Table of Contents – Goal and Objective Overview

GOAL, APPROPRIATION SUMMARY	1
Budget Authority / Obligations	1
Full-time Equivalents (FTE)	
CLEAN AIR AND GLOBAL CLIMATE CHANGE	
Goal, Objective Summary	5
CLEAN AND SAFE WATER	
Goal, Objective Summary	
LAND PRESERVATION AND RESTORATION	
Goal, Objective Summary	25
HEALTHY COMMUNITIES AND ECOSYSTEMS	
Goal, Objective Summary	
COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP	
Goal, Objective Summary	

GOAL, APPROPRIATION SUMMARY

Budget Authority / Obligations (Dollars in Thousands)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request
Clean Air and Global Climate Change	\$932,373.4	\$1,011,027.3	\$968,882.7
Environmental Program & Management	\$446,488.0	\$474,140.0	\$487,626.0
Science & Technology	\$210,745.0	\$205,636.0	\$210,821.0
Building and Facilities	\$9,563.0	\$9,604.0	\$8,842.0
State and Tribal Assistance Grants	\$257,744.0	\$312,750.0	\$252,750.0
Inspector General	\$4,641.0	\$5,715.0	\$5,459.0
Hazardous Substance Superfund	\$3,193.0	\$3,182.0	\$3,385.0
Clean and Safe Water	\$3,810,107.5	\$2,944,875.7	\$2,813,028.3
Environmental Program & Management	\$480,422.0	\$484,351.0	\$466,863.0
Science & Technology	\$134,224.0	\$102,189.0	\$155,305.0
Building and Facilities	\$6,410.0	\$6,469.0	\$6,200.0
State and Tribal Assistance Grants	\$3,167,874.0	\$2,333,033.0	\$2,166,600.0
Inspector General	\$21,176.0	\$18,833.0	\$18,060.0
I and Duscomotion and Dastonation			
Land Preservation and Restoration	\$1,722,255.3	\$1,805,990.8	\$1,691,463.0
Environmental Program & Management	\$194,219.0	\$209,150.0	\$220,985.0
Science & Technology	\$14,945.0	\$9,106.0	\$14,006.0
Building and Facilities	\$5,203.0	\$5,233.0	\$4,933.0
State and Tribal Assistance Grants	\$119,337.0	\$144,350.0	\$116,350.0
Leaking Underground Storage Tanks	\$73,372.0	\$72,545.0	\$73,027.0
Oil Spill Response	\$17,455.0	\$16,425.0	\$15,863.0
Inspector General	\$2,061.0	\$2,506.0	\$2,372.0
Hazardous Substance Superfund	\$1,295,662.0	\$1,346,676.0	\$1,243,927.0
Healthy Communities and Ecosystems	\$1,222,772.7	\$1,292,007.7	\$1,336,247.8
Environmental Program & Management	\$586,080.0	\$641,214.0	\$677,503.0 *
Science & Technology	\$321,192.0	\$321,794.0	\$336,730.0
Building and Facilities	\$15,553.0	\$14,993.0	\$14,192.0
State and Tribal Assistance Grants	\$249,715.0	\$297,867.0	\$292,300.0

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request
Inspector General	\$5,861.0	\$7,209.0	\$7,349.0
Hazardous Substance Superfund	\$44,372.0	\$8,931.0	\$8,174.0
Compliance and Environmental Stewardship	\$739,222.5	\$735,342.5	\$760,978.2
Environmental Program & Management	\$516,319.0	\$508,103.0	\$550,786.0
Science & Technology	\$76,969.0	\$50,461.0	\$43,779.0
Building and Facilities	\$7,142.0	\$6,618.0	\$6,051.0
State and Tribal Assistance Grants	\$114,026.0	\$143,800.0	\$132,800.0
Inspector General	\$3,046.0	\$3,734.0	\$3,715.0
Hazardous Substance Superfund	\$21,721.0	\$22,627.0	\$23,847.0
Total	\$8,426,731.4	\$7,789,244.0	\$7,570,600.0 *

 $^{^*}$ The FY 2006 President's Budget includes \$50M to be derived from changes to Toxics and Pesticides fees proposed in subsequent legislation. In FY 2005 the fees were \$30M.

GOAL, APPROPRIATION SUMMARY

Full-time Equivalents (FTE)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request
Clean Air and Global Climate Change	2,644.3	2,760.2	2,658.1
Environmental Program & Management	1,892.0	1,961.0	1,897.0
Science & Technology	672.0	702.0	679.0
Inspector General	33.0	41.0	40.0
Hazardous Substance Superfund	18.0	18.0	18.0
Envir. Program & Mgmt - Reim	2.0	0.0	0.0
Science and Tech Reim	3.0	3.0	3.0
FEMA - Reim	3.0	0.0	0.0
WCF-REIMB	21.0	35.0	22.0
Clean and Safe Water	2,904.0	3,088.5	2,916.9
Environmental Program & Management	2,256.0	2,448.0	2,250.0
Science & Technology	471.0	489.0	519.0
Inspector General	149.0	135.0	131.0
Envir. Program & Mgmt - Reim	13.0	0.0	0.0
WCF-REIMB	14.0	16.0	16.0
Land Preservation and Restoration	4,646.4	4,763.6	4,752.2
Environmental Program & Management	1,177.0	1,259.0	1,237.0
Science & Technology	46.0	48.0	52.0
Leaking Underground Storage Tanks	74.0	79.0	77.0
Oil Spill Response	89.0	100.0	99.0
Inspector General	15.0	18.0	17.0
Hazardous Substance Superfund	3,132.0	3,177.0	3,180.0
Envir. Program & Mgmt - Reim	6.0	0.0	0.0
Oil Spill Response - Reim	6.0	0.0	0.0
FEMA - Reim	3.0	0.0	0.0
Superfund Reimbursables	88.0	78.0	78.0
WCF-REIMB	11.0	4.0	12.0

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request
Healthy Communities and Ecosystems	3,825.4	3,844.8	3,834.7
Environmental Program & Management	2,444.0	2,535.0	2,521.0*
Science & Technology	1,021.0	998.0	1,018.0
Inspector General	41.0	52.0	53.0
Rereg. & Exped. Proc. Rev Fund	187.0	187.0	187.0
Hazardous Substance Superfund	59.0	42.0	20.0
Envir. Program & Mgmt - Reim	16.0	0.0	0.0
Pesticide Registration Fund	23.0	0.0	0.0
WCF-REIMB	34.0	31.0	35.0
Compliance and Environmental Stewardship	3,590.8	3,446.9	3,469.3
Environmental Program & Management	3,216.0	3,068.0	3,143.0
Science & Technology	213.0	222.0	170.0
Inspector General	21.0	27.0	27.0
Hazardous Substance Superfund	112.0	116.0	114.0
Envir. Program & Mgmt - Reim	12.0	0.0	0.0
WCF-REIMB	16.0	14.0	15.0
Total	17,610.9	17,904.0	17,631.0*

^{*} Agency Authorized FTE levels are being aligned with actual utilization. See overview section.

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 equivalents (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 (FTE) (Dollars in Thousands)

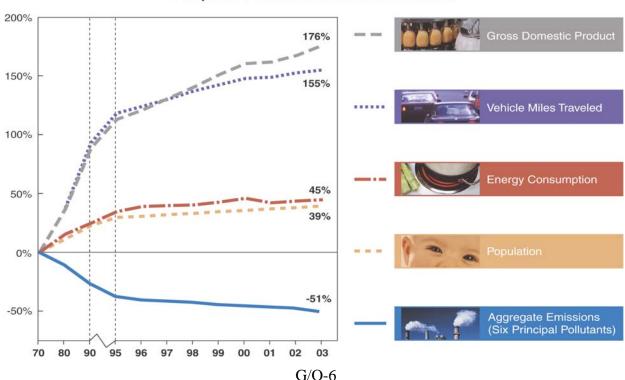
	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Clean Air and Global Climate Change	\$932,373.4	\$1,011,027.3	\$968,882.7	(\$42,144.6)
Healthier Outdoor Air	\$588,929.9	\$660,428.2	\$612,802.7	(\$47,625.5)
Healthier Indoor Air	\$49,526.2	\$50,257.9	\$48,451.1	(\$1,806.8)
Protect the Ozone Layer	\$19,542.4	\$22,760.6	\$20,573.9	(\$2,186.7)
Radiation	\$33,758.8	\$35,132.0	\$38,839.2	\$3,707.1

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Reduce Greenhouse Gas Intensity	\$105,114.1	\$111,516.0	\$114,922.6	\$3,406.6
Enhance Science and Research	\$135,502.1	\$130,932.6	\$133,293.2	\$2,360.7
Total Workyears	2,644.3	2,760.2	2,658.1	-102.2

EPA implements the Clean Air and Global Climate Change goal through national 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 – particulate matter, ozone, acid rain, air toxics, indoor air, radiation and stratospheric ozone depletion – address 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. Between 1970 and 2003, gross domestic product (GDP) increased 176 percent, vehicle miles traveled increased 155 percent, energy consumption increased 45 percent, and U.S. population grew by 39 percent. During the same time period, total emissions of the six principal air pollutants dropped by 51 percent. The graphic below shows the decrease in emissions versus the percentage growth in GDP, vehicle use, energy consumption, and population since 1970.

