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GOAL, APPROPRIATION SUMMARY

Budget Authority (Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud
Clean Air and Global Climate Change	\$927,328.8	\$918,152.7	\$933,690.8	\$911,568.1
Environmental Program & Management	\$441,310.4	\$454,102.6	\$447,900.0	\$439,346.3
Science & Technology	\$213,853.5	\$208,719.8	\$214,789.2	\$216,316.5
Building and Facilities	\$9,101.0	\$8,748.4	\$8,748.4	\$7,636.6
State and Tribal Assistance Grants	\$255,366.5	\$238,344.6	\$253,692.5	\$239,194.0
Inspector General	\$4,816.5	\$4,864.4	\$5,174.0	\$5,550.1
Hazardous Substance Superfund	\$2,881.0	\$3,372.8	\$3,386.7	\$3,524.7
Clean and Safe Water	\$3,314,952.7	\$2,824,280.4	\$2,729,396.0	\$2,714,315.3
Environmental Program & Management	\$484,561.6	\$454,825.8	\$449,866.5	\$454,008.1
Science & Technology	\$131,483.3	\$165,869.6	\$170,692.3	\$150,194.4
Building and Facilities	\$6,253.9	\$6,039.4	\$6,039.4	\$5,309.6
State and Tribal Assistance Grants	\$2,672,948.2	\$2,180,239.7	\$2,085,435.0	\$2,085,766.0
Inspector General	\$19,705.8	\$17,305.9	\$17,362.7	\$19,037.2
Land Preservation and Restoration	\$1,760,905.0	\$1,653,880.8	\$1,690,385.8	\$1,663,120.2
Environmental Program & Management				
Science & Technology	\$218,819.5	\$221,386.8	\$218,760.6	\$220,537.8
Building and Facilities	\$16,756.8	\$11,806.4	\$12,149.9	\$12,367.4
State and Tribal Assistance	\$5,042.9	\$4,871.3	\$4,871.3	\$4,270.1
Grants	\$117,693.0	\$145,158.0	\$140,912.2	\$125,620.0
Leaking Underground Storage	, ,,,,,,,,,	, 2,22	, 2,2 = -	, 2,0-0.0
Tanks	\$86,184.4	\$69,001.1	\$72,759.0	\$72,461.0
Oil Spill Response	\$15,895.5	\$16,506.0	\$16,506.0	\$17,280.0
Inspector General	\$2,255.4	\$2,411.0	\$2,494.6	\$2,659.0
Hazardous Substance Superfund	\$1,298,257.5	\$1,182,740.2	\$1,221,932.2	\$1,207,924.8

	FY 2006	Current	FY 2007	FY 2008
	Actuals	Rate CR	Pres Bud	Pres Bud
Healthy Communities and				
Ecosystems	\$1,264,197.4	\$1,353,184.0	\$1,227,659.4	\$1,171,565.0
Environmental Program &				
Management	\$628,547.0	\$646,757.4	\$637,032.8	\$619,420.0
Science & Technology	\$345,535.3	\$338,578.8	\$348,424.1	\$332,682.3
Building and Facilities	\$14,996.2	\$13,951.7	\$13,951.7	\$12,167.4
State and Tribal Assistance				
Grants	\$251,621.8	\$338,253.9	\$213,656.3	\$192,117.0
Inspector General	\$6,344.9	\$7,116.2	\$6,576.1	\$6,863.1
Hazardous Substance Superfund	\$17,152.3	\$8,526.1	\$8,018.3	\$8,315.2
Compliance and Environmental				
Stewardship	\$759,283.1	\$744,109.2	\$734,343.1	\$743,831.4
Environmental Program &				
Management	\$558,696.3	\$560,920.1	\$553,057.1	\$564,875.8
Science & Technology	\$57,108.7	\$41,025.9	\$42,218.6	\$42,945.5
Building and Facilities	\$6,278.3	\$6,205.1	\$6,205.1	\$5,417.3
State and Tribal Assistance				
Grants	\$111,943.2	\$106,877.9	\$103,752.0	\$101,753.0
Inspector General	\$3,378.9	\$3,402.5	\$3,492.5	\$3,898.6
Hazardous Substance Superfund	\$21,877.6	\$25,677.7	\$25,617.7	\$24,941.2
Sub-Total	\$8,026,667.0	\$7,493,607.1	\$7,315,475.0	\$7,204,400.0
Rescission of Prior Year Funds				
Total	\$8,026,667.0	\$7,493,607.1	\$7,315,475.0	\$7,204,400.0

GOAL, APPROPRIATION SUMMARY

Authorized Full-time Equivalents (FTE)

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud
Clean Air and Global Climate Change	2,623.7	2,664.4	2,620.6
Environmental Program & Management	1,859.9	1,891.4	1,853.4
Science & Technology	680.6	688.3	680.0
Inspector General	32.7	39.5	42.0
Hazardous Substance Superfund	17.5	17.6	17.5
Envir. Program & Mgmt - Reim	2.9	0.3	0.3
Science and Tech Reim	2.7	3.0	3.0
FEMA - Reim	2.3	0.0	0.0
WCF-REIMB	25.0	24.3	24.3
Clean and Safe Water	2,888.3	2,890.8	2,895.6
Environmental Program & Management	2,221.6	2,229.1	2,229.6
Science & Technology	495.7	511.6	504.1
Inspector General	133.6	132.4	144.1
Envir. Program & Mgmt - Reim	19.4	0.3	0.3
WCF-REIMB	18.0	17.4	17.5
Land Preservation and Restoration	4,624.4	4,693.5	4,582.0
Environmental Program & Management	1,190.0	1,237.1	1,203.7
Science & Technology	51.5	51.2	50.8
Leaking Underground Storage Tanks	69.8	76.9	75.3
Oil Spill Response	84.2	98.7	102.2
Inspector General	15.3	19.0	20.1
Hazardous Substance Superfund	3,012.0	3,120.1	3,039.4
Envir. Program & Mgmt - Reim	91.8	0.1	0.1
Oil Spill Response - Reim	5.9	0.0	0.0
FEMA - Reim	1.4	0.0	0.0
Superfund Reimbursables	89.4	77.5	77.5
WCF-REIMB	13.1	12.9	13.0
Healthy Communities and Ecosystems	3,808.5	3,825.4	3,743.9

