ENVIRONMENTAL PROTECTION AGENCY

Since 2001, the Administration:

- Proposed Clear Skies legislation that mandates a 70-percent reduction in air pollution from power plants over the next 15 years;
- Finalized a rule for the New Source Review program that will encourage emissions reductions and increase energy efficiency at power plants;
- Revitalized communities by signing and implementing historic brownfields legislation, encouraging investment and redevelopment of urban areas; and
- Strengthened rules for concentrated animal feeding operations that will help remove over two billion pounds of pollutants from waterways annually.

The President's Budget:

- Protects public health and improves air quality through an expanded diesel school bus retrofit program that will reduce harmful bus emissions;
- Provides \$45 million for Great Lakes clean-up, nearly a five-fold increase over previous levels;
- Makes States' and Tribes' environmental performance and accountability a priority with a new \$23 million competitive grant program;
- Expands Superfund long-term clean-up resources by nearly 50 percent to tackle the tougher hazardous waste sites remaining on the National Priorities List;
- Provides a new \$20 million program to improve water quality monitoring so that EPA can make a national assessment of water quality; and
- Strengthens the inspection program for underground storage tanks by providing \$26 million in additional State grants.

Environmental Protection Agency

Administrator Mike Leavitt

www.epa.gov (202) 564-4700

Number of Employees: 17,556 civilian; 79 commissioned Public Health Service officers

2005 Discretionary Budget Authority:

\$7.8 billion

Key Components: 10 regional offices, 31

laboratories.



Administrator Leavitt.

OVERVIEW

The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment. To meet these goals, EPA works with States and Tribes to implement air, water, solid waste, and chemical programs. Over 40 percent of EPA's budget consists of grants to help States assume authority for these programs, as well as finance infrastructure to clean wastewater and provide drinking water. EPA also fulfills its mission by regulating vehicle emissions and fuels and running the Superfund program, which cleans up hazardous waste sites. EPA is working to develop policies and regulations based on strong, peer-reviewed science, and to ensure that its activities are linked to public health and environmental outcomes. These two criteria will continue to help EPA find the most effective solutions to environmental issues and ensure that the benefits of its actions can be demonstrated to the taxpayers.

Since the founding of EPA in 1970, the Nation has experienced historic economic growth while dramatically improving the protection and health of our natural resources. This environmental turnaround is one of the country's greatest success stories. A number of challenges remain. President Bush has focused on addressing these challenges in a common sense, cost-effective manner based on sound science, and his 2005 Budget builds upon these successful principles.

Through policies and programs that recognize regional differences, employ market forces, and empower individuals to be good stewards of the earth, we can and will meet the environmental challenges of the future.

> President George W. Bush October 2002

President Bush has developed the most ambitious air quality policies of any administration. His Clear Skies legislation would significantly reduce air pollutants, improving air quality while giving power plants the flexibility to find the most cost-effective solutions. The Administration also updated the New Source Review program, encouraging power plants to meet

ambitious environmental targets using new economically efficient, energy-saving technologies. The 2005 Budget continues the President's progress in improving air quality by providing \$65 million

for a significantly expanded diesel school bus retrofit and replacement program, protecting children and their environment by reducing emissions.

In cooperation with the U.S. Department of Agriculture, EPA strengthened requirements for concentrated animal feeding operations (CAFOs), the source of a growing water quality problem nationwide. These new requirements will eliminate over two billion pounds of pollutants from waterways each year, protecting aquatic ecosystems and public health. In 2005, an additional \$20 million will assist States in implementing nationally consistent water quality monitoring programs. These monitoring programs will provide data to EPA and eventually allow the Agency to make a credible national assessment of water quality. Information from these monitoring programs will also help scientists and policymakers ensure resources and remedies are targeted, appropriate, and cost-effective.

New EPA Grant Program Rewards Environmental Performance

President Bush believes that the best way to ensure strong, effective programs is to promote accountability, competition, and performance. The President's Budget includes a new \$23 million State and Tribal Performance Fund that will award grants on a competitive basis for environmental programs. These funds will allow States and Tribes that can link their proposed activities to public health and environmental outcomes to receive additional funding from EPA. Eligible projects will include activities such as air quality assessments, wetlands restoration, and hazardous waste management.



Through the new Performance Fund, States and Tribes will be able to receive additional funds for activities such as wetlands restoration. Here, a restored wetland protects water quality and provides habitat for a heron.

