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EPA Mission and Purpose

The mission of the Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment -- air, water, and land -- upon which life depends. EPA's purpose is to ensure that:

- All Americans are protected from significant risks to human health and the environment where they live, learn, and work.
- National efforts to reduce environmental risk are based on the best available scientific information.
- Federal laws protecting human health and the environment are enforced fairly and effectively.
- Environmental protection is an integral consideration in U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy.
- All parts of society: communities, individuals, business, state and local governments, and tribal governments have access to accurate information sufficient to effectively participate in managing human health and environmental risks.
- Environmental protection contributes to making our communities and ecosystems diverse, sustainable, and economically productive.
- The United States plays a leadership role in working with other nations to protect the global environment.

EPA Goals

EPA has developed a series of ten strategic, long-term goals in its Strategic Plan. These goals, together with the underlying principles that will be used to achieve them, define the Agency's planning, budgeting, analysis, and accountability process.

- **Clean Air:** The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from the health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

- **Clean and Safe Water:** All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve public health, enhance water quality, reduce flooding, and provide habitat for wildlife.

- **Safe Food:** The foods Americans eat will be free from unsafe pesticide residues. Children will especially be protected from the health threats posed by pesticide residues, because they are among the most vulnerable groups in our society.

- **Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems:** Pollution prevention and risk management strategies aimed at cost-effectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this Nation.

- **Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response:** America's wastes will be stored, treated, and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restoring them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

- **Reduction of Global and Cross-Border Environmental Risks:** The United States will lead other nations in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

EPA Goals

- **Expansion of Americans' Right to Know About Their Environment:** Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.

- **Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems:** EPA will develop and apply the best available science for addressing current and future environmental hazards, as well as new approaches toward improving environmental protection.

- **A Credible Deterrent to Pollution and Greater Compliance with the Law:** EPA will ensure full compliance with laws intended to protect human health and the environment.

- **Effective Management:** EPA will establish a management infrastructure that will set and implement the highest quality standards for effective internal management and fiscal responsibility.

Overview of the 2001 Budget

For three decades, the Environmental Protection Agency (EPA) and its partners have made significant strides in controlling pollution and other environmental risks to human health and the environment. The air, land, and water are now safer for all Americans due to our Nation's investment in environmental protection.

The Environmental Protection Agency's 2001 Annual Plan and Budget Request of $7.257 billion in discretionary budget authority, and 18,050 Full Time Equivalencies (FTE), builds on our commitment to protect the environment and public health with common-sense programs that promote environmental health and sustain economic growth. This budget request maintains the Administration's dedication to ensure that the air, water, and land are safe and healthy, and that the American public has the health protections they need and deserve.

Cleaning America's Water

Over the past three decades, our Nation has made significant progress in water pollution prevention and cleanup. While we have substantially cleaned many of our most polluted waterways, and provided safer drinking water for millions of U.S. residents, significant challenges remain. This budget request addresses the challenge to provide clean and safe water in every American community.

Great Lakes Initiative

The Great Lakes, our Nation's most significant and beautiful water resources, will receive $50 million in the President's Budget for a new Initiative that will continue the progress we have made in their cleanup and restoration. Through this initiative, states and municipalities will be eligible to compete for grants to improve water quality through stormwater pollution control, wetlands restoration and contaminated sediment remediation at identified Aareas of concern.@ State or local governments will be required to provide at least 40 percent of total project costs.

Helping States Ensure Clean Water, Address Runoff

For water, the President's 2001 Budget bolsters the successes we have achieved by providing $250 million in grants, a $50 million increase, to address polluted runoff, which is currently the largest threat to our Nation's water quality.

Helping States Restore Polluted Waters

This budget request strengthens our efforts to identify and restore polluted waterways with $161 million in Pollution Control (Section 106) grants, a $45 million increase over 2000, specifically targeted to help states develop pollution allocation and implementation plans (known as Total Maximum Daily Loads, or TMDLs) for some 20,000 waterways across the Nation. States would be required to provide at least 40 percent of TMDL program costs.

