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GOAL, APPROPRIATION SUMMARY

Budget Authority / Obligations (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud
Clean Air and Global Climate Change	\$927,481.7	\$923,596.4	\$932,024.5
Environmental Program & Management	\$443,492.8	\$452,246.5	\$446,242.3
Science & Technology	\$210,039.6	\$209,077.3	\$214,789.2
Building and Facilities	\$9,881.5	\$8,672.3	\$8,748.4
State and Tribal Assistance Grants	\$255,475.1	\$245,484.0	\$253,692.5
Inspector General	\$5,701.0	\$5,040.4	\$5,174.0
Hazardous Substance Superfund	\$2,891.7	\$3,075.9	\$3,378.1
Clean and Safe Water	\$3,517,729.0	\$3,133,211.9	\$2,731,342.1
Environmental Program & Management	\$503,466.6	\$484,969.8	\$451,812.7
Science & Technology	\$134,592.4	\$121,337.1	\$170,692.3
Building and Facilities	\$6,717.1	\$6,050.8	\$6,039.4
State and Tribal Assistance Grants	\$2,848,262.8	\$2,501,325.0	\$2,085,435.0
Inspector General	\$24,690.1	\$19,529.1	\$17,362.7
Land Preservation and Restoration	\$1,780,624.2	\$1,656,471.0	\$1,689,635.1
Environmental Program & Management	\$210,037.2	\$216,513.0	\$217,902.2
Science & Technology	\$17,261.4	\$14,713.7	\$12,149.9
Building and Facilities	\$5,393.8	\$4,966.4	\$4,871.3
State and Tribal Assistance Grants	\$121,827.5	\$113,718.0	\$140,912.2
Leaking Underground Storage Tanks	\$70,589.5	\$79,953.0	\$72,759.0
Oil Spill Response	\$17,594.9	\$15,629.0	\$16,506.0
Inspector General	\$2,572.0	\$2,277.7	\$2,494.6
Hazardous Substance Superfund	\$1,335,347.8	\$1,208,700.2	\$1,222,039.9
Healthy Communities and Ecosystems	\$1,257,846.7	\$1,249,321.4	\$1,228,933.7
Environmental Program & Management	\$616,729.7	\$640,732.5	\$638,298.6
Science & Technology	\$345,807.2	\$334,290.4	\$348,424.1
Building and Facilities	\$16,249.6	\$13,929.8	\$13,951.7
State and Tribal Assistance Grants	\$257,253.9	\$245,983.0	\$213,656.3

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud
Inspector General	\$7,906.2	\$6,642.4	\$6,576.9
Hazardous Substance Superfund	\$13,900.2	\$7,743.2	\$8,026.1
Compliance and Environmental Stewardship	\$773,201.2	\$742,815.3	\$733,539.6
Environmental Program & Management	\$535,511.7	\$552,249.1	\$552,361.1
Science & Technology	\$78,202.5	\$51,391.4	\$42,218.6
Building and Facilities	\$6,939.0	\$6,006.7	\$6,205.1
State and Tribal Assistance Grants	\$125,660.3	\$107,199.0	\$103,752.0
Inspector General	\$4,137.8	\$3,414.4	\$3,491.8
Hazardous Substance Superfund	\$22,749.8	\$22,554.7	\$25,511.0
Sub-Total	\$8,256,882.7	\$7,705,416.0	\$7,315,475.0
Rescission of Prior Year Expired Contracts, Grants, and Interagency Agreements			
Environmental Programs and Management	\$0	\$-2,000	\$0
Science & Technology	\$0	\$-1,000	\$0
State and Tribal Assistance Grants	\$0	\$-66,000	\$0
Hazardous Substance Superfund	\$0	\$-11,000	\$0
Total	\$8,256,882.7	\$7,625,416.0	\$7,315,475.0

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud
Clean Air and Global Climate Change	2,646.4	2,655.3	2,652.0
Environmental Program & Management	1,889.8	1,895.5	1,879.0
Science & Technology	674.8	679.2	688.3
Inspector General	34.6	36.6	39.5
Hazardous Substance Superfund	17.1	17.8	17.5
Envir. Program & Mgmt - Reim	3.0	0.3	0.3
Science and Tech Reim	3.0	3.0	3.0
FEMA - Reim	2.3	0.0	0.0
WCF-REIMB	21.8	23.0	24.3
Clean and Safe Water	2,906.9	2,930.1	2,906.8
Environmental Program & Management	2,249.7	2,257.2	2,245.1
Science & Technology	476.5	514.5	511.6
Inspector General	150.0	141.7	132.4
Envir. Program & Mgmt - Reim	15.5	0.3	0.3
WCF-REIMB	15.4	16.5	17.4
Land Preservation and Restoration	4,602.5	4,737.8	4,686.2
Environmental Program & Management	1,195.2	1,228.2	1,229.3
Science & Technology	48.3	52.0	51.2
Leaking Underground Storage Tanks	72.1	77.4	76.9
Oil Spill Response	91.9	99.2	98.7
Inspector General	15.6	16.5	19.0
Hazardous Substance Superfund	3,061.7	3,174.4	3,120.6
Envir. Program & Mgmt - Reim	11.0	0.1	0.1
Oil Spill Response - Reim	7.5	0.0	0.0
FEMA - Reim	0.4	0.0	0.0
Superfund Reimbursables	87.2	77.5	77.5
WCF-REIMB	11.5	12.4	12.9

Healthy Communities and Ecosystems	3,874.8	3,812.5	3,834.2
Environmental Program & Management	2,470.1	2,496.5	2,520.5
Science & Technology	1,014.3	1,023.6	1,016.1
Inspector General	45.4	48.2	50.2
Rereg. & Exped. Proc. Rev Fund	185.3	187.2	187.2
Hazardous Substance Superfund	42.7	19.9	21.3
Envir. Program & Mgmt - Reim	8.9	0.5	0.5
Pesticide Registration Fund	72.7	0.0	0.0
WCF-REIMB	35.4	36.6	38.5
Compliance and Environmental Stewardship	3,464.0	3,495.3	3,480.5
Environmental Program & Management	3,099.5	3,170.7	3,133.6
Science & Technology	202.2	168.9	164.5
Inspector General	25.1	24.8	26.6
Hazardous Substance Superfund	111.3	114.5	137.9
Envir. Program & Mgmt - Reim	10.1	0.3	0.3
WCF-REIMB	15.7	16.2	17.5
Total	17,494.6	17,631.0	17,559.7

CLEAN AIR AND GLOBAL CLIMATE CHANGE

Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.

STRATEGIC OBJECTIVES:

- Through 2010, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.
- By 2008, 22.6 million more Americans than in 1994 will be experiencing healthier indoor air in homes, schools, and office buildings.
- By 2010, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and the risk to human health from overexposure to ultraviolet (UV) radiation, particularly among susceptible subpopulations, such as children, will be reduced.
- Through 2008, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.
- Through EPA's voluntary climate protection programs, contribute 45 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas intensity improvement goal by 2012. (An additional 75 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for greenhouse gas intensity improvement.)
- Through 2010, provide and apply sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 1.

GOAL, OBJECTIVE SUMMARY

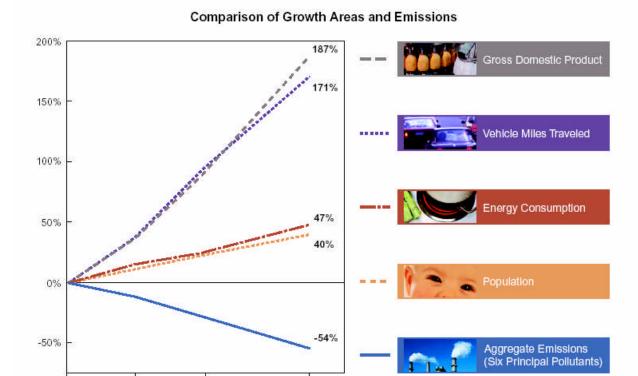
Budget Authority / Obligations Full-time Equivalents (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Clean Air and Global Climate Change	\$927,481.7	\$923,596.4	\$932,024.5	\$8,428.1
Healthier Outdoor Air	\$588,382.2	\$583,161.8	\$596,460.1	\$13,298.3
Healthier Indoor Air	\$48,141.4	\$46,956.8	\$47,674.9	\$718.1

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Protect the Ozone Layer	\$16,872.9	\$16,666.0	\$21,625.0	\$4,959.0
Radiation	\$34,905.9	\$36,213.8	\$37,242.7	\$1,028.9
Reduce Greenhouse Gas Intensity	\$111,978.8	\$111,091.4	\$110,298.0	(\$793.4)
Enhance Science and Research	\$127,200.4	\$129,506.6	\$118,723.8	(\$10,782.8)
Total Authorized Workyears	2,646.4	2,655.3	2,652.0	-3.3

EPA implements the Clean Air and Global Climate Change goal through national and regional programs designed to provide healthier outdoor and indoor air for all Americans, protect the stratospheric ozone layer, minimize the risks from radiation releases, reduce greenhouse gas intensity, and enhance science and research. In implementing the goal, EPA carries out its responsibilities through programs that include several common elements: setting risk-based priorities; facilitating regulatory reform and market-based approaches; partnering with state, Tribal, and local governments, non-governmental organizations, and industry; promoting energy efficiency; and using sound science.

EPA's key clean air programs – including those addressing particulate matter, ozone, acid rain, air toxics, indoor air, radiation and stratospheric ozone depletion – focus on some of the highest health and environmental risks faced by the Agency. These programs have achieved results. According to EPA's projections, every year, state and federal air pollution programs established under the Clean Air Act help prevent tens of thousands of premature mortalities, millions of incidences of chronic and acute illness, tens of thousands of hospitalizations and emergency room visits, and millions of lost work days.



04

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According to EPA analyses, the benefits of implementing the Clean Air Act exceed costs by a factor of six or seven to one. Based on EPA's estimates, Clean Air Act costs have been relatively small compared to the dollar value of public health and environmental benefits. For example, EPA estimates that for every dollar the agency spends on voluntary climate change programs returns \$75 in energy savings.

The FY 2007 budget request includes funding for implementing provisions of the Energy Policy Act of 2005, which includes new responsibilities and requirements in the fuels and diesel retrofit programs. In the area of fuels, EPA is required to develop a number of new regulations, revise several existing regulations, revise models and undertake a series of fuel-related studies and analyses. This effort includes promulgating regulations for: a major new renewable fuels program; the current reformulated gasoline (RFG) program; new regulations requiring health and environmental testing of fuels; and in conjunction with DOE, conducting a study on Federal, state, and local fuel requirements with recommendations on harmonization. The request includes funding for expanded diesel retrofit program for a variety of sources.

The Clean Air Rules are a suite of actions that will dramatically improve America's air quality and will address the transport of pollution across state borders. The rules provide national tools to achieve significant improvement in air quality and the associated benefits of improved health, longevity and quality of life for all Americans. Taken together, they will make significant air quality improvement in years to come. The Clean Air Rules encompass the following major rules:

Clean Air Mercury Rule: EPA issued the Clean Air Mercury Rule (originally proposed as the Utility Mercury Reductions Rule) on March 15, 2005. This rule will build on the Clean Air Interstate Rule (CAIR) to reduce mercury emissions from coal-fired power plants, the largest remaining domestic source of human-caused mercury emissions. Issuance of the Clean Air Mercury Rule marks the first time EPA has regulated mercury emissions from utilities, and makes the U.S. the first nation in the world to control emissions from this major source of mercury pollution. Mercury is a persistent, toxic pollutant that accumulates in the food chain. While concentrations of mercury in the air are usually low, mercury emissions can reach lakes, rivers and estuaries and eventually build up in fish tissue. Americans are exposed to mercury primarily by eating certain species of fish. However, close to 80 percent of the fish Americans buy comes from overseas, from other countries and from waters beyond our reach and control. The United States contributes just a small percentage of human-caused mercury emissions worldwide - roughly three percent with U.S. utilities responsible for about one percent of that.

NonRoad Diesel Rule: The Clean Air Nonroad Diesel Rule, a component of the National Clean Diesel Campaign (NCDC), will improve diesel engine function to remove emissions and innovative diesel fuel refining techniques to remove sulfur. The black puff of smoke seen coming from construction and other nonroad diesel equipment will be eliminated. Even with more stringent heavy-duty highway engine standards set to take effect over the next decade, over the next twenty years millions of diesel engines already in use will continue to emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems. The Diesel Retrofit work will be covered under the Energy Policy Act of 2005. These problems are manifested by thousands of instances of premature mortality, hundreds of thousands of asthma attacks, millions of lost work days, and numerous other health impacts. The NCDC works to reduce the pollution emitted from diesel engines across the country through the implementation of varied control strategies and the aggressive involvement of national, state, and local partners.

Ozone Rule: The Clean Air Ozone Rules (dealing with 8-hour ground-level ozone designation and implementation) designate those areas where air does not meet the health-based standards for ground-level ozone and classify the seriousness of the problem in each area. The Rules also set forth the schedule and minimum elements required in plans states must submit to reduce the levels of ozone in areas where the ozone standards are not met. Ground-level ozone is an air pollutant that causes human health problems, and damages crops and other vegetation. It is a key ingredient of urban smog.

Fine Particle Rule: The Clean Air Fine Particle Rules (dealing with PM 2.5 designations and implementation) designate those areas where air does not meet the health-based standards for fine-particulate pollution and classify the seriousness of the problem in each area. An upcoming rule will also set forth the schedule and minimum elements required for state plans to reduce the levels of fine particulate matter in areas where the standards are not met. Particulate Matter is associated with increased hospital admissions and emergency room visits for people with heart and lung disease as well as increased work and school absences. It is also the major source of haze that reduces visibility in many parts of the United States, including our National Parks.

The Clean Air Interstate Rule and the Nonroad Diesel Rule, combined with other existing state and Federal programs, including the Tier 2 clean vehicles and gasoline sulfur standards for cars and light trucks, the heavy duty diesel engines and low sulfur diesel rule, and the NOx SIP Call Rule to reduce interstate ozone, will bring well over half of counties now monitoring non-attainment into attainment with the fine particle and ozone standards.

The Indoor Air Program characterizes the risks of indoor air pollutants to human health, develops techniques for reducing those risks, and educates the public about what they can do to reduce their risks from indoor air. Through voluntary partnerships with non-governmental and professional organizations, EPA educates and encourages individuals, schools, industry, the health care community, and others to take action to reduce health risks in indoor environments using a variety of approaches including national public awareness, media campaigns, as well as community-based outreach and education. EPA also uses technology-transfer to improve the design, operation, and maintenance of buildings – including schools, homes, and workplaces – to promote healthier indoor air. EPA also supports a national radon (second only to smoking as a cause of lung cancer) program that encourages voluntary national, regional, state, and tribal programs and activities that support initiatives targeted to radon testing and mitigation as well as radon resistant new construction.