Comparison of Growth Areas and Emissions



The benefits of implementing the Clean Air Act exceed costs by a factor of six or seven to one, as noted in OMB's report, *Informing Regulatory Decisions*. 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 EPA's voluntary climate change programs, every EPA dollar spent returns \$75 in energy savings. To achieve the Clean Air and Global Climate Change goal, we will use the following strategies:

- **Long term -** We will make decisions today that increase the pace of environmental progress and significantly enhance public health for generations to come.
- **Collaborate** We will achieve our goals through meaningful and productive interaction with others who seek environmental progress and improved public health.
- **Enhance Economic Growth and Prosperity** Our actions will not compromise our economic competitiveness, and will have benefits that justify their costs.
- Strategically Focused and Performance-based We will link our priorities to *EPA's* 2003-2008 Strategic Plan: Direction for the Future and measure our success by our outcomes.
- **National standards, compliance and enforcement** We will set strong national standards, assist with compliance, and bring the full force of the law consistently and fairly on those who evade.
- **Markets, incentives and innovation** We will benefit from the power of markets and well-crafted incentives to increase the velocity of progress, stimulate technological innovation and reward performance.
- **Best science** We will generate, share and rely on the best-available scientific, engineering and economic information to guide our endeavors.

Historically, environmental progress has been achieved largely by advances in environmental technologies – including such advances as catalytic converters on cars and trucks, sulfur dioxide (SO_2) scrubbers, selective catalytic reduction for nitrogen oxides (NO_x) removal, and reformulated gasoline. EPA can foster demand for new and innovative, cost-effective technologies by designing and promoting market-based strategies, such as the President's Clear Skies Initiative cap-and-trade program, that create markets and provide incentives to develop the most efficient, best-performing technologies. Technological innovation will continue to be the foundation that will enable us to reach aggressive goals over the next 15 years that will match or exceed the progress we have made in the past. Hundreds of new products are under development, in testing, or coming to market that will further help meet air quality goals. Fuel cells, hybrid vehicles, renewable fuels, and zero-emission power plants are only a few examples of the new and emerging technologies that will help us achieve cleaner air for all Americans over the next 15 years.

EPA's strategy for achieving clean outdoor air includes the President's Clear Skies Initiative - a comprehensive, multi-pollutant approach that combines national and local measures, with implementation responsibilities carried out by the most appropriate and effective level of government. Air pollution sources with broad regional, national or global impact – emissions from power plants and other large sources, pollution from motor vehicles and fuels, and stratospheric ozone depletion – are often most effectively handled at the Federal level. A national approach allows for the use of traditional, regulatory tools where appropriate, and

enables EPA to implement innovative, market-based techniques such as emissions trading, banking, and averaging, and other cost-effective national programs. These Federal programs help states and Tribes both meet National Ambient Air Quality Standards (NAAQS) and reduce public exposure to harmful levels of air toxics.

States, Tribes, and local agencies can best address the regional and local problems that remain after Federal measures have been fully applied. Many of these approaches employ innovative techniques, such as early action compacts, diesel retrofits and community-based approaches to toxics that are well-suited to the local nature of many air-related problems. EPA works closely with public- and private-sector partners and stakeholders to develop the analytical tools – such as monitoring, modeling, and emission factors and inventories – that allow states, Tribes, and localities to address these more localized problems.

To improve air quality and address the highest health and environmental risks, EPA will proceed with Federal stationary and mobile source programs aimed at achieving large, nationwide, cost-effective reductions in emissions of particulate matter (PM) and its contributors such as SO_2 , NO_x , and elemental and organic carbon; ozone-forming NO_x ; and volatile organic compounds (VOCs). In FY 2006, we will continue our progress towards healthier air by helping states, Tribes, and localities meet ozone and particulate matter air quality standards by their attainment dates under the Clean Air Act via the President's Clear Skies Initiative or, should legislation not be enacted, through the Clean Air Interstate Rule. EPA is coordinating its efforts to implement these standards with the Regional Haze rule to maximize the ability of the states, Tribes and regulated community to respond to these requirements in an integrated fashion. Continued research into air quality models and other tools will enable states and local areas to attain these standards as cost-effectively as possible. Joint efforts with Canada and Mexico will address transboundary air pollution in the U.S.-Canada and U.S.-Mexico border regions. In their efforts to attain the standards, states and local areas will be able to take advantage of market-based approaches.

While significant progress has been made under the existing Clean Air Act, further benefits could be achieved faster, with more certainty, and at less cost to consumers through Clear Skies – an Administration proposal that expands the current Acid Rain program to dramatically reduce nationwide power plant emissions of SO₂ and NO_x, as well as, for the first time ever, reduce mercury emissions from power plants. Clear Skies would reduce emissions of these three pollutants by nearly 70 percent while encouraging innovation and the deployment of cleaner, more cost effective technologies. The Clear Skies legislation was submitted to Congress in 2002 and the Administration continues to promote its enactment.

Although Clear Skies is the more comprehensive and cost effective approach and therefore the strongly preferred solution, the Administration is pursuing a regulatory path that would achieve many of the same benefits should legislation not be enacted. EPA has proposed the Clean Air Interstate Rule (CAIR) which regulates the transport of power plant emissions of SO2 and NOx across state lines via a market-based approach similar to Clear Skies. CAIR is projected to reduce pollution from electrical power generation sources by close to 70% when fully implemented.

Both Clear Skies and CAIR call for utilities to utilize a cap and trade program modeled after EPA's successful Acid Rain SO₂ Allowance Trading Program. The Acid Rain Program provides incentives for operators of power plants to find the best, fastest, and most efficient ways to make the required reductions in emissions as well as to do make reductions earlier than required.

One of EPA's highest priorities is meeting the fine particulate matter and ozone standards. This will be achieved through implementation of Clear Skies or CAIR; the on-road and non-road vehicle and fuels standards; and state, tribal, and local clean air programs. When combined with emission reductions from the recently completed Clean Air Non-road Diesel Rule and other national control programs, the reductions resulting from Clear Skies or the final CAIR will allow most areas of the country to meet the ozone and fine particulate matter standards without having to impose additional local controls. States rely on EPA for modeling, emissions factors and other tools as they develop their clean air plans for particulate matter and ozone.

Clean fuels and clean technologies are an integral part of reducing emissions from mobile sources. EPA promotes the use of clean fuels – especially hydrogen, alternative fuels, and near-zero sulfur fuels – as well as cleaner technologies. Cost-effective national standards, public/private partnerships, market incentives, and consumer education campaigns are some of the tools that will be used to accomplish this. Opportunities exist to obtain significant reductions from new non-road and existing diesel engines. The Agency will continue to work with engine manufacturers and fuel producers to assure smooth implementation of the 2007 Clean Diesel Program for trucks and buses. The Clean School Bus USA program has also led the Agency to explore other avenues for retrofitting or replacing existing diesel engines.

In FY 2006, EPA and a coalition of clean diesel interests will work together to expand the retrofitting of diesel engines into new sectors by adopting a risk-based strategy, targeting key places and working with specific use sectors to identify opportunities to accelerate the adoption of cleaner technologies and fuels. EPA will partner with a diverse group of stakeholders including industry, state and local governments, public health officials and environmental organizations to develop strategies for four sectors: construction, ports, freight, and school buses. EPA's Clean Diesel Initiative will achieve immediate results by working with this coalition to leverage Federal funds with private sector and state and local support. The Initiative will complement regional approaches, including the West Coast Diesel Emissions Reduction Collaborative, the Midwest Clean Diesel Corridors Initiative, and the Boston Breathes Better Initiative.

The Clean Air Act includes a variety of provisions that address air toxics from all categories of sources. The 188 hazardous air pollutants (HAPs) listed in the Act are emitted from mobile sources, major stationary sources and area stationary sources. EPA implements a two-phase program to reduce emissions of air toxics from major stationary sources. In the first phase, EPA set Maximum Achievable Control Technology (MACT) standards. In the second phase, which is risk-based, EPA examines each MACT standard eight years after promulgation to determine if the health risk remaining from each industrial category from is considered safe. Where appropriate, EPA will develop more stringent residual risk standards to reduce cancer and non-cancer health risks.