Clean Water State Revolving Fund

This budget request includes $800 million for the Clean Water State Revolving Fund (CWSRF). This investment keeps EPA on track with our commitment to meet the goal for the CWSRF to provide an average of $2.0 billion in annual financial assistance. Indeed, the President's Budget calls for cumulative additional capitalization of $3.2 billion in fiscal years 2002-2005, which will enable the program to exceed the Administration commitment. Over $17 billion has already been provided to capitalize the CWSRF, more than twice the original Clean Water Act authorized level of $8.4 billion. Total SRF funds available for loans since 1987, reflecting loan repayments, state match dollars, and other sources of funding, are approximately $30 billion, of which $26 billion having been provided to communities as financial assistance ($4.2 billion was available for loans as of June 1999).

Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWSRF) request of $825 million keeps the Administration on track to provide an average of $500 million a year to states and tribes to modernize drinking water systems.

U.S./Mexico Border

This request includes $100 million for water and wastewater projects along the U.S./Mexico Border. With these resources, the Agency provides grant assistance to address the environmental and public health problems associated with untreated industrial and municipal sewage on the border.

Legislative Proposals

This budget request includes three legislative proposals that would provide states with flexibility in operating their CWSRFs, as well as demonstrating the Admin-istration's longstanding commitment to protect public health and the environ-ment on tribal lands.

- ***19% Set-Aside.*** The Agency proposes to allow states to reserve up to 19% of their CWSRF capitalization grants to address polluted runoff through grants of no more than 60% of the costs of implementing nonpoint source and estuary management projects. This set-aside will provide states with flexibility to help address the leading cause of water pollution -- polluted runoff.

- ***Tribal Wastewater Grants.*** To improve public health and water quality in Indian Country, the Agency proposes to increase the percentage of CWSRF funds reserved for wastewater grants to tribes from 0.5 percent to 1.5 percent for 2001 and beyond. This will substantially increase the amount of funds available to tribes for wastewater treatment project grants.

- ***Tribal Nonpoint Source Grants.*** In this budget request, the Agency is proposing to permanently eliminate the statutory one-third of one percent cap on Clean Water Act Section 319 Nonpoint Source Pollution grants that may be awarded to tribes.

Congress eliminated the cap for fiscal year 2000 only. Tribes applying for and receiving Section 319 grants have steadily increased from two in 1991 to eleven in 1999. Twenty two tribes have met the eligibility requirements to receive Section 319 grants. This proposal recognizes the increasing demand on the limited pool of Section 319 grant funds for Tribal nonpoint source program needs.

Cleaning America's Air

Clean Air Partnership Fund

One of the Administration's most important public health commitments is to improve the air that Americans breathe. Over one-third of Americans still live in areas where the air does not meet the new air quality standards. The 2001 budget request includes $85 million for the Clean Air Partnership Fund. This initiative will foster public-private partnerships to help communities achieve their own clean air goals in ways that make the best sense for them.

The Clean Air Partnership Fund will:

- be a catalyst for innovative local, state, and private partnerships for air pollution reductions;
- demonstrate locally managed, self-supporting programs that achieve early integrated reductions in soot, smog, air toxics, and greenhouse gases;
- be used to capitalize local revolving funds and other financial mechanisms that investment and pollution reduction; and
- stimulate technology innovation.

The Clean Air Partnership Fund will fund more optimal, multi-pollutant control strategies. Currently, businesses and municipalities often invest in short-term, single-pollutant control approaches. The Partnership will encourage many industries, such as electric utilities and the transportation sector, to pursue comprehensive criteria pollutant reductions while improving energy and operational efficiencies, thereby also reducing greenhouse gas emissions.

Air Grants to States and Tribes

This budget provides $222.9 million in state and tribal air grants. Of these resources, $5 million will be for state, tribal, and regional planning bodies to implement programs to address regional haze and integrate those programs with approaches to reducing ozone and fine particulate matter.

Meeting the Climate Change Challenge

This budget request of $227.3 million for EPA's portion of the Climate Change Technology Initiative (CCTI) continues the Administration's commitment, through this multi-Agency program, to address the significant threat that global warming poses to public health and the environment. This investment will reduce greenhouse gas emissions through investments in energy efficient technologies, as well as partnerships with businesses, schools, state and local governments, and other organizations. This initiative promotes voluntary measures and common-sense approaches to reduce energy use and energy bills for consumers and bus-

inesses while protecting the global environment for future generations.