For more than a decade, businesses and organization have partnered with EPA through voluntary climate protection programs to pursue common sense approaches to reducing greenhouse gas emissions and help in meeting the President's greenhouse gas intensity goal. Voluntary programs such as Energy Star and SmartWay Transport have contributed to increasing the use of energy-efficient products and practices and reducing emissions of carbon dioxide as well as methane and other greenhouse gases with very high global warming potentials. These partnership programs help spur investment in advanced energy technologies and the purchase of energy-efficient products and create emissions reduction benefits that accrue over the lifetime of the investment or product.

EPA's Domestic Stratospheric Ozone Protection Program will continue to implement the provisions of the Clean Air Act and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), contributing to the reduction and control of ozone-depleting substances (ODSs) in the U.S. and lowering health risks to the American public associated with exposure to UV radiation.

In FY 2007, EPA will continue upgrading the national radiation monitoring system, thus improving response time, data dissemination, and population/geographic coverage of the U.S should there be an accidental or intentional release of radiation either domestically or internationally. EPA will also maintain readiness of deployable monitors allowing for sampling density at locations near and downwind from radiological incidents. The Agency will continue to enhance laboratory response capacity and capability to ensure a minimal level of surge capacity for radiological incidents.

International Activities

EPA will continue to work with other agencies on the Methane to Markets program. This program is an international initiative that focuses on advancing cost-effective, near-term methane recovery and use as a clean energy source. The goals of the program are to reduce global methane emissions to enhance economic growth, promote energy security, improve the environment, and reduce greenhouse gas emissions. Other benefits include improving mine safety, reducing waste, and improving local air quality. EPA is the lead agency for the Methane to Markets program.

EPA will also participate in the newly-established Asia-Pacific Partnership on Clean Development and Climate. The Partnership aims to promote development and transfer of cleaner, more efficient technologies that can address greenhouse gas mitigation and energy security - issues that are crucial not only to the region but the entire world. Through these programs, EPA will work with international governments to transfer American technology and voluntary program techniques. The Department of State is the lead agency for implementing this initiative.

Research

EPA's air research provides the scientific foundation for the Agency to fulfill its responsibilities under the Clean Air Act, which helps make the air safe to breathe and protects human health and the environment. The Agency focuses its research on National Ambient Air Quality Standards (NAAQS) pollutants and also studies hazardous air pollutants (HAPs).

In FY 2007, the Agency's air research will continue to strengthen the scientific basis for the periodic review and implementation of air quality standards. This research is concentrated on particulate matter (PM), but includes other NAAQS pollutants. PM research is aligned with the ten priority research topics for PM identified by the National Academy of Sciences (NAS). The NAS has conducted four reviews of EPA's PM research since 1998 to identify relevant, high-priority research needs and monitor research performance.

In FY 2007, the Agency's air toxics research will complete selected ongoing research efforts and begin transitioning toward the Multiple Air Pollutant Program (MAPP) focus recommended by external review. Air toxics research provides health hazard and exposure methods, data, and models that enable the Agency to reduce uncertainty in risk assessment. It also produces tools that enable national, regional, state, and local officials to identify and implement cost-effective approaches to reduce risk from sources of air toxics.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through a) the use of research strategies and plans, b) program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and c) peer review.

In 2005, the BOSC evaluated the NAAQS research program to assess the quality and relevance of its research and the program's historical performance. The subcommittee concluded that the program has reduced scientific uncertainty and that there was a high degree of integration between the program's in-house and external research, which is usually conducted through competitive, peer-reviewed grants under the Agency's Science to Achieve Results (STAR) program.

Research is guided by strategies and plans that are developed with participation from Agency research programs' major clients. Strategies outline the research needs and priorities. Multi-year research plans outline steps for meeting strategic research needs and annual performance goals and measures for evaluating progress.

Taken together, these mechanisms serve to ensure that EPA's research and science remain relevant, of high quality, and contribute to superior environmental performance.

The Agency approaches its research programs' workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

Workforce

Senior management supports Human Capital efforts to develop leadership and technical skills for all employees supporting the Clean Air and Global Climate Change Goal. Offices within the Goal are analyzing their knowledge management needs and capabilities as an important element of the overall strategic succession plan. This analysis includes evaluating the skills of the current workforce and needs for the future to ensure that EPA possesses the skills necessary to meet the challenges that lie ahead.

The Agency approaches its research programs' workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

EPA offices work together to enhance information and data access across the offices, and better communicate EPA's message about air quality.

FY 2005 PARTs

The following programs were assessed in 2005 though OMB's Program Assessment Rating Tool (PART).

• National Ambient Air Quality Standards (NAAQS) Federal Program

¹ EPA, Office of Research and Development, Board of Scientific Counselors, *Particulate Matter and Ozone Research Program (Washington: EPA, 2005)*. Available at: http://www.epa.gov/osp/bosc/pdf/pm0508rpt.pdf>

- Air Quality Grants and Permitting Programs
- Indoor Environments
- National Ambient Air Quality Standards (NAAQS) Research (re-PART)

More detailed information is provided in specific program project descriptions.

CLEAN AND SAFE WATER

Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.

STRATEGIC OBJECTIVES:

- Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.
- Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
- Provide and apply a sound scientific foundation to EPA's goal of clean and safe water by conducting leading-edge research and developing a better understanding and characterization of the environmental outcomes under Goal 2.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations Full-time Equivalents (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Clean and Safe Water	\$3,517,729.0	\$3,133,211.9	\$2,731,342.1	(\$401,869.8)
Protect Human Health	\$1,270,988.5	\$1,220,989.2	\$1,177,458.2	(\$43,531.0)
Protect Water Quality	\$2,121,752.9	\$1,791,519.9	\$1,412,740.6	(\$378,779.3)
Enhance Science and Research	\$124,987.5	\$120,702.8	\$141,143.3	\$20,440.5
Total Authorized Workyears	2,906.9	2,930.1	2,906.8	-23.3

Over the 30 years since enactment of the Clean Water and Safe Drinking Water Acts (CWA and SDWA), government, citizens, and the private sector have worked together to make dramatic progress in improving the quality of surface waters and drinking water. Thirty years ago, much of the Nation's tap water had either very limited treatment (usually disinfection) or no treatment at all. About two-thirds of the surface waters assessed by states were not attaining basic water quality goals and were considered polluted. Some of the Nation's waters were open sewers posing health risks and many water bodies were so polluted that traditional uses, such as swimming, fishing, and recreation, were impossible.

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² United States Environmental Protection Agency Office of Water. 1998. *Clean Water Action Plan: Restoring and Protecting America's Water.* Washington, DC: Government Printing Office.

Today, drinking water systems monitor and treat water to assure compliance with drinking water standards covering a wide range of contaminants. In addition, EPA now protects sources of drinking water through activities such as regulating underground injection of wastes. The number of polluted waters has been reduced and many clean waters are even healthier. A massive investment of Federal, state, and local funds resulted in a new generation of wastewater treatment facilities able to provide "secondary" treatment or better. EPA has issued national discharge regulations for over 50 industrial categories.³ In addition, sustained efforts to implement "best management practices" have helped reduce runoff of pollutants from diffuse or "nonpoint" sources.

Cleaner, safer water has renewed recreational, ecological, and economic interests in communities across the nation. The recreation, tourism, and travel industry is one of the largest employers in the nation, and a significant portion of recreational spending comes from swimming, boating, sport fishing, and hunting.⁴ Each year, more than 180 million people visit the shore for recreation.⁵ In 2001, sportspersons spent a total of \$70 billion–\$35.6 billion on fishing, \$20.6 billion on hunting, and \$13.8 million on items used for both hunting and fishing. Wildlife watchers spent an additional \$38.4 billion on their activities around the home and on trips away from home.⁶ The commercial fishing industry, which also requires clean water and healthy wetlands, contributed \$28.6 billion to the economy in 2001.⁷ The Cuyahoga River, which once caught fire, is now busy with boats and harbor businesses that generate substantial revenue for the City of Cleveland. The Willamette River in Oregon has been restored to provide swimming, fishing, and water sports. Even Lake Erie, once infamous for its dead fish, now supports a \$600 million per year fishing industry.⁸

Although there has been much progress on important economic, human health and environmental benefits, there is still work to be done to realize the vision of clean rivers, lakes, streams and coastal areas and safe water to drink. In 2007, EPA will work with states and tribes to continue accomplishing measurable improvements in the safety of the Nation's drinking water and in the condition of rivers, lakes and coastal waters. This Overview summarizes key environmental and public health goals and describes the general strategies EPA proposes to implement to accomplish these goals. With the help of states, tribes and other partners, EPA expects to continue progress toward protecting human health and improving water quality by 2008, including –

• Water Safe to Drink: increase the percentage of population served by community water systems that meet all applicable health-based drinking water standards from 89% to 95%;

³ Code of Federal Regulations. Title 40, PARTs 405 -471. Revised as of July 1, 2005

⁴ Travel Industry Association of America. *Tourism for America, 11th Edition.* Washington, DC: Travel Industry of America.

⁵ Pew Oceans Commission. 2002. *America's Living Oceans Charting a Course for Sea Change*. Arlington, VA: Pew Oceans Commission.

⁶ U.S. Fish and Wildlife Service. 2002. 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. Washington, DC: Government Printing Office.

⁷ National Marine Fisheries Service. 2002. Fisheries of the U.S. 2001. Washington, DC: Government Printing Office.

⁸ United States Environmental Protection Agency Office of Water. 1998. Clean Water Action Plan: Restoring and Protecting America's Water. Washington, DC: Government Printing Office.

- **Fish and Shellfish Safe to Eat:** reduce the percentage of the water miles/acres identified by states or Tribes as having fish consumption advisories in 2002 where increased consumption of safe fish is allowed, (485,205 river miles, 11,277,276 lake acres) while increasing the percentage of the shellfish growing acres monitored by states that are approved or conditionally approved for use from 77% to 91%;
- Surface Water Meeting Standards: address water quality problems on a watershed basis so that water quality standards are fully attained in waterbodies identified by states as not meeting standards
- Healthy Coastal Waters: maintain or improve the overall health of each of the four major coastal ecosystems around the country, as measured by the National Coastal Condition Report.

The clean and safe water goals are closely related to goals established in Goal 4 of the Agency Strategic Plan regarding improvements in wetlands, estuaries, targeted geographic programs such as the waters of the Mexico Border region, the Great Lakes, the Chesapeake Bay, and the Gulf of Mexico. The key strategies that EPA plans to implement in FY 2007 to make progress toward the public health and environmental goals identified in the Strategic Plan are briefly described below.

Water Safe to Drink

For almost 30 years, protecting the Nation's public health through safe drinking water has been the shared responsibility of EPA, the states, and nearly 54,000 community water systems (CWSs)⁹ nationwide that supply drinking water to more than 260 million Americans (approximately 90% of the U.S. population). Within this time span, safe drinking water standards have been established and are being implemented for 91 microbial, chemical, and radiological contaminants. Forty-nine states have adopted primary authority for enforcing their drinking water programs. Additionally, CWS operators are better informed and trained to both treat contaminants and prevent them from entering the source of their drinking water supplies.

During 2007, EPA, the states, and CWSs will build on these successes while working toward the 2008 goal of assuring that 95 percent of the population served by CWSs receives drinking water that meets all applicable standards. Collectively, these core areas and other interrelated elements of the national safe drinking water program form a balanced, integrated framework that comprises the multiple barrier approach to protecting public health from unsafe drinking water. EPA has identified key activities within five core program areas described below that are critical to ensuring safe drinking water.

⁹ Although the Safe Drinking Water Act applies to 159,796 public water systems nationwide (as of January 2004), 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 January 2004, there were 52,838 CWSs.

Drinking Water Standards

During FY 2007, EPA will continue to assess the need for new or revised drinking water standards based on available data on health effects, occurrence, risks of exposure, analytical (detection) methods, as well as information on technologies to prevent, detect, or remove specific contaminants. Specifically, EPA will:

- Determine whether to regulate at least five unregulated contaminants on the second contaminant candidate list (CCL) and, through the Six-Year Review of existing regulations, whether a revision to an existing standard is warranted;
- Continue analysis to prepare the Agency's third CCL;
- Continue the comprehensive Lead and Copper Rule Review that began in 2004;
- Begin to develop revisions to the Total Coliform Rule (TCR); and
- Consider additional protections of drinking water distribution systems.

Drinking Water Implementation

During FY 2007, EPA will support state efforts to meet existing and new drinking water standards including the Cryptosporidium (Long Term 2 Enhanced Surface Water Treatment), Disinfection (Stage 2 Disinfectants and Disinfection Byproducts Rule), and Ground Water Rules. In many states, EPA will be responsible for directly implementing the early monitoring requirements under the Cryptosporidium and Disinfection rules. In addition, initial monitoring requirements under the revised arsenic rule and revised radionuclides rule will be underway. EPA and the states will use the following tools to encourage compliance:

- Public Water System Supervision (PWSS) Program Grants: These grants to states and tribes provide assistance to implement and enforce National Primary Drinking Water Regulations to ensure the safety of the Nation's drinking water resources and to protect public health.
- Sanitary Surveys: Sanitary surveys are on-site reviews of the water sources, facilities, equipment, operation, and maintenance of public water systems. All states are to be in compliance with requirements to conduct sanitary surveys at CWSs once every three years starting in 2004.
- Data Access, Quality, and Reliability: EPA will complete the modernization of the Safe Drinking Water Information System (SDWIS), which serves as the primary source of national information on compliance with all health-based, regulatory requirements of SDWA.

Promotion of Sustainable Management of Drinking Water Infrastructure

The Drinking Water State Revolving Loan Fund (DWSRF), established under the SDWA, offers low interest loans to help public water systems across the nation make improvements and upgrades to their water infrastructure, or support other activities that build system capacity. In FY 2007, the DWSRF program will provide an estimated 600 additional loans. EPA will also

work with states to increase the percentage of loan agreements made each year that return a system to compliance, estimated to be 30% of loan agreements in 2002.

Protection of Sources of Drinking Water

In FY 2007, EPA will work with states and water systems to improve protection of sources of drinking water in two key areas.

- Voluntary Source Water Protection Strategies: EPA will promote the concept of a multiple barriers approach to drinking water program management and will work with states to track, to the extent feasible, the development and implementation of source water protection strategies. EPA has set a goal of increasing the number of source water areas (both surface and ground water) for community water systems that have minimized risk to public health from an estimated baseline of 5% of all areas in 2002 to 20% in FY 2007.
- Underground Injection Control: EPA works with states to regulate injection of hazardous substances and other waste to prevent contamination of underground sources of drinking water. In FY 2007, EPA will continue to focus on shallow wells (Class V) in source water areas. EPA and the states will work to assure that all identified Class V motor vehicle waste disposal wells are closed by 2008. EPA and states will also work to assure that 100 percent of Class I, II, III and V wells that are determined to be in violation are addressed.