The Indoor Air Program addresses indoor air quality problems by characterizing the risks of indoor air pollutants to human health, developing techniques for reducing those risks, and educating 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. 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's Climate Protection Programs continues to contribute to the greenhouse gas reductions required to meet the President's 18 percent greenhouse gas intensity reduction goal by 2012. For more than a decade, businesses and organization have partnered with EPA through voluntary climate protection programs to pursue common sense approaches. Energy Star and other voluntary programs 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. As these partnership programs spur investment in advanced energy technologies and the purchase of energy-efficient products, they create emissions reduction benefits that accrue over the lifetime of the investment or product.

Offering recognition for innovative solutions to commuting challenges faced by employers and employees, Best Workplaces for CommutersSM is a public-private sector voluntary program advocating employee commuter benefits. Established by the EPA and the U.S. Department of Transportation (DOT), this program publicly recognizes employers whose commuter benefits reach the National Standard of Excellence. Providing commuter benefits helps employers address limited or expensive parking, reduce traffic congestion, improve employee recruiting and retention, and minimize the environmental impacts associated with drive-alone commuting. EPA continues to expand the ENERGY STAR program for energy efficiency in the residential, commercial, and industrial sectors. The Buildings Sector represents one of EPA's largest areas of potential, and at the same time is one of its most successful. The Industrial Sector goals include the Agency's work with state and local governments, and state and local governments' work with industry to prevent greenhouse gas emissions. EPA will continue to build on the success of the voluntary programs in the industrial sector, focusing on reducing CO₂ emissions and continuing the highly successful initiatives to reduce methane emissions and emissions of the high global-warming-potential gases.

The SmartWay Transport Partnership is a national voluntary program developed by EPA and freight industry representatives to reduce greenhouse gases and air pollution and promotes cleaner, more efficient ground freight transportation. By 2012, the Partnership aims to reduce as much as 33 to 66 million metric tons of carbon dioxide (CO₂) emissions and up to 200,000 tons of nitrogen oxides (NO_x) emissions annually. Partners achieve goals by adopting improved practices, processes and energy saving technologies that are cost effective, cleaner, more efficient, and capable of reducing greenhouse gas emissions.

Under the Clean Automotive Technology (CAT) program, EPA works to: achieve ultra-low pollution emissions; increase fuel efficiency; and reduce greenhouse gases. By promoting the development of cost-effective technologies, the CAT program also encourages manufacturers to produce cleaner and more fuel-efficient vehicles. The program encourages the

commercialization of promising technologies by actively pursuing the transfer of EPA's technologies into the private sector. EPA partners with industry to maximize the viability of targeted technologies for commercial production through cooperative research and development agreements.

An FY 2006 Climate Change Program initiative is the Methane to Markets Partnership - a U.S. led international initiative that promotes cost-effective, near-term methane recovery and use as a clean energy source. The Partnership has the potential to deliver by 2015 annual reductions in methane emissions of up to 50 MMTCE or recovery of 500 billion cubic feet (Bcf) of natural gas. The Methane to Markets Partnership builds on the success of EPA's domestic methane voluntary programs by creating an international forum to promote methane recovery and use projects in developing countries.

The benefits of increasing methane recovery and use include reduced global methane emissions, enhanced economic growth, increased energy security, and improved local air quality. The Partnership initially targets three major methane sources: landfills, underground coal mines, and natural gas and oil systems. The Partnership will achieve its goals through collaboration among developed countries, developing countries, and countries with economies in transition – together with strong participation from the private sector, development banks, and other governmental and non-governmental organizations.

EPA's Domestic Stratospheric Ozone Protection Program will implement the provisions of the Clean Air Act and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), which will lead to the reduction and control of ozone-depleting substances (ODSs) in the U.S. and lower health risks to the American public due to exposure to UV radiation. EPA will focus its efforts on finding alternatives to methyl bromide, an ozone-depleting substance.

In FY 2006, EPA will continue upgrading the national radiation monitoring system. The response time and data dissemination of the upgraded monitoring system would be significantly better than that of the existing monitoring system, and the population coverage of the upgraded system would be significantly better than the population coverage of the existing fixed monitoring system as well as allowing for greater density of sampling locations near and downwind from incidents and maintenance and calibration of deployable monitoring stations. Additionally, EPA will equip up to two radiation teams with state-of-the-art radiation equipment and technical tools to deploy to two simultaneous incidents in any part of the country. Each team will be fully capable of providing timely and accurate information to support the Agency's decontamination/disposal decision-making efforts. EPA will also augment existing applied science radiological labs to meet emergency homeland security needs by developing radiochemistry methods, refining analytical protocols, and conducting training. EPA will also enhance lab response capability to ensure a minimal level of surge capacity for radiological terrorism incidents.

Research

EPA's air research provides the scientific foundation the Agency needs to fulfill responsibilities under the Clean Air Act: to make the air safe to breathe and protect human health and the

environment. This research focuses on the NAAQS pollutants, as well as the HAPs identified in the Act.

In FY 2006, NAAQS research will continue to strengthen the scientific basis for the periodic review and implementation of air quality standards. This research is concentrated on PM, and includes research on the other NAAQS pollutants on an as needed basis (for more information on EPA's programs to reduce NAAQS pollutants, visit: http://www.epa.gov/ord/htm/air.htm). PM research is aligned with the ten priority research topics for PM identified by the National Research Council (NRC). The NRC has conducted four reviews of EPA's PM research since 1998 to ensure it is relevant to the highest priority research needs and to monitor research performance.

Air toxics research will provide information on effects, exposure, and source characterization, as well as other data to quantify existing emissions and to identify key pollutants and strategies for cost-effective risk management. In FY 2006, research will focus on providing health hazard and exposure methods, data, and models to enable the Agency to reduce uncertainty in risk assessments, and the production of tools that enable national, regional, state, or local officials to identify and implement cost-effective approaches to reduce risks from sources of air toxics.

EPA manages its air-related research programs according to the Administration's Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its air toxics and NAAQS-related research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the particulate matter research program in the second quarter of FY 2005. The NAAQS program will be reassessed by OMB's Program Assessment Rating Tool (PART) in the spring of 2005.

In FY 2006, a portion of EPA's air research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Air and Radiation to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority air research needs.

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 (FTE) (Dollars in Thousands)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Clean and Safe Water	\$3,810,107.5	\$2,944,875.7	\$2,813,028.3	(\$131,847.4)
Protect Human Health	\$1,293,345.7	\$1,169,287.4	\$1,195,366.2	\$26,078.8
Protect Water Quality	\$2,382,542.5	\$1,653,907.9	\$1,483,516.9	(\$170,391.0)
Enhance Science and Research	\$134,219.2	\$121,680.5	\$134,145.2	\$12,464.8
Total Workyears	2,904.0	3,088.5	2,916.9	-171.6

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.

¹ 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, we now protect 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. 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.² Each year, more than 180 million people visit the shore for recreation.³ 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.⁴ The commercial fishing industry, which also requires clean water and healthy wetlands, contributed \$28.6 billion to the economy in 2001.⁵ 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.⁶

Although we have made much progress and this progress has had important economic as well as 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 Fiscal Year 2006, 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 make significant progress toward protecting human health and improving water quality by 2008, including –

- Water Safe to Drink: increase the rate of compliance with drinking water standards from 93% to 95%;
- 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

² Travel Industry Association of America. *Tourism for America*, 11th Edition. Washington, DC: Travel Industry of America.

³ Pew Oceans Commission. 2002. *America's Living Oceans Charting a Course for Sea Change*. Arlington, VA: Pew Oceans Commission.

⁴ U.S. Fish and Wildlife Service. 2002. 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. Washington, DC: Government Printing Office.

⁵ National Marine Fisheries Service. 2002. Fisheries of the U.S. 2001. Washington, DC: Government Printing Office.

⁶ United States Environmental Protection Agency Office of Water. 1998. Clean Water Action Plan: Restoring and Protecting America's Water. Washington, DC: Government Printing Office.

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%;

- Water Safe for Swimming: increase the percentage of the stream miles and lake acres identified by States in 2000 as having water quality unsafe for swimming where water quality that is restored to allow swimming. (90,000 stream miles, 2.6 million lake acres);
- Cleaner Water and Healthy Watersheds: restore polluted waters so that, of the 2,262 major watersheds across the Nation, at least 600 have few remaining problems (i.e., at least 80% of assessed waters meet State water quality standards (WQS)) and show improvement in 200 watersheds; and
- **Healthy Coastal Waters:** show steady improvement in seven specific indicators of the health of each of the four major coastal ecosystems around the country.

The clean and safe water goals are closely related to goals established in Goal 4 of the Agency *Strategic Plan* related to 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 2006 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 over 53,000 community water systems (CWSs)⁷ 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 2006, 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. At the national level, implementation of this approach is expected to result in significant progress toward the public health goals described above. EPA has identified key activities within five core program areas that are critical to ensuring safe drinking water. The core program areas are described below:

G/O-15

⁷ 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 2006, 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;
- Develop revisions to the Total Coliform Rule (TCR); and
- Consider additional protections of drinking water distribution systems.