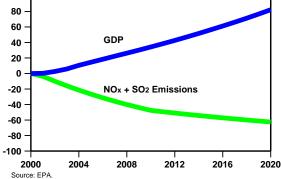
President Bush long advocated for changes in brownfields policy to clean up old, contaminated sites more quickly, effectively, and economically. In January 2002, the President signed historic brownfields legislation into law, and the 2005 Budget continues the President's strong support for the brownfields program, providing \$210 million to help States and Tribes assess and redevelop sites, revitalizing communities.

EPA'S PROGRAMS

Improving Air Quality

The air in the United States has improved dramatically since the Congress passed the Clean Air Act in 1970. Total emissions of six major pollutants (carbon monoxide, sulfur dioxide, ozone, nitrogen dioxide, particulate matter, and lead) have nearly been halved over the past three decades. This decrease has occurred even as the gross domestic product grew 164 percent, energy consumption

Clear Skies Emission Reductions and **Economic Growth** Percent 100 **GDP**



increased 42 percent, and vehicle miles traveled increased 155 percent. Remaining air quality problems, however, are more complex, and effective solutions often require an approach different from the command-and-control methods of the past.

In response to this need for innovative solutions to remaining problems, President Bush proposed the Clear Skies initiative. Clear Skies will produce dramatic improvements in air quality by reducing power plants' emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), and mercury by 70 percent—more than any other clean air initiative for power plants.

Through its market-based approach, Clear Skies will reduce emissions faster and with more certainty by utilizing economic incentives and allowing plant managers to choose among effective methods to reach ambitious targets. This initiative will help communities meet health-based air quality standards at less cost than earlier air quality approaches, protecting public health and the environment while also supporting economic growth. Pending congressional action on Clear Skies, EPA is moving forward with rulemakings to achieve as many of these reductions as possible.

In April 2003, EPA began the Clean School Bus USA pilot program to provide schools and school districts cost-share grants to reduce diesel emissions from school buses. **EPA** received nearly \$60 million in requests for the \$5 million available in 2003. the Administration proposes to significantly expand the Clean School Bus USA program, increasing funding to \$65 million. This initiative will reduce buses' potentially harmful emissions and help protect public health in a cost-effective manner that promotes local solutions to air quality problems.

The Administration also recognized that changes to other vehicle emissions would result in significant improvements in air quality.



Get on the bus. Expanding the Clean School Bus USA program makes additional funds available to communities for diesel bus retrofit and replacement, reducing harmful emissions.

Accordingly, EPA issued strict new emissions standards for diesel engines in new heavy-duty trucks and buses, and required the use of low-sulfur diesel fuel in those engines by 2007. When fully implemented, these actions will cut harmful pollution from heavy-duty trucks and buses by 95 percent, eliminating 2.6 million tons of smog-causing nitrogen oxide emissions and 110,000 tons of soot and particulate matter each year. EPA also proposed standards for heavy-duty, non-road diesel engines used in construction, mining, agricultural, and industrial equipment. Combined with regulations that will require low-sulfur diesel fuel, the Administration's approach will prevent up to 9,600 premature deaths and nearly a million lost work days due to illness.

Clean Power to the People

In 1999 the Detroit Edison Monroe Power Plant in Monroe, Michigan applied to EPA for approval to install new, more efficient turbines that would allow increased electricity generation without exceeding their Clean Air Act permit limits. However, EPA's New Source Review (NSR) rules discouraged technology upgrades such as this with the threat of additional and complex regulatory requirements, causing the plant to delay installation of the turbines. In August 2003, EPA finalized revised NSR rules that make it easier for power plants to modernize equipment, maintain plant safety, invest in new technologies, and perform routine



President Bush meets with employees of the Detroit Edison Monroe Power Plant in Monroe, Michigan.

maintenance. These common-sense policies protect public health, benefit the environment, and contribute toward energy security.

Cleaning Up Hazardous Waste and Revitalizing Communities

Since its inception in 1980, the Superfund program has been instrumental in protecting people and the environment from the legacy of hazardous waste pollution. The Administration recognizes that clean-up and management of hazardous waste sites can provide significant economic, environmental, and public health benefits to communities.

