the Bay is 185,000 acres. In FY 1985, only 21% of this goal was achieved (38,211 acres). In FY 2005, 72,935 acres or 39% of the goal was achieved. The FY 2007 target is to achieve 41% (75,850 acres). (Note: EPA has also reported 89,659 acres for FY 05 performance based on the "single best year" of acreage achieved during the three-year period FY 2003-2005. The single best acreage year occurred in FY 2003.)
- The Chesapeake Bay Program's long-term goal for DO restoration in the Bay is 100% attainment of standards in all tidal waters of the Bay. In FY 1988, only 16% of this goal was achieved. In FY 2005, 34% of the goal was achieved. The FY 2007 target is to achieve 36%.

To achieve SAV and DO restoration goals, the Chesapeake Bay Program partners committed to reducing nutrient and sediment pollution loads sufficiently to remove the Bay and the tidal portions of its tributaries from the list of impaired waters. Bay watershed models estimate that annual nitrogen (N) loadings must be reduced 162 million pounds (M lbs) from 1985 levels to no more than 175 M lbs; phosphorus (P) must be reduced 14.3 M lbs to no more than 12.8 M lbs; and sediment (S) must be reduced 1.68 M tons per year to no more than 4.15 M tons (based on average rainfall simulations).

1) Reduction in number of pounds of nitrogen entering the Bay each year from 1985 levels:

2002 Baseline: 52.8 M lbs. (33%) 2006 Commitment: 74 (45.5%) 2005 Actual: 67 (41%) 2007 Target: 76.38 (47%)

2) Reduction in number of pounds of phosphorus entering the Bay each year from 1985 levels:

2002 Baseline: 8 M lbs. (56%) 2006 Commitment: 8.7 (61%) 2005 Actual: 8.39 (58%) 2007 Target: 9.19 (64%)

3) Reduction in tons of sediment entering the Bay each year from 1985 levels:

2002 Baseline: 0.8 M tons (47%) 2006 Commitment: 1.06 (63%) 2005 Actual: 0.9 (54%) 2007 Target: 1.03 (61%)

B) Key Strategies

Progress on Bay restoration must be accelerated substantially as the restoration goal of 2010 approaches. The water quality standards and permitting approach, which applies to over 450 facilities basin wide, will speed up nutrient reductions from wastewater facilities. The cost of implementing all tributary strategies is an estimated \$28 billion, with only a fraction of the funds being currently available. This places a premium on improving access to available assistance programs and targeting them to measures that yield the greatest water quality benefit for the expenditure.

CBP partners are emphasizing implementation of the most cost-effective BMPs, using the Program's analytical capability. Priorities for funding restoration measures were established by CBP leaders in 2005 to help focus available resources. EPA and its partners are also funding watershed projects to test the effectiveness of key nonpoint source BMPs and spur innovations such as better technology and market incentives. In order to accelerate the pace of water quality and aquatic habitat restoration, EPA and Bay area States are taking a number of steps to make the most cost-effective use of available regulatory, incentive and voluntary tools, including the following key actions for FY 2007:

- fully implement base clean water programs in the Bay;
- accelerate Bay cleanup by focusing on the most cost-effective nutrient-sediment control and habitat restoration measures;
- enhance use of monitoring, modeling and demonstration projects to target and assess the effectiveness of restoration actions;
- strengthen accountability for implementation of restoration measures; and
- use the CBP federal partnership for cooperative conservation to improve access to available financial and technical assistance programs, and link federal programs to CBP's strategic priorities.

1) Core Programs: Core Clean Water Act programs provide a foundation of water pollution control and wetlands protection that is critical to protecting and restoring Chesapeake Bay tidal waters. Clean Air Act regulations controlling emissions of nitrogen compounds also contribute substantially to Bay restoration.

A 2005 study identified ways to use EPA's regulatory authorities more effectively to advance Bay restoration, and these recommendations will be implemented in FY 2006-7. EPA and watershed States will set stronger nutrient limits for wastewater facilities under the Chesapeake Bay permitting approach, increasing use of SRF low interest loans for financing municipal wastewater treatment improvements. New NPDES CAFO permit requirements will be put in place. To curb urban/suburban storm water loads and damage to the watershed's carrying capacity from rapidly-increasing impervious surface acreage and loss of riparian buffers, EPA will cooperate with State and local partners to strengthen implementation of NPDES MS4 and construction permit requirements.

2) Cost-effective Nutrient and Sediment Reduction:

Wastewater treatment: CBP partners have already taken steps to increase the costeffectiveness of nutrient controls in wastewater treatment, by supporting demonstrations of biological nitrogen removal and justifying use of annual load limits in NPDES permits. States will accelerate new NPDES requirements by watershed permits (and nutrient trading) in at least two jurisdictions.