Drinking Water Implementation

During FY 2006, EPA will support State efforts to meet existing and new drinking water standards including the Cryptosporidium⁸, Disinfection⁹ (Stage 2 Disinfectants and Disinfection Byproducts Rule), and Ground Water Rules. EPA will be responsible for directly implementing the early monitoring requirements under these 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 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 Safe Drinking Water Act, offers low interest loans to help public water systems across the nation make improvements and upgrades to their water infrastructure, or other activities that build system capacity. In FY 2006, the DWSRF program will provide an estimated 600 more 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.

⁸ Long Term 2 Enhanced Surface Water Treatment

⁹ Stage 2 Disinfectants and Disinfection Byproducts Rule

Protection of Sources of Drinking Water

In FY 2006, 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 concepts 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 2006.
- 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 2006, 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 identified in violation are addressed.

Assurance that Critical Water Infrastructure Is Secure

In FY 2006, EPA will continue its lead Federal Agency responsibility in supporting States and water utilities to secure their water infrastructure from terrorist threats and other intentional harm. In addition, due to its new responsibilities under Homeland Security Presidential Directives 7 and 9, EPA will support the water sector in implementing protective measures and in launching a new and innovative drinking water surveillance and monitoring program. 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. The EPA *Strategic Plan* calls for improving the quality of water and 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

C

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:

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

- 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
- working to identify emerging contaminants to ensure that routes of fish exposure to new, emerging contaminants are addressed early, before they become a new reason for waters coming under advisory

Safe Shellfish

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

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

Finally, success in achieving the shellfish goal also depends on the efforts of other agencies. For example, EPA is working with the National Oceanic and Atmospheric Administration and the Food and Drug Administration to improve data and data management on contaminated and closed shellfishing areas.

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. 11 For FY 2006, EPA's national strategy for improving the safety of recreational waters will include these key elements:

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

Improve Beach Monitoring and Public Notification

Another important element of the strategy for improving the safety of recreational waters is improving monitoring of public beaches and notifying the public of unsafe conditions. EPA is working with States to implement the Beaches Environmental Assessment and Coastal Health Act and requests grant funding of \$10 million to States to carry out this work. EPA expects that all Tier 1 public beaches will be monitored and managed under the BEACH Act in FY 2006 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

A key component of the strategy to restore waters unsafe for swimming is to identify the specific waters that are unsafe and develop plans to accomplish the needed restoration. An important part of this work is to maintain strong progress toward development of Total Maximum Daily Loads (TMDLs) based on the schedules established by States in conjunction with EPA. 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 2006 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 2006, 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:

- 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 2006, EPA, in partnership with States and Tribes, needs to 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 2006 is the continued implementation of the *Water Quality Standards and Criteria Strategy*, developed in cooperation with States, Tribes, and the public in 2003. The *Standards 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 water pollutants, including implementation protocols and methods. In addition, the *Strategy* identifies key efforts to strengthen the program, including developing nutrient criteria, adopting biological criteria, approving state WQS in a more timely 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 is essential for cleaning up and protecting the Nation's waters. Federal and state water quality monitoring and assessment programs, the underpinnings of all aspects of the watershed approach, need strengthening. Information about the condition of waterbodies is critical to sound water quality protection decisions. A top priority for FY 2006 is to continue to support States in developing monitoring programs consistent with national monitoring guidance published in 2003, including State participation in efforts to develop statistically valid monitoring networks and State support of the national STORET water quality database.
- **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 2006, EPA will compare States' progress in developing TMDLs against the approved schedules. The purpose is to determine whether states will achieve the goal of being 100 percent on pace each year to meet State schedules or straight-line rates that ensure that the national policy of TMDL completion within 13 years of listing is met.
- Control Nonpoint Source Pollution on a Watershed Basis: Polluted runoff from nonpoint sources is the largest single cause of water pollution. In FY 2006, EPA will focus grants to States under Section 319 of the CWA to expand efforts to manage nonpoint pollution on a watershed basis through the development and implementation of watershed plans. Special emphasis will be placed on restoring impaired waters on a watershed basis.
- Strengthen NPDES Permit Program: The NPDES program requires point sources discharging to water bodies to have permits. In FY 2006, 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. The Strategy focuses limited resources on the most critical environmental problems and addresses program efficiency and integrity, including activities to streamline permit issuance and assessments of State programs and permit quality.

• 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 2006. 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 embraced 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 2006, 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. For FY 2006, EPA will expand support for protection of key watersheds by building on the success of the Watershed Initiative (now called the *Targeted Watershed Grants Program see Goal 4*).
- 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 2006, 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. Each State and EPA Region will work to define the extent to which implementation of watershed approaches should be accelerated over the coming years in order to meet the watershed/waterbody restoration and improvement goals for 2008 in the EPA Strategic Plan.

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 2006, EPA's national strategy for improving the condition of coastal and ocean waters will include the following key elements:

Reduce Vessel Discharges

EPA will also focus on enhancing regulation of discharges of pollution from vessels. Key work for FY 2006 includes developing standards for cruise ships operating in Alaskan waters; cooperating with the Department of Defense to develop discharge standards for certain armed forces vessels; and assessing the effectiveness of current regulations for marine sanitation devices.

Manage 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 2006, EPA and COE will continue to focus resources on improving how disposal of dredged material is managed, including evaluating disposal sites, designating and monitoring the 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 2006, EPA will assist the U.S. Coast Guard in its efforts to develop ballast water exchange requirements and discharge standards and is addressing this issue at the international level. In addition, EPA will work to develop improved measures for monitoring the rate of increase of invasive species.

Address 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 effecting shared ecosystems, and the introduction of non-indigenous species introduced through maritime shipping. To reach these ends we are seeking to reduce the successful introduction of invasive species to U.S. waters through the negotiation of effective international standards addressing ballast water discharges,

harmful anti-foulants, and air emissions from ships. In addition, we are isolating high-level radioactive wastes in Northwest Russia that threaten the health of shared natural resources in the

Arctic ecosystem. 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.

The drinking water research program will 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 provide 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.

In FY 2006, important areas of research emphasis will include: 1) arsenic treatment technologies for the removal of arsenic from small community drinking water systems; 2) immune response associated with exposures to waterborne pathogens (e.g., *Cryptosporidium*, Norwalk virus) and chemicals (e.g., arsenic, disinfection byproducts) that may contaminate drinking water; 3) habitat alteration; 4) treatment and contaminant transport and fate from biosolids; 5) reproductive health effects associated with exposures to DBPs; and 6) improved detection methods for pharmaceuticals and personal care products in effluents.

EPA manages its water-related research programs according to the Administration's Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its drinking water and water quality research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the drinking water research program in the second quarter of FY 2005. EPA's Science to Achieve Results (STAR) grants program is also managed according to the Investment Criteria for Research and Development, ensuring the quality of its extramural research through a competitive, peer-reviewed awards process. The STAR program engages the Nation's best scientists to provide high quality, innovative research and solutions to protect human health and the environment.

In FY 2006, a portion of EPA's water research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Water to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority water research needs.

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 (FTE) (Dollars in Thousands)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Land Preservation and Restoration	\$1,722,255.3	\$1,805,990.8	\$1,691,463.0	(\$114,527.7)
Preserve Land	\$200,414.0	\$239,585.1	\$216,930.9	(\$22,654.2)
Restore Land	\$1,450,870.8	\$1,509,152.0	\$1,416,681.8	(\$92,470.2)
Enhance Science and Research	\$70,970.5	\$57,253.7	\$57,850.4	\$596.7
Total Workyears	4,646.4	4,763.6	4,752.2	-11.4

Left 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 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 beneficial use.

EPA will work to preserve and restore the land with the most effective waste management and cleanup methods available. EPA will use a hierarchy of approaches to protect the land: reducing waste at its source, recycling waste, and managing waste effectively by preventing spills and releases of toxic materials, and cleaning up contaminated properties. The Agency is especially concerned about threats to our most sensitive populations, such as children, the elderly, and individuals with chronic diseases.

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 wastes at industrial facilities.

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 to protecting the land. 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 will ensure that EPA is adequately prepared to minimize contamination and harm to the environment when spills do occur.

Four themes characterize EPA's land program activities under Goal 3: Revitalization; One Cleanup Program; Recycling, Waste Minimization and Energy Recovery; and Homeland Security.