Assurance that Critical Water Infrastructure is Secure

In FY 2007, EPA will continue to lead and support state and water utility efforts to secure their water infrastructure from terrorist threats and other intentional harm. In addition, due to its responsibilities under Homeland Security Presidential Directives 7 and 9, EPA will support the water sector in implementing protective measures and in continuing to pilot a new and innovative drinking water surveillance and monitoring program. In FY 2007, EPA will establish, in selected cities, additional pilot contamination warning systems based upon intensive water monitoring and other surveillance. The pilots will integrate information from contaminant-specific sampling and laboratory analysis, on-line water quality monitoring, public health surveillance, customer complaints and physical security to form a *comprehensive contamination warning system*. The WaterSentinel program will prove the concept of an effective contamination warning system, so that drinking water utilities, ideally of all sizes and characteristics, could adopt such a system. The Agency will also provide critical tools, training, and exercises that will help utilities detect, prevent, and respond to threats.

Fish and Shellfish Safe to Eat

Across the U.S., states and tribes have issued fish consumption advisories for a range of persistent, bioaccumulative contaminants covering more than 840,000 river miles and 14 million lake acres as of 2003.¹⁰ The EPA *Strategic Plan* calls for improving the quality of water and

¹⁰ United States Environmental Protection Agency Office of Water. Fact Sheet: National Listing of Fish Advisories. EPA-823-F-04-016. August 2004. Available on the Internet at http://www.epa.gov/waterscience/fish/advisories/factsheet.pdf

sediments to allow increased consumption of fish and shellfish. EPA's national approach to meeting safe fish and shellfish goals is described below.

Safe Fish

Most of the current fish consumption advisories issued by states are for mercury, PCBs, and dioxin. EPA is emphasizing strategic partnerships within the Agency to address these pollutants. EPA's water program is also addressing remaining controllable sources of fish exposure to these chemicals. The Agency is:

- Developing mercury fish tissue criteria implementation guidance to ensure new criteria are incorporated into WQS and implemented in National Pollutant Discharge Elimination System (NPDES) permits;
- Working with states to improve their advisory programs with particular emphasis on periodic re-sampling of previously tested waters that are under advisory; and
- Working to identify emerging contaminants to ensure that routes of fish exposure to new, emerging contaminants are addressed early.

Safe Shellfish

Success in achieving the shellfish goals relies on implementation of CWA programs that are focused on sources of pollution that cause 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 Total Maximum Daily Loads (TMDLs), and revision of discharge permit limits can be applied to improve conditions.

Water Safe for Swimming

Recreational 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. In November 2004, EPA established more protective health-based WQSs for bacteria for those states and Territories bordering Great Lakes or ocean waters that had not yet adopted standards in accordance with the Beaches Environmental Assessment and Coastal Health Act of 2000, an important step to further protect the quality of the nation's coastal recreation waters. For FY 2007, EPA's national strategy for improving the safety of recreational waters will include these key elements:

Improve Beach Monitoring and Public Notification

A key component 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

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¹¹ United States Environmental Protection Agency. Federal Register; November 16, 2004; Volume 69, Number 220; pages 67217 – 67243. Water Quality Standards for Coastal and Great Lakes Recreation Waters. Available on the Interenet at http://www.epa.gov/fedrgstr/EPA-WATER/2004/November/Day-16/w25303.htm

with states to implement the Beaches Environmental Assessment and Coastal Health (BEACH) Act. In FY 2007, EPA expects that all Tier 1 public beaches will be monitored and managed under the BEACH Act and that states and localities will be taking actions where possible and appropriate to address sources of unsafe conditions that result in the closure of beaches.

Identify Unsafe Recreational Waters and Begin Restoration

Another important element 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. An important part of this work is to maintain strong progress toward development of TMDLs based on the schedules established by states in conjunction with EPA. In a related effort, the Agency will better focus compliance assistance and, where necessary, enforcement resources on unsafe recreational waters. In addition, working with communities that have frequent wet weather discharges (which are a major source of pathogens) to ensure progress to reduce the frequency of these discharges is one of the Agency's national enforcement priorities for FY 2005 through 2007.

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 CSOs;
- Address major sources discharging pathogens under the permit program; and
- Improve management of septic systems.

Restore and Improve Water Quality on a Watershed Basis

A significant investment of the National Water Program resources is under the CWA, which directly support efforts to restore and improve the quality of rivers, lakes, and streams. In FY 2007, EPA will work with states to make continued progress toward the clean water goals identified in the Strategic Plan by using a two-part strategy. EPA will also implement core clean water programs, including innovations that apply programs on a watershed basis and accelerate efforts to improve water quality on a watershed basis.

Implement Core Clean Water Programs:

To protect and improve water quality on a watershed basis in FY 2007, EPA, in partnership with states and tribes, will continue to focus the work on integrating the six key program areas that form the foundation of the water program. Core water program work includes:

• Strengthen Water Quality Standards: The top priority for the criteria and standards program in FY 2007 is the continued implementation of the *Water Quality Standards* (WQS) and Criteria Strategy, developed in cooperation with states, tribes, and the public in 2003. The Standards and Criteria Strategy prioritizes key strategic actions EPA and

the states need to complete in order to strengthen the WQS program to guide assessment and restoration efforts. This Strategy calls for EPA to continue work in developing scientific "criteria documents" for key chemical, microbial, and water pollutants, including implementation protocols and methods. Key elements identified in the Strategy include developing nutrient criteria, adopting biological criteria, approving state WQSs in a timelier manner, and providing technical and scientific support to the states and tribes in conducting Use Attainability Analyses and developing site-specific criteria. Finally, EPA will work with states and tribes to ensure the effective operation and administration of the standards program.

- Improve Water Quality Monitoring: Scientifically defensible water quality data and information are essential to all aspects of the national program to protect and restore water yet, as documented in numerous independent evaluations, Federal and state water quality monitoring and assessment programs need strengthening. Top priorities for FY 2007 are state participation in efforts to develop statistically valid monitoring networks, continued EPA support of states in developing monitoring programs consistent with national monitoring guidance published in 2003, and state support of the national water quality database.
- Develop Total Maximum Daily Loads (TMDLs) and Related Plans: Development of TMDLs for an impaired waterbody is a critical tool for meeting water restoration goals. In FY 2007, EPA will continue to support states as they develop TMDLs to meet court-ordered schedules and ensure that the national policy of TMDL completion within 13 years of waterbody listing is met. EPA will continue to pursue innovative approaches to help states and other partners develop and implement waterbody restoration plans as efficiently as possible.
- Control Nonpoint Source Pollution on a Watershed Basis: Polluted runoff from nonpoint sources is the largest single remaining cause of water pollution. In FY 2007, EPA will use grants to states under Section 319 of the CWA to support efforts to manage nonpoint pollution through the development and implementation of watershed plans. Special emphasis will be placed on restoring impaired waters on a watershed basis.
- **Industrial Water Pollution Control:** EPA will develop regulations for industries where the risk to waterbodies can be reduced and water quality can be improved through wastewater treatment. In FY 2007, EPA will be working on regulations for the 4 industries identified in the 2004 effluent guideline plan and any additional industries that may be identified in the 2006 plan.
- Strengthen NPDES Permit Program: The NPDES program requires point sources discharging to water bodies to have permits. In FY 2007, EPA will work with states to use the "Permitting for Environmental Results Strategy" to address concerns about the workload for issuing permits and the health of state NPDES programs. Additionally, EPA will finalize a rule that incorporates financial incentives for states that implement adequate NPDES fee systems.

• Support Sustainable Wastewater Infrastructure: The Clean Water State Revolving Funds (CWSRFs) provide low-interest loans to help finance wastewater treatment facilities and other water quality projects. Recognizing the substantial remaining need for wastewater infrastructure, EPA will continue to provide significant annual capitalization to CWSRFs in FY 2007. Another important approach to closing the gap between the need for clean water projects and available funding is to use sustainable management systems to prolong the lives of existing systems. EPA will work to encourage rate structures that lead to full cost pricing and other conservation measures.

Accelerate Watershed Protection

Strong execution of core CWA programs alone is not sufficient to maintain and accelerate progress toward cleaner water and accomplish the water quality improvements called for in the *Strategic Plan*. About a decade ago, EPA fostered the watershed approach, focusing on multistakeholder and multi-program efforts within hydrologically defined boundaries, as a better way to address water quality problems. In FY 2007, EPA will accelerate watershed protection by working in three key areas:

- Core Programs Organized by Watershed: In addition to development of watershed based plans, discussed below, core programs can be implemented on a watershed basis. Some examples in practice as a result of innovations developed by state, EPA Regions, and others are development of TMDLs and NPDES permits on a watershed basis and implementing water quality "trading" programs within a watershed.
- Local Watershed Protection Efforts: EPA is developing national tools, training, and technical assistance that will help community partnerships to be more effective at improving watershed health.
- Apply an Adaptive Management Framework: The best way to achieve progress in improving and protecting waters and watersheds is by applying an adaptive management approach to better understand the problems, set challenging but realistic goals, and address opportunities associated with developing programs and building partnerships at the watershed level. In FY 2007, EPA will continue to work with states and tribes to apply an adaptive management framework to identify the specific mix of watershed tools that best suit local needs and conditions.

Protect Coastal and Ocean Waters

Coastal waters are among the most productive ecosystems on Earth, but 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. The work described here will be closely coordinated with the implementation of the National Estuary Program (described in Goal 4).

For FY 2007, EPA's national strategy for improving the condition of coastal and ocean waters will include the key elements listed below. The health of ocean and coastal waters and progress in meeting EPA's strategic targets will be tracked through the National Coastal Condition Report. In addition, the OSV *BOLD*, EPA's ocean survey vessel, will support monitoring and assessment needs in coastal regions.

Reduce Vessel Discharges

EPA will focus on enhancing regulation of discharges of pollution from vessels. Key work for FY 2007 includes proposing wastewater standards for cruise ships operating in Alaskan waters and cooperating with the Department of Defense to develop discharge standards for all armed forces vessels.

Manage MPRSA Ocean Dumping Program (Including Dredged Material)

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. In FY 2007, EPA and COE will continue to focus resources on improving how disposal of dredged material is managed, including evaluating, designating, and monitoring disposal sites. EPA will also review and concur on the disposal permits issued by COE.

Manage Invasive Species

One of the greatest threats to U.S. 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 discharge standards. In addition, EPA will continue efforts to target invasive species in coastal areas. Efforts addressing invasive species on an international level are discussed below.

FY 2005 Performance Assessment Rating Tool Evaluations (PARTs):

The following programs were assessed using the Program Assessment Rating Tool (PART) for the FY 2005 PART process (final PART ratings will be included in the President's Budget):

- Oceans and Coastal Programs
- Surface Water Protection Program
- Section 106 Categorical Grants
- Drinking Water Research

More detailed information is provided in specific program project descriptions.

International Activities

Internationally, our objective is to protect the environmental quality of U.S. coastal and ocean waters. U.S. waters are subject to international sources of pollution and EPA's international

efforts in this area are focused on the development and implementation of international standards necessary to address transboundary sources of pollution, pollution affecting shared ecosystems, and the introduction of non-indigenous species through maritime shipping. To reach these ends we are seeking to reduce the introduction of invasive species to U.S. waters by working with the U.S. Coast Guard regarding the International Ballast Water Standards Convention under MARPOL. Another emphasis is negotiation of effective international standards addressing harmful anti-foulants and air emissions from ships. Achievement of the objective and strategic targets will enhance U.S. water quality, human health, and help stabilize aquatic ecosystems in North America.

Research

EPA's drinking water and water quality research programs conduct leading edge, problem-driven research to provide a sound scientific foundation for Federal regulatory decision-making. These efforts will result in strengthened public health and aquatic ecosystem protection by providing data methods, models, assessments, and technologies for EPA program and regional offices, as well as state and local authorities.

In FY 2007, the drinking water research program will continue to focus on filling key data gaps and developing analytical detection methods for measuring the occurrence of chemical and microbial contaminants on the Contaminant Candidate List (CCL) and developing and evaluating cost-effective treatment technologies for removing pathogens from water supplies while minimizing microbial/disinfection by-product (M/DBP) formation. The water quality research program will continue providing approaches and methods the Agency and its partners need to develop and apply criteria to support designated uses, tools to diagnose and assess impairment in aquatic systems, and tools to restore and protect aquatic systems.

A new investment in FY 2007 will support research and development of innovative approaches and technologies aimed at the growing gap in the nation's water infrastructure requirements. Aging and deteriorated potable water and wastewater infrastructure makes it difficult to meet Clean Water Act and Safe Drinking Water Act requirements, and increases the potential for waterborne disease outbreaks. The purpose of this initiative will be to generate the science and engineering to evaluate promising innovative technologies and techniques to reduce the cost of operation, maintenance, and replacement of aging and failing wastewater and potable water conveyance systems and move towards sustainable water infrastructure.

Other important areas of research in FY 2007 will include: 1) developing a web-enabled database of treatability information for chemicals and pathogens, providing information to the Agency for prioritization of contaminants and for Homeland Security efforts; 2) reporting on public health benefits associated with improvements in drinking water treatment to reduce microbial exposures; 3) conducting wetlands research to develop a hierarchical assessment approach to address the objectives of the President's initiative to preserve and restore wetlands, and augment the current no-net-loss policy; and 4) performing a suite of epidemiological studies to establish a strong, defensible link between rapid water quality indicators and swimming-associated health effects.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby, providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through the use of research strategies and plans, program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and peer review.

In 2005, the BOSC evaluated the Agency's drinking water research program to assess the quality and relevance of its research and the program's historical performance. The subcommittee concluded that the program has produced significant research, which in turn has been used by the Agency's Office of Water (OW), states, and industry to achieve outcomes. The subcommittee also lauded the program's use of the Agency's Science to Achieve Results (STAR) program, which awards competitive research grants through a rigorous peer review process. The FY 2005 PART process resulted in specific annual and long term performance measures that will improve quantification of outcomes. Notably, the drinking water research program will measure the long term utility of its products for key decisions by the Office of Water.

Strategies are tailored to specific research needs and priorities. The Agency maintains multi-year research plans (MYP) that outline steps for meeting those strategic research needs and annual performance goals (APG) and measures (APM) for evaluating progress.

Taken together, these mechanisms serve to ensure that EPA's research and science remain relevant, of high quality, and contribute to superior environmental performance.

In order to sustain a viable and credible workforce, the Agency approaches its research programs' workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

LAND PRESERVATION AND RESTORATION

Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.