Agriculture: The tributary strategies define specific, localized approaches for reducing nutrient and sediment loads from agricultural operations, the largest category of sources. They emphasize agricultural BMPs such as nutrient management, low/no-till cultivation, cover crops and forest buffer restoration, which are among the most cost-effective of all measures for controlling nutrient-sediment pollution loads. EPA and State partners will integrate tributary strategy implementation with Farm Bill programs.

CBP's animal manure management strategy emphasizes innovative measures such as animal feed adjustment, and encourages markets for manure-based products, such as soil amendment on federal and state lands. Watershed projects, such as the Corsica River, will be supported to demonstrate effectiveness of combined BMPs. Streamside forest buffers (see Program Activity Measure CB-2) will be expanded to achieve 53% of the forest buffer planting goal in FY 2007. Additional information concerning this measure is available on the Internet at (http://chesapeakebay.net/status.cfm?sid=83).

Urban/suburban lands: The 2004 CBP Blue Ribbon Finance Panel stressed that storm water pollution prevention, coupled with preservation of riparian forest buffers and wetlands, was by far the most cost-effective approach to controlling pollution from urban/suburban development, and the CEC agreed that EPA and State partners should strengthen these efforts.

The 2006-7 goal is to establish and implement a basin-wide consensus on principles and standards for regulating new development and redevelopment, linking federal, State and local programs and emphasizing "low impact development", preservation of natural streamside buffers, increased urban tree canopy and wetlands restoration, with watershed approaches including trading and restoration banking.

3) Better Assessment and Targeting

EPA is upgrading its watershed modeling capability, to improve tributary strategy planning and assessment. In FY 2007, the Chesapeake Bay Phase 5 Watershed Model will be calibrated and verified for management application. EPA and USACE are upgrading the Chesapeake Bay water quality model and are cooperating with USGS, NOAA and USDA to organize an assessment of regional sediment management.

In 2004, EPA, USGS and Bay States adopted a basin wide non-tidal monitoring network, integrated with USGS gages and State Clean Water monitoring but tailored to monitoring results

of measures to reduce nutrient-sediment loads to tidal Bay waters. In 2006-7, the network will be expanded under an interagency initiative to improve assessment and geographic targeting of BMPs. EPA and its partners will also increase collaborative assessment of watershed demonstration projects, including several new projects funded by EPA with FY 2005-6 targeted watershed funds.

4) Strengthened Accountability and Reporting

In 2006, the CBP substantially revised its indicators and reporting for Chesapeake Bay health and restoration, both to improve accountability and to respond to recommendations from the General Accountability Office. Working with the scientific community through CBP's Scientific and Technical Advisory Committee, the new indicators will be evaluated and expanded in FY 2007 to include tributary health and restoration reporting. In FY 2007, EPA, NOAA and the states will collaborate on improved integration of water quality and fisheries monitoring and reporting, under the CEC's precedent-setting agreement in 2005 to establish ecosystem-based fisheries management for the Chesapeake Bay.

5) Federal Partnership Agreement for Chesapeake Bay Restoration

EPA and the Bay States need to strengthen partnerships with complementary federal agency programs that fund agricultural conservation and ecosystem restoration, manage lands and fisheries, and contribute to Bay scientific understanding.

A key step was taken in October 2005, when CBP goals and tributary strategy funding priorities were presented to the first high-level federal meeting on Chesapeake Bay restoration since 1998. EPA and 16 other federal agencies agreed to strengthen shared programs to achieve the 10 "keystone commitments" of *Chesapeake 2000*, to meet annually at high-level to review progress and renew cooperation, and to improve access to federal financial and technical assistance for Bay restoration measures, through cooperation with the Chesapeake Bay Watershed Assistance Network. In FY 2007, this federal partnership agreement will be in its second year of implementation.

C) Grant Program Resources

Grant resources supporting this goal include the Chesapeake Bay Implementation Grants under Section 117 of the Clean Water Act, Chesapeake Bay Small Watershed Grants, and Chesapeake Bay Targeted Watershed Grants (FY 05-06) as well as a range of water program grants to States. A new website provides information about grants progress toward meeting environmental results (http://www.epa.gov/region3/chesapeake/grants/progress.htm).



10) Protect the Gulf of Mexico

The Gulf of Mexico basin has been called "America's Watershed." Its U.S. coastline is 1,630 miles, it is fed by thirty-three major rivers, and it receives drainage from 31 States in addition to a similar drainage area from Mexico. One sixth of the U.S. population now lives in Gulf Coast States, and the Region is experiencing remarkably rapid population growth. In addition, the Gulf yields approximately forty percent of the Nation's commercial fishery landings. Gulf Coast wetlands comprise about half the national total and provide critical habitat for seventy-five percent of the migratory waterfowl traversing the United States.