	FY 2006 Actuals	FY 2007 Pres Bud	FY 2008 Pres Bud
Environmental Program & Management	2,420.2	2,511.7	2,441.8
Science & Technology	1,028.1	1,016.1	1,002.9
Inspector General	43.0	50.2	51.9
Rereg. & Exped. Proc. Rev Fund	187.0	187.2	187.2
Hazardous Substance Superfund	27.5	21.3	21.1
Envir. Program & Mgmt - Reim	9.5	0.5	0.5
Science and Tech Reim	1.1	0.0	0.0
Pesticide Registration Fund	51.4	0.0	0.0
WCF-REIMB	40.7	38.5	38.4
Compliance and Environmental Stewardship	3,409.1	3,485.6	3,481.7
Environmental Program & Management	3,073.4	3,138.2	3,138.5
Science & Technology	176.9	164.5	167.9
Inspector General	22.9	26.6	29.5
Hazardous Substance Superfund	107.4	138.5	127.9
Envir. Program & Mgmt - Reim	10.5	0.3	0.3
WCF-REIMB	17.9	17.5	17.6
Total	17,353.9	17,559.7	17,323.8

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 2011, 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.
- Through 2012, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.
- By 2030, through worldwide action, ozone concentrations in the stratosphere will have stopped declining and slowly begun the process of recovery, and overexposure to ultraviolet radiation, particularly among susceptible subpopulations, such as children, will be reduced.
- Through 2011, 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 80 million metric tons of carbon equivalent (MMTCE) annually to the President's 18 percent greenhouse gas (GHG) intensity goal by 2012. (An additional 24 MMTCE to result from the sustained growth in the climate programs are reflected in the Administration's business-as-usual projection for GHG intensity improvement.)
- Through 2011, 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 Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Clean Air and Global Climate Change	\$927,328.8	\$918,152.7	\$933,690.8	\$911,568.1	(\$22,122.7)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Healthier Outdoor Air	\$599,210.0	\$587,353.5	\$628,676.1	\$588,247.2	(\$40,428.9)
Healthier Indoor Air	\$46,589.0	\$48,768.1	\$47,831.5	\$45,698.8	(\$2,132.7)
Protect the Ozone Layer	\$17,252.1	\$22,097.2	\$21,665.6	\$17,130.9	(\$4,534.7)
Radiation	\$38,012.1	\$39,447.7	\$39,452.7	\$39,318.1	(\$134.6)
Reduce Greenhouse Gas Intensity	\$124,735.0	\$127,658.9	\$99,750.4	\$122,937.2	\$23,186.8
Enhance Science and Research	\$101,530.5	\$92,827.4	\$96,314.5	\$98,235.9	\$1,921.4
Total Authorized Workyears	2,623.7	2,660.0	2,664.4	2,620.6	-43.8

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. Every year, state and Federal air pollution programs established under the Clean Air Act 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.

Clean Air Rules

The Clean Air Rules are a major component of EPA work under Goal 1 and include a suite of actions that will dramatically improve America's air quality. Three of the rules specifically address the transport of pollution across state borders (the Clean Air Interstate Rule, Clean Air Mercury Rule and Clean Air Nonroad Diesel Rule). These 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 the next 15 years one of the most productive periods of air quality improvement in America's history. In FY 2008, EPA will be working with the states and industry to implement these rules.

Energy Policy Act

In addition to the suite of Clean Air Rules, EPA is investing over \$8 million to develop and operate the market-based credit trading system required by the Renewable Fuels Standard (RFS) program, in addition to annual State-by-State surveys to determine market shares of conventional and reformulated gasoline containing ethanol, and data collection and analysis activities needed to evaluate the impacts of the RFS program on the environment, air quality, and on the nation's energy security. The Renewable Fuels Standards (RFS) rule is scheduled to be promulgated in 2007 and work will continue on the development of several more actions required by the Energy Policy Act (EPAct) of 2005. Some of these EPAct actions involve a study of the changes in emissions of air pollutants and air quality, and a fuel system harmonization study. In 2008, EPA will promulgate new standards for locomotives and marine diesel engines, as well as new standards for large commercial ships. EPA also will issue a rule addressing exhaust and evaporative emissions from small gasoline engines (under 50 horsepower), including all recreational marine gasoline engines, non-handheld engines (such as those used in lawnmowers), and handheld engines (such as those used in trimmers and chainsaws).

Reduce Risks to Indoor Air and Radon Programs

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 and 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 carries out a national radon program that encourages and facilitates 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. Radon is second only to smoking as a cause of lung cancer.

Climate Protection

For more than a decade, businesses and other organizations have partnered with EPA through voluntary climate protection programs to pursue common sense approaches to reducing greenhouse gas emissions and meeting the President's greenhouse gas intensity goal. Voluntary programs such as Energy Star and SmartWay Transport have increased the use of energy-efficient products and practices and reduced emissions of carbon dioxide as well as methane and other greenhouse gases with very high global warming potentials. These partnership programs 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. In 2008, EPA will invest \$4.4 million in the Methane to Markets by assessing the feasibility of methane recovery and

use projects at landfills, coal mines, and natural gas and oil facilities and by identifying and addressing institutional, legal, regulatory and other barriers to project development in partner countries. In addition EPA plans to invest \$5 million to support the Asia-Pacific Partnership programs. In FY 2008 this partnership between the United States Australia, China, India, Japan, and South Korea will focus on developing country-specific strategies to improve energy security and reduce pollution. EPA also will work with the Asia-Pacific region to develop and deploy new and emerging technologies and tailor programs, such as methane capture and use, to meet the specific conditions of each area. Both the Methane to Markets program and Asia Pacific Partnerships will coordinate with other agencies to achieve the goals in these programs.

Stratospheric Ozone - Domestic and Montreal Protocol

In FY 2008 EPA's Domestic Stratospheric Ozone Protection Program will invest \$9.8 million support cost-effective projects that are designed to build capacity and eliminate ODS production and consumption in over 60 developing countries. The Multilateral Fund continues to support over 5,150 activities in 139 countries, and when fully implemented, will prevent annual emissions of more than 223,729 metric tons of ODS. Over 80% of already agreed project activities have been implemented to date, with remaining work in these already agreed projects expected to be fully implemented by 2009. In addition to continuing to implement the provisions of the Clean Air Act and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), and 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.