However, to be most effective in improving the environment, the laws governing brown-fields—lightly contaminated or potentially contaminated properties—needed attention. Across the country, nearly half a million brownfields sat barren and unused because the threat of liability and clean-up was too great to lure developers. Before he was elected, President Bush proposed to make it easier to clean up and reuse these sites. He also proposed to limit liability for small volume contributors and innocent land owners.

In January 2002, President Bush signed the Small Business Liability Relief and Brownfields Revitalization Act, which modified Superfund to accelerate the clean-up of brownfields. EPA's brownfields program determines site contamination and makes money available for clean-up. With the stigma of contamination removed, private investors and communities can now turn these sites back into businesses, greenspaces, or housing. The President's 2005 Budget provides \$210 million to continue to help revitalize neighborhoods and stimulate local economies through brownfields assessment and clean-up.

Also covered under the Superfund law are the more highly contaminated Superfund sites. Most are cleaned by those who contaminate them, but about 30 percent have no entity to take responsibility for clean-up. EPA then steps in to make sure these "orphan" sites are made safe. Most of the Superfund sites on the National Priorities List have reached the "construction complete" stage, but some tough sites remain. For 2005, the Administration is requesting \$380 million, nearly a 50-percent increase, for Superfund site clean-up to help turn potentially dangerous properties into healthy parts of America's communities.



From broken glass and nails...The Industri-Plex Superfund site in North Woburn, Massachusetts became contaminated with hazardous substances over a 130 year period, beginning in 1853.



...to retail sales. Working with responsible parties, the State of Massachusetts and others, EPA helped assess and redevelop the site.

In the upcoming year, OMB and EPA will evaluate Superfund's remedial program using the Program Assessment Rating Tool (PART). The remedial program focuses on long-term clean-ups of hazardous substances that pose a threat to the public or the environment. This process will help the Administration refine the program to ensure that it maximizes its benefit to human health and the environment.

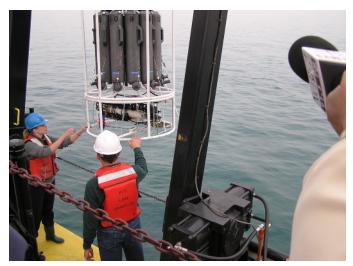
EPA also works in partnership with States and Tribes to clean up leaking underground petroleum tanks. To date, States have cleaned up over 300,000 sites with financial and technical assistance from EPA, and an additional 21,000 clean-ups are expected in 2005. Like Superfund sites, remaining underground storage tank (UST) sites are more complicated and will require more time and effort to correct. In recognition of this, the Administration is requesting \$26 million in new funding for States to increase UST training and inspections.

Restoring and Protecting Water Resources

Water is essential in every aspect of our lives, from basic activities such as eating and drinking to complex enterprises such as manufacturing. As a result, water pollution has a serious impact on human health and ecosystems, and can have detrimental effects on recreation, fishing, transportation, and commerce. The Administration has focused on providing innovative, cost-effective solutions that protect water resources while also supporting economic growth.

EPA's Water Quality Trading Policy, released in January 2003, is a cornerstone of this approach. The trading policy provides a framework for States and Tribes that wish to develop water quality trading programs to help them meet Clean Water Act requirements in a more economically efficient and flexible manner. In Long Island Sound, 79 publicly-owned treatment works (POTWs) have implemented a water quality trading program for nitrogen that is expected to improve water quality and encourage economic growth. In the Sound's program, one POTW can meet its regulatory allowance for nitrogen by using nitrogen reductions created by another source that has lower control costs due to factors such as economies of scale. The President's 2005 Budget includes \$4 million to fund trading programs across the country.

The Great Lakes are the largest system of fresh surface water on Earth. The Great Lakes basin also is home to more than one-tenth of the population of the United States, one-quarter of the population of Canada, and heavy concentrations of industry. Over the years, industrial development has contaminated sediments throughout large areas of the lakes with toxics such as polychlorinated biphenyls and heavy metals, putting large populations and the tremendous water resource at risk. In November 2002, the President signed the Great Lakes Legacy Act. This region-specific initiative calls for EPA to provide funding to remediate contaminated sediments, keeping them from entering the food chain where they may cause adverse effects on human health and the environment. In 2005, the Administration will demonstrate its commitment to



Catch of the day. EPA scientists retrieve a water monitoring device called a rosette from Lake Michigan. The rosette collects samples at different depths and locations, providing EPA with data on water quality indicators such as dissolved oxygen and nutrients.

the health and well-being of the basin and its citizens by proposing to fund the Great Lakes Legacy program at \$45 million, nearly five times the amount available in 2004. This will allow EPA, along with Great Lakes community partners, to start remedial action at six sites.