A) Environmental/Health Results Expected

Environmental and public health results identified in the new EPA *Strategic Plan* related to the Gulf of Mexico are:

1) 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 2006Target: 2.4

2005 Actual: 2.4 **2007 Target: 2.4** 2008 Target: 2.5

2) 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

2005 Actual: 12,700 km² 2015 Target: less than 5,000 km²

B) Key Strategies

For FY 2007, EPA has worked with States and other partners to define key activities to support attainment of environmental and health goals that align with the *Gulf of Mexico Action Plan* developed by the Gulf States Alliance. These activities fall into three categories:

- implementation of core clean water programs, in support of both the environmental goal for the Gulf of Mexico and in support of actions in the Mississippi Basin that help reduce Gulf hypoxia;
- activities that support meeting water quality and habitat restoration goals for the Gulf;
 and
- activities specifically focused on the Mississippi Basin that are designed to reduce the size of the Hypoxic Zone in the Gulf.

1) Core Clean Water Programs

The Clean Water Act provides authority and resources that are essential to protecting water quality in the Gulf of Mexico and in the larger Mississippi River Basin that contributes pollution, especially oxygen demanding nutrients, to the Gulf. EPA Regions and the Gulf of Mexico Program Office will work with States to assure the continued effective implementation of core clean water programs, ranging from discharge permits, to nonpoint pollution controls, to wastewater treatment, to protection of wetlands.

In addition, the Gulf of Mexico Program Office has a long-standing commitment to develop effective partnerships with other programs within EPA, in other Federal agencies, and with other organizations. For example, the Program Office is working with the EPA Office of Research and Development and other Federal agencies to develop and implement a coastal monitoring program to better assess the condition of Gulf waters. The Program Office is working closely with the US Department of Agriculture to coordinate allocation of technical assistance and funding to priority geographic areas around the Gulf. EPA is also working with the National Oceanic and Atmospheric Administration, environmental organizations, the Gulf of Mexico Foundation, and area universities to identify and restore critical habitat.

2) Protecting and Restoring the Gulf of Mexico

A central pillar of the strategy to restore the health of the Gulf is restoration of water quality and habitat in 13 priority coastal watersheds. These 13 watersheds include 354 of the impaired segments identified by States around the Gulf and will receive targeted technical and financial assistance to restore impaired waters. The 2008 goal is to fully attain water quality standards in at least 20% of these segments (see Program Activity Measure GM-1) with a 2007 restoration goal of 42 segments.

Another key element of the strategy for improving the water quality in the Gulf is to restore, enhance or protect a significant number of acres of coastal and marine habitat. The overall wetland loss in the Gulf area is on the order of 50 percent and protection of the critical habitat that remains is essential to the health of the Gulf aquatic system. EPA has a

goal of restoring 20,000 acres of habitat by 2008, with a FY 2007 interim goal of 13,400 acres (see Program Activity Measure GM-2).

EPA is working with Mexico and Gulf States to implement an early warning system to manage harmful algal blooms (see Program Activity Measure GM-3) and expects to expand the system in 2007.

Another priority for the Gulf of Mexico Program Office is to work with States and other Federal agencies to reduce the rate of shellfish-borne Vibrio vulnificus illnesses caused by consumption of commercially harvested oysters (see Program Activity Measure GM-4). Over a recent ten-year period, the Centers for Disease Control identified over 200 serious illnesses from Vibrio resulting in 105 deaths. EPA will support efforts to improve education about proper cooking of oysters and the dangers of eating raw oysters. EPA will also support work to identify economically viable post-harvest treatment technologies. EPA has a goal of reducing the rate of illness from .303 per million consumers to .121 per million by 2008.

3) Reducing the Size of the Hypoxic Zone

Any strategy to improve the overall health of the entire Gulf of Mexico must include a focused effort to reduce the size of the zone of hypoxic conditions (i.e. low oxygen in the water) in the northern Gulf. Actions to address this problem must focus on both localized pollutant addition throughout the Basin and on nutrient loadings from the Mississippi River.