Protecting our Children

The Administration remains dedicated to providing children with the health protections they need through for the Children's Health Initiative, which is funded in 2001 at over $67 million. Children are among the most vulnerable members of our society, and prolonged exposure to toxins in our environment increases the risks to their health. Through the Children's Health Initiative, the Agency supports research to develop a better understanding of children's vulnerabilities and improve its ability to assess their health risks. The Agency also focuses on children's exposure to toxins in the environment. The budget continues to support the 2000 Children's Asthma Initiative and an interagency 2001 Children's Lead Poisoning Initiative.

Providing for Communities

Promoting Smart Growth through Better America Bonds

To better protect America's communities, the Administration is again proposing Better America Bonds that states, tribes, and local governments can use to preserve open space, protect water quality, and clean up abandoned industrial sites. Through this Initiative, the Administration will provide the authority to issue $2.15 billion in bonds to state, local, and tribal governments in 2001.

Creating a New Source of Environmental Information: The Information Integration Initiative

This Administration has made a commitment to empower the public with environmental information on toxic releases in their communities. This information is a powerful tool for the public to take action to ensure that their local environment is safe and healthy. This budget request expands on the public's right-to-know about their environment with the Information Integration Initiative. This Initiative will provide $30 million for the Agency to work with the states to develop and make public integrated environmental data, providing the public with an unprecedented level of integrated information on local environments across the Nation.

Cleaning Up Toxic Waste

Keeping Superfund Working Fair, Fast and Cost-Effective

This budget continues a commitment to clean up toxic waste sites with a request of $1.45 billion for Superfund cleanups. Funding will provide resources to mitigate the effects of uncontrolled releases on local populations and sensitive environments. This budget request keeps us on track with Superfund site cleanups. Currently, 91% of the 1,412 final sites on the Superfund National Priorities List (NPL) are either undergoing cleanup construction (remedial or removal) or are completed. Combined with continuing administrative reforms, these funds will help meet the President's goal of 900 clean up completions by 2002.

Expanding Brownfields to Revitalize Local Economies and Create Jobs

The 2001 budget request of nearly $92 million for the Brownfields initiative will continue to promote local cleanup and redevelopment of industrial sites, returning abandoned land to productive use and bringing jobs to blighted areas. This budget request provides funding for technical assistance and grants to communities for site assessment, redevelopment planning, and job training, as well as revolving loan funds to finance cleanup efforts at the local level. Through 2001, EPA will have funded Brownfields site assessment pilots in more than 350 communities.

Sound Science

Achieving maximum environmental and health protections requires employing the best methods, models, tools, and approaches to implement a very demanding environmental agenda. This budget request includes $674 million to develop and apply sound science to address both current and future environmental challenges. The budget request describes a balanced research and development program designed to meet the science challenges of administering environmental legislation such as the Clean Air Act (CAA), the Safe Drinking Water Act (SDWA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Food Quality Protection Act (FQPA), and others, and addressing Administration and Agency priorities.

Strengthening Tribal Partnerships

This budget request includes $53 million for the Indian Environmental General Assistance Program (GAP) grants to allow virtually every tribe in the United States to have one or more people working in their community to build a strong, sustainable environment for the future. This request will support vital work by assessing the status of a tribe's environmental condition and developing the infrastructure for an environmental program tailored to that tribe's needs. In addition to developing, for example, the environmental education programs and solid waste management plans needed in almost every tribal community, a key role of these personnel is to alert EPA of serious conditions requiring attention in the near term so that, in addition to assisting in the building of tribal environmental capacity, EPA can work with the tribe to respond to immediate public health and ecological threats.

Food Quality Protection Act (FQPA)