In 2002, EPA finalized a rule that required all CAFOs to obtain water quality permits. This rule, which revised an existing CAFO rule, ensured that EPA's permitting process protected the environment while reflecting the realities of current animal agriculture practices, which have moved toward larger numbers of animals in more confined situations. EPA estimates that the new rule will prevent the release of over 56 million pounds of phosphorus, 100 million pounds of nitrogen, and two billion pounds of sediments each year, protecting human health and the environment. The 2005 Budget includes an additional \$5 million in EPA funding to help States implement this new rule, and up to \$1 billion in USDA funding to help producers meet the stricter requirements.

The Budget continues the President's commitment to the Clean Water and Drinking Water State Revolving Funds (SRFs). SRFs provide States and communities with a long-term source of funding for water infrastructure to protect public health and the environment. Since the Clean Water SRF's inception in 1988, EPA has provided nearly \$20 billion of Federal investment, with over \$5 billion provided since 2001. These funds have allowed States to make available over \$47 billion in loans to municipalities. These loans have helped finance over 14,000 wastewater projects, such as the construction of treatment plants and sewers.

The Budget provides \$850 million for the Clean Water SRF, resulting in a long-term average revolving level of \$3.4 billion. The Budget also fully supports the President's commitment to the Drinking Water SRF. With cumulative Federal capitalization totaling \$5 billion, the Drinking Water SRF has made available \$6.4 billion in loans and financed over 3,000 drinking water infrastructure improvement projects nationwide. The President also proposes to fund the Drinking Water SRF at \$850 million, resulting in a long-term average revolving level of \$1.2 billion. In the coming year, EPA will improve the link between the SRFs and environmental and public health outcomes, consistent with PART recommendations.

To reduce public health risks, EPA finalized a 10 parts per billion (ppb) standard for arsenic in drinking water in January 2001. EPA estimated that when compared to the previous standard of 50 ppb, the change will provide additional protection against cancer and other health problems, including cardiovascular disease and diabetes, for 13 million Americans. However, the Administration also

recognized that compliance with the arsenic rule could pose financial burdens on smaller systems. To help address this problem, in 2002 EPA began a two-year, \$20 million research and development and technical assistance program to identify affordable cost-effective technologies to help small systems comply with the new arsenic standard. The program includes 26-32 demonstration projects at small water utilities with arsenic problems. In 2005, research and development efforts will continue to focus on helping small systems comply with the new arsenic standard.

Keeping Our Water Supplies Safe

In response to the September 11, 2001, attacks, the Administration worked with States and communities to protect America's 54,000 community drinking water systems and 16,000 public wastewater treatment systems from terrorist threats. By 2005, all community drinking water systems supplying more that 3,300 people will have completed vulnerability assessments as required under the Bioterrorism Response Act of 2002. Since 2002, over \$140 million in EPA's budget has been dedicated to these critical infrastructure protection activities. Another \$10 million is



requested for 2005 to continue grants to States for emergency planning efforts and to support the Water Information Sharing and Analysis Center, a secure web-based, password-protected database that provides information on threats or alerts to drinking water and wastewater utilities.

Promoting Environmental Stewardship and Compliance

All of us have a responsibility to be the stewards of our land.

President George W. Bush January 2002 EPA targets its enforcement and compliance assurance programs to address the most significant risks to human health and the environment and to ensure that disadvantaged populations do not bear a disproportionate environmental burden. This "smart" enforcement approach relies on the appropriate mix of data

collection and analysis, compliance monitoring, and compliance assistance and incentives to achieve environmentally beneficial outcomes. EPA also cooperates with States, Tribes, regulated entities, and the public to maximize environmental understanding and compliance.

EPA's compliance assistance centers have helped small and medium-sized businesses and governments understand, and comply with, Federal environmental requirements. The centers provide one-stop shopping for regulatory and technical assistance, pollution prevention activities, and sector specific information. Currently, EPA has 10 centers, and has plans to develop three more during 2004–2005.

EPA continues to implement its successful audit and self-policing policy that waives or substantially reduces gravity-based civil penalties if companies voluntarily disclose and correct environmental violations. The small business compliance policy uses the audit and self-policing feature to help small businesses comply with environmental regulations. As an added incentive, EPA offers the option of establishing an environmental management system to resolve violations.