STRATEGIC OBJECTIVES:

- By 2008, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.
- By 2008, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.
- Through 2008, provide and apply sound science for protecting and restoring land by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 3.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations Full-time Equivalents (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Land Preservation and Restoration	\$1,780,624.2	\$1,656,471.0	\$1,689,635.1	\$33,164.1
Preserve Land	\$217,596.8	\$217,305.7	\$242,090.9	\$24,785.2
Restore Land	\$1,501,041.1	\$1,383,140.1	\$1,395,285.3	\$12,145.2
Enhance Science and Research	\$61,986.3	\$56,025.2	\$52,258.9	(\$3,766.3)
Total Authorized Workyears	4,602.5	4,737.8	4,686.2	-51.6

Uncontrolled, hazardous and nonhazardous wastes on the land can migrate to the air, groundwater, and surface water, contaminating drinking water supplies, causing acute illnesses or chronic diseases, and threatening healthy ecosystems in urban, rural, and suburban areas. Hazardous substances can kill living organisms in lakes and rivers, destroy vegetation in contaminated areas, cause major reproductive complications in wildlife, and otherwise limit the ability of an ecosystem to survive.

EPA leads the country's activities to prevent and reduce the risks posed by releases of harmful substances and by contaminated land. The most effective approach to controlling these risks incorporates developing and implementing prevention programs, improving response

capabilities, and maximizing the effectiveness of response and cleanup actions. This approach will help to ensure that human health and the environment are protected and that land is returned to or continues to be used beneficially.

EPA will work to preserve and restore the land with the most effective waste management and cleanup methods available. EPA uses a hierarchy of approaches to protect the land: reducing waste at its source, recycling waste, managing waste effectively by preventing spills and releases of toxic materials, and cleaning up contaminated properties. The Agency especially is concerned about threats to our most sensitive populations, such as children, the elderly, and individuals with chronic diseases, and prioritizes cleanups accordingly. Additional information on these programs can be found at: www.epa.gov/superfund, http://www.epa.gov/superfund/programs/er/index.htm.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, or Superfund) and the Resource Conservation and Recovery Act (RCRA) provide the legal authority for most of EPA's work toward this goal. The Agency and its partners use Superfund authority to clean up uncontrolled or abandoned hazardous waste sites and return the land to productive use. Under RCRA, EPA works in partnership with states and Tribes to address risks associated with leaking underground storage tanks and with the generation and management of hazardous and nonhazardous waste.

EPA also uses authorities provided under the Clean Air Act, Clean Water Act, and Oil Pollution Act of 1990 to protect against spills and releases of hazardous materials. Controlling the many risks posed by accidental and intentional releases of harmful substances presents a significant challenge. EPA's approach integrates prevention, preparedness, and response activities to minimize these risks. Spill prevention activities keep harmful substances from being released to the environment. Improving its readiness to respond to emergencies through training, development of clear authorities, and provision of proper equipment ensures that EPA is adequately prepared to minimize contamination and harm to the environment when spills do occur.

The following themes characterize EPA's land program activities under Goal 3: Revitalization; Recycling, Waste Minimization and Energy Recovery; Emergency, Preparedness and Response and Homeland Security; and implementation of the recently-authorized Energy Policy Act of 2005 (EPAct).

• Revitalization: All of EPA's cleanup programs (Superfund Remedial, Superfund Federal Facilities Response, RCRA Corrective Action, Brownfields, and Underground Storage Tanks) and their partners are taking proactive steps to accommodate and facilitate the cleanup and revitalization of contaminated properties. Revitalizing these once productive properties can provide numerous positive impacts for communities such as removing blight, satisfying the growing demand for land, helping limit urban sprawl, fostering ecologic habitat enhancements, enabling economic development, and maintaining or improving quality of life. Efforts are underway to develop cross-program revitalization measures that will enable EPA to capture a broader array of accomplishments resulting from the assessment and cleanup of properties.

- Recycling, Waste Minimization and Energy Recovery: EPA's strategy for reducing waste generation and increasing recycling is based on: (1) establishing and expanding partnerships with businesses, industries, Tribes, states, communities, and consumers; (2) stimulating infrastructure development, environmentally responsible behavior by product manufacturers, users, and disposers ("product stewardship"), and new technologies; and (3) helping businesses, government, institutions, and consumers through education, outreach, training, and technical assistance.
- Emergency Preparedness, Response, and Homeland Security: EPA has a major role in reducing the risk to human health and the environment posed by accidental or intentional releases of harmful substances and oil. EPA will continue to improve its capability to effectively prepare for and respond to these incidents, including natural disasters such as Hurricane Katrina, working closely with other Federal agencies within the National Response Plan.
- Implementing New Energy and Transportation Legislation: EPA has a critical role in implementing the EPAct. The EPAct contains numerous provisions that significantly affect Federal and state underground storage tank (UST) programs. In FY 2007, EPA will provide assistance to states to help them meet their new responsibilities, which include performing additional inspections, developing operator training requirements, prohibiting fuel deliveries at non-compliant UST facilities, and requiring secondary containment for new and replaced tanks and piping or financial responsibility for tank installers and manufacturers.

Controlling Risks to Human Health and the Environment at Contaminated Sites

EPA and its partners work to identify contaminated lands that pose significant risks to human health and the environment. Once identified, these contaminated lands are cleaned up to levels sufficient to prevent and control risks to human health and the environment and, where necessary, to return the land to productive use. EPA and its partners follow four key steps to accomplish cleanups and control risks to human health and the environment from contaminated lands: assessment of risk, identification and stabilization of contaminants, selection of appropriate remedies to address risk posed by contaminants, and implementation of remedies to reduce contamination to below health-based risk levels. The Agency's cleanup activities, some new and some well-established, include removing contaminated soil, capping or containing contamination in place, pumping and treating groundwater, and bioremediation. New tools, such as Triad, a process for flexible and targeted sampling, help provide a more focused strategy to characterize contaminated lands. Also, through an Environmental Management Systems (EMS) approach, which involves a continuous cycle of planning, implementing, reviewing, and improving practices at each site, EPA has improved performance and reduced operating costs of remedies while ensuring continued protectiveness.

EPA has ongoing cleanup and property transfer responsibilities at some of the Nation's most contaminated Federal properties, which range from realigning and closing military installations and former military properties containing unexploded ordnance, solvents and other industrial chemicals, to Department of Energy sites containing nuclear waste. EPA's Superfund Federal Facilities Response program helps Federal and local governments, Tribes, states, redevelopment authorities and the affected communities ensure contamination at Federal or former Federal

properties is addressed in a manner that protects human health and the environment. For more information on the Superfund Federal Facilities Response program, please refer to http://www.epa.gov/fedfac.

EPA uses a variety of tools to accomplish cleanups, including permits, enforcement actions, consent agreements, and Federal facility agreements. Cleanup programs at all levels of government work together to ensure that appropriate cleanup tools are used; that resources, activities, and results are coordinated with partners and stakeholders and communicated to the public effectively; and that cleanups are protective and contribute to community revitalization. The Agency's two major cleanup programs, Superfund and RCRA Corrective Action, now rely on similar human health and groundwater protection environmental indicators. EPA is working to coordinate across all of its cleanup programs, while maintaining the flexibility needed to accommodate differences in program authorities and approaches.

EPA fulfills its cleanup and waste management responsibilities on Tribal lands by acknowledging Tribal sovereignty, which means recognizing Tribal governments as the most appropriate authorities for setting standards, making policy decisions, and managing programs consistent with Agency standards and regulations. EPA works with its Federal, state, Tribal, and local government partners to identify facilities and sites on or adjacent to Indian country requiring attention and to monitor changes in priorities.

Even though the Superfund program met its FY 2005 targets for a majority of its existing performance measures, challenges remain for the coming years. The program has a number of projects ready for construction, while it also needs to fund several large, complex remedial projects at an optimal pace. In addition, as the program has matured, it has become necessary for the Agency to devote more resources toward post construction activities, including long-term remedial actions and five-year reviews. Therefore, the Agency proposes to redirect resources from earlier phase activities toward construction in FY 2007.

To meet its objective to control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and to make land available for reuse, EPA intends to achieve the following results in FY 2007:

- Make 350 final site-assessment decisions under Superfund;
- Increase the total number of Superfund sites where all identified unacceptable human exposures are controlled to at or below health-based levels for current land and/or groundwater use conditions by 10;
- Increase the total number of Superfund sites where the migration of contaminated groundwater is under control through engineered or natural processes by 10;
- Select final remedies at 25 Superfund sites on the National Priorities List (NPL);
- Complete construction of remedies at 40 Superfund sites on the NPL;
- Increase the percentage of high priority RCRA facilities with human exposure to controlled toxins from an estimated 82% in FY 2006 to 89%;
- Increase the percentage of high priority RCRA facilities with toxic releases to groundwater contamination to 75% from an estimated 68% in FY 2006; and
- Complete 13,000 leaking underground storage tanks cleanups.

Enforcement authorities play a unique role under the Superfund program: they are used to leverage private-party resources to conduct a majority of the cleanup actions and to reimburse the Federal government for cleanups financed by the Trust Fund. The Superfund program's "enforcement first" policy ensures that sites that have viable potentially responsible parties (PRPs) are cleaned up by those parties, allowing EPA to focus appropriated resources on sites where viable PRPs either do not exist or lack funds or capabilities needed to conduct the cleanup. In tandem with this approach, various reforms have been implemented to increase fairness, reduce transaction costs, and promote economic development. For more information regarding various components, EPA's enforcement program and its please refer www.epa.gov/compliance/cleanup/superfund/.

The Agency also has been encouraging the establishment and use of Special Accounts within the Superfund Trust Fund. These accounts segregate site-specific funds obtained from responsible parties that complete settlement agreements with EPA. These funds may create an incentive for other PRPs at that specific site to perform work they otherwise might not be willing to perform. Alternatively, these funds may be used by the Agency to fund cleanup activities if there are not known or viable PRPs. As a result, the Agency can get more sites cleaned up while preserving the appropriated Trust Fund dollars for sites without viable PRPs.

In FY 2007, the Agency will continue to implement its "enforcement first" strategy. It will negotiate remedial design/remedial action cleanup agreements and removal agreements at contaminated properties. Where negotiations fail, the Agency will either take unilateral enforcement actions to require PRP cleanup or use appropriated dollars to remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs whenever possible. The Agency will also continue its efforts to establish and maximize the use of Special Accounts to facilitate clean up.

By continuing to pursue cost recovery settlements, the program promotes the principle that polluters should perform or pay for cleanups, preserving appropriated Superfund Trust Fund resources for site remediation where there is no known or viable PRP. The Agency's expenditures are recouped through administrative actions, CERCLA section 107 case referrals, and through settlements reached with the use of alternative dispute resolution.

EPA's financial management offices provide a full array of support services to the Superfund program including managing oversight billing for Superfund site cleanups and financial cost recovery. The Department of Justice supports EPA's Superfund Enforcement program through negotiations and judicial actions to compel PRP cleanup and litigation to recover Trust Fund monies spent.

Encouraging Land Revitalization

Land is one of America's most valuable resources. However, where contamination presents a real or perceived threat to human health and the environment, options and even interest in future use of that property may be limited. To address these common scenarios, EPA's cleanup programs have set a national goal of returning formerly contaminated sites to long-term, sustainable, and productive use. This goal creates greater impetus for selecting and implementing

remedies that, in addition to providing clear environmental benefits, support reasonably anticipated future land use options and provide greater economic and social benefits.

To help achieve its land revitalization goals, EPA works with external partners to: (1) promote land revitalization by ensuring that current use or reuse options are considered explicitly in the evaluation of cleanup options; (2) commit the necessary resources to address current use or reuse as a top priority in cleanup decisions; (3) develop new comprehensive policies and programs to address unintended cross-jurisdiction and cross-program barriers to the protective reuse of contaminated properties; (4) promote protective, long-term current use or reuse of properties; (5) promote sustainable reuse to prevent further contamination and indirect environmental problems that may result from some reuse (sustainable reuses include open spaces, energy efficient buildings, low impact design, smart growth community developments, and wildlife habitats); (6) develop and promote a land revitalization research agenda that improves our understanding of and our ability to use protectively or reuse contaminated or potentially contaminated properties; (7) build partnerships to leverage knowledge, expertise, and resources in the revitalization of properties (including government-to-government partnerships at the local, state, Tribal, and Federal levels as well as partnerships with non-government, private, and community organizations); (8) expand community capabilities through improved public involvement tools and information systems on contamination, cleanup, reuse, and long-term stewardship; (9) expand and promote educational and training programs that encourage and provide needed tools to achieve land revitalization; and (10) promote various approaches to measure and report the status and impacts of the collective efforts to revitalize.

For more information concerning EPA's land revitalization efforts, please refer to http://www.epa.gov/swerrims/landrevitalization/.

Reducing and Recycling Waste

Preventing pollution before it is generated and poses harm is often less costly than cleanup and remediation. Source reduction and recycling programs can increase resource and energy efficiencies and thereby reduce pressures on the environment. RCRA directs EPA to minimize the amount of waste generated and to improve recovery and conservation of materials through recycling. To this end, EPA builds on partnerships with other Federal agencies; state, Tribal, and local governments; business and industry; and non-governmental organizations. These voluntary partnerships provide information sharing, recognition, and assistance to improve practices in both public and private sectors.

EPA launched the Resource Conservation Challenge (RCC) as a major national effort to find flexible, yet more protective ways to conserve our valuable natural resources through waste reduction, energy recovery, and recycling. Through the RCC, EPA challenges every American to prevent pollution, promote recycling and reuse, and conserve energy and materials. The RCC programs foster source reduction and recycling in business, industry, and government; encourage local adoption of economic incentives that further source reduction and recycling; reduce hazardous wastes containing priority chemicals; promote waste-based industries that concurrently create jobs; foster cost-effective recycling programs in communities and Tribes; enhance markets for recycled materials by increasing procurement of recycled-content products; encourage innovative practices that result in more cost-effective source reduction and recycling;

implement the President's Climate Change Action Plan; and provide information to assess and track progress in reaching national goals.

Reducing waste generation has clear benefits in combating the ever-growing stream of municipal solid waste (MSW). MSW includes waste generated from residences, commercial establishments, institutions, and industrial non-process operations. Annual generation of MSW grew steadily from 88 million to 236 million tons between 1960 and 2003. In FY 2007, EPA's municipal solid waste program will implement a set of coordinated strategies, including source reduction (also called waste prevention), recycling (including composting), combustion with energy recovery, and landfilling. Preference will be given to strategies that maximize the diversion of waste from disposal, with source reduction (including reuse) as the highest priority.

To meet its objective for reducing materials use through product and process redesign, and increasing materials and energy recovery from wastes otherwise requiring disposal, EPA intends to achieve the following results in FY 2007:

- Maintain the national average MSW generation rate at no more than 4.5 pounds per person per day; and
- Divert 85.2 million tons of MSW from landfills and combustion.