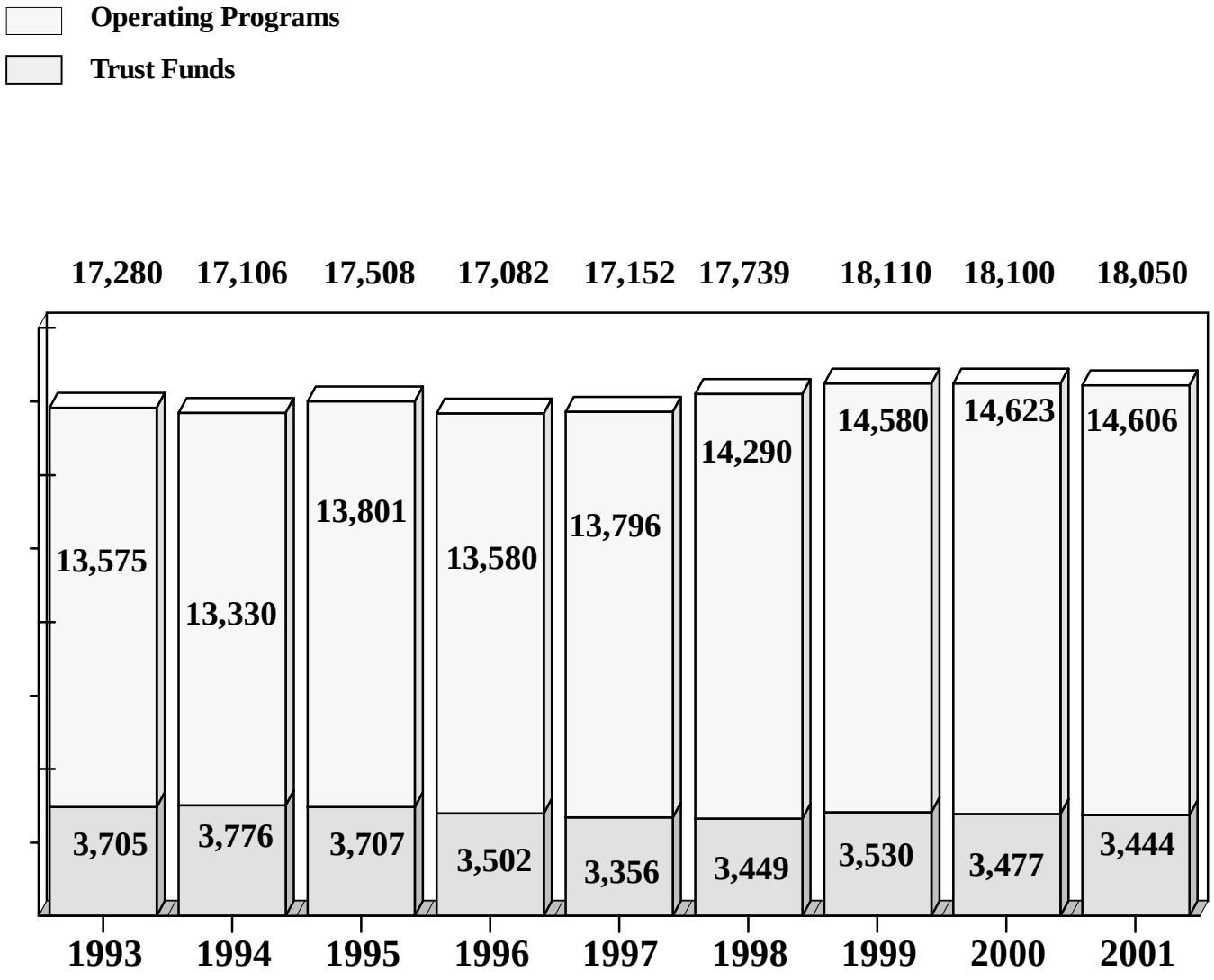
The 2001 request includes $74.5 million to help meet the multiple challenges of the implementation of the Food Quality Protection Act (FQPA) of 1996 so that all Americans will continue to enjoy one of the safest, most abundant, and most affordable food supplies in the world. FQPA focuses on the registration of reduced risk pesticides to provide an alternative to the older versions on the market, and on developing and delivering information on alternative pesticides/techniques and best pest control practices to pesticide users. FQPA implements a "whole farm" approach to pollution management

and will help farmers transition - without disrupting production - to safer substitutes and alternative farming practices. Expanded support for tolerance reassessments will reduce the risks to public health from older pesticides. Reassessing existing tolerances ensures food safety, especially for infants and children and ensures that all pesticides registered for use meet the most current health standards. This budget request also enhances FQPA-related science through scientific assessments of cumulative risk, including funds for validation of testing components of the Endocrine Disruptor Screening Program.

Summary

The Environmental Protection Agency's 2001 Annual Plan and Budget Request supports innovative, common-sense, cost-effective programs to ensure a healthy environment and healthy communities for the 21st Century. To accomplish our mission, we will continue to strengthen our partnerships with states, tribes, local communities, and other stakeholders. This budget request builds on the environmental progress of the Administration, and provides the American public with the environmental and health protections they need and deserve.