Radiation Monitoring

In FY 2008, 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.

Global Change Research

EPA conducts research that provides a scientific foundation for the Agency's actions to protect the air all Americans breathe. In FY 2008, EPA's air research program will supports implementation of the Clean Air Act, especially the National Ambient Air Quality Standards (NAAQS). The NAAQS program will focus on setting limits on how much tropospheric ozone, particulate matter, carbon monoxide; sulfur dioxide, nitrogen oxides, and lead are allowed in the atmosphere. EPA also conducts research to improve understanding of the risks from hazardous air pollutants, also known as air toxics.

In FY 2008, the Agency's air research program will continue research to understand the sources and composition of air pollution; develop methods for controlling sources' emissions; study atmospheric chemistry and model U.S. air quality; investigate Americans' exposure to air pollution; and conduct epidemiological, clinical, and toxicological studies of air pollution's health effects. The Agency also will award research grants to universities and nonprofits to study topics such as how long-term exposure to fine particles in the atmosphere influences heart disease. In FY 2008, an important focus of the program will be air pollution near roads.

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 federal 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.

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.
- By 2011, conduct leading-edge, sound scientific research to support the protection of human health through the reduction of human exposure to contaminants in drinking water, fish and shellfish, and recreational waters and to support the protection of aquatic ecosystems-specifically, the quality of rivers, lakes, and streams, and coastal and ocean waters.

GOAL, OBJECTIVE SUMMARY Budget Authority Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Clean and Safe Water	\$3,314,952.7	\$2,824,280.4	\$2,729,396.0	\$2,714,315.3	(\$15,080.7)
Protect Human Health	\$1,233,605.2	\$1,186,716.6	\$1,176,754.8	\$1,155,717.4	(\$21,037.4)
Protect Water Quality	\$1,953,776.5	\$1,503,178.8	\$1,412,834.3	\$1,422,163.4	\$9,329.1
Enhance Research to Support Clean and Safe Water	\$127,571.0	\$134,385.0	\$139,806.8	\$136,434.5	(\$3,372.3)
Total Authorized Workyears	2,888.3	2,896.3	2,890.8	2,895.6	4.8

EPA implements the Clean and Safe Water goal through programs designed to provide improvements in the quality of surface waters and drinking water. In FY 2008, EPA will work with states and Tribes to continue to accomplish measurable improvements in the safety of the nation's drinking water and in the conditions of rivers, lakes, and coastal waters. With the help of these partners, EPA expects to make significant progress in these areas, as well as support a few more focused water initiatives.

The National Water Program will continue to pay special attention to sustainable infrastructure and watershed stewardship, through its "four pillars" program, specifically focusing on innovative financing and leveraging for infrastructure sustainability, banking for wetlands conservation, and trading among point sources and non-point sources for water quality upgrades. Additionally, in FY 2008, the Agency will continue advancing the water quality monitoring initiative and a water quality standards strategy under the Clean Water Act, as well as, important rules and activities under the Safe Drinking Water Act, involving lead and emerging contaminants. Related efforts to improve monitoring and surveillance will help advance water security nationwide.

Drinking Water

During FY 2008, EPA, the states and community water systems will build on past successes while working toward the FY 2008 goal of assuring that 90 percent of the population served by community water systems receives drinking water that meets all applicable health-based standards. To promote compliance with drinking water standards, states carry out a variety of activities, such as conducting onsite sanitary surveys of water systems and working with small systems to improve their capabilities. EPA will work to improve compliance rates by providing guidance, training, and technical assistance; ensuring proper certification of water system operators; promoting consumer awareness of drinking water safety; maintaining the rate of system sanitary surveys and onsite reviews; and taking appropriate action for noncompliance. To help ensure that water is safe to drink, the FY 2008 President's Budget requests \$842 million for the Drinking Water State Revolving Fund.

Clean Water

In FY 2008, EPA will work with states to continue progress toward the clean water goals to implement core clean water programs, including innovations that apply programs on a watershed basis, and to accelerate efforts to improve water quality on a watershed basis. Building on the progress toward clean water achieved over the past 30 years, EPA is working with states and Tribes to implement the Clean Water Act by focusing on: scientifically sound water quality standards; effective water monitoring; strong programs for controlling nonpoint sources of pollution; and strong discharge permit programs.

The Agency's request continues the monitoring initiative begun in 2005 to strengthen the nationwide monitoring network and complete the baseline water quality assessment of lakes and streams. These efforts will result in scientifically defensible water quality data and information essential for cleaning up and protecting the nation's waters. Progress in improving coastal and ocean waters documented in the National Coastal Condition Report will be maintained by focusing on: assessing coastal conditions; reducing vessel discharges; implementing coastal nonpoint source pollution programs; managing dredged material; and supporting international marine pollution control. EPA will continue to provide annual capitalization to the Clean Water State Revolving Fund (CWSRF). The FY 2008 President's Budget provides \$688 million and will allow EPA to meet the Administration's Federal

capitalization target of \$6.8 billion total for 2004-2011 and enable the CWSRF to eventually revolve at a level of \$3.4 billion.

Private Activity Bonds

Included in the President's Budget is a proposal to exempt Private Activity Bonds (PABs) used to finance drinking water and wastewater infrastructure from the private activity bond unified state volume cap. PABs are tax-exempt bonds issued by a State or local government, the proceeds of which are used by another entity for a public purpose or by the government entity itself for certain public-private partnerships. By removing drinking water and wastewater bonds from the volume cap, this proposal will provide States and communities greater access to PABs to help finance their water infrastructure needs and increase capital investment in the Nation's water infrastructure.

This Water Enterprise Bond proposal would provide an exception to the unified annual State volume cap on tax-exempt qualified private activity bonds for exempt facilities for the "furnishing of water" or "sewage facilities." To ensure the long-term financial health and solvency of these drinking water and wastewater systems, communities using these bonds must have demonstrated a process that will move towards full-cost pricing for services within five years of issuing the Private Activity Bonds. This will help water systems become self-financing and minimize the need for future subsidies.