Recognizing that some hazardous wastes cannot be completely eliminated or recycled, the RCRA program works to reduce exposure to hazardous wastes by maintaining a cradle-to-grave approach to waste management. The program's primary focus is to prevent hazardous releases from RCRA facilities and reduce emissions from hazardous waste combustion through a combination of regulations, permits and voluntary standards. State program authorization provides the states with primary RCRA implementation and enforcement authority; reduces overlapping and dual implementation by the states and EPA; provides the regulated community with one set of regulations; reduces overall Federal enforcement presence in the states; and can provide the opportunity for some of the newer, less-stringent RCRA regulations to be implemented by the states. To date, 48 States, Guam, and the District of Columbia are authorized to issue permits. Important goals of the RCRA program include strong state partnerships, the authorization of states for all portions of the RCRA hazardous waste program, including regulations addressing waste management issues contained in permits, and results-oriented state oversight.

¹² US Environmental Protection Agency. *Municipal Solid Waste in the United States:* 2003 Facts and Figures, Executive Summary, U.S. Government Printing Office, Washington, DC, October 2003. Available online at www.epa.gov/epaoswer/non-hw/muncpl/msw99.htm. Last updated April 5, 2005.

EPA works with states, Tribes and Intertribal Consortia to prevent, detect, and correct leaks into the environment from Federally-regulated USTs containing petroleum and hazardous substances. Achieving significant improvements in release prevention and detection requires a sustained emphasis by both EPA and its partners. Because states are the primary enforcers of the UST program requirements, EPA has adopted a decentralized approach to UST program implementation by building and supporting strong state and local programs. Concerns about the use of fuel oxygenates, like MTBE, in gasoline further underscores EPA's and the states' emphasis on promoting compliance with all UST requirements. EPA provides technical information, forums for information exchanges and training opportunities to states, Tribes and Intertribal Consortia to encourage program development and/or implementation of the UST program. In FY 2007, EPA will make grants to states and Tribes under Section 2007(f)(2) of the Solid Waste Disposal Act (SWDA) for underground storage tank detection, prevention and correction programs and grants or cooperative agreements for new activities authorized by the Underground Storage Tank Compliance Act of 2005 (USTCA), which was enacted as Title XV, Subtitle B of the EPAct, that are not otherwise provided for in Section 2007 of the SWDA. Due to authority limits, EPA will not use STAG funds for leaking underground storage tank cleanup activities that are authorized by Section 205 of the Superfund Amendments and Reauthorization Act of 1986, even if those activities are also authorized by the USTCA.

To meet its objective for reducing releases to the environment by managing hazardous wastes and petroleum products properly, EPA intends to achieve the following results in FY 2007:

- Prevent releases from RCRA hazardous waste management facilities by increasing the number of facilities with permits or other approved controls by 2.4 percent over the FY 2006 level. At the end of FY 2005, 90 percent of the facilities had permits or other approved controls;¹³
- Increase the percentage of UST facilities in significant operational compliance with both release detection and release prevention (spill, overfill, and corrosion protection) requirements to 67 percent of the estimated universe of approximately 256,000 facilities; and
- Reduce the number of confirmed releases at UST facilities to 10,000 or fewer. (Between FY 1999 and FY 2005, confirmed releases averaged 10,844. The annual number of confirmed releases in FY 2005 was 7,421).

Emergency Preparedness, Response, and Homeland Security

EPA will continue to improve its emergency preparedness and response capability, including homeland security capabilities. EPA plays a major role in reducing the risks that accidental and intentional releases of harmful substances and oil pose to human health and the environment. Under the multi-agency National Response Plan (NRP), EPA evaluates and responds to thousands of releases annually. EPA's primary role in the NRP is to serve as the Federal On-Scene Coordinator (OSC) for spills and releases in the inland zone. As a result of NRP efforts, many major oil spills and releases of hazardous substances have been contained, minimizing the adverse impacts on human health and the environment.

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¹³ This goal currently tracks approximately 2,460 hazardous waste management facilities subject to permitting requirements. This baseline was updated for FY 2006.

An important component of EPA's land strategy is to prevent oil spills from reaching our Nation's waters. Under the Clean Water Act, as amended by the Oil Pollution Act, the Agency requires certain facilities (defined in 40 CFR 112.2) to develop and implement spill prevention, control, and countermeasure (SPCC) plans. Compliance with these requirements reduces the number of oil spills that reach navigable waters and prevents detrimental effects on human health and the environment should a spill occur.

Each year, EPA personnel assess, respond to, mitigate, and clean up thousands of releases, whether accidental, deliberate, or naturally occurring. These incidents range from small spills at chemical or oil facilities to national disasters, such as hurricanes and earthquakes, to large-scale terrorist events.

EPA will work to improve its capability to respond effectively to incidents that may involve harmful chemical, oil, biological, and radiological substances. The Agency will explore improvements in field and personal protection equipment, expand training for response personnel and continue to participate in multi-agency training and exercises. EPA also will review response data provided in the "after-action" reports prepared by EPA emergency responders following a release and examine "lessons learned" reports to identify which activities work and which need improvement. Application of this information and other data will advance the Agency's state-of-the-art emergency response operations.

EPA's 25-year-old Emergency Response and Removal program is supported by EPA OSCs, the Environmental Response Team (ERT) and the National Decontamination Team (NDT), who respond to small and large scale response actions, disasters and terrorist incidents. Responding to these incidents is one of EPA's traditional responsibilities.

The FY 2007 President's Budget request includes funding to enable EPA to improve the capabilities of EPA's responders through procurement of state-of-the-art equipment, to organize a new Environmental Laboratory Response Network (eLRN) program to strengthen such lab capabilities, expand participation for pre-deployments to national security special events, and develop decontamination protocols.

In FY 2007, EPA will continue to implement its homeland security plans and procedures and to meet its responsibilities in order to respond to major hazardous substance, oil, weapons of mass destruction (WMD) or nationally significant terrorist incidents. EPA will prepare for the possibility of simultaneous attacks on multiple targets and will implement the National Approach to Response (NAR), which is EPA's internal multi-faceted mechanism to effectively manage and conduct responses to nationally significant events. The NDT will improve its specialized decontamination capabilities to address chemical and biological and/or radiological agents in both environmental and building contamination situations. The ERT will provide training and specialized scientific, technical, and health and safety support to EPA's responders.

To meet its objective to reduce and control the risks posed by accidental or intentional releases of harmful substances by improving our Nation's capability to prepare for and respond more effectively to these emergencies, EPA intends to achieve the following results in FY 2007:

- Improve the Agency's emergency preparedness by achieving and maintaining the capability to respond to simultaneous large-scale emergencies and by improving response readiness by 10 percent from the previous year using the core emergency response criteria;
- Complete 315 removal actions (excluding actions at Federal facilities and actions by PRPs with enforcement instruments);
- Inspect or conduct exercises or drills at approximately 200 oil storage facilities required to have Facility Response Plans; and
- Respond to 300 oil spills.

Implementing New Legislation

EPA has a critical role to play in implementing the EPAct. The EPAct contains numerous provisions that significantly affect Federal and state underground storage tank (UST) programs. The EPAct requires that EPA and states strengthen tank release and prevention programs, such as: mandatory inspections every three years, operator training, prohibition of delivery for noncomplying facilities, secondary containment or financial responsibility for tank installers, and various compliance reports. The EPAct imposes very strict deadlines on EPA and states; EPA is required to develop numerous grant guidelines before the FY 2007 grant cycle and states are required to develop their first new requirements for tank owners by February 2007. EPA must develop regulations and guidance that states must adopt, and must develop a strategy for USTs in Indian Country to bring them into compliance and to clean up leaks. EPA is currently working with state, tribal, and industry partners to develop and implement the various requirements.

Enhancing Science and Research to Restore and Preserve Land

The FY 2007 land research program supports the Agency's objective of reducing or controlling potential risks to human health and the environment at contaminated waste sites by providing the science to accelerate scientifically defensible and cost-effective decisions for cleanup at complex sites in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

In FY 2007, research will focus on contaminated sediments, ground water contamination, site characterization, and technical support to specific sites. Reducing uncertainties in the assessment of contaminated sediments and developing and evaluating remedial options will be the focus of this research theme. Ground water research will continue to develop applications for permeable reactive barriers and address fate and transport and treatment methods for contaminants. Site characterization and sampling methods will continue to support site specific statistical and analytical applications. The technical support centers will continue to provide site specific assistance on technical issues. Oil spill research will address fate and effects of non-petroleum oil and dispersion effectiveness. Underground storage tank research will address fate and transport issues for fuel components and remediation methods.

¹⁴ For more information, please visit http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109 cong public laws&docid=f:publ058.109.pdf and scroll to Title XV - Ethanol and Motor Fuels, Subtitle B Underground Storage Tank Compliance, on pages 500-513 of the pdf file.

Multimedia decision-making and materials management constitute the two major areas of research under the Resource Conservation and Recovery Act (RCRA) in FY 2007, as the Agency works toward identifying releases to inform proper facility management. Multimedia research continues to advance multimedia modeling and uncertainty/sensitivity analysis methodologies that support core RCRA program needs as well as emerging RCRA resource conservation needs which include beneficial reuse issues (e.g., electronic waste recycling and waste-derived products). Materials management research will provide technical reports and technical support on methods to improve industrial and municipal waste management. Materials management research will evaluate landfill caps, containment technologies, as well as leachate issues and hard to treat wastes.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through a) the use of research strategies and plans, b) peer review, and c) program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB).

In 2005, the BOSC evaluated the Land Research Program to assess the quality and relevance of its research and the program's historical performance. The BOSC will report its findings to the Agency in the 2nd quarter of 2006.

Research is guided by research strategies and plans, which are developed with participation from major clients. The strategy outlines the research needs and priorities. The Agency also maintains multi-year research plans that outline steps for meeting strategic research needs, and annual performance goals and measures for evaluating progress.

Taken together, these mechanisms serve to ensure that EPA's research and science remain relevant, of high quality, and contribute to superior environmental performance.

In order to sustain a viable and credible workforce, the Agency approaches its research programs' workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

FY 2005 PARTs

The following programs were assessed by OMB's Program Assessment Rating Tool (PART) for the FY 2005 PART process (final PART ratings will be included in the President's Budget):

- Superfund Federal Facilities Response
- Oil Spill
- Superfund Emergency Response and Removal (rePART)

More detailed information is provided in specific program project descriptions.

Environmental Protection Agency FY 2007 Annual Performance Plan and Congressional Justification

HEALTHY COMMUNITIES AND ECOSYSTEMS

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

STRATEGIC OBJECTIVES:

- Prevent and reduce pesticide, chemical, and genetically engineered biological organism risks to humans, communities, and ecosystems.
- Sustain, clean up, and restore communities and the ecological systems that support them.
- Protect, sustain, and restore the health of natural habitats and ecosystems.
- Enhance the Nation's capability to prevent, detect, protect, and recover from acts of terror.
- Through 2008, provide a sound scientific foundation for EPA's goal of protecting, sustaining, and restoring the health of people, communities, and ecosystems by conducting leading-edge research and developing a better understanding and characterization of environmental outcomes under Goal 4.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations Full-time Equivalents (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Healthy Communities and Ecosystems	\$1,257,846.7	\$1,249,321.4	\$1,228,933.7	(\$20,387.7)
Chemical, Organism, and Pesticide Risks	\$390,156.3	\$399,053.9	\$376,874.5	(\$22,179.4)
Communities	\$290,561.6	\$272,118.6	\$247,874.1	(\$24,244.5)
Ecosystems	\$178,713.5	\$193,885.7	\$199,421.1	\$5,535.4
Enhance Science and Research	\$398,415.4	\$384,263.2	\$404,764.1	\$20,500.9
Total Authorized Workyears	3,874.8	3,812.5	3,834.2	21.7

EPA must bring together a wide variety of programs, tools, approaches and resources to promote healthy communities and ecosystems. Achieving the Agency's goal of protecting, sustaining or restoring healthy communities and ecosystems requires strong partnerships with Federal, state, Tribal and local governments. Programs under this goal focus on reducing chemical and pesticide risks, addressing high priority ecosystem risks, and supporting local community priorities.

A key component of this goal is protecting human health and the environment by identifying, assessing, and reducing the potential risks presented by the thousands of chemicals and pesticides on which our society and economy have come to depend. EPA must also address the emerging challenges posed by a growing array of biological organisms—naturally occurring and, increasingly, genetically engineered—that are being used in industrial and agricultural processes.

Biological agents are potential weapons that could be exploited by terrorists against the United States. EPA's pesticides antimicrobial program has been very responsive to addressing this threat by assessing efficacy of antimicrobial products used against biological weapons of mass destruction, and registering products as necessary.

EPA programs under this goal have many indirect benefits. For example, each year the Toxic Substances Control Act (TSCA) New Chemicals program reviews and manages the potential risks from approximately 1,700 new chemicals and 40 products of biotechnology that enter the marketplace. Americans also come into daily contact with any number of chemicals that entered the market before the New Chemicals Program was established in 1978, yet relatively little is known about many of their potential impacts. Obtaining basic hazard testing information on large volume chemicals is one focus of EPA's work in the Existing Chemicals program. EPA also plans a dual approach to address the possible health risks associated with nanoscale materials. EPA is currently reviewing pre-manufacture notices for new nanoscale materials under TSCA to ensure protection of human health and the environment. For new and existing chemical nanoscale materials, EPA is developing a stewardship program.

The Acute Exposure Guideline Levels (AEGLs) Program was designed by EPA to provide scientifically credible data to directly support chemical emergency planning, response, and prevention programs mandated by Congress. Emergency workers and first responders addressing accidental or intentional chemical releases need to know how dangerous a chemical contaminant may be to breathe or touch, and how long it may remain dangerous. The program develops short-term exposure limits applicable to the general population for a wide range of extremely hazardous substances (approximately 400).

As the population in coastal regions grows, the challenges to preserve and protect these important ecosystems increase. Through the National Estuary Program, coastal areas have proved valuable grounds for combining innovative and community-based approaches with national guidelines and interagency coordination to achieve results.

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs. Yet the nation loses an estimated 58,000 acres per year, and existing wetlands may be degraded by excessive sedimentation, nutrient enrichment, and other factors.¹⁵

Large water bodies like the Gulf of Mexico, the Great Lakes, and the Chesapeake Bay are surrounded by industrial and other development and have been exposed to substantial pollution over many years at levels higher than current environmental standards permit. As a result, the volume of pollutants in these water bodies has exceeded their natural ability to restore balance. Working with stakeholders, EPA has established special programs to protect and restore these unique resources by addressing the vulnerabilities for each.

EPA's Brownfields program promotes the clean up, reuse, and redevelopment of brownfields sites through its assessment, revolving loan fund, and cleanup grants. The program also supports research, training, and technical assistance efforts; clarifies liability issues; and promotes Federal, state and local partnerships toward the goal of putting contaminated land back into productive use.