EPA, in cooperation with States and other Federal Agencies, developed an *Action Plan for Reducing, Mitigating and Controlling Hypoxia in the Northern Gulf of Mexico* (2001). This Action Plan includes as a goal the long term target to reduce the size of the hypoxic zone from about 14,000 square km to less than 5,000 square km. measured as a five year running average. In working to accomplish this goal, EPA, States, and other Federal agencies will continue implementation of core clean water programs and partnerships. Specifically, in FY 2007, EPA will:

- support State-based implementation of nutrient-focused hypoxia reduction measures through multi-year budget strategies;
- support collaborative monitoring and assessment framework to measure and calibrate the performance of nitrogen reduction efforts;
- support the update of information on flow, nutrient concentrations, and loadings at the mouths of each major sub-basin in partnership with USGS and Sub-Basin Committees;
- support evaluation of modeling of the hypoxic zone;

- support cooperative implementation of industry-led nonpoint source nutrient reduction strategies through effective sub-basin team partnerships; and
- support EPA's partnership component of the 5-year science and management reassessment of nutrient load reductions achieved and the response of the hypoxic zone, water quality throughout the Basin, and economic and social effects of Gulf of Mexico hypoxia.

C) Grant Program Resources

The Gulf of Mexico Program issues an annual Funding Guidance soliciting:

- projects that support the restoration of impaired water bodies including coastal and marine habitat protection, restoration, and enhancement in priority coastal areas;
- Gulf-wide projects protecting public health or initiatives for monitoring and assessment, education, and public outreach; and
- projects in the Lower Mississippi River and its tributaries to reduce nutrient loading.

Additional information concerning these grants is provided in the grant program guidance website (http://www.epa.gov/water/waterplan).

III WATER PROGRAM MANAGEMENT SYSTEM

This *National Program Guidance* document describes the general approaches that EPA, in consultation with States and Tribes, expects to be most effective in attaining the environmental and public health improvements identified in the new EPA *Strategic Plan*.

This *Guidance*, however, is part of a larger, three step management process:

- Step 1: Complete National Water Program Guidance (April of 2006);
- Step 2: EPA Region/State/Tribe Consultation/Planning: EPA Regions work with States and Tribes to develop FY 2007 Performance Partnership Agreements or other workplans, including commitments to reporting key activities and, in some cases, commitments to specific FY 2007 program output accomplishments (April October); and
- Step 3: Program Evaluation and Adaptive Management: Evaluate program progress in 2007 and adapt water program management and priorities based on this assessment information (FY 2007).

Steps 2 and 3 of this program management system are discussed below.

1) EPA Region/State/Tribe Consultation/Planning (Step 2)

EPA Regions will work with States and Tribes beginning in April of 2006 to develop agreements concerning program priorities and commitments for FY 07. This process has several key elements:

- A) Strategic Plan/Regional Plan Foundation: As in FY 2005, work planning processes for FY 2007 are to be organized using the goal structure of the EPA Strategic Plan and are to be informed by Regional Plans. Both the Strategic Plan and the Regional Plans address the same environmental and public health outcome measures and therefore provide a common "results" framework across EPA programs and within each EPA Region. Regional Plans further articulate strategies for accomplishing objectives and subobjectives that best fit that Region and also address Regional priorities not covered in the Strategic Plan.
- **B) Program Integration:** EPA is encouraging States and Tribes to use an integrated, cross-program approach to achieve environmental and public health results. Three key ways EPA is encouraging program integration are:

- **Performance Partnership Agreements/Grants:** EPA is encouraging States and Tribes to develop workplans on an integrated, cross-program basis, including development of integrated agreements and grants.
- "Bottom-up" Program Activity Commitment Process: This water program management process supports program integration because it frees Regions and States to make annual resource allocations among program areas based on the priorities understood by the Regions and States, rather than as a simple extrapolation of a national priority and allocation. These national priorities still need to be considered over the long run (i.e. 2008 targets), but the foundation of results-based strategies creates the opportunity to free Regional, State, and Tribal planners to adapt program allocations to fit the most pressing needs in the short-term.
- Integrated Measures Management: EPA has developed a new, internet based, online system to manage all EPA program measures developed to monitor program activities and commitments in FY 2007. This integrated system will give all parties the chance to look at program measures and commitments across EPA programs, across Regions, as well as nationally.
- C) Translating Strategies into Annual Program Commitments: EPA has worked with States and Tribes to define a minimum number of measures that address the critical program activities that are expected to contribute to attainment of long-term goals. Some of these Program Activity Measures track activities carried out by EPA HQ or Regions while others address activities carried out by States and Tribes (see Appendix A). In addition, some of these measures include annual "targets" while others are intended to simply indicate change over time.

During the Spring/Summer of 2006, EPA Regions will work with States and Tribes to:

- reach agreement concerning periodic reporting (i.e. not less than mid year/endof-year) of program activities including, at a minimum, the Program Activity Measures identified in Appendix 2; and
- for the subset of Program Activity Measures where an annual "target" is indicated, develop FY 2007 commitments in light of these targets and reflect the commitments in annual workplans (Appendix 2 includes "targets" for each EPA Region along with a national target).