Homeland Security

EPA has a major role in supporting the protection of the nation's critical water infrastructure from terrorist threats. In FY 2008, EPA will continue to support the Water Security Initiative (formerly known as Water Sentinel) pilot program and water sector-specific agency responsibilities, including the Water Alliance for Threat Reduction (WATR), to protect the nation's critical water infrastructure. The FY 2008 budget provides \$22 million for the Water Security Initiative completing deployment of final pilot systems. In FY 2008, the Agency in collaboration with our water sector security stakeholders will continue our efforts to develop, implement and initiate tracking of national measures related to homeland security critical infrastructure protection activities.

Research

EPA's drinking water and water quality research programs conduct leading edge, problemdriven research to provide a sound scientific foundation for Federal regulatory decisionmaking. 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 2008, these research programs will conduct studies and deliver science products needed by the nation to realize clean and safe water. The drinking water research program will focus on filling key gaps in data, methods and technologies to support the Agency's mission to protect drinking water from chemical and microbial contaminants including

developing contaminant detection methods, conducting health effects studies, developing and evaluating cost-effective treatment technologies, and constructing tools to protect source waters. The water quality research program will continue providing approaches and methods that 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. These programs also will conduct research that will yield tools and strategies to manage our nation's aging water infrastructure.

Other important areas of research in FY 2008 will include: 1) development of molecular microarrays for detection of bacterial pathogens and non-pathogenic microbes in drinking water source waters; 2) epidemiological studies on the illness rate for untreated groundwater and distributions systems; 3) studies on the practice of blending together waste water effluents in various stages of the disinfection process to prevent peak wet weather flows from overwhelming treatment facilities while protecting water quality; and 4) providing more efficient monitoring and diagnostic tools through continued research to develop methods of using landscape assessments for monitoring and assessing watershed conditions. These programs will help assess risks and priorities for ensuring clean water.

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.

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 2011, 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 2011, 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 2011, provide and apply sound science for protecting and restoring land by conducting leading-edge research, which through collaboration, leads to preferred environmental outcomes.

GOAL, OBJECTIVE SUMMARY Budget Authority Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Land Preservation and Restoration	\$1,760,905.0	\$1,653,880.8	\$1,690,385.8	\$1,663,120.2	(\$27,265.6)
Preserve Land	\$223,407.8	\$250,024.2	\$242,510.5	\$231,574.8	(\$10,935.7)
Restore Land	\$1,479,533.9	\$1,350,189.8	\$1,397,705.7	\$1,382,938.7	(\$14,767.0)
Enhance Science and Research	\$57,963.3	\$53,666.8	\$50,169.6	\$48,606.7	(\$1,562.9)
Total Authorized Workyears	4,624.4	4,691.6	4,693.5	4,582.0	-111.5

Land is one of America's most valuable resources. 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. To address these issues, EPA implements the Land Preservation and Restoration goal utilizing a three pronged approach—prevention, protection, and response activities to address immediate needs; enforcement and compliance

assistance to determine what needs to be done and who should pay; and sound science and research to address risk factors and new, innovative solutions.

Prevention, Protection, and Response Activities

EPA leads the country's activities to prevent and reduce the risks posed by releases of harmful substances and to preserve and restore land with effective waste management and cleanup methods. In FY 2008, the Agency will continue to apply the most effective approach to controlling these risks by developing and implementing prevention programs, improving response capabilities, and maximizing the effectiveness of response and cleanup actions. This approach will help ensure that human health and the environment are protected and that land is returned to beneficial use.

In FY 2008, EPA also will continue to use 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.¹

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, allowing land to be returned 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. In FY 2008, EPA will continue to ensure that it is adequately prepared to minimize contamination and harm to the environment from spills and releases of hazardous materials by improving its readiness to respond to emergencies through training as well as maintaining a highly skilled, well-trained, and equipped response workforce.

The following themes characterize EPA's land program activities under Goal 3 in FY 2008: Revitalization; Recycling, Waste Minimization and Energy Recovery; Emergency Preparedness, Response, and Homeland Security; and implementation of the recently-authorized Energy Policy Act of 2005 (EPAct).

• <u>Revitalization</u>: All of EPA's cleanup programs (Superfund Remedial, Superfund Federal Facilities Response, Superfund Removal, RCRA Corrective Action, Brownfields, and Underground Storage Tanks) and their partners are taking proactive steps to facilitate the

¹ Additional information on these programs can be found at: www.epa.gov/superfund, http://www.epa.gov/superfund/programs/er/index.htm, <a href="http://www.epa.gov/superfund/programs/er/ind

cleanup and revitalization of contaminated properties. Revitalizing these once productive properties helps communities by 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. In reflection of the high priority the Agency has placed on land revitalization, the Superfund program is participating in efforts to implement cross-program revitalization measures to capture a broader array of accomplishments across all of EPA's cleanup programs resulting from the assessment and cleanup of properties. One example is the new Superfund Remedial PART measure "Acres of land ready for reuse." In addition, in FY 2006 the Superfund program developed the "Site-wide Ready for Anticipated Use" measure to track National Priority List (NPL) sites where construction of the remedy is complete; where cleanup goals in the Record of Decision (ROD) have been achieved such that there are no unacceptable risks associated with current and reasonably anticipated future uses; and where all institutional controls required in the ROD have been implemented. In FY 2008, the Agency expects 30 NPL sites to achieve this accomplishment.