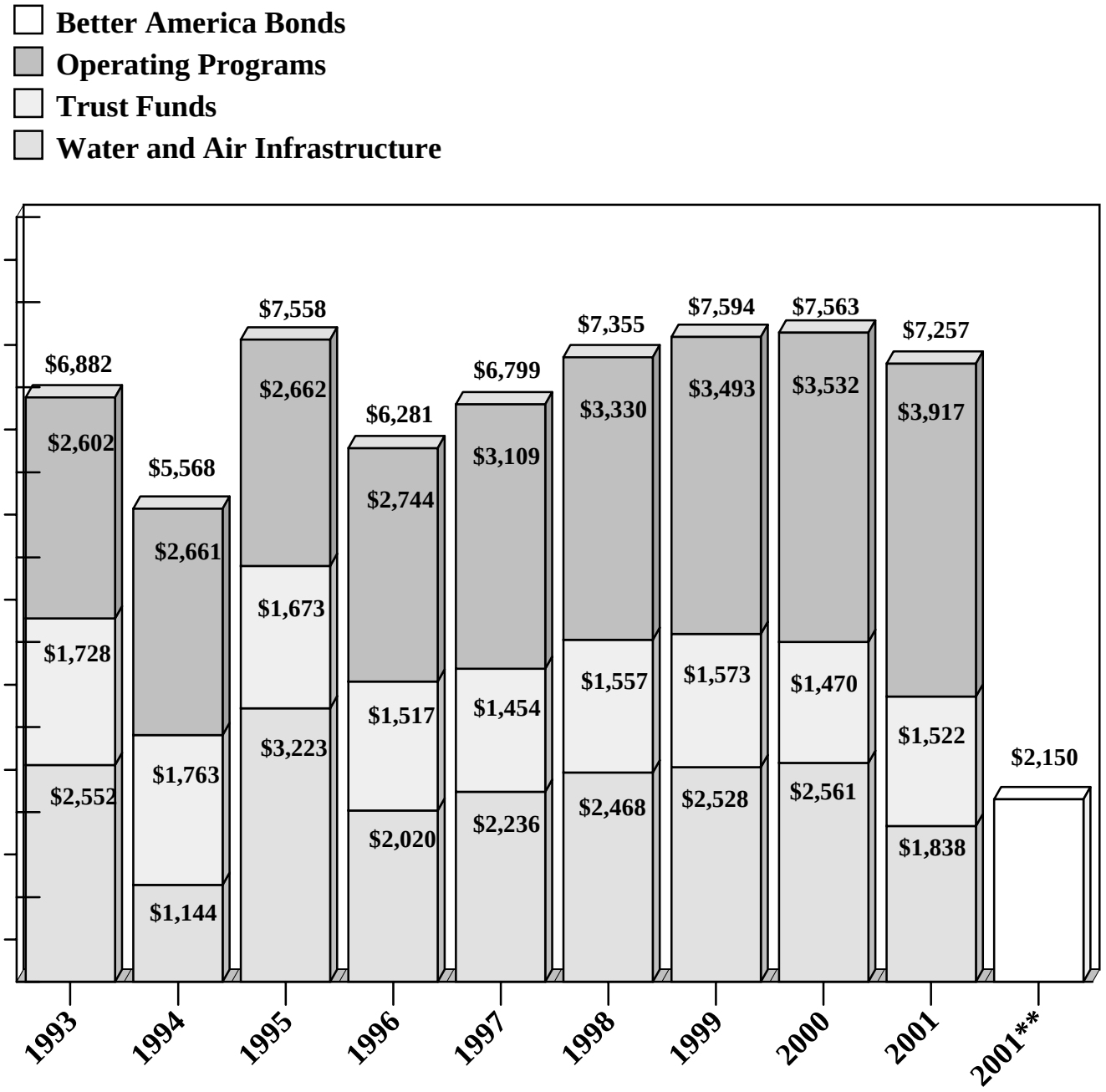
Agency Workyear Decrease in 2001



NOTE: FY 1993 through 1999 reflect actual FTE usage.