- Revitalization: EPA and its partners are restoring contaminated land to make it economically
 productive or available as green space. Like the Agency's Brownfields program included
 under Goal 4, these revitalization efforts complement the Agency's traditional cleanup
 programs, and enable affected communities to reuse contaminated lands in beneficial ways.
 EPA is developing performance measures to assess its success in restoring and revitalizing
 sites under all its cleanup programs.
- One Cleanup Program: Through the One Cleanup Program, the Agency is looking across its programs to bring consistency and enhanced effectiveness to site cleanups. The Agency will work with its partners and stakeholders to enhance coordination, planning, and communication across the full range of Federal, State, tribal, and local cleanup programs. This effort will improve the pace, efficiency, and effectiveness of site cleanups, as well as more fully integrate land reuse and continued use into cleanup programs. The Agency will promote information technologies that describe waste site cleanup and revitalization

information in ways that keep the public and stakeholders fully informed. Finally, the Agency will develop environmental outcome performance measures that report progress among all cleanup programs, such as the number of acres able to be reused after site cleanup. A crucial element to this effort is a national dialogue, currently underway, on the future of Superfund and other EPA waste cleanup programs. A crucial element to this effort is a national dialogue, currently underway, on the future of Superfund and other EPA cleanup programs.

- 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, 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.
- <u>Emergency Preparedness, Response, and Homeland Security</u>: 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, working closely with other Federal agencies within the National Response System.

Controlling Risks to Human Health and the Environment at Contaminated Sites

EPA and its partners work to clean up contaminated land to levels sufficient to control risks to human health and the environment and to return the land to productive use. 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.

EPA uses a variety of tools to accomplish cleanups: permits, enforcement actions, consent agreements, Federal facility agreements, and many other mechanisms. As part of EPA's One Cleanup Program Initiative, programs at all levels of government will 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. Through the One Cleanup Program Initiative, 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 and recognizing tribal governments as being the most appropriate authorities for setting standards, making policy decisions, and managing programs consistent with Agency standards and regulations. EPA and its partners follow four key steps to accomplish cleanups and control risks to human health and the environment: assessment, stabilization, selection of

appropriate remedies, and implementation of remedies. EPA will continue to work with its Federal, state, tribal, and local government partners at each step of the process to identify facilities and sites requiring attention and to monitor changes in priorities.

Through strong policy, leadership, program administration, and a dedicated workforce, EPA's cleanup programs will merge sound science, cutting-edge technology, quality environmental information, and stakeholder involvement to protect the Nation from the harmful effects of contaminated property. To accomplish its cleanup goals, the Agency continues to forge partnerships and develop outreach and education strategies.

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 2006:

- Make 500 final site-assessment decisions under Superfund;
- Control all identified unacceptable human exposures from site contamination to at or below health-based levels for current land and/or groundwater use conditions at 10 of the Superfund human exposure sites;
- Control the migration of contaminated groundwater through engineered remedies or natural processes at 10 of the Superfund groundwater exposure sites;
- Select final remedies (cleanup targets) at 20 Superfund sites; and
- Complete construction of remedies at 40 Superfund sites.

EPA's enforcement program is critical to the Agency's ability to cleanup the vast majority of the nation's worst hazardous waste sites. This program secures cleanups from Potentially Responsible Parties (PRPs) at EPA's priority sites. The PRPs perform approximately 70% of the long-term cleanups and EPA uses appropriated dollars to pay for the other 30% of the long-term cleanups. If PRPs do not perform a cleanup, and EPA uses appropriated dollars to clean up sites, the enforcement program recovers EPA's expenditures from the PRPs.

The Agency has also 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 can be provided as an incentive for other PRPs to perform work they might not be willing to perform or used by the Agency to fund cleanup. The result is the Agency can clean up more sites and allows the Agency to preserve appropriated Trust Fund dollars for other sites without viable PRPs.

This program pursues an "enforcement first" policy to ensure that sites for which there are viable responsible parties are cleaned up by those parties. In tandem with this approach, various reforms have been implemented to increase fairness, reduce transaction costs, and promote economic redevelopment. Enforcement maximizes PRP participation in cleanups while promoting fairness in the enforcement process, and recovering costs from PRPs when EPA expends funds. For more information regarding EPA's enforcement program, and its various components, please refer to www.epa.gov/compliance/cleanup/superfund/.

In FY 2006, 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 remediate sites. When appropriated dollars are used to clean up sites, the program will recover this money from the PRPs. The Agency will also continue its efforts to establish and use Special Accounts to facilitate clean up.

By pursuing cost recovery settlements, the program promotes the principle that polluters should perform or pay for cleanups preserves the Superfund Trust Fund resources for site remediation where there is no known or viable PRP. The Agency's expenditures will be 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.

Encouraging Land Revitalization and Reuse

The goals of the Land Revitalization Initiative are to restore and return contaminated, and potentially contaminated, properties to beneficial use for America's communities; to ensure that cleanups protect public health and the environment and that anticipated future uses are fully considered in all cleanup decisions; and to remove unintended barriers to the restoration and beneficial reuse of contaminated properties. To achieve this mission, EPA has been working over the last two years to develop a comprehensive approach to revitalization, and has developed and implemented a wide range of demonstration projects, redevelopment tools, and educational efforts. The Agency is also forming partnerships with States, Tribes, other Federal agencies, local governments, communities, landowners, lenders, developers, and parties potentially responsible for contamination that can help bring about reuse of formerly contaminated sites.

Usable land is a valuable resource. However, where contamination presents a real or perceived threat to human health and the environment, options for future land use at that site may be limited. 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, will support reasonably anticipated future land use options and provide greater economic and social benefits.

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 and 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 232 million tons between 1960 and 2000. In FY 2006, 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 2006:

- Maintain the national average municipal solid waste generation rate at no more than 4.5 pounds per person per day; and
- Divert 33.4 percent (80 million tons) of municipal solid waste from landfilling 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

¹ US Environmental Protection Agency. *Municipal Solid Waste in the United States:* 2001 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 November 5, 2003.

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. Strong state partnerships, the authorization of States for all portions of the RCRA hazardous waste program, including regulations that address waste management issues contained in permits, and results-oriented state oversight are important goals.

In managing petroleum products properly, EPA works with States, Tribes and Intertribal Consortia to prevent, detect, and correct leaks into the environment from federally regulated underground storage tanks (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 (e.g., methyl tertiary butyl ether, or 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.

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 2006:

- Prevent releases from RCRA hazardous waste management facilities by increasing the number of facilities with permits or other approved controls by 2.5 percent over the FY 2005 level. At the end of FY 2004, 86 percent of the facilities had permits or other approved controls;²
- Increase the percentage of UST facilities that are in significant operational compliance with both release detection and release prevention (spill, overfill, and corrosion protection) requirements to 66 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 2004, confirmed releases averaged 12,641).

Emergency Preparedness, Response, and Homeland Security

EPA will continue to improve its emergency preparedness and response capability, particularly in terms of homeland security. 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 System (NRS), EPA evaluates and responds to thousands of releases annually. EPA's primary role in the NRS is to serve as the Federal On-Scene Coordinator (OSC) for spills and releases in the inland zone. As a result of NRS efforts, many major oil spills and releases of hazardous substances have been contained, minimizing the adverse impacts on human health and the environment.

.

² Approximately 2,750 hazardous waste management facilities are currently regulated under RCRA. EPA plans to reassess this universe in FY 2006.

An important component of EPA's land strategy is to prevent oil spills from reaching our Nation's waters. Under 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 and response training and exercises; 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 to be improved. Application of this information and other data will advance the Agency's state-of-the-art emergency response operations.

Responding to small and large-scale disasters is one of EPA's traditional responsibilities supported by the OSCs, the Environmental Response Team (ERT), and the National Decontamination Team (NDT). The Agency's crucial role in responding to the World Trade Center and Pentagon attacks, the decontamination of anthrax and ricin in a U.S. Senate Office Building, and the response to the Columbia shuttle disaster have further defined the nation's expectations of EPA's emergency response capabilities.

The FY 2006 President's Budget request includes additional funding to enable EPA to improve the capabilities of EPA's responders through procurement of state-of-the-art equipment, develop a new Environmental Laboratory Preparedness and Response (ELPR) program to strengthen such lab capabilities, support readiness for pre-deployments to national security special events, and develop decontamination protocols.

In FY 2006, EPA will continue to implement its homeland security plans and procedures and meet its responsibilities 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 more than one target 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 2006:

- 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;
- Respond to 350 hazardous substance releases and 300 oil spills; and
- Inspect or conduct exercises or drills at approximately 100 oil storage facilities required to have Facility Response Plans.

Enhancing Science and Research to Restore and Preserve Land

The FY 2006 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 accelerating scientifically-defensible and cost-effective decisions for cleanup at complex sites, mining sites, marine spills, and Brownfields in accordance with CERCLA. These research efforts will improve the range and scientific foundation for contaminated sediment remedy selection options by improving risk characterization and site characterization, and increasing understanding of different remedial options, in order to optimize environmental and human health protection and the cost-effectiveness of remedial decisions.

Funding for the Superfund Innovative Technology Evaluation (SITE) program will be reduced, existing contracts will be closed out, and the program will be terminated in FY 2006. As the Superfund program has matured, innovative approaches evaluated through the SITE program and other mechanisms have become standard tools for remediation. Additionally, the business of environmental remediation has matured and the private sector now offers many more opportunities for vendors to promote their products and systems.