- Recycling, Waste Minimization and Energy Recovery: EPA's strategy for reducing waste generation and increasing recycling will continue to be based on: 1) establishing and expanding partnerships with businesses, industries, Tribes, states, communities, and consumers; 2) stimulating infrastructure development and environmentally responsible behavior by product manufacturers, users, and disposers; and 3) helping businesses, government, institutions, and consumers reduce waste generation and increase recycling through education, outreach, training, and technical assistance. In FY 2008, EPA will continue the Resource Conservation Challenge 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.
- 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. In FY 2008, EPA will continue to improve its capability to effectively prepare for and respond to these incidents, including natural disasters such as hurricanes, by working closely with other Federal agencies within the National Response Plan. EPA will also continue to develop a national environmental laboratory capability and decontamination options to ensure that the nation can quickly recover from nationally significant incidents.
- Implementing the EPAct: The EPAct² contains numerous provisions that significantly affect Federal and state underground storage tank (UST) programs and requires that EPA and states strengthen tank release and prevention programs. In FY 2008, EPA is requesting \$34 million to provide assistance to states to help them meet their new responsibilities, which include 1) mandatory inspections every three years for all underground storage tanks, 2) operator training, 3) prohibition of delivery for non-complying facilities³, 4) secondary containment

³ Refer to Grant Guidelines to States for Implementing the Delivery Prohibition Provision of the Energy Policy Act of 2005, August 2006, EPA-510-R-06-003, http://www.epa.gov/oust/fedlaws/epact_05.htm#Final.

² For more information, refer to http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109 cong public laws&docid=f;publ058.109.pdf (scroll to Title XV - Ethanol And Motor Fuels, Subtitle B – Underground Storage Tank Compliance, on pages 500-513 of the pdf file).

or financial responsibility for tank manufacturers and installers, 5) various compliance reports, and 6) grant guidelines. EPA is also submitting new legislative language to allow states to use alternative mechanisms such as the Environmental Results Program (ERP) to meet the mandatory three-year inspection requirement. This proposal provides States with a less costly alternative to meet the objectives of the Energy Policy Act. In FY 2008, EPA will also implement the UST Tribal strategy⁴ developed in FY 2006 in Indian country.

Enforcement

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 appropriations. 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.⁵

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 and Enforcement 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.⁶

In FY 2008, the Agency will continue to encourage the establishment and use of Special Accounts within the Superfund Trust Fund. As of the end of FY 2006, EPA maintains more than 500 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. In addition, 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 2008, the Agency 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

⁴ Refer to *Strategy for an EPA/Tribal Partnership to Implement Section 1529 of the Energy Policy Act of 2005*, August 2006, EPA-510-F-06-005, http://www.epa.gov/oust/fedlaws/epact_05.htm#Final.

⁵ For more information regarding EPA's enforcement program and its various components, please refer to http://www.epa.gov/compliance/cleanup/superfund/.

⁶ For more information on the Superfund Federal Facilities Response and Enforcement program, please refer to http://www.epa.gov/fedfac.

remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs whenever possible.

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.

Enhancing Science and Research to Restore and Preserve Land

The FY 2008 land research program supports the Agency's objective of reducing and 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 of sites in accordance with CERCLA, RCRA and other applicable statutes. 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.

In FY 2008, EPA is requesting \$48.6 million to enhance science and research in support of EPA's land preservation and restoration programs. Research activities in FY 2008 will focus on contaminated sediments, ground water contamination, site characterization, analytical methods, and site-specific technical support. Research activities will advance EPA's ability to accurately characterize the risks posed by contaminated sediments and determine the range and scientific foundation for remedy selection options. EPA's land research program will also address the transport of contaminants in ground water and subsequent intrusion of contaminant vapors into buildings. Oil spill remediation research will continue to focus on physical, chemical, and biological risk management methods for petroleum and non-petroleum oils spilled into freshwater and marine environments, as well as development of a protocol for testing solidifiers and treating oil. UST research will address the development of online transport models that can be used by state project managers. Research in resource conservation, corrective action, hazardous waste treatment, landfills, leaching, containment systems, and landfill bioreactors will constitute the major areas of research and support for RCRA activities in FY 2008. In addition, EPA's land research program will continue to provide site-specific assistance on technical issues across the land remediation and restoration programs.

EPA will continue to collaborate with states and the private sector to conduct field sampling and optimize operations and monitoring of long-term remedies and research activities. Furthermore, in response to an independent review of the RCRA portion of the land research program, a shift in the research program will be made in FY 2008 to address nanotechnology fate and transport research issues in an effort by the program to focus on emerging issues and strategic research topics.

2006 PART

The following programs were assessed by OMB's Program Assessment Rating Tool (PART) for the 2006 PART process:

- Land Protection and Restoration Research
- Underground Storage Tank Program

More detailed information is provided in specific program project descriptions.

Healthy Communities and Ecosystems

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

STRATEGIC OBJECTIVES:

- By 2011, prevent and reduce pesticide and industrial chemical 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 critical natural habitats and ecosystems.
- Through 2011, identify and synthesize the best available scientific information, models, methods, and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems. Focus research on pesticides and chemical toxicology; global change; and comprehensive, cross-cutting studies of human, community, and ecosystem health.

GOAL, OBJECTIVE SUMMARY Budget Authority Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Healthy Communities and Ecosystems	\$1,264,197.4	\$1,353,184.0	\$1,227,659.4	\$1,171,565.0	(\$56,094.4)
Chemical and Pesticide Risks	\$400,291.2	\$397,124.7	\$386,011.2	\$387,165.5	\$1,154.3
Communities	\$288,984.5	\$377,124.2	\$251,034.0	\$234,758.2	(\$16,275.8)
Restore and Protect Critical Ecosystems	\$190,453.1	\$200,050.5	\$198,150.5	\$178,373.7	(\$19,776.8)
Enhance Science and Research	\$384,468.6	\$378,884.6	\$392,463.7	\$371,267.6	(\$21,196.1)
Total Authorized Workyears	3,808.5	3,820.7	3,825.4	3,743.9	-81.5

In FY 2008, the Environmental Protection Agency will protect, sustain or restore the health of communities and ecosystems by bringing together a variety of programs, tools, approaches and resources, including partnerships with stakeholders and Federal, state, Tribal, and local government agencies. EPA manages environmental risks to watersheds, communities, homes, and workplaces to protect human health and the environmental integrity of ecosystems. The Agency employs a mix of regulatory programs and partnership approaches to achieve results in ways that are efficient, innovative, and sustainable. Ideally, EPA can implement a strategy of preventing pollution at the source; however, where programs to prevent pollution or ecosystem damage are not viable, EPA promotes waste minimization, avoidance of impact on habitat, safe disposal, and remediation.