Regions are to use these targets as guidelines in discussions with States and Tribes and should convert these targets into State, tribal, and Regional "commitments" in draft form by July 1 and final form by September 1. The goal of this joint effort is to allocate available resources to those program activities that are likely to result in the best progress toward accomplishing water quality and public health goals for that State/Tribe (e.g. improved compliance with drinking water standards, improved water quality on a watershed basis).

Regional targets in this *Guidance* are the starting point for discussions, but the more formal, State-specific commitments that result from workplan discussions are intended to reflect environmental and financial circumstances in each State and to supplant these targets. The tailored State/Tribal program commitments that result from this process will define, in an operational sense, the "strategy" for the National Water Program for FY 2007.

D) Linking Program Grants to Strategic Plan/Regional Plans: EPA has developed new requirements for clear definition of the link between a program grant and the Agency Strategic Plan. As part of this process, this National Program Guidance includes specific references to program grants that support each of the objectives and subobjectives in the EPA Strategic Plan.

In summary, the schedule for key steps in Step 2 of the program management process is:

April Final National Program Guidance /FY 07 Targets
 April - June Regions/States/Tribes Begin FY 07 Work Planning
 July Regions/States/Tribes Complete DRAFT Commitments
 September Final FY 07 Commitments

2) Program Evaluation and Adaptive Management (Step 3)

As the strategies and programs described in this *Guidance* are implemented during FY 2007, EPA, States and Tribes will evaluate progress toward water goals and work to improve program performance by refining strategic approaches or adjusting program emphases.

The National Water Program will evaluate progress using three key tools:

A) HQ/Regional Dialogues: Each year, the Office of Water will visit 3-4 EPA Regional Offices and Great Waterbody Offices to conduct dialogues on program management and performance. These visits will include assessment of performance in the Region against the:

- objectives and subobjectives in the Strategic Plan;
- regional water issues identified in the Regional Plan; and
- annual State/tribal Program Activity Measure commitments.

In addition, a key topic for the HQ/Regional dialogues will be identification of program innovations or "best practices" developed by the Region, States, Tribes, watershed organizations, and others. By highlighting best practices identified in HQ/Region dialogues, these practices can be described in water program performance reports and more widely adopted throughout the country.

B) Program-Specific Evaluations:

In addition to looking at the performance of the National Water Program at the national level and performance in each EPA Region, individual water programs will be evaluated periodically by EPA and by external parties.

EPA program evaluations include projects undertaken by the evaluation staff in the Office of Water and the continuing oversight and evaluation of State/tribal program implementation in key program areas (e.g. NPDES program). Evaluations of water programs by external parties include projects conducted by the EPA Inspector General, the Congressional Government Accountability Office, the Office of Management and Budget, and the National Academy of Sciences.

EPA will develop an annual plan that identifies all the water program-specific evaluations that are expected to be underway in that year. The plan will be developed during the Spring/Summer for the fiscal year starting in October and will be provided to EPA Regions/States/Tribes and the public for comment. The plan will be a tool for avoiding duplication of evaluation projects, for prudent scheduling of evaluation projects, and for setting evaluation priorities based on input from other sources (e.g., *Strategic Plan*, HQ/Region dialogues).

C) National Water Program Performance Reports:

The Office of Water will prepare a performance report for the National Water Program at the mid-point in each fiscal year and the end of each fiscal year based on data provided by EPA HQ program offices, EPA Regions, States, and Tribes. These reports will give program managers an integrated analysis of:

• progress *at the national level* with respect to program activities and expected environmental and public health goals identified in the *Strategic Plan* and Regional plans;

- progress *in each EPA Region* with respect to the *Strategic Plan*, program activity measures, and the Regional Plan (including State/Region specific data);
- insights from recent *HQ/Regional dialogues*, including "best practices" identified from the work of the Region, States, or Tribes; and
- insights from recent *program-specific evaluations*, including internal and external evaluations.

The reports will include conclusions and recommended actions to improve program performance. In addition, the Office of Water will maintain program performance records over time and, to the extent possible, will use this information to identify long-term trends in program performance.