The Agency will continue to support the National Environmental Justice Advisory Council (NEJAC) which provides the Agency significant input from interested stakeholders such as community-based organizations, business and industry, academic institutions, state, Tribal and local governments, non-governmental organizations and environmental groups.

Pesticides and Chemicals Programs

EPA will continue using both voluntary and regulatory approaches to address risks associated with the use of pesticides in the home, work environment and agricultural settings. These approaches include identifying and assessing potential risks from pesticides, setting priorities for addressing these risks, strategizing for reducing these risks, and promoting innovative and alternative measures of pest control, such as environmental stewardship and integrated pest management (IPM). In addition, EPA will strengthen education and training of workers and the public and promote the registration and use of reduced risk pesticides.

EPA will make progress towards its objective of protecting human health, communities and ecosystems from pesticide use by focusing on meeting our Food Quality Protection Act (FQPA) statutory mandate of completing the assessment of all existing tolerances (9,721). This process includes the issuance of all food use Reregistration Eligibility Decisions (REDs). These regulatory actions will ensure that pesticides on the market and the associated tolerance residues remain safe for the public and the environment. EPA will also continue identifying candidates for countering potential bioterrorist use of pesticides and biopesticides.

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¹⁵ Dahl, T.E. 1990. Status and Trends of Wetlands in the Conterminous United States, 1986 to 1997. Washington, DC: U.S. Department of the Interior, U.S. Fish and Wildlife Service. Available online at: http://wetlands.fws.gov/bha/SandT/SandTReport.html: Report to Congress on the Status and Trends of Wetlands in the Conterminous United States, 1986 to 1997.

TOLL	RANCE REASSI	ESSMENT SUMM	AKI DKEAKI	JUWN
Category	Tolerances to be Reassessed	Total Reassessed as of 12/19/05	Tolerances Remaining	Percentage Reassessed
Organophosphates	1691	1147	544	67.83%
Carbamates	545	317	228	58.17%
Organochlorine	253	253	0	100%
Carcinogen	2008	1530	478	76.2%
High Hazard Inert	5	5	0	100%
Other	5219	4578	641	87.70%
TOTALS	9721	7830	1891	80.50%

EPA plans to emphasize the continuation and further development of programs for the review of new and existing chemicals. The Agency will also continue to carry out its mandate to review potential risks from newly manufactured or imported chemicals before they are introduced to commerce. EPA's "Sustainable Futures" program encourages chemical manufacturers to apply pollution prevention techniques in the design of new chemicals, so that chemicals entering the new chemical review process will be less hazardous and less risky.

In addressing chemicals that have entered the market before the inception of the new chemical review program, EPA will continue to implement its voluntary High Production Volume (HPV) Chemicals Program, which challenges industry to develop chemical hazard data on existing chemicals that it chooses to "sponsor." This will enable EPA and the public to screen many chemicals already in commerce for risks they may be posing.

Complementing HPV is the Voluntary Children's Chemical Evaluation Program (VCCEP), a high-priority screening program targeting existing chemicals believed to have particular impact on children's health. Inventory Update Reporting Data, due for submission in 2006, will provide the Agency with valuable manufacturing, processing and use information on many chemicals in commerce. We will make special efforts to assess the potential risks of newly developed substitutes for a chemical category of emerging concern: brominated flame retardants. EPA is working to engage stakeholders in a cooperative process to evaluate the efficacy and potential risks of developing flame retardants. In addition, the Agency will continue to evaluate and implement perfluorooctanoic acid (PFOA) risk management actions as needed and will continue developments of information collection and chemical testing rules to address the needs of the Agency and others.

The lead program is developing a comprehensive program for the management of renovation, repair and painting activities involving lead based paint hazards and will continue to shift its focus from oversight and rule development at the Headquarters level to regional oversight of activities supported through grant funding, such as state-implemented lead-based paint training and certification programs and efforts targeted to high-risk areas, and on implementation of a few of the highest priority regulatory and outreach efforts. The Agency will continue to work with the Maritime Administration (MARAD) in order to dispose of its fleet of obsolete ships containing equipment that uses PCBs and will continue to work with the U.S. Navy to develop a national approval for the reefing of ships.

The Agency will continue Homeland Security activities focused on identifying and reviewing proposed pesticides for use against pathogens of greatest concern for crops, animals, and humans in advance of their potential introduction, including testing of antimicrobial products to determine which are effective against human pathogens. If the safety concerns are met, and the product is effective (in the case of antimicrobials), EPA can approve use of the product. Close cooperation with other Federal agencies and industry will continue in order to carry out these activities which directly respond to requirements in Homeland Security Presidential Directives. Additionally, EPA's Acute Exposure Guideline Levels (AEGLs) program will continue to develop proposed AEGL values.

The Toxic Release Inventory (TRI) program provides the public with information on the releases and other waste management of toxic chemicals. Two laws, Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 6607 of the Pollution Prevention Act (PPA), mandate that EPA annually collect information on listed toxic chemicals from certain industries and make the information available to the public through various means, including a publicly accessible national database. EPCRA also allows EPA to change reporting frequency by issuing a regulation with a one-year prior notification to Congress.

Water Programs

Protecting the Great Lakes

As the largest freshwater system on the face of the earth (containing 20 percent of the earth's surface water and 84 percent¹⁶ of the surface water in the United States), 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, work remains.

In FY 2007, EPA will continue efforts to protect and restore the Great Lakes, and will work with state, local, and Tribal partners using the Great Lakes Regional Collaboration's strategy as a guide. The President's May 2004 Executive Order established the Great Lakes Task Force to coordinate the Federal effort to improve water quality in the Great Lakes. EPA is working with partners to restore the chemical, physical, and biological integrity of the Great Lakes ecosystem, by implementing Clean Water Act core programs and other actions including the clean up and de-listing of Areas of Concern (AOC), and a reduction in PCB concentrations in lake trout and

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¹⁶ Great Lakes National Program Office. Basic Information. http://www.epa.gov/glnpo/basicinfo.html

walleye. Some of the key activities include preventing and controlling invasive species, cleaning up Areas of Concern through the Great Lakes Legacy Act.

- Core Clean Water Programs: While the Great Lakes face a range of unique pollution problems (e.g., extensive sediment contamination) they also face problems common to most other water bodies around the country. Core clean water programs must be fully and effectively implemented throughout the Great Lakes Basin. EPA will focus on assuring that by 2008, 100 percent of the major, permitted discharges to the Lakes or major tributaries have permits that reflect the most current standards. In addition, EPA will focus on assuring that 95 percent of permits are consistent with the national Combined Sewer Overflow Policy.
- **Great Lakes Legacy Act:** Restoration of contaminated sediments around the Great Lakes is a critical step toward meeting water quality goals. In FY 2007, EPA will expedite work to address contaminated sediment. EPA anticipates that FY 2007 funding will result in cleanup of a half million cubic yards of contaminated sediments.
- Critical Ecosystem Issues: In FY 2007 EPA will lead the development of management recommendations to mitigate the underlying causes of the annual occurrence of high rates of oxygen depletion which lead to low dissolved-oxygen levels in Lake Erie in the so-called "dead zone." EPA will also lead Canadian and U.S. Federal agencies and the academic community in exploring causes of the rapid decline of the *Diporeia* population in the Great Lakes. The dead zone occurrence and the *Diporeia* decline are both problems believed to be related to invasive species.

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 using the *Border 2012 Plan*. Under this *Plan*, EPA expects to take several key actions to improve water quality and protect public health.

- Core Program Implementation: EPA will continue to implement core programs under the Clean Water Act (CWA) 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. The program has sufficient resources to carry out currently approved projects and provides \$25 million to address new needs in FY 2007.
- **Build Partnerships:** 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.

National Estuary Program (NEP)/Coastal Watersheds

The goal of this program is to restore the physical, chemical, and biological integrity of the Nation's estuaries and coastal watersheds by protecting and enhancing water quality and living resources.

In FY 2007, EPA will undertake various efforts in support of coastal watershed protection and restoration. In the area of monitoring, we will continue to work with our Federal and state partners on the National Coastal Condition Report, the only statistically-significant measure of U.S. water quality on a nationwide basis. We will also support estuarine monitoring efforts using such tools as the Ocean Survey Vessel *Bold*, EPA's research vessel. EPA will also support coastal watersheds to enhance their efforts to address threats to the health of estuaries and coastal waters through various means, including providing technical assistance on financing estuary and coastal protection projects, developing and disseminating tools and resources for localities on planning for growth, and continuing to play a lead role in the five-year reassessment of the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico.

The NEP is EPA's flagship watershed protection effort. The NEP provides inclusive, community-based planning and action at the watershed level and has an established record of improvements to ecosystem conditions.

A top priority in FY 2007 is to continue supporting the efforts to implement Comprehensive Conservation and Management Plans in all 28 NEP estuaries. EPA created a baseline to track priority actions in 2004 and now tracks implementation of actions.

The health of the nation's estuarine ecosystems also depends on the maintenance of high-quality habitat. Diminished and degraded habitats are less able to support healthy populations of wildlife and marine organisms and perform the economic, environmental, and aesthetic functions on which coastal populations depend for their livelihood. A key success has been the restoration of over 500,000 acres of habitat over the past decade. For 2007, EPA has set a goal of protecting or restoring an additional 75,000 acres of habitat within the 28 study areas. Finally, EPA will work with NEPs in FY 2007 to provide more focused support for several priority areas, including invasive species, nutrient over-enrichment, and coastal growth.

Wetlands Protection

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. EPA's strategy for meeting wetland goals in FY 2007 is described below.

• **Net Gain Goal:** Meeting the President's goal of restoring, protecting, or creating 3 million wetland acres primarily will be 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 supports the goal through EPA's regulatory programs, including the CWA Section 404/401 permit review, compliance and enforcement, and other programs. EPA will also support states, Tribes, and others to protect and restore wetlands and build capacity to increase wetland functionality. In implementing these responsibilities, each Region will identify watersheds where wetlands and other aquatic resources are most at risk, including from cumulative impacts. EPA will improve levels of protection by integrating wetlands protection into other EPA programs such as Section 319, State Revolving Fund, NEP; working with the COE and/or states on permitting and mitigation compliance; providing grants and technical assistance to state, Tribal or local organizations; and developing information, education and outreach tools.

Building upon the analysis of existing mitigation data base systems, the COE, EPA, USDA, DOI, and NOAA is in the process of establishing a shared mitigation database. Utilizing the shared database, the Agencies will provide an annual public report card on compensatory mitigation to complement reporting of other wetlands programs. The COE has initiated six new performance measures designed to improve permitting and mitigation compliance, including compliance inspections and audits, and resolution of enforcement actions.

EPA will work with the COE to ensure application of the 404(b)(1) guidelines, which require that discharges into waters of the U.S. be avoided and minimized to the extent practicable. Each Region will also identify opportunities to partner with the COE in meeting performance measures for compensatory mitigation for unavoidable impacts. The Agency is also working closely with the COE to develop and implement wetlands and barrier island restoration projects along the Gulf Coast to help ensure an improved level of protection from hurricanes.

Chesapeake Bay Protection and Restoration

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 Bay Executive Council—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 unique regional partnership has defined environmental improvements needed in the Bay and developed a strategy that blends regulatory and voluntary processes.

While there are a number of measures used by the Chesapeake Bay Program, a key measure of success, which integrates both water quality and essential aquatic habitat, is the restoration of submerged aquatic vegetation (SAV). An additional measure of environmental improvement in the Bay is the reduction in nitrogen, phosphorus, and sediment entering the bay.

To achieve improved water quality needed to restore submerged aquatic vegetation, 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 by 2010. Key elements of state strategies to achieve these reductions include: the implementation of advanced treatment of wastewater to reduce nutrient discharges, the use of a range of management practices to reduce nutrients and sediments from farms, and the restoration and protection of riparian forests that serve as a buffer against sediment and nutrient pollution that enters waterways from the land.

The targets in EPA's plan for nutrient and sediment reductions are scientifically based and also reflect a multi-state consensus. The Program plans to conduct a full re-evaluation in 2007. In the meantime, the Program continues to pursue program strategies to accelerate nutrient-sediment reduction, including state adoption of enforceable bay-specific water quality standards, an innovative new basin-wide NPDES permitting strategy for nitrogen and phosphorus, and development of a strategy to address excess animal manure and poultry litter for Chesapeake Executive Council endorsement in 2005. Attention is also being given to financing issues.

Protecting the Gulf of Mexico

The Gulf of Mexico basin has been called "America's Watershed." Its U.S. coastline is 1,630 miles long; thirty-three major rivers feed into it; and, drainage from 31 states in addition to a similar drainage area from Mexico flow into it. One sixth of the U.S. population now lives in Gulf Coast states. For FY 2007, EPA has worked with states and other partners to define key activities to support attainment of environmental and health goals. These activities fall into three categories:

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 will work with states to assure effective implementation of
core clean water programs, including discharge permits, nonpoint pollution controls,
wastewater treatment, and protection of wetlands.

- 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 12 priority coastal watersheds. These 12 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 percent of these segments.
- 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 will need to focus on both controlling localized addition of pollution to the Gulf and on controlling the loadings of nutrients from the Mississippi River.

In working to accomplish this goal, EPA and other Federal agencies will continue implementation of core clean water programs and partnerships among agencies. Specific efforts in FY 2007 will include:

- Work with states to select a project watershed in each of the states in the Lower Mississippi River Basin to reduce nitrogen loadings to the lower Mississippi River:
- Work with states and other partners to identify "100 Highest Opportunity Watersheds" where nitrogen reduction strategies will be implemented;
- Implement the "Friends of the Gulf" award program to recognize corporations, organizations, or individuals that have taken effective, voluntary measures to reduce nutrient inputs; and
- Work with the private sector to support Industry Led Solutions for reducing both point and nonpoint sources.

Multidisciplinary Programs

Children's Health

EPA's Children's Health program reduces risks to children from a range of environmental hazards. The Agency builds partnerships and effective working relationships with other Federal agencies, health care providers, and international organizations to incorporate children's environmental health concerns into their programs and activities. In addition, work is underway to reduce exposure of older adults to environmental hazards. Efforts focus on building capacity, providing tools and information for better decision-making, and engaging in outreach activities.

Solid Waste and Emergency Response

To reduce or eliminate the potential risks associated with chemical releases, EPA must first identify and understand potential chemical risks and releases. EPA will use information generated by the Risk Management Program (RMP), Emergency Planning and Community Right-to-Know Act (EPCRA), and the Spill Prevention Control and Countermeasure (SPCC) program to supplement data on potential chemical risks and to develop voluntary initiatives and activities to reduce risk at high-risk facilities, priority industry sectors, and/or specific geographic areas.

To meet its objective of protecting human health, communities, and ecosystems from chemical releases through facility risk reduction efforts and building community infrastructures, EPA, working with state and local implementing agencies, intends to complete 400 RMP audits in FY 2007. EPA will also continue to work to transition the RMP submission system to allow complete Internet-based risk management plan submission.