Multimedia decision-making and waste management constitute the two major areas of research under RCRA in FY 2006, as the Agency works toward preventing releases through proper facility management. Multimedia research will focus on resource conservation (e.g., electronic waste recycling and waste-derived products), corrective action, and multimedia modeling. Research will enhance sustainability by providing technical reports and technical support on methods to improve industrial and municipal waste management. Waste management research continues to advance multimedia modeling and uncertainty/sensitivity analyses methodologies that support core RCRA program needs as well as emerging RCRA resource conservation needs.

EPA manages its research to support land preservation and remediation programs according to the Administration's Investment Criteria for Research and Development. The Agency's detailed, externally-reviewed multi-year plans for its Contaminated Sites and RCRA-related research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources. As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and

performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the land protection and restoration research program in 2005.

In FY 2006, a portion of EPA's land preservation and restoration research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Solid Waste and Emergency Response to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority land preservation and restoration research needs.

Environmental Protection Agency FY 2006 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 (FTE) (Dollars in Thousands)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Healthy Communities and Ecosystems	\$1,222,772.7	\$1,292,007.7	\$1,336,247.8	\$44,240.1
Chemical, Organism, and Pesticide Risks	\$364,699.2	\$366,759.0	\$392,044.8	\$25,285.8
Communities	\$282,939.8	\$324,792.2	\$325,437.0	\$644.8
Ecosystems	\$155,528.1	\$205,463.2	\$203,902.9	(\$1,560.2)
Enhance Science and Research	\$419,605.6	\$394,993.3	\$414,863.1	\$19,869.8
Total Workyears	3,825.4	3,844.8	3,834.7	-10.1

To promote healthy communities and ecosystems, EPA must bring together a variety of programs, tools, approaches and resources. The support of a multitude of stakeholders, along with strong partnerships with Federal, state, tribal and local governments, are necessary to achieve the Agency's goal of protecting, sustaining or restoring healthy communities and ecosystems.

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. Antimicrobials play an important role in public health and safety. EPA is conducting comprehensive scientific assessments and developing test protocols to determine product safety and efficacy of products used against chemical and 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 1,800 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.

Americans 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. The voluntary High Production Volume program challenges industry to develop chemical hazard data critical to enabling EPA, States, Tribes, and the public to screen chemicals already in commerce for any risks they may be posing. EPA's responsibility for managing the known risks of other chemicals centers on reducing exposure through proper handling or disposal.

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).

This goal also focuses on geographic areas with human and ecological communities most at risk. For example, the Mexican Border is an area facing unique environmental challenges. At the Mexican Border, EPA addresses local pollution and infrastructure needs that are priorities for the Mexican and the U.S. governments under the Border 2012 agreement.

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.¹

In 2001 the Supreme Court determined that some isolated waters and wetlands are not regulated under the Clean Water Act. Many waters with important aquatic values may no longer be covered by CWA Section 404 protections. However, in FY 2006, EPA and the Army Corps of Engineers (CORPS) will continue to strive towards the Administration's commitment of "no net loss" of wetlands in the United States.

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 Initiative to clean up brownfields and return them to use funds pilot programs and other research efforts; clarifies liability issues; enters into Federal, state and local partnerships; conducts outreach activities; and creates related job training and workforce development programs.

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.

EPA also 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. Under Goal 4, EPA will conduct research in many areas, including emerging areas such as biotechnology and computational toxicology, to help develop better understandings and characterizations of positive environmental outcomes related to healthy communities and ecosystems.

G/O-37

.

¹ 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.

In coordination with our state and tribal co-regulators and co-implementers and with the support of industry, environmental groups, and other stakeholders, EPA will use multiple approaches to address risks associated with chemicals and pesticides. Improving communities' ability to address local problems is a critical part of our efforts to reduce risk.

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/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.

Category	Tolerances to be Reassessed	Total Reassessed as of 7/20/04	Tolerances Remaining	Percentage Reassesses
Organophosphates	1691	1131	560	66.88%
Carbamates	545	305	240	55.96%
Organochlorine	253	253	0	100%
Carcinogen	2008	1329	679	66.19%
High Hazard Inert	5	3	2	60.00%
Other	5219	3723	1496	71.33%
TOTALS	9721	6744	2977	69.37%

EPA plans to emphasize the continuation and further development of programs for the review of new and existing chemicals. On the new chemicals front, the Agency will 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. 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.

The Agency will continue to manage its programs to address specific chemicals of concern, including lead, mineral fibers, dioxin, mercury, polychlorinated biphenyls (PCBs), and persistent, bioaccumulative and toxic (PBT) chemicals generally. The lead program will 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. EPA will continue to implement a national voluntary phase-out of PCB Large Capacitors and PCB Transformers, focusing on major Federal and private owners and operators of electrical equipment. Priorities include the identification of opportunities for replacement of older, less efficient equipment with newer, more efficient equipment and the accelerated phase-out of PCB-containing electrical equipment as supplemental environmental projects. 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.

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 9 and 10. 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.

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.
- **Build Partnerships:** Since 1995, the NAFTA-created institutions, the Border Environment Cooperation Commission (BECC) and the North American Development Bank (NADBank), have had the primary role in working with communities to develop and construct infrastructure projects. In FY 2006, 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.

Protection and Restoration of Ecosystems

The National Estuary Program (NEP) is a key tool for restoring and protecting the quality of the nation's ecosystems. 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 2006 is to continue supporting the efforts to implement Comprehensive Conservation and Management Plans in all 28 NEP estuaries. A critical measure of success is the number of priority actions in these plans that have been initiated and the number that have been completed. 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 2006, EPA has set a goal of protecting or restoring an additional 25,000 acres of habitat within the 28 study areas.

Finally, EPA will work with National Estuary Programs in FY 2006 to improve information about conditions in the estuaries. Starting in FY 2005, each program will have indicators in place to track environmental trends in the estuary. In FY 2006, EPA will develop and issue a baseline report on the condition of NEP estuaries modeled after the National Coastal Condition Report.

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 2006 is described below.

• **Net Gain Goal:** Meeting the "net gain" element of the wetland goal 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 contributes to achieving no overall net loss through EPA's regulatory programs, including the Clean Water Act 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 through actions that include: working with and integrating wetlands protection into other EPA programs such as Section 319, State Revolving Fund, National Estuary Program; working with the Corps of Engineers (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.

• No Net Loss: Building upon the analysis of existing mitigation data base systems, the Corps, EPA, USDA, DOI, and NOAA will establish a shared mitigation database by FY 2005. Utilizing the shared database, the Agencies will provide an annual public report card on compensatory mitigation to complement reporting of other wetlands programs. To help ensure no net loss of aquatic resources the Corps 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 Corps in meeting performance measures for compensatory mitigation for unavoidable impacts.

Targeted Watershed Grant Program

The Targeted Watersheds Grant Program, now in its third year, is designed to encourage successful community-based approaches and management techniques to protect and restore the nation's waters. This a competitive grant program predicated on the following fundamental principles of environmental improvement: collaboration, new technologies, market incentives, and results-oriented strategies. The organizations chosen to receive funds use the resources for a variety of restoration, protection and trading projects. Money is used to stabilize stream banks, demonstrate innovative nutrient management schemes, establish pollutant credits, and work with local governments and private citizens to promote sustainable practices and strategies. Grants range from \$300,000 to \$1,300,000, with an additional 25 percent leveraged from other sources.

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 90 percent 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.

Over the upcoming year, the local, state, tribal, and Federal Great Lakes Regional Collaboration will work together to develop a strategy to address Great Lakes water quality. The Regional Collaboration was called for as part of the President's May 2004 Executive Order, directing EPA to establish the great Lakes Task force to coordinate the Federal effort to improve water quality in the Great Lakes. The strategy will focus on outcomes like cleaner water and sustainable fisheries, and targeting measurable results and build upon priority setting work done by the eight Great Lakes governors and by partners to the *Great Lakes Strategy* 2002: A Plan for the New Millennium. Objectives of strategy include cleaning up and de-listing at least 10 Areas of Concern by 2010, a 25 percent reduction in PCB concentrations in lake trout and walleye, and restoration or enhancement of 100,000 acres of wetlands in the Great Lakes Basin. In FY 2006, EPA will give special attention to work in the following three areas:

- Core Clean Water Programs: While the Great Lakes face a range of unique pollution problems (extensive sediment contamination) they also face problem common to most other waterbodies 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 2006, EPA will expedite work to address contaminated sediment. In FY 2006 EPA anticipates remediation efforts will result in cleanup of over one-quarter million cubic yards of contaminated sediments, with cleanup beginning at approximately 6 sites.