Improved program performance requires both a commitment to sustained program evaluation and a commitment to using program performance information to revise program management approaches. Some of the steps the Office of Water will take to improve the link between program assessment and program management include:

- 1) Communicate Performance Information to Program Managers: The Office of Water will use performance information to provide mid-year and annual program briefings to the Deputy Administrator and senior HQ water program managers. In addition, program performance reports will be provided at meetings of Water Division Directors twice a year. Mid-year and annual performance reports will also be provided to State organizations and Tribes.
- 2) Communicate Performance Information to Congress and the Public: The Office of Water will use performance assessment reports and findings to communicate program progress to other Federal agencies, the Office of Management and Budget, the Congress, and the public.
- 3) **Link to Budget and Workforce Plans:** The Office of Water will use performance assessment information in formulation of the annual budget and in development of workforce plans.
- 4) **Promote Wide Dissemination of Best Practices:** The Office of Water will actively promote the wide application of best practices and related program management innovations identified as part of program assessments. This may include expanded support of "peer to peer" networks among program managers and staff in EPA HQ, EPA Regions, States, and Tribes.
- 5) **Expand Regional Office Participation in Program Assessment:** The Office of Water will promote expanded involvement of Regional offices in program

- assessments and implementation of the assessment process. This effort will include expanded participation of the Lead Region in program assessment processes and inclusion of another Region in the HQ/Region dialogue meetings.
- 6) **Strengthen Program Performance Assessment in Personnel Evaluations:** The Office of Water will include in EPA staff performance standards specific references that link the evaluation of staff, especially the Senior Executive Service corps, to success in improving program performance.
- Recognize Successes: In cases where program performance assessments have contributed to improved performance in environmental or program activity terms, the Office of Water will recognize these successes. By explaining and promoting cases of improved program performance, the organization builds confidence in the assessment process and reinforces the concept that performance improvements are attainable.
- 8) **Strengthen Development of Future Strategic Plans**: The Office of Water will use program assessments to improve future strategic plans and future program activity measures.

APPENDICES:

- A) Slides of Program Activity Measures
- B) National Water Program Grants Management for FY 2007
- C) PART Measures Not Directly Reported in Guidance
- D) Regional and National Commitments (to be published as separate Appendix in October 2006)

APPENDIX B NATIONAL WATER PROGRAM GRANTS MANAGEMENT FOR FY 2007

The Office of Water places a high priority on effective grants management. The key areas to be emphasized as grant programs are implemented are:

- standardizing the timing of issuance of grants guidance for categorical grants (i.e., by April of the fiscal year prior to the year in which the guidance applies);
- ensuring that a high priority is placed on the effective management of grants; and
- linking grants performance to the achievement of environmental results as laid out in the Agency's *Strategic Plan* and the *National Water Program Guidance*.

The Office of Grants and Debarment (OGD) issued a Grants Management Plan for 2003 – 2008 which is designed to help ensure that grant programs meet the highest management and fiduciary standards and further the Agency's mission of protecting human health and the environment. The Plan highlights five grants management goals:

- enhance the skills of EPA personnel involved in grants management;
- promote competition in the award of grants;
- leverage technology to improve program performance;
- strengthen EPA oversight of grants; and
- support identifying and realizing environmental outcomes.

The Office of Water is committed to accomplishing these goals and working to manage grants efficiently and effectively.

Timing of Guidance Issued for Categorical Grants

One of the Office of Water's objectives is to organize and coordinate the issuance of draft and final guidance documents, including grants guidance, to coincide as much as possible with State, tribal, and regional planning processes. As a result, the goal is to issue all guidance packages for categorical grant programs by April of the year in advance of the fiscal year of availability of funds (i.e., guidance for fiscal year 2007 appropriated funds should be issued by April 2006) if at all possible. Not all categorical grant programs issue annual guidance. These programs may simply indicate that they are continuing to use their current guidance.

A table of all grants guidance issued for categorical grants and other key water program grants is available on the Internet at (http://www.epa.gov/water/waterplan/grants.htm). The table will be updated to provide links to the most recent grant specific guidance documents by the time the FY 2007 National Water Program Guidance is issued as final in April.

In the FY 2007 President's Budget, the following language directing EPA to develop a grant work plan template for State categorical grants was included:

State and Tribal Assistance Grants – This appropriation supports core Agency programs and each of the Agency's five goals through grants to States and other partners. However, EPA faces difficulties in getting States, which receive over 38 percent of EPA's budget, to report consistent, meaningful performance information. To address this issue, EPA will develop standardized templates for State grants that all States will use to submit their State grant agreements, including Performance Partnerships. The new template will clearly link to EPA's strategic plan, reducing or eliminating the need to translate State workplan information into EPA's strategic and annual goals. This action will increase accountability and make it easier to compare and analyze performance data over time and across States.

EPA, in cooperation with State partners and OMB, has determined that the "templates" required under this authority will apply to the following five key State grant programs:

- Water Pollution Control State and Interstate Program Support (106 grants);
- Public Water System Supervision (PWSS);
- State Underground Water Source Protection (UIC);
- Beach Monitoring and Notification Program Implementation Grants, and
- Nonpoint Source Implementation Grants.