In managing risk, EPA directs its efforts toward the greatest threats in our communities, homes, and workplaces, including threats to sensitive populations such as children and the elderly, and to communities with potential disproportionately high and adverse environmental and public health effects including minorities and/or low-income communities. Pound for pound, children breathe more air, drink more water, and eat more food than adults, and their behavior patterns may increase their exposure to potential toxics. Even older Americans in good health may be at increased risk from exposure to environmental pollutants. As people age, their bodies are less able to detoxify and eliminate toxins. Native Americans represent another segment of the population with a different risk profile. Their traditional sources for food and ways of life may lead to higher levels of exposure to certain toxics.

Pesticides Programs

A key component of protecting the health of people, communities, and ecosystems is identifying, assessing, and reducing the risks presented by the thousands of chemicals on which our society and economy have come to depend. Toward that end, EPA is investing \$122.4 million in Pesticides Licensing programs in FY 2008. Chemical and biological pesticides help meet national and global demands for food; provide effective pest control for homes, schools, gardens, highways, utility lines, hospitals, and drinking water treatment facilities; and control animal vectors of disease. In accordance with the provisions of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the Agency is restructuring the presentation of FIFRA implementation funding and replacing the Pesticides Registration, Reregistration and Field programs with these new programs in FY 2008:

- Pesticides: Protect Human Health from Pesticides Risk
- Pesticides: Protect the Environment from Pesticides Risk, and
- Pesticides: Realize the Value of Pesticides Availability

In 2008, as required by the Food Quality Protection Act (FQPA), EPA will continue to establish a process for periodic review of pesticide registrations with the goal of completing the process every 15 years. The Agency will also focus its reregistration resources to support the 2008 FQPA deadline for completing non-food use Registration Eligibility Decisions (REDs).

Toxics Programs

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 1,500 new chemicals and 40 products of biotechnology that enter the marketplace. This new chemical review process not only protects the public from the possible immediate threats of harmful chemicals, but it has also contributed to changing the behavior of the chemical industry, making industry more aware and responsible for the impact these chemicals have on human health and the environment.

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 and has assigned values to 190 chemicals to date.

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. The HPV Chemicals Program challenges industry to develop chemical hazard data on existing chemicals that it chooses to "sponsor." EPA will make data publicly available for approximately 1,400 HPV chemicals sponsored under the program and issue initial risk screening reports for the highest priority of those chemicals. 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.

The Agency will continue to manage its programs to address specific chemicals and toxics of concern, including lead, mineral fibers, mercury, polychlorinated biphenyls (PCBs), perfluorooctanoic acid (PFOA), and persistent, bioaccumulative and toxic (PBT) chemicals generally. The Lead program is focusing efforts on reducing lead hazards, and a \$1 million investment, as requested for FY 2008, will allow the Agency to promulgate a final regulation to address lead-safe work practices for renovation, repair and painting activities in homes with lead-based paint. The program will also continue to improve methods to reach vulnerable populations and communities with a high concentration of children with elevated blood-lead levels and emphasize grant-supported activities such as state-implemented lead-based paint training and certification programs.

EPA's Community Action for a Renewed Environment (CARE) is a competitive grant program that offers an innovative way for communities to take action to reduce toxic pollution. Through CARE, communities create local collaborative partnerships that

implement local solutions to reduce releases of toxic pollutants and minimize exposure to toxic pollutants.

Water Programs

EPA's ecosystem protection programs encompass a wide range of approaches that address specific at-risk regional areas and larger categories of threatened systems, such as estuaries and wetlands. Locally generated pollution, combined with pollution carried by rivers and streams and through air deposition, can accumulate in these ecosystems and degrade them over time. Large water bodies, such as the Gulf of Mexico, the Great Lakes, and the Chesapeake Bay, have been exposed to substantial pollution over many years. Coastal estuaries and wetlands are also vulnerable. As the populations in coastal regions grow, the challenges to preserve and protect these important ecosystems increase. Working with stakeholders, EPA has established special programs to protect and restore these unique resources.

In FY 2008, EPA will continue cooperation with Federal, state and Tribal governments and other stakeholders to achieve the President's goal, set in 2004, to restore, improve, and protect three million acres of wetlands by 2009. A \$17.2 million request in FY 2008 will support and monitor all 28 NEPs in implementing approved Comprehensive Conservation and Management Plans (CCMPs), which identify more than 2,000 priority actions needed to protect and restore the estuaries.

The Great Lakes program ecosystem is requesting \$21.8 million in the FY 2008 budget to continue support of the Great Lakes Regional Collaboration and the Great Lakes Water Quality Agreement. The program will monitor ecosystem indicators; support toxics reduction through contaminated sediment remediation and pollution prevention; protect and restore habitat; and address strategic issues such as aquatic invasive species and the need to investigate the decline of *Diporeia*, a key lower-food web organism. The FY 2008 request to implement the Great Lakes Legacy Act, which supports cleanup of contaminated sediments, is \$35 million. EPA is committed to its long-term goal of 100 percent attainment of dissolved oxygen standards in waters of the Chesapeake Bay and 185,000 acres of submerged aquatic vegetation (SAV). In FY 2008, \$4.5 million will bring the Agency closer to improving key priority coastal and ocean issues in the Gulf of Mexico.

Brownfields

Building the capacity for a community to make decisions that affect their environment is at the heart of EPA's community-centered work. EPA's efforts to share information and build community capacity offer the tools communities need to consider the many aspects of planned development or redevelopment. EPA encourages community development by providing funds to assist communities with inventory, assessment, and clean up the lightly contaminated properties ("Brownfields") that lie abandoned or unused. In addition, along the U.S.-Mexico border, addressing local pollution and infrastructure deficiencies are priorities for Mexico and the United States under the Border 2012

Agreement. Addressing these challenges requires combining innovative and community-based approaches with national guidelines and interagency coordination to achieve results.

Smart Growth

The Smart Growth program works with stakeholders to create an improved economic and institutional climate for Brownfields redevelopment. Critical issues for Brownfield redevelopment in FY 2008 include land assembly, development permitting issues, financing, parking and street standards, and other factors that influence the economic viability of Brownfields redevelopment. The Smart Growth program removes barriers and creates incentives for Brownfield redevelopment by changing development standards that affect the viability of Brownfields redevelopment; and creating cross-cutting solutions that improve the economic, regulatory and institutional climate for Brownfield redevelopment.