• Implementing Expanded Beach Safety Programs: In FY 2006, EPA will work with States to both improve the state water quality standards for bacteria in recreational waters and to implement the BEACH Act (see Goal 2). EPA has a goal that 100percent of high priority beaches around the Great Lakes are served by water quality monitoring and public notification programs consistent with the BEACH Act guidance.

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.

One of the key measures of success in achieving improved Chesapeake Bay water quality will be the restoration of submerged aquatic vegetation. 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. EPA and Bay area States have agreed to an approach to meeting restoration goals for Chesapeake Bay including the following key actions for FY 2006:

- Implement Pollution Reduction Strategies: States have developed pollution reduction strategies for each of the watersheds within the larger Bay watershed. These strategies define specific, localized approaches to meeting new state water quality standards and to restoring impaired waters by the year 2010. Although each strategy will describe a series of steps specifically designed for that watershed, most strategies will address the need for advanced treatment at sewage treatment plants, the need to reduce nutrients and sediments from farms, and the need to expand streamside buffers.
- Core Programs in the Bay Area: In addition to new watershed-specific strategies, EPA and state partners will continue to implement core clean water programs that are essential to maintaining past progress in improving the health of the Bay. For example, Bay area States will continue to provide low interest loans for the financing of sewage treatment systems and will continue to implement comprehensive, statewide programs for reducing nonpoint sources of pollution. The discharge permit program will provide controls on discharges from storm water facilities, confined animal feeding operations, sewage treatment plans and combined sewer overflows.

Protecting the Gulf of Mexico

The Gulf of Mexico basin has been called "America's Watershed." Its U.S. coastline is 1,630 miles, it is fed by thirty-three major rivers, and it receives drainage from 31 States in addition to a similar drainage area from Mexico. One sixth of the U.S. population now lives in Gulf Coast

states. For FY 2006, 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 the continued effective implementation of core clean water programs, ranging from discharge permits, to nonpoint pollution controls, to wastewater treatment, to 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 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 2006 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.

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 100 RMP audits in FY 2006.

EPA will collect information from the local emergency planning committees (LEPCs) during FYs 2004-2006 to determine the extent to which they have incorporated appropriate facility risk information into their emergency preparedness and community right-to-know programs. This information will serve as a baseline from which EPA will track progress toward this strategic goal. 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 2006:

- Assess 1,000 Brownfields properties
- Clean up 60 properties using Brownfields funding
- Leverage \$1 billion in cleanup/redevelopment funding
- Leverage 5,000 jobs
- Train 200 participants, placing 65 percent in jobs

Community Action to Renew the 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.

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 06, 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.

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 human health, communities, and ecosystems through 2008, EPA will engage in high priority, multidisciplinary research efforts to improve understanding of the risks associated with: 1) human health and ecosystems; 2) mercury; 3) pesticides and toxics; 4) computational toxicology; 5) endocrine disruptors; 6) global change; and 7) homeland security. The Agency also is proposing an Advanced Monitoring Initiative (AMI) for FY 2006, which will bring the best monitoring data and information into environmental decision making to protect human health and the environment.

In FY 2006, EPA will continue research efforts on susceptible subpopulations to support the National Children's Study (NCS). The Agency will collaborate with the NCS Interagency Consortium to assess the early pre- and post-natal NCS results, and develop tools for characterizing environmental risks to young children and adolescents participating in the study.

Also, the Agency's human health risk assessment research program expects to produce 32 final and external review draft dose-response assessments of high priority chemicals in support of Program Office, Regional, state and tribal risk assessment needs. These include three assessments of microbial contaminant risks in support of Contaminant Candidate List (CCL) regulatory determinations by EPA's Water program; and one final Air Quality Criteria Document (AQCD-ozone) and one external review draft AQCD (lead) to support National Ambient Air Quality Standards (NAAQS) decision-making.

In order to better 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 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. Monitoring methods and decision support systems will continue being developed and diagnosis and forecasting models previously developed will be applied to provide a better scientific basis for ecosystem protection and restoration. In FY 2006 EPA will also continue research to evaluate the effectiveness of restoration options for aquatic ecosystems, with particular emphasis on options for the Mid-Atlantic Region and the western United States.

In the mercury research program, research will focus on evaluating the cost and performance of options to reduce mercury emissions from coal-fired utility boilers and further testing of continuous source emission monitors (CEMs). Work on control technologies will include pilot-and full-scale testing of systems that optimize mercury, SO₂, and NOx control from the combustion of bituminous, sub-bituminous, and lignite coals and evaluation of the performance and cost of promising control technologies under development (e.g., new sorbents) and assessing how these technologies impact the characteristics of coal combustion residues.

EPA continues to make real progress in the area of computational toxicology. In FY 2006, the Agency expects to deliver the first alternative assay for animal testing of environmental toxicants. This assay could be a replacement for a currently used animal-based assay in the Tier 1 screening battery of compounds that may disrupt the body's endocrine or hormonal systems. Also, under its endocrine disruptors research program, the Agency has developed and refined assays so that its Prevention, Pesticides, and Toxic Substances program has the necessary protocols to validate for use in the Agency's Endocrine Disruptors Screening Program and in FY 2006 will develop a report on a protocol to screen environmental chemicals for their ability to interact with the male hormone receptor.

EPA's homeland security research program supports the Administration's R&D priority of addressing our Nation's ability to prevent, detect, treat, remediate, and attribute acts of terrorism. Homeland Security research will continue to enhance the state of knowledge of potential threats, as well as response capabilities in accordance with Homeland Security Presidential Directives (HSPDs). Areas of emphasis will include decontamination and consequence management, water infrastructure protection, and threat and consequence assessment.

The Agency will also train the next generation of environmental scientists through its fellowship programs and seek to identify emerging risks and opportunities in nanotechnology through its Science to Achieve Results (STAR) program exploratory grants program.

EPA continues to work closely with the Administration's Climate Change Science Program (CCSP). EPA's Global Change Research Program is focused on understanding the potential consequences of global change with the goal of producing information that can be readily used by policymakers to understand the various potential impacts of global change and to formulate strategies to effectively respond to the risks and opportunities presented by global change. In addition, EPA manages its basic research programs according to the Administration's Investment Criteria for Research and Development. Specifically, the Agency's detailed, externally-reviewed multi-year plans for its research programs describe clear goals and priorities, and are periodically updated to reflect changes in science and resources.

As part of the periodic multi-year plan revisions, EPA is examining the design of each program to help identify its outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes. Beginning in FY 2005, EPA is implementing regular evaluations by independent and external panels that provide prospective and retrospective review of program relevance, quality, and performance, including the program's design and performance goals. The Agency's Board of Scientific Counselors, the chosen mechanism for these reviews, will examine the ecosystems protection and human health research programs in the second quarter of FY 2005. EPA's Science to Achieve Results (STAR) grants program is also managed according to the Investment Criteria for Research and Development, ensuring the quality of its extramural research through a competitive, peer-reviewed awards process.

In FY 2006, a portion of EPA's pesticides and toxic substances research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Prevention, Pesticides, and Toxic Substances to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority pesticides and toxic substances research needs.

In addition, two programs in this Goal have been reviewed through the Program Assessment Rating Tool (PART). The ecosystems protection research program is in the process of responding to PART recommendations, including developing outcome and efficiency measures. EPA will reassess the program in the spring of 2005. EPA also reviewed for the FY 2006 PART process EPA's endocrine disruptors program, which received an "Adequate" rating.

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. In addition, the 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.

Environmental Justice

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 that 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)), as well as cooperation with multinational organizations like the Commission for Environmental Cooperation, the World Trade Organization, and the World Health Organization. Strategies also include contributing to a set of measurable end points that will show reductions in pollutants of concern and pollutants at their origin, as well as exposure to our citizens along the US borders, thereby reducing the level of pollutants in the global atmosphere.

Environmental Protection Agency FY 2006 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 to be determined for 2005.)
- 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 (FTE) (Dollars in Thousands)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Compliance and Environmental Stewardship	\$739,222.5	\$735,342.5	\$760,978.2	\$25,635.7
Improve Compliance	\$431,488.5	\$438,530.6	\$486,878.1	\$48,347.5
Improve Environmental Performance through Pollution Prevention and Innovation	\$135,703.6	\$147,593.1	\$142,142.6	(\$5,450.5)

	FY 2004 Obligations	FY 2005 Pres. Bud.	FY 2006 Request	FY 2006 Request v. FY 2005 Pres. Bud.
Build Tribal Capacity	\$76,812.7	\$79,625.8	\$74,016.8	(\$5,609.1)
Enhance Science and Research	\$95,217.6	\$69,593.0	\$57,940.7	(\$11,652.3)
Total Workyears	3,590.8	3,446.9	3,469.3	22.3

Throughout FY 2006, 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. The EPA will protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public to promote environmental stewardship. 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 2006 EPA will identify and address significant environmental and public health problems, strategically deploy its resources, and make use of integrated approaches to achieve strong environmental outcomes. In the context of the Enforcement and Compliance Assurance Program, these principles mean that we must be "smart" in the work that we do.