Information collected from the local emergency planning committees (LEPCs) indicating how they have incorporated appropriate facility risk information into their emergency preparedness and community right-to-know programs will serve as a baseline from which EPA will track progress toward this strategic goal in later years. EPA will also continue an initiative to improve and enhance emergency preparedness and prevention in Tribal communities.

Brownfields

Economic changes over several decades have left thousands of communities with these contaminated properties and abandoned sites. Working with its state, Tribal, and local partners to meet its objective to sustain, cleanup, and restore communities and the ecological systems that support them, together with extension of the Brownfields tax credit, EPA intends to achieve the following results in FY 2007:

- Assess 1,000 Brownfields properties
- Clean up 60 properties using Brownfields funding
- Leverage \$900 million in cleanup/redevelopment funding
- Train 200 participants, placing 65 percent in jobs

Smart Growth

The Smart Growth program achieves measurably improved environmental and economic outcomes by working with states, communities, industry leaders, and nonprofit organizations to minimize the environmental impacts of development. EPA provides tools, technical assistance, education, research, and environmental data to help states and communities grow in ways that minimize environmental and health impacts and evaluate environmental consequences of various development patterns. EPA's Smart Growth activities and tools show community and government leaders how they can meet environmental standards through innovative community design, and identify and research new policy initiatives to improve environmental quality by supporting environmentally friendly development patterns. In FY 07, EPA plans to build upon its work in Smart Growth outreach and direct implementation assistance.

EPA will also continue to coordinate smart growth work with EPA's Brownfield program to reuse and revitalize vacant and abandoned properties. EPA plans to continue developing

incentives for brownfield redevelopment, provide direct assistance to communities working on brownfields, and maintain our education and outreach on innovative methods for brownfield redevelopment.

Community Action for a Renewed Environment

EPA supports community-based, multi-media approaches to the reductions of toxics through the Community Action to Renew the Environment (CARE) program. This program fills a gap in our national programs which provide a broad level of basic health and environmental protection but which do not always sufficiently meet the needs of all communities, especially those which are overburdened by toxic pollutants. CARE works to reduce those risks through cost-effective, tailored and immediate actions. Grants will be awarded to provide funding for communities to organize and assess the risks in their community and to take action to reduce those risks. The program also provides multi-media risk reduction and risk assessment tools, models to assist communities in identifying, prioritizing and reducing risks. This program will result in measurable results in the reduction of exposures to toxic pollutants including toxic chemicals, lead, pesticides and particulates, as well as a reduction in exposure to asthma triggers.

Enforcement and Compliance

EPA's continued enforcement efforts will be strengthened through the development of measures to assess the impact of enforcement activities, and assist in targeting areas that pose the greatest risks to human health or the environment, display patterns of noncompliance, and include disproportionately exposed populations.

Environmental Justice

EPA's enforcement program supports Environmental Justice efforts by focusing enforcement actions and criminal investigations on industries that have repeatedly violated environmental laws in minority and/or low-income areas. EPA's environmental justice program will continue education, outreach, and data availability initiatives. The program provides a central point for the Agency to address environmental and human health concerns in minority and/or low-income communities, segments of the population that have been disproportionately exposed to environmental harms and risks. The program will continue to manage the Agency's Environmental Justice Community Small Grants program which assists community-based organizations working to develop solutions to local environmental issues.

The Agency will continue to support the National Environmental Justice Advisory Council (NEJAC). The Council provides the Agency with significant input from interested stakeholders such as community-based organizations, business and industry, academic institutions, state, Tribal and local governments, non-governmental organizations and environmental groups. The Agency will also continue to chair an Interagency Working Group (IWG) consisting of eleven departments and agencies, as well as representatives of various White House offices, to ensure that environmental justice concerns are incorporated into all Federal programs.

International Affairs

Many human health and environmental risks to the American public originate outside our borders. Many pollutants can travel easily across borders - via rivers, air and ocean currents, and migrating wildlife. Even in the remote Arctic, industrial chemicals such as polychlorinated

biphenyls (PCBs) have been found in the tissues of local wildlife. Further, differences in public health standards can contribute to global pollution. A chemical of particular concern to one country may not be controlled or regulated in the same way by another. EPA employs a range of strategies for achieving its goals. These strategies include participation in bilateral programs (U.S.-Mexico and U.S.-Canada programs, and the Border Environmental Cooperation Commission (BECC)), cooperation with multinational organizations like the Commission for Environmental Cooperation, the World Trade Organization and the World Health Organization, and contribution to a set of measurable end points that will show reduction in pollutants of concern and that will reduce exposure to our citizens along the US borders, and the reduction of pollutants at their origin thereby reducing the level of pollutants in the global atmosphere.

Research

EPA has a responsibility to ensure that efforts to reduce potential environmental risks are based on the best available scientific information. Strong science allows identification of the most important sources of risk to human health and the environment as well as the best means to detect, abate, and avoid possible environmental problems, and thereby guides our priorities, policies, and deployment of resources.

To enable the Agency to enhance science and research for healthy people, communities, and ecosystems, EPA will engage in high priority, multidisciplinary research efforts in areas related to human health, ecosystems, mercury, global change, pesticides and toxics, endocrine disruptors, computational toxicology and Homeland Security.

The Agency is also proposing an investment in nanotechnology research, and an investment to promote transparency of and participation in EPA assessments (as part of the IRIS process) in FY 2007.

In FY 2007, the human health research program will continue research efforts on cumulative risks. Research will focus on risk intervention and prevention strategies that ultimately reduce human risk associated with exposures to single and multiple environmental stressors, including reducing chemical exposure in schools. Also, the Agency's human health risk assessment research program will complete 16 human health assessments of high priority chemicals for interagency review or external peer review, and deliver final air quality criteria documents for lead, which will serve as the basis for the EPA staff paper supporting the National Ambient Air Quality Standards (NAAQS).

In order to balance the growth of human activity with the need to protect the environment, it is important to understand the current condition of ecosystems, what stressors are changing that condition, what the effects are of those changes, and what can be done to prevent, mitigate, or adapt to those changes. To meet these objectives, the Agency's ecosystems research will continue to develop approaches to identify and test the linkages between probability-based and targeted water quality monitoring programs, landscape characteristics, and the probability of water body impairment. The Agency will continue to develop monitoring methods and decision support systems to improve its ability to identify probable causes of ecological impairment in streams. Diagnosis and forecasting models previously developed will be applied to provide a better scientific basis for ecosystem protection and restoration.

With the completion of critical research efforts in FY 2006 in areas such as the development of tools and approaches for the prioritization of endocrine disruptor screening and testing needs, the computational toxicology research program is positioned to expand efforts in FY 2007 to focus on four key areas: information technology, chemical prioritization and categorization tools, system biology models, and cumulative risk assessment. In the pesticides and toxics research program, research designed to provide updated tools for asbestos risk assessments will be completed in 2007.

In FY 2007, an increased investment in nanotechnology research will accelerate efforts to generate the underlying science needed to better understand and predict the potential implications of nanoparticle releases to the environment and their fate, transport, and potential effects on human health and ecosystems. Nanotechnology research will also identify how nanoscale science can be responsibly used for beneficial environmental applications, such as improved sensors and new control and remediation technologies.

In addition, resources in FY 2007 supporting health risk assessments will elevate and help to ensure acceptance of Agency assessments through identification and airing of scientific issues at an early stage in assessment development, improve transparency in how issues are resolved, and enhance the quality, objectivity, utility, and integrity of health assessments that result from advice and review from the National Academy of Sciences.

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through the use of research strategies and plans, program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB), and peer review.

In 2005, the BOSC evaluated the endocrine disruptors, human health, and ecological research programs to assess the quality and relevance of the research and the programs' historical performance. The endocrine disruptors subcommittee concluded that the program's goals and scientific questions are appropriate and represent an understandable and solid framework for setting research priorities. The human health subcommittee concluded that the program's research is of high quality and appropriately focused. In addition, the ecological subcommittee stated that the potential benefits of the program to the public are evident and clearly articulated. The subcommittees also reviewed each program's external research, which is usually conducted through competitive, peer-reviewed grants under the Agency's Science to Achieve Results (STAR) program.

Research is guided by a number of research strategies and plans, which are developed in concert with internal and external partners. Strategies are tailored to specific research needs and priorities. The Agency maintains multi-year research plans (MYP) that outline steps for meeting those strategic research needs and annual performance goals and measures for evaluating progress.

Three major research programs in this Goal have undergone OMB's PART evaluation through FY 2005. They include endocrine disruptors research, ecosystems protection research and human health research. Climate change research is tentatively scheduled for PART review in FY 2006.

Lastly, workforce planning is essential to sustaining a viable and credible research program. The Agency approaches its research program workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

FY 2005 PARTs

The following programs were assessed by OMB's Program Assessment Rating Tool (PART) for the FY 2005 PART process:

- Lead Risk Reduction
- Human Health Research
- Ecological Research (re-PART)
- Human Health Research
- Oceans and Coastal Programs

More detailed information is provided in specific program project descriptions.

Environmental Protection Agency FY 2007 Annual Performance Plan and Congressional Justification

COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

STRATEGIC OBJECTIVES:

- By 2008, maximize compliance to protect human health and the environment through compliance assistance, compliance incentives, and enforcement by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated, and achieving a 5 percent increase in the number of regulated entities making improvements in environmental management practices. (Baseline established in 2006.)
- By 2008, improve environmental protection and enhance natural resource conservation on the part of government, business, and the public through the adoption of pollution prevention and sustainable practices that include the design of products and manufacturing processes that generate less pollution, the reduction of regulatory barriers, and the adoption of results-based, innovative, and multimedia approaches.
- Through 2008, assist all federally recognized tribes in assessing the condition of their environment, help in building their capacity to implement environmental programs where needed to improve tribal health and environments, and implement programs in Indian country where needed to address environmental issues.
- Through 2008, strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

GOAL, OBJECTIVE SUMMARY

Budget Authority / Obligations Full-time Equivalents (Dollars in Thousands)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Compliance and Environmental Stewardship	\$773,201.2	\$742,815.3	\$733,539.6	(\$9,275.7)
Improve Compliance	\$470,414.5	\$485,146.6	\$491,033.4	\$5,886.8
Improve Environmental Performance through Pollution Prevention and Innovation	\$121,112.5	\$120,975.7	\$112,735.3	(\$8,240.4)

	FY 2005 Obligations	FY 2006 Enacted	FY 2007 Pres Bud	FY 2007 Pres Bud v. FY 2006 Enacted
Build Tribal Capacity	\$88,989.5	\$73,551.6	\$74,630.5	\$1,078.9
Enhance Science and Research	\$92,684.7	\$63,141.4	\$55,140.4	(\$8,001.0)
Total Authorized Workyears	3,464.0	3,495.3	3,480.5	-14.8

In FY 2007, the Environmental Protection Agency will work to improve the nation's environmental protection practices, and to enhance natural resource conservation on the part of government, business, and the public. To accomplish these goals, the Agency will employ a mixture of effective inspection, enforcement and compliance assistance strategies; provide leadership and support for pollution prevention and sustainable practices; reduce regulatory barriers; and refine and apply results-based, innovative, and multimedia approaches to environmental stewardship and safeguarding human health.

In order to be effective, the EPA requires a strong enforcement and compliance program, one which identifies and reduces noncompliance problems; assists the regulated community in understanding environmental laws and regulations; responds to complaints from the public; strives to secure a level economic playing field for law-abiding companies; and deters future violations. In FY 2007, the enforcement program will also carry out actions outlined in the Domenici-Barton Energy Policy Act of 2005, providing compliance assistance to owners and operators of Underground Storage Tanks. The EPA will protect human health and the environment by increasing compliance with existing laws and regulations. Innovation and environmental stewardship will be encouraged. In addition, EPA will assist Federally recognized Tribes in assessing environmental conditions in Indian Country, and will help build their capacity to implement environmental programs. EPA will also strengthen the scientific evidence and research supporting environmental policies and decisions on compliance, pollution prevention, and environmental stewardship.

Improving Compliance with Environmental Laws

Critical to the success of EPA's mission is a strong commitment to ensuring compliance with environmental laws and policies. Working in partnership with state and Tribal governments, local communities and other Federal agencies, in FY 2007 EPA will identify and address significant environmental and public health problems, strategically deploy its resources, and make use of integrated approaches to reduce noncompliance and achieve strong environmental protection outcomes.

In order to meet the Agency's goals, its "smart enforcement" strategy employs an integrated, common-sense approach to problem-solving and decision-making. An appropriate mix of data collection and analysis; compliance monitoring, assistance and incentives; civil and criminal enforcement resources; and innovative problem-solving approaches are used to address significant environmental issues and achieve environmentally beneficial outcomes.

This approach also requires that the Agency develop and maintain strong and flexible partnerships with regulated entities and a well-informed public, in order to foster a climate of empowerment and shared responsibility for the quality of our nation's land, resources and communities. Thus the Agency can carefully target its enforcement and compliance assurance resources, personnel and activities to address the most significant risks to human health and the environment, and to ensure that certain populations do not bear a disproportionate environmental burden.

EPA's continued enforcement efforts will be strengthened through the development of meaningful measures to assess the impact of enforcement and compliance activities; assist in targeting areas that pose the greatest risks to human health or the environment; display patterns of noncompliance; or include disproportionately exposed populations. Further, EPA cooperates with states and the international community to enforce and ensure compliance with cross-border environmental regulations, and to help build their capacity to design and implement effective environmental regulatory, enforcement and Environmental Impact Assessment programs.

Compliance Assistance and Incentives: The Agency's Enforcement and Compliance Assurance Program uses compliance assistance and incentive tools to encourage compliance with regulatory requirements, and to reduce adverse public health and environmental problems. To achieve compliance, the regulated community must first understand its obligations, and then learn how to best comply with regulatory obligations. Throughout FY 2007, EPA will support the regulated universe by working to assure that requirements are clearly understood. EPA also enables other assistance providers (e.g., states, universities) to provide compliance information to the regulated community.

Compliance Monitoring: The Agency reviews and evaluates the activities of the regulated community to determine compliance with applicable laws, regulations, permit conditions and settlement agreements, and to determine whether conditions presenting imminent and substantial endangerment exist. The majority of work years devoted to compliance monitoring are provided to the Agency's Regional offices to conduct investigations and on-site inspections, and perform monitoring, sampling and emissions testing. FY 2007 Compliance Monitoring activities will be both environmental media- and sector-based. The traditional media-based inspections complement those performed by states and Tribes, and are a key part of our strategy for meeting the long-term and annual goals established for the air, water, pesticides, toxic substances, and hazardous waste environmental goals included in the EPA Strategic Plan. The National Enforcement and Compliance Assurance Program will utilize statistically valid noncompliance information to select and evaluate National Priorities.