International Affairs

To sustain and enhance domestic and international environmental progress, the Agency collaborates with other nations and international organizations to identify, develop, and implement policy options to address environmental problems of mutual concern. By assisting developing countries in managing their natural resources and protecting the health of their citizens, EPA helps reduce transboundary movement of pollution in the air and in water. EPA also works to include environmental protection provisions and commitments to effectively enforce environmental laws and regulations in all international trade agreements negotiated by the United States.

Environmental Justice

EPA is committed to environmental justice for all people, regardless of race, color, national origin, or income. Toward that end, the Agency will focus its environmental justice efforts on the following eight priorities:

- Reducing asthma attacks,
- Reducing exposure to air toxics,
- Increasing compliance with regulations,
- Reducing incidence of elevated blood lead levels,
- Ensuring that fish and shellfish are safe to eat,
- Ensuring that water is safe to drink,
- Revitalizing brownfields and contaminated sites, and
- Using collaborative problem-solving to address environmental and public health concerns.

Research

In order to adequately protect or restore the health of communities and ecosystems, environmental policy and regulatory decisions must be based on sound science. 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 continue to conduct high priority, multidisciplinary research in the areas of human health, ecosystems, mercury, global change, pesticides and toxics, endocrine disruptors, computational toxicology, nanotechnology, and Homeland Security. The Agency also will cultivate the next generation of environmental scientists by awarding fellowships to pursue higher education in environmentally related fields and by hosting recent graduates at its facilities.

In FY 2008, 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. The Agency's human health risk assessment (HHRA) research program will develop and implement a process to identify, compile, characterize, and prioritize new scientific studies for science assessments of criteria air pollutants to assist EPA's air and radiation programs in determining the National Ambient Air Quality Standards (NAAQS). Also, the HHRA research program will complete 16 human health assessments of high priority chemicals for interagency review or external peer review and deliver revised science assessments for Sulfur Dioxide and Nitrogen Oxides.

In order to balance human well-being with the need to protect the environment, it is important to understand the type of services that ecosystems provide, the stressors that affect these services, and how to successfully optimize the services provided by the ecosystem as a whole. In FY 2008, the ecosystems protection program will continue research on the development of decision-support tools for managing resources in ways that improve their resilience to disturbance, thus reducing the need for future costly restoration efforts. The program will also use spatial analysis methods to develop options for maximizing existing ecosystem services and for analyzing tradeoffs among the types of services that can be achieved.

Computational toxicology research, which facilitates a better understanding of the relationships between sources of environmental pollutant exposure and adverse outcomes, will support four key areas in FY 2008:

- Information technology,
- Chemical prioritization and categorization tools,
- Systems biology models, and
- Cumulative risk assessment.

Specifically, initial results for the "ToxCast," will emerge in FY 2008. The "ToxCast" is the Agency's chemical prioritization research program that offers promise in revolutionizing the effective and efficient use of animals in toxicology testing schemes.

In addition, modeling research, which now plays a crucial role in practically all areas of biological research, will begin developing a computational model of the liver by integrating biological information in order to achieve an improved understanding of how susceptibility to toxicant exposure depends on environmental, behavioral and genetic factors, and on age and health status.

Endocrine Disruptors research will continue to develop methods and models to evaluate the effects associated with exposure to endocrine disruptors as well as continue to develop improved molecular and computational tools that can be used to prioritize endocrine disrupting chemicals for screening and testing. Nanotechnology research is another area of high visibility in FY 2008. Efforts will continue to focus on nanotechnology's environmental applications and investigate its implications on the environment, health, and safety.

In FY 2008, continued research in the pesticides and toxics research program will characterize toxicity and pharmacokinetic profiles of perfluoroalkyl chemicals, examine the potential for selected perfluorinated telomers to degrade to perfluoroctanoic acid or its precursors, and develop methods and models to forecast the fate of pesticides and byproducts from source waters through drinking water treatment systems and ultimately to the U.S. population.

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.

Compliance and Environmental Stewardship

Improve environmental performance through ensuring compliance with environmental requirements by enforcing environmental statutes, 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 remote environmental stewardship and long-term sustainable outcomes.

STRATEGIC OBJECTIVES:

- By 2011, maximize compliance to protect human health and the environment through enforcement and other compliance assurance activities by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated by regulated entities, including those in Indian country. (Baseline to be determined in 2006)
- Improve Environmental Performance through Pollution Prevention and the Adoption of other Stewardship Practices that Lead to Sustainable Outcomes. By 2011, enhance public health and environmental protection and increase conservation of natural resources by promoting pollution prevention and the adoption of other stewardship practices by companies, communities, governmental organizations, and individuals.
- Protect human health and the environment on tribal lands by assisting federallyrecognized tribes to: build environmental management capacity; assess environmental conditions and measure results; and implement environmental programs in Indian country.
- Conduct leading-edge, sound scientific research on pollution prevention, new technology development, socioeconomic, sustainable systems, and decision-making tools. By 2011, the products of this research will be independently recognized as providing critical and key evidence in informing Agency polices and decisions and solving problems for the Agency and its partners and stakeholders

GOAL, OBJECTIVE SUMMARY Budget Authority Full-time Equivalents

(Dollars in Thousands)

	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Compliance and Environmental Stewardship	\$759,283.1	\$744,109.2	\$734,343.1	\$743,831.4	\$9,488.3
Achieve Environmental Protection	\$487,509.6	\$499,045.8	\$491,948.8	\$508,148.3	\$16,199.5

through Improved Compliance	FY 2006 Actuals	FY 2007 Current Rate CR	FY 2007 Pres Bud	FY 2008 Pres Bud	FY 2008 Pres Bud v. FY 2007 Pres Bud
Improve Environmental Performance through Pollution Prevention and Innovation	\$124,170.1	\$115,775.8	\$113,157.8	\$108,612.8	(\$4,545.0)
Improve Human Health and the Environment in Indian Country	\$78,499.8	\$76,018.8	\$74,073.6	\$74,303.9	\$230.3
Enhance Societies Capacity for Sustainability through Science and Research	\$69,103.6	\$53,268.9	\$55,163.0	\$52,766.5	(\$2,396.5)
Total Authorized Workyears	3,409.1	3,491.1	3,485.6	3,481.7	-3.9

The Environmental Protection Agency will work to improve the nation's environmental protection practices and 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 multi-media approaches to environmental stewardship and safeguarding human health.