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 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 2006 EPA will support the regulated universe by working to assure that requirements are clearly understood, and will help industry to identify cost-effective innovative, cost-effective compliance options. 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 2006 Compliance Monitoring activities will be both environmental media- and sector-based. The traditional media-based inspections compliment 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.

Enforcement: The Enforcement Program addresses violations of environmental laws, to ensure that violators come into compliance with Federal laws and regulations. In FY 2006 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.

Auditing and Evaluation Tools: Maximum compliance requires the active efforts of the regulated community to police itself. Throughout FY 2006 EPA will continue to investigate options for encouraging self-directed audits and disclosures. It 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 developing innovative approaches 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

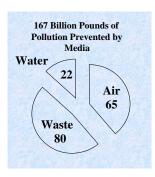
EPA will work to bring about a performance-oriented regulatory system that develops innovative, flexible strategies to achieve measurable results; promotes environmental stewardship in all parts of society; supports sustainable development and pollution prevention; and fosters a culture of creative environmental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

Partnering with Businesses and Consumers: In 2006, 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 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: The 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.

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. In 2006, EPA plans to enhance its P2 grant management system by incorporating pollution prevention metrics that capture quantifiable environmental results within individual work plans, and by 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); define common data standards, formats, and trading partner agreements for sharing data over the Exchange Network; and the plan, develop, and implement collaborative, innovative uses of the Exchange Network.

Promoting Environmental Stewardship and Innovation

In FY 2006, EPA will encourage and support states, Tribes, communities and businesses to "go beyond compliance" with environmental regulations, and to practice and promote environmental stewardship. EPA will accomplish its goals using the next generation of voluntary innovative environmental protection strategies. The Agency will work with states, businesses, and communities to develop the "next generation" of environmental protection, one that focuses more on results than process, and promotes business practices that are both environmentally and economically sustainable. EPA will focus on five areas of work under its innovation strategy:

- Promote innovative leadership through new ideas, creative partnerships, and sound analysis;
- Encourage environmental stewardship in businesses;

- Promote stronger facility-level environmental management, including Environmental Management Systems (EMSs);
- Improve environmental performance of selected business sectors; and
- Improve program efficiency through increased evaluation and measurement.

Innovation Grant Program: EPA will continue to award Innovation Grants to states and Tribes to encourage testing innovative environmental protection strategies, such as permit streamlining; development of environmental management systems that promote the use of innovative technologies for better environmental results; and other projects that demonstrate improved efficiencies in environmental management.

Performance Grant Fund: For FY 2006 EPA proposes a new competitive state and Tribal Performance Grant Fund to support results-oriented environmental protection work. The grants will help states and Tribes measure, document and improve the results of their environmental protection programs. The Fund will support state work with businesses, non-profit organizations and communities to pursue alternative means of compliance and performance through a variety of means. These include pollution prevention, changes in business processes, product stewardship, technical and compliance assistance, recycling and pollution trading. The Fund will also support geographic, ecosystem, and regulatory program performance improvement initiatives.

Performance Track: One of EPA's most successful voluntary programs, Performance Track recognizes and rewards private and public facilities that demonstrate levels of environmental performance that exceed current requirements. Performance Track membership is steadily growing, as more and more businesses recognizes the benefits of the program, and see that their participation "makes good business sense." EPA will continue to recruit facilities to participate in Performance Track, and provide assistance to those facilities to improve their environmental performance. In FY 2006 Performance Track members will collectively achieve an annual reduction of: 900 million gallons in water use; 7,000,000 MMBTUs in energy use; 20,000 tons in materials use; 300,000 tons of solid waste; 35,000 tons of air releases; and 10,000 tons in water discharges.

Sector-based Stewardship: In FY 2006 EPA will continue to work with the following industrial business sectors: agribusiness, cement manufacturing, construction, forest products, iron and steel manufacturing, paint and coatings, ports, shipbuilding, metal finishing, die casting and meat processing. 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 regulatory burdens and test innovative strategies.

Small Business Ombusdman: EPA will continue to support the Small Business Ombudsman program, which serves as EPA's gateway and leading advocate for small business issues.



The Agency will partner with state Small Business Assistance Programs, and hundreds of small business and trade associations, to reach out to the small business community. These partnerships provide the information and perspective EPA needs to help small businesses achieve their environmental goals, and gives businesses access to networks, advocacy resources, tools and educational forums.

Building Tribal Capacity

Since adoption of the EPA Indian Policy in 1984 EPA has worked with Tribes on a government-to-government basis, one that affirms the Agency's trust responsibility over federally recognized Tribes and Tribal governments. Under Federal environmental statutes, the Agency has responsibility for assuring human health and environmental protection in Indian communities. EPA has worked to establish the internal infrastructure and organize its activities in order to meet this responsibility. The creation of EPA's American Indian Environmental Office (AIEO) in 1994 took responsibility for such efforts and was a further step 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 2006, using Tribal GAP grant resources EPA will provide approximately 510 Federally recognized Tribes and InterTribal Consortia access to resources to hire at least one person working in their community to build a strong, sustainable environment for the future. Tribal communities can then assess environmental conditions on their lands, and build an environmental program tailored to their specific needs. In addition to assisting in the building of Tribal environmental capacity, another key role of this workforce is to alert EPA of immediate public health and ecological threats, so that EPA can work with the Tribe to respond quickly and effectively.

Provide Access to Environmental Information: EPA will provide the information needed by Tribes to meet EPA and Tribal environmental priorities. At the same time, ensure that the Agency has the ability to view and analyze the conditions on Indian trust lands, and the impacts of EPA and tribal actions and programs on Indian trust lands.

Implementation of Environmental Goals: The Agency will provide opportunities for the implementation of Tribal environmental programs by Tribes, or directly by EPA, as necessary.

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 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 2006, EPA will integrate 10 existing Agency data systems and assist other agencies to adopt these common codes.

Pollution Prevention and Enforcement Research

Pollution Prevention: Over the past several years 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.

In FY 2006, research will explore the principles governing sustainable systems and the integration of social, economic, and environmental objectives in environmental assessment and management. The Agency will also assess the interactions between various stressors that threaten human and environmental health, and will work to develop innovative and cost-effective responses. In a broader context, the program will focus not just on the industrial sectors, but other areas critical to stewardship, e.g., municipal sector and ecosystems. FY 2006 research will also develop tools and methodologies to prevent pollution at its source and evaluate the performance of innovative environmental technologies through the Environmental Technology Verification (ETV) program.

EPA manages its compliance and environmental stewardship research programs according to the administration's Investment Criteria for Research and Development. Specifically, the agency is in the process of revising its pollution prevention multi-year plan to emphasize sustainability. This multi-year plan will describe clear goals and priorities. As part of this effort, EPA will identify the appropriate outputs, customers, transfer needs, and short-, intermediate-, and long-term outcomes for this program. In FY 2005, EPA will continue to implement a program of regular evaluations by independent and external panels, to provide prospective and retrospective review of programs' relevance, quality, and performance, including the programs' design and performance goals.

EPA also conducts Economics and Decision Sciences (EDS) research to improve decision making, cost-benefit analyses, and implementation strategies. In FY 2006, EDS research will be accomplished using a new approach to applied research funding at EPA. This arrangement, based on the existing collaborative framework between the media and research offices, is designed to ensure continued relevance and quality of applied research at EPA. In FY 2006, funds will be provided to the Office of Policy, Economics and Innovation to use a fee-for-service arrangement with the Office of Research and Development to obtain additional research focusing on the Agency's highest priority economics and decision science research needs.

Forensics Support: The Agency's Forensic Support program provides specialized scientific and technical support for the nation's most complex civil and criminal enforcement cases, and provides technical expertise for non-routine Agency compliance efforts. In FY 2006, efforts to stay at the forefront of environmental enforcement will include the refinement of successful multi-media inspection approaches; use of customized laboratory methods to solve unusual enforcement case problems; applied research and development for both laboratory and field

applications, and further development of electronic data analysis methods for use investigative support related to computers and data fraud.

The Agency's Forensics program also will continue development of emerging technologies in field and laboratory analytical technique, and evaluate the scientific basis and/or technical enforceability of select EPA regulations. EPA's National Enforcement Investigations Center (NEIC) is the only accredited environmental forensics center in the nation; in FY 2006 the Center will also continue to function under more stringent International Standards of Operation for environmental data measurements to maintain its accreditation.

Index – Goal and Objective Overview

Brownfields	Exchange Network	54
Climate Protection Program 10	Forensics Support	57
Commission for Environmental Cooperation	Great Lakes Legacy Act	42
49	Mexican Border	36
Compliance Monitoring 52	Small Business Ombudsman	55
Endocrine Disruptors	Wetlands	37, 41
Environmental Justice		