In 2001, The Agency's Budget Totals $7.3 Billion

(dollars in millions)



** Total dollars for 2001 reflect offsetting recepts.*

*** Better America Bonds - In 2001 the Adminstration is proposing bond authority of $2.15 billion.*

GOALS

Clean Air

Strategic Goal: The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 - FY 2000 Delta
Clean Air	**$540,965.5**	**$647,514.2**	**$106,548.7**
Attain NAAQS for Ozone and PM	$382,105.9	$455,169.9	$73,064.0
Reduce Emissions of Air Toxics	$95,123.4	$132,939.4	$37,816.0
Attain NAAQS for CO, SO2, NO2, Lead	$44,103.4	$39,111.4	-$4,992.0
Acid Rain	$19,632.8	$20,293.5	$660.7
Total Workyears**:**	1,857.9	1,856.6	-1.3

Means and Strategy:

Criteria Pollutants

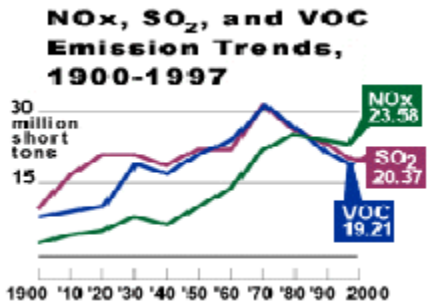
EPA develops standards to protect public health and the environment that limit concentrations of the most widespread pollutants (known as criteria pollutants), which are linked to many serious health and environmental problems:

- Ground-level ozone. Causes respiratory illness, especially in active children; aggravates respiratory illnesses such as asthma; causes damage to vegetation and contributes to visibility problems.
- Sulfur dioxide (SO_2). Aggravates the symptoms of asthma and is a major contributor to acid rain.
- Nitrogen dioxide (NO_2). Irritates the lung and contributes to the formation of ground-level ozone, acidic deposition, and visibility problems.
- Carbon monoxide (CO). Interferes with the delivery of oxygen to body tissues, particularly affecting people with cardiovascular diseases.
- Lead. Causes nervous system damage, especially in children, leading to reduced intelligence.
- Particulate Matter (PM). Linked to premature death in the elderly and people with cardiovascular disease and to respiratory illness in children; affects the environment through visibility impairment.

Clean Air

Hazardous Air Pollutants

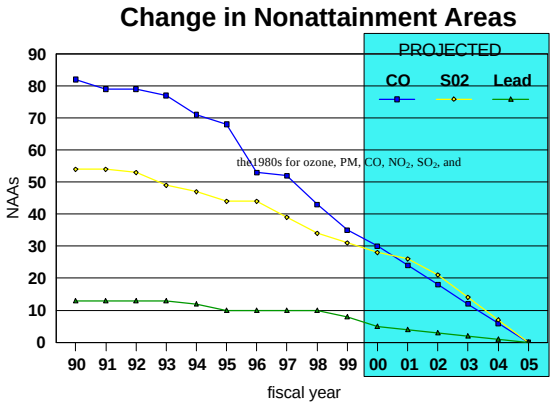
Hazardous air pollutants (HAPs), commonly referred to as air toxics or toxic air pollutants, are pollutants that cause, or may cause, adverse health effects or ecosystem damage. The Clean Air Act Amendments of 1990 list 188 pollutants or chemical groups as hazardous air pollutants and targets sources emitting them for regulation. Examples of air toxics include heavy metals such as mercury and chromium, dioxins, and pesticides such as chlordane and toxaphene. HAPs are emitted from literally thousands of sources including stationary as well as mobile sources. Adverse effects to human health and the environment due to HAPs can result from exposure to air toxics from individual facilities, exposures to mixtures of pollutants found in urban settings, or exposure to pollutants emitted from distant sources that are transported through the atmosphere over regional, national, or even global airsheds.



Compared to information for the criteria pollutants, the information about the potential health effects of HAPs is relatively incomplete. Most of the information on potential health effects of these pollutants is derived from experimental animal data. Of the 188 HAPs mentioned above, almost 60 percent are classified by EPA as known, probable, or possible carcinogens. One of the more documented ecological concerns associated with toxic air pollutants is the potential for some to damage aquatic ecosystems. Deposited air pollutants can be significant contributors to overall pollutant loadings entering water bodies.