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

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 order to meet the Agency's goals, the program's strategy employs an integrated, commonsense 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.

Further, the Agency's Enforcement and Compliance Assurance program uses compliance assistance and incentive tools to encourage compliance with regulatory requirements and 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.

The Agency's Compliance Monitoring program 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. FY 2008 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 Enforcement program addresses violations of environmental laws, to ensure that violators come into compliance with Federal laws and regulations. In FY 2008, 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. In FY 2008, EPA will continue to implement its National Compliance and Enforcement Priorities (NCEP), which address the most widespread types of violations that also pose the most substantive health and environmental risks. The NCEP list will use statistically valid noncompliance information developed by Compliance Monitoring. In addition, in FY 2008 EPA anticipates reducing, treating, or eliminating an estimated 550 million pounds of pollutants building upon our achievements to date in reducing pollution through enforcement settlement agreements and compliance incentives by an estimated 4.5 billion pounds over the last six fiscal years.

Maximum compliance requires the active efforts of the regulated community. Evaluation of self-reporting will occur in order to understand the effectiveness and accuracy of such self-reporting. Throughout FY 2008, EPA will continue to investigate options for encouraging self-directed audits and disclosures. Also in FY 2008, EPA's Enforcement and Compliance Assurance program will continue to develop meaningful measures to assess the impact of enforcement and compliance activities and target areas that pose the greatest risks to human health or the environment, display patterns of noncompliance, or include disproportionately exposed populations.

NEPA Federal Review: EPA fulfills its uniquely Federal responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act by reviewing and commenting on other Federal agency Environmental Impact Statements (EISs), and making the comments available to the public. 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 adverse impacts.

Improving Environmental Performance through Innovation and Pollution Prevention and Stewardship

Pollution prevention will continue being one of the Agency's primary tools for minimizing and preventing adverse environmental impacts by preventing the generation of pollution at the source. 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 2008, through the Pollution Prevention (P2) program, EPA will promote stronger regional partnerships and geographically tailored approaches to address unique community problems. Also in FY 2008, 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 nonrenewable natural resources, and constitute the least threat to human health and to the environment. EPA's innovative Green Suppliers Network (GSN) 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. P2 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.

In FY 2008, through the National Partnership for Environmental Priorities (NPEP), the Agency will continue to reduce priority chemicals in wastes. As of August 2006, the NPEP program has obtained industry commitments for 2.1 million pounds of priority chemical reductions through 2011. Reductions will be achieved primarily through source reduction made possible by safer chemical substitutes.

Promoting Innovation and Stewardship: In FY 2008, EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promote environmental stewardship in all parts of society; support sustainable development and pollution prevention; and foster a culture of creative environmental problem solving.

The Performance Track (PT) program will improve program reporting, develop and implement national and regional challenge commitments, and leverage state environmental leadership programs by aligning PT with 20 state programs. In addition, EPA will sponsor a formal program evaluation of the program in FY 2008 and FY 2009.

Also in FY 2008, EPA will continue to grow its partnerships and track environmental performance trends with major manufacturing sectors, such as steel, cement, forest products, and shipbuilding, plus important non-manufacturing sectors like agribusiness, construction, and ports. The Agency will address barriers to improved performance, provide sector-specific "drivers" for continuous improvement and stewardship, and use the partnerships to tackle high priority environmental issues.

EPA will also continue to promote environmental performance through the Environmental Results Program (ERP), a state-run program promoting environmental performance and efficiency through assistance and incentives to both states and businesses. In FY 2008, EPA will support the growing demand for the ERP program, beyond the 15 States and 10 sectors currently active in the program.

Finally, EPA will continue the State Innovation Grant (SIG) program in FY 2008, which provides support to states, allowing them to develop their own innovative approaches, including flexible permitting, ERP, and environmental leadership programs (e.g. PT). Measurement and program evaluation also will continue to be priorities.

Building Tribal Capacity

The EPA Indian Policy of 1984 promotes working with federally recognized Tribes on a government-to-government basis. Under Federal environmental statutes, the Agency will work to assure 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 Office works to ensure 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 continue to work to create an environmental presence for each Federally-recognized Tribe.

Provide Access to Environmental Information: EPA will provide the information Tribes need to meet EPA and Tribal environmental priorities, as well as characterize the environmental and public health improvements that result from joint actions.

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 FY 2008, the budget provides \$56.9 million for GAP grants, which will build Tribal environmental capacity to assess environmental conditions, utilize available Federal information, and build an environmental program tailored to Tribes' needs. The grants will develop environmental education and outreach programs, develop and implement integrated solid waste management plans, and alert EPA to serious conditions that pose immediate public health and ecological threats. Through GAP program guidance, EPA emphasizes outcome based results.

Sustainability

EPA has developed and evaluated tools and technologies to monitor, prevent, control, and clean up pollution throughout its history. Since the Pollution Prevention Act of 1990, the Agency has increasingly focused on preventative and sustainable approaches to health and environmental problems. EPA's efforts in this area support research specifically designed to address the issue of advancing sustainability goals – EPA's Science and Technology for Sustainability (STS) program.

Sustainable approaches require: innovative design and production techniques that minimize or eliminate environmental liabilities; integrated management of air, water, and land resources; and changes in the traditional methods of creating and distributing goods and services.

In FY 2008, EPA's Sustainability research program will embark on a new effort that is aimed at creating a suite of science-based sustainability metrics that are readily understood by the public. This work will address both large and small systems. In addition, the People, Prosperity, and Planet (P3) Award will support up to 50 student design projects from around the country, focusing on challenges in areas such as materials and chemicals, energy, resources, and water.

FY 2006 PART

• EPA's Pollution Prevention Program, including the Categorical Grant Program, underwent PART review in FY 2006 and received a "moderately effective" rating.