The "templates" identify measures from this *Guidance* that are associated with each grant program. Data reported for measures included in the "templates" will be for each State, rather than simply the Region or national data provided for other measures in this *Guidance*. The "templates" are available at (http://www.epa.gov/ocfopage/npmguidance/template/htm or http://www.epa.gov/water/waterplan).

Effective Grants Management

The Agency has issued directives, policies, and guidance to help improve grants management. It is the policy of the Office of Water that all grants are to comply with applicable grants requirements described below, regardless of whether the program specific guidance document addresses the requirement.

Policy for Competition of Assistance Agreements: The Office of Water strongly supports the Agency policy to promote competition to the maximum extent practicable in the award of assistance agreements. Project officers must comply with Agency policy concerning competition in the award of grants and cooperative agreements and ensure that the competitive process is fair and impartial, that all applicants are evaluated only on the criteria stated in the announcement, and that no applicant receives an unfair advantage. The Policy for Competition of Assistance Agreements, EPA Order 5700.5A1, effective January 15, 2005, applies to competitive announcements issued, released, or posted after January 14, 2005; assistance agreement competitions, awards, and disputes based on

competitive announcements issued, released, or posted after January 14, 2005; non-competitive awards resulting from non-competitive funding recommendations submitted to a Grants Management Office after January 14, 2005; and assistance agreement amendments issued after January 14, 2005.

If program offices and Regions choose to conduct competitions for awards under programs that are exempt from the Order, they must comply with the Order and any applicable guidance issued by the Grants Competition Advocate (GCA). This includes complying with the Office of Management and Budget (OMB) standard formatting requirements for Federal agency announcements of funding opportunities.

As of October 1, 2006, per OMB Directive, all federal agency funding opportunity announcements for open competitions must provide applicants with the opportunity to submit applications electronically through (http://www.grants.gov). Grants.gov is the official federal government website where applicants can find and apply to funding opportunities from all 26 federal grant-making agencies.

Policy on Compliance Review and Monitoring: The Office of Water is required to develop and carry out a post-award monitoring plan and conduct basic monitoring for every award. EPA Order 5700.6A1, revised on January 8, 2004, streamlines post-award management of assistance agreements and helps ensure effective oversight of recipient performance and management. The Order encompasses both the administrative and programmatic aspects of the Agency's financial assistance programs. From the programmatic standpoint, this monitoring should ensure satisfaction of five core areas:

- 1) compliance with all programmatic terms and conditions;
- 2) correlation of the recipient's work plan/application and actual progress under the award;
- 3) availability of funds to complete the project;
- 4) proper management of and accounting for equipment purchased under the award; and
- 5) compliance with all statutory and regulatory requirements of the program.

If during monitoring it is determined that there is reason to believe that the grantee has committed or commits fraud, waste and/or abuse, then the project officer must contact the Office of the Inspector General. Advanced monitoring activities must be documented in the official grant file and the Grantee Compliance Database.

Performance Standards for Grants Management: Project officers participate in a wide range of pre-and post-award activities. OGD issued Interim Guidance *Assessing Grants Management Performance under the Performance Appraisal and Recognition System (PARS)* on January 20, 2006 to be used for 2006 PARS performance agreements/appraisals

of project officers who are managing at least one active grant during the rating period and their supervisors/managers. The Office of Water supports the requirement that project officers and their supervisors/managers adequately address grants management responsibilities through the Agency's PARS process.

Environmental Results under EPA Assistance Agreements: On January 1, 2005, EPA Order 5700.7, went into effect. The Office of Water is actively involved in Agency initiatives to focus grant resources on achieving environmental results that are described in the Strategic Plan. Additional information on the Order and the required linkage of results to the Strategic Plan architecture is provided below.

Environmental Results and Linkage to the Strategic Plan

The Office of Water's *Strategic Plan* includes key "outcome" measures of environmental and public health progress we hope to accomplish by 2008. Both Goal 2 and Goal 4 of the *Strategic Plan* present specific objectives, subobjectives and strategic targets that define, in measurable terms, the change in public health or environmental conditions to be accomplished by 2008. Grants are one of the many tools that EPA, States, local governments, and others will use to accomplish the environmental and public health goals in the *Strategic Plan*.

The OGD Grants Management Plan for 2003 – 2008 includes the goal of linking grants performance to the achievement of the Agency's *Strategic Plan* and managing for results. On January 1, 2005, EPA issued the Environmental Results Order (5700.7). The Order states that it is EPA policy to link proposed assistance agreements to the Agency's Strategic Plan / GPRA architecture, ensure that outputs and outcomes are appropriately addressed in assistance agreement competitive funding announcements, work plans, and performance reports, and consider how the results from completed assistance agreement projects contribute to the Agency's programmatic goals and responsibilities.