Enforcement: The Enforcement Program addresses violations of environmental laws, to ensure that violators come into compliance with Federal laws and regulations. In FY 2007, the program will work to achieve the Agency's environmental goals through consistent, fair and focused enforcement of all environmental statutes. The overarching goal of the Enforcement program is to protect human health and the environment, targeting its actions according to degree of health and environmental risk. Further, it aims to level the economic playing field by ensuring that violators do not realize an economic benefit from non-compliance, and also seeks to deter future violations; one way the enforcement program carries this out is by working with the Department

of Justice (DOJ) on enforcement of all environmental laws and regulations. In FY 2007, EPA will continue to implement its National Compliance and Enforcement Priorities, which address the most widespread types of violations that also pose the most substantive health and environmental risks. The National Compliance and Enforcement Priority list will use the statistically valid noncompliance information developed by Compliance Monitoring. Also in FY 2007, the enforcement program will also carry out actions outlined in the Domenici-Barton Energy Policy Act of 2005, providing compliance assistance to owners and operators of Underground Storage Tanks.

Auditing and Evaluation Tools: Maximum compliance requires the active efforts of the regulated community to police itself. Evaluation of self-reporting will occur in order to understand the effectiveness and accuracy of such self-reporting. Throughout FY 2007, EPA will continue to investigate options for encouraging self-directed audits and disclosures. We will also continue to measure and evaluate the effectiveness of Agency programs in improving compliance rates and provide information and compliance assistance to the regulated community. Further, the Agency will maintain its focus on evaluating the effectiveness of the innovative approaches developed through better communication, fostering partnerships and cooperation, and the application of new technologies.

Partnering: State, Tribal and local governments bear much of the responsibility for ensuring compliance, and EPA works in partnership with them and other Federal agencies to promote environmental protection. EPA also develops and maintains productive partnerships with other nations to enable and enforce compliance with U.S. environmental standards and regulations.

Improving Environmental Performance through Pollution Prevention

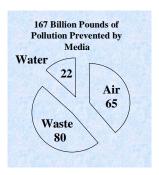
Through pollution prevention integration, EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promotes environmental stewardship in all parts of society; supports sustainable development and pollution prevention; and fosters a culture of creative environmental problem solving.

Partnering with Businesses and Consumers: In 2007, through the Pollution Prevention (P2) program, EPA will continue to encourage, empower, and assist government and business to "green" the nation's supply and demand structures to make them more environmentally sound. Through the Environmentally Preferable Purchasing Program, the Agency will provide enhanced guidance to the Federal building community on model green construction specifications and help Federal agencies identify and procure those products that generate the least pollution, consume fewest non-renewable natural resources, and constitute the least threat to human health and to the environment. EPA's innovative Green Suppliers Network Program works with large manufacturers to increase energy efficiency; identify cost-saving opportunities; optimize resources and technology through the development of sound business approaches incorporating pollution prevention; and to promote those approaches among their numerous suppliers.



"An Ounce of Pollution Prevention is Worth Over 167 Billion Pounds of Cure"

A Decade of Pollution Prevention Results, 1990-2000



Resources Conserved

- 215 million kWh of energy
- 4.1 billions gallons of water
- \$666 million in cost savings

Source: National Pollution Prevention Roundtable, January 2003 report on achievement of state and local P2

Partnering with Industry: EPA will continue to reduce the amount of toxic chemicals in use by encouraging the design of alternative less toxic chemicals and industry processes through its Green Chemistry and Green Engineering Programs. New emphasis will be placed on the development of environmentally preferable substitutes for emerging chemicals of concern such as brominated flame retardants, perfluorinated acids, and chemicals which are persistent in the environment, toxic, and capable of accumulating in animal, fish, and human tissue. In conjunction with the efforts of the Green Chemistry and Green Engineering Programs, the Design for the Environment Program will continue collaborative partnerships with industries to develop safer products, processes and technologies.

Reducing Impacts in the Electronics Lifecycle: EPA is focusing FY 2007 efforts to address key environmental impacts in the electronics lifecycle. End-of-life impacts of used and obsolete electronics are part of an increasing and complex waste stream that poses enormous environmental management problems. Almost 3 million tons of consumer electronics entered the municipal waste stream in 2003, up from 2 million in 2001. This includes personal computers, TVs, other video and audio products, telephones, fax machines, printers, and modems. Electronic products contain hazardous materials. Monitors, circuit boards, batteries, and other electronic components contain lead, mercury, brominated flame retardants (BFRs) and cadmium.

Pollution Prevention Grant Program: Pollution Prevention Grants to states and Tribes enable them to provide technical assistance, education and outreach to assist businesses and industries in identifying strategies and solutions to reduce wastes and pollution at the source. The importance of tracking outcomes from P2 grants has been reinforced by adding key P2 environmental outcome targets to program guidance reporting measures. The P2 grant management system will be enhanced by the incorporation of P2 metrics that capture quantifiable environmental results within individual work plans and sharing those results regionally and nationally.

NEPA Federal Review: EPA fulfills its uniquely Federal responsibilities under the National Environmental Policy Act (NEPA) by reviewing and commenting on other Federal agency Environmental Impact Statements (EISs). NEPA requires that Federal agencies prepare and submit EISs to identify potential environmental consequences of major proposed activities, and develop plans to mitigate or eliminate negative impacts. The Enforcement and Compliance Assistance Program maximizes its use of NEPA review resources by targeting its efforts toward potentially high-impact projects, thereby promoting cooperation and innovation, and working towards a more streamlined review process.

Environmental Information Exchange Network: The Exchange Network Grant Program provides funding to states, territories, Tribes, and Tribal consortia to help them develop the information management and technology (IM/IT) capabilities they need to participate in the Environmental Information Exchange Network (Exchange Network). In FY 2007, EPA, states, Tribes, and territories will continue to re-engineer data systems so that information previously not available or not easily available can be exchanged using common data standards. By the end of 2007 all fifty states and approximately ten Tribes will have established nodes on the Exchange Network and will be mapping data for sharing with partners and submission to EPA.

Promoting Environmental Stewardship and Innovation

In FY 2007, EPA will promote environmental stewardship, an ethic that goes beyond the minimum compliance with environmental regulations. The Agency will accomplish this through education, and by providing incentives, tools and technical assistance to states, tribes, communities and businesses. EPA will accomplish its goals using the next generation of voluntary environmental protection strategies, which emphasize results rather than process, and promote business practices that are both environmentally and economically sustainable. EPA will work to achieve a performance-oriented regulatory system that allows flexible strategies to achieve measurable results; environmental stewardship that maintains sustainable development and places pollution prevention first; and a culture of creative environmental problem solving that emphasizes collaboration and results-driven work. EPA will focus on five areas under its innovation strategy:

- Promote innovative environmental leadership in business, one that uses new ideas, creative partnerships, and sound analysis to grow their business and protect the environment;
- Instill the ethics of environmental stewardship and sustainability in business practices;
- Promote stronger facility-level environmental management, including Environmental Management Systems (EMSs);
- Improve overall environmental performance within high-priority business sectors; and
- Improve program efficiency through increased evaluation and measurement.

Innovation Grant Program: EPA will expand the Innovation Grants program, to encourage states and tribes to develop and test innovative protection strategies, such as permit streamlining and environmental management systems. These grants promote the use of innovative technologies for better environmental results, and demonstrate measurable efficiencies in environmental management.

Performance Track: Performance Track is one of EPA's most successful and fastest growing voluntary programs. Successful because it uses positive incentives to recognize and reward private and public facilities that demonstrate environmental stewardship, and strong environmental performance beyond current requirements. In FY 2007, EPA will move to significantly increase the number of facilities participating in the program, with closer coordination and involvement of states. EPA will expand activities to recruit facilities to participate in Performance Track and provide assistance to those facilities. In FY 2007 Performance Track members will collectively achieve an annual reduction of: 1.1 billion gallons in water use; 8.4 million MMBTUs in energy use; 20,000 tons in materials use; 360,000 tons of solid waste; 42,000 tons of air releases; and 10,000 tons in water discharges.

Sector-based Stewardship: In FY 2007 EPA will continue to work with twelve industrial business sectors: agribusiness, cement manufacturing, construction, forest products, iron and steel manufacturing, paint and coatings, ports, shipbuilding, metal finishing, die casting and meat EPA will work with national representatives of these business sectors to set pollution reduction goals, measure performance, provide environmental protection tools and technical assistance, remove barriers, develop incentives, reduce unnecessary regulatory burden and test innovative strategies.

Small Business Ombudsman: EPA will continue to support the Small Business Ombudsman who serves as EPA's gateway and leading advocate for small business issues, partnering with state Small Business Assistance Programs, and hundreds of small business trade associations, to reach out to the small business community. These partnerships provide the information and perspective EPA needs to help small businesses reduce waste and



materials use, and to achieve their environmental goals. This is a comprehensive program that provides networks, resources, tools and forums for education and advocacy on behalf of small businesses.

Building Tribal Capacity

Since adoption of the EPA Indian Policy in 1984 EPA has worked with Tribes on a governmentto-government basis, to affirm the Agency's trust responsibility to federally recognized Tribes. Under Federal environmental statutes, the Agency has responsibility for assuring human health and environmental protection in Indian Country. EPA has worked to establish the internal infrastructure and organize its activities in order to meet this responsibility. EPA's American Indian Environmental program goes a step further in ensuring environmental protection in Indian Country. EPA's strategy for achieving this Objective has three major components:

Establish an Environmental Presence in Indian Country: The Agency will work to create an environmental presence for each Federally recognized Tribe. In FY 2007, using Tribal General Assistance Program (GAP) grant resources EPA will provide approximately 517 Federally recognized Tribes and Inter-Tribal Consortia access to resources to hire at least one person working in their community to build a strong, sustainable environment for the future; for these

purposes, the universe of eligible entities is 572. Tribal communities can then assess environmental conditions on their lands, and build an environmental program tailored to their specific needs. EPA will also continue to develop environmental and public health outcome-based measures to quantify programmatic success.

Provide Access to Environmental Information: EPA will provide the information needed by Tribes to meet EPA and Tribal environmental priorities. At the same time, we will ensure that the Agency has the ability to view and analyze the conditions in Indian Country, and the impacts of EPA and tribal actions and programs in Indian Country. The Agency continues to take advantage of new technology to establish direct links to the U.S. Geological Service, Bureau of Reclamation, Indian Health Service, and other Federal agency data systems to further the development of an integrated, comprehensive, multi-agency Tribal Program Enterprise Architecture. The Agency continues to formalize interagency data standards and protocols to ensure quality information is collected and reported consistently among the Federal agencies. To this end, EPA has adopted Tribal Identifier codes that will enable data systems to identify Tribal sources of information. In FY 2007, EPA will integrate two additional existing Agency data systems within the Tribal Program Enterprise Architecture and encourage other agencies to adopt common Tribal codes.

Implementation of Environmental Goals: The Agency will provide opportunities for the implementation of Tribal environmental programs by Tribes, or directly by EPA, as necessary. In addition to assisting in the building of Tribal environmental capacity, another key role of the environmental presence workforce in Indian Country is to alert EPA of immediate public health and ecological threats, so EPA can work with the Tribe to respond quickly and effectively.

Pollution Prevention and Enforcement Research

EPA has developed and evaluated tools and technologies to monitor, prevent, control, and clean up pollution throughout its history. During the 1970s and 1980s, the agency emphasized controlling or remediating environmental dangers. Since the Pollution Prevention Act of 1990, the agency has increasingly focused on preventative and sustainable approaches to health and environmental problems. Sustainable approaches require: (1) innovative design and production techniques that minimize or eliminate environmental liabilities; (2) integrated management of air, water, and land resources; and (3) changes in the traditional methods of creating and distributing goods and services. EPA remains committed to helping industry achieve these ideals while at the same time adopting more effective and efficient practices, materials, and technologies.

EPA's pollution prevention work promotes innovative new technology, assessing the interaction of stressors threatening human and environmental health, and developing cost-effective responses to those stressors (R&D Criteria: Relevance). In FY 2007, research will continue to explore the principles governing sustainable systems and the integration of social, economic, and environmental objectives in environmental assessment and management. In a broader context, the program will focus not just on the industrial sectors, but on all decision-makers in areas critical to environmental stewardship (e.g., municipal sector and ecosystems) such as testing the effectiveness of a market-based incentive as a tool to manage storm water run-off in urban

watersheds. Efforts within environmental economics and decision science research are designed to improve EPA's decision making, cost-benefit analyses, and implementation strategies (R&D Criteria: Performance). Research will focus on benefit transfer methods and better understanding of and design for practical trading programs. These two areas are high priorities for EPA's program offices and have broad applications to the Agency's regulatory work.

Also in FY 2007, the innovative student design competition award program known as P3 (People, Prosperity, and Planet) will support up to 50 student design projects from around the country. This awards program encourages technological innovation in a wide range of activities. This competition promotes innovative thinking in sustainable approaches toward research, development and design of scientific and technical solutions to environmental problems. In FY 2006 several awards have already moved from the design stage to business plan and may soon be ready for commercialization (R&D Criteria: Relevance; Performance).

Recognizing that environmental policy and regulatory decisions will only be as good as the science upon which they are based, EPA makes every effort to ensure that its science is of the highest quality and relevance, thereby, providing the basis for sound environmental results. EPA uses the Research and Development (R&D) Investment Criteria of quality, relevance, and performance in its decision-making processes through a) the use of research strategies and plans, b) peer review, and c) program review and evaluation by the Board of Scientific Counselors (BOSC) and the Science Advisory Board (SAB). EPA's Science Advisory Board (SAB), an independently chartered Federal Advisory Committee Act (FACA) committee, annually conducts in-depth reviews and analyses of EPA's Science and Technology (S&T) account and other science activities. The SAB provides its findings to the House Science Committee of Congress and reports them to EPA's Administrator.

Research is guided by research strategies and plans, which are developed with participation from our major clients (R&D Criteria: Quality; Relevance). The strategy outlines the research needs and priorities. The Agency also maintains multi-year research plans (MYP) that outline steps for meeting strategic research needs, and annual performance goals and measures for evaluating progress. Taken together, these mechanisms serve to ensure that EPA's research and science remain relevant, of high quality, and contribute to superior environmental performance.

In order to sustain a viable and credible workforce, the Agency approaches its research programs' workforce planning in a manner consistent with its human capital strategy. Key elements of this strategy include working to develop and implement a holistic approach to recruitment, preserving a diverse workforce that reflects a wide spectrum of viewpoints, and retaining existing talent.

FY 2005 PARTs

The following programs were assessed by OMB's Program Assessment Rating Tool (PART) for the FY 2005 PART process:

• No programs within Goal 5 were assessed by OMB's Program Assessment Rating Tool (PART) in FY 2005.

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¹ <u>http://www.epa.gov/mercuryrule/</u>