PERFORMANCE EVALUATION OF SELECT PROGRAMS

The Budget continues to focus on improving program performance. Nine of EPA's programs were assessed using the Program Assessment Rating Tool (PART), which evaluated each of the programs' design and purpose, strategic planning efforts, how well they are managed, and whether they are generating positive results for taxpayers. Additionally, eight programs previously assessed were re-evaluated. Below are some of the highlights and recommendations from the PART evaluations. For further details on EPA's performance assessments, see the White House budget website at www.whitehouse.gov/omb/budget/.

Program	Rating	Explanation	Recommendation
Acid Rain	Effective	The program implements a successful, cost-effective trading scheme for reducing SO ₂ and NO _x emissions, protecting human health and the environment.	Expand and enhance by promoting the enactment of Clear Skies legislation. Develop efficiency measures that consider the full cost of the program.
Existing Chemicals	Adequate (2004 rating was Results Not Demonstrated)	The program reviews and regulates chemicals that may harm human health and the environment. For 2005, the program created a new long-term outcome measure that focuses on reducing chronic human health risk to improve its strategic planning and accountability.	Create outcome measures for acute exposure chemical guidelines, which are important for homeland security response, recovery, and preparedness. Develop a long-term efficiency measure.
Ecological Research	Results Not Demonstrated	The program is intended to improve scientific knowledge about ecosystems. The program needs to coordinate with other similar Federal programs to leverage efforts and better assess performance.	Develop long-term outcome performance measures. Shift resources to the water quality monitoring initiative.

UPDATE ON THE PRESIDENT'S MANAGEMENT AGENDA

The table below provides an update on EPA's implementation of the President's Management Agenda as of December 31, 2003.

	Human Capital	Competitive Sourcing	Financial Performance	E-Government	Budget and Performance Integration
Status					
Progress					

EPA's management reform efforts have yielded results. EPA continues to be a strong performer in financial management, where EPA linked financial and performance information for day-to-day decisionmaking, achieved a clean financial audit, and met new end-of-year and audit requirements a year ahead of time. Human Capital (HC) has witnessed steady progress as EPA finalized a HC Strategy and accountability system. However, EPA still needs to implement its strategy throughout the agency, and implement a plan to reduce skill gaps. EPA also made organizational changes that will enhance its Competitive Sourcing Program, and expects to announce its first standard competition in the second quarter of 2004. EPA already has completed four streamlined competitions according to schedule. EPA's E-Government's progress is also steady, as EPA continues to participate in 14 of the 24 E-Gov initiatives, and works toward E-Payroll migration and the implementation of an Earned Value Management System for business cases. In Budget and Performance Integration, EPA continues to develop efficiency and long-term outcome measures for evaluating program effectiveness. Approximately 35 percent of programs that were first reviewed for 2004 improved in rating when re-evaluated for 2005. In addition, three of nine programs were able to demonstrate results for the 2005 review, whereas only one program was able to demonstrate results when reviewed for 2004. EPA will also apply the Research and Development (R&D) Investment Criteria to better plan, manage, and assess its R&D programs. The R&D Investment Criteria are discussed in detail in the Research and Development chapter in the Analytical Perspectives volume.

ENVIRONMENTAL PROTECTION AGENCY

(In millions of dollars)

	Actu	Actual		Estimate	
_	2001	2003	2004	2005	
Spending					
Discretionary Budget Authority:					
Operating program	3,861	4,055	4,323	4,355	
Clean water state revolving fund	1,347	1,341	1,342	850	
Drinking water state revolving fund	823	844	845	850	
Brownfields cleanup funding	_	90	93	121	
Diesel school bus retrofit program	_	_	_	65	
Targeted water infrastructure funding	465	416	429	94	
Requested	(112)	(123)	(98)	(94)	
Unrequested	(353)	(293)	(331)	_	
Superfund	1,267	1,265	1.257	1,381	
Other	,	72	76	43	
Total, Discretionary budget authority	7,835	8,084	8,365	7,759	
Total, Discretionary outlays	7,598	8,219	8,269	8,415	
Mandatory Outlays:					
Superfund recoveries	-202	-147	-125	-125	
Other	_ 	-12	-14	-13	
Total, Mandatory outlays	-207	-158	-140	-138	
Total, Outlays	7,391	8,061	8,129	8,277	