The Order defines outputs as an environmental activity, effort, and/or associated work products related to an environmental goal and objective, that will be produced or provided over a specified period of time. Outputs may be quantitative or qualitative, but must be measurable during an assistance agreement funding period.

Outcomes are defined by the Order as the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related or programmatic in nature, must be quantitative, and may not necessarily be achievable within an assistance agreement funding period.

There are two major types of outcomes; "end outcomes" and "intermediate outcomes". End outcomes are the desired end or ultimate results of a project or program. They represent

results that lead to environmental / public health improvement. A change in water quality and resultant change in human health or environmental condition are examples of end outcomes.

Intermediate outcomes are outcomes that are expected to lead to end outcomes, but are not in and of themselves, "ends". Given that the end outcomes of an assistance agreement may not occur until after the assistance agreement funding period, intermediate or short-term outcomes realized during the funding period are an important way to measure progress in achieving end outcomes. For example, reductions in nutrient loading may be considered an intermediate outcome to measure progress toward contributing to end outcomes of improved water quality.

The Order applies to all non-competitive funding packages / funding recommendations submitted to Grants Management Offices after January 1, 2005, all competitive assistance agreements resulting from competitive funding announcements issued after January 1, 2005, and competitive funding announcements issued after January 1, 2005. Project officers must include in the Funding Recommendation a description of how the project fits within the Agency's Strategic Plan /GPRA architecture. The description must identify all applicable EPA strategic goal(s), objectives, and where available, subobjective(s), consistent with the appropriate Program Results Code(s). In addition, project officers must:

- consider how the results from completed assistance agreement projects contribute to the Agency's programmatic goals and objectives;
- ensure that well-defined outputs and outcomes are appropriately addressed in assistance agreement work plans, solicitations, and performance reports;
- negotiate and ensure that work plans contain well-defined outputs and, to the maximum extent practicable, well-defined outcomes;
- certify/assure that they have reviewed the assistance agreement work plan and that the work plan contains outputs and outcomes.

The Office of Water continues to align grant management with the National Water Program Guidance, and encourages the use of measures (output and outcome) developed in concert with our state and tribal partners. In order to maintain consistency with the Strategic Plan and leverage the extensive and collaborative work conducted with our state and tribal partners, OW developed menus for the major categorical grant programs that link grant activities to the Strategic Plan goals, objectives, subobjectives, and Program Activity Measures (PAMs). The 1-2 page menus are tools that project officers can use to strengthen and demonstrate the linkage between grant activities and achieving strategic goals, and facilitate implementation of the Environmental Results Order. The menus are available on the Internet at (http://www.epa.gov/water/waterplan).

Appendix C: PART Measures Not Directly Reported in Guidance

Under OMB's Program Assessment Rating Tool (PART) review, programs are required to develop long term and annual performance measures. Each program is required to develop at least one efficiency measure, one to two long-term measures, and two more annual measures. Most of the measures developed though the PART process over the past four years have been based on Strategic Targets from the 2003 Strategic Plan and/or Program Activity Measures from the National Program Guidance. The PART efficiency measures are not directly reported in the FY 2007 Guidance. The national program will, however, report these measures using program data derived from measures in the Guidance and dividing by the dollars invested.

PART Efficiency Measures

Program	Term	Measure	
Drinking Water State Revolving Fund (DWSRF) / Public Water System Supervision (PWSS) / Underground Injection Control (UIC)	Long- Term	People receiving drinking water in compliance with health-based drinking water standards per million dollars (Federal and State).	
DWSRF / PWSS	Long Term	Dollars per community water system in compliance with health-based drinking water standards.	
DWSRF	Annual	Average funding (in millions of dollars) per project initiating operations.	
Nonpoint Source	Long Term	Section 319 funds (\$ million) expended per partially or fully restored waterbody.	
Mexico Border	Long Term	Additional people served per million dollars (U.S. and Mexico).	
National Estuary Program/ Marine Pollution	Annual	Program dollars per acre of habitat protected or restored.	
Pollution Control Grants (106)	Annual	Cost per water segment restored.	
Surface Water Protection	Annual	Loading (pounds) of pollutants removed per program dollar expended.	

PART Annual Measure

The Underground Injection Control Program includes an annual PART measure related to the compliance of community water systems. An overall compliance rate for community water systems is not reported under the current *Strategic Plan* because the rate is presented for regulations issued before or after 2002. EPA will report the overall number using data from the Safe Drinking Water Information System (SDWIS) in FY 2006 and 2007. EPA is proposing to change the measures in the new *Strategic Plan* to include a single, overall community water system compliance rate and will report that rate under the new *Plan* starting in FY 2008.