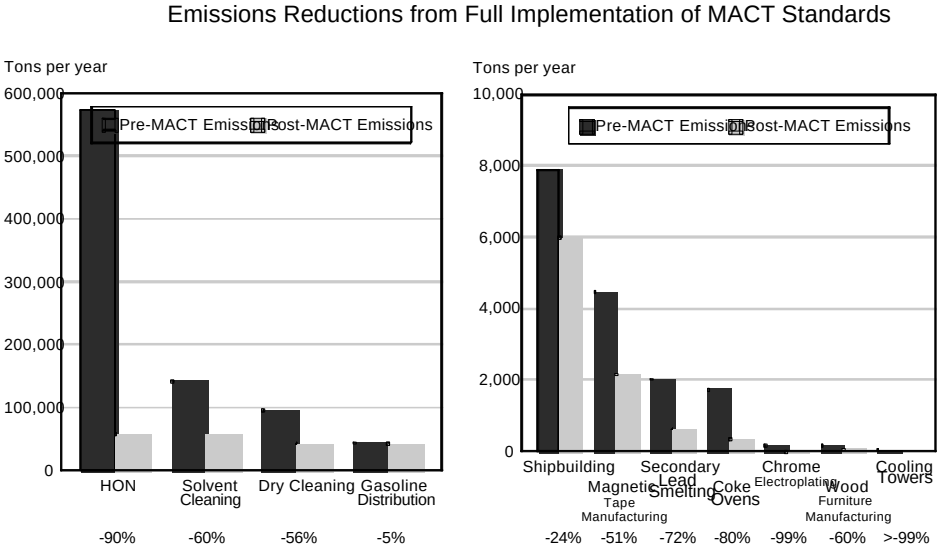
Acid Rain

The Clean Air Act Amendments of 1990 established a program to control emissions from electric power plants that cause acid rain and other environmental and public health problems. Emissions of SO_2 and nitrogen oxides (NO_x) react in the atmosphere and fall to earth as acid rain, causing acidification of lakes and streams and contributing to the damage of trees at



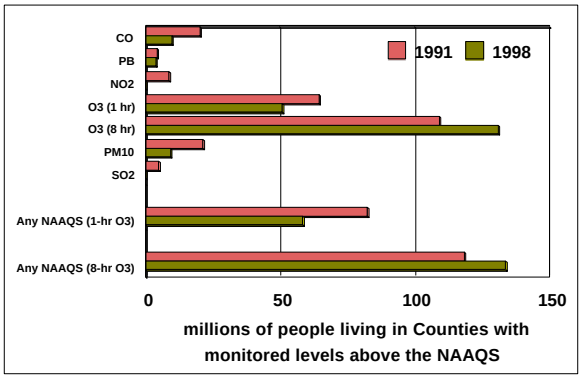
high elevations. Acid deposition also accelerates the decay of building materials and paints and contributes to degradation of irreplaceable cultural objects such as statues and sculptures. NO_x emissions are a major precursor of ground-level ozone, which affects public health and damages crops, forests, and materials. Additionally, NO_x deposition contributes to eutrophication of coastal waters, such as the Chesapeake and Tampa Bays. Before falling to earth, SO_2 and NO_x gases can form fine particles that may ultimately affect public health by contributing to premature mortality, chronic bronchitis, and other respiratory problems.

Air Toxics Reductions



The fine particles also contribute to reduced visibility in national parks and elsewhere.

Air quality has continued to improve during the past 10 years for all six pollutants. Nationally, air quality concentration data taken from thousands of monitoring stations across the country has continued to show improvement since the1980s for ozone, PM, CO, NO_2, SO_2, and lead.



In fact, all the years throughout the 1990s have shown better air quality than any of the years in the 1980s. This steady trend of improvement resulted in spite of weather conditions in the 1990s which were generally more conducive to higher pollution levels, especially ground-level ozone formation. Emissions of hazardous air pollutants have also been reduced significantly. Actions since the Clean Air Act was amended in 1990, have reduced air toxic emissions by over 1 million tons annually, a greater than 25 percent reduction. The primary programs responsible for the reductions include the Maximum Achievable Control Technology (MACT) standards and the reformulated gasoline programs.

The dramatic improvements in emissions and air quality occurred simultaneously with significant increases in economic growth and population. The

improvements are a result of effective implementation of clean air laws and regulations, as well as improvements in the efficiency of industrial technologies.

While substantial progress has been made, it is important not to lose sight of the magnitude of the air pollution problem that still remains. Despite great progress in air quality improvement, in 1998 there were still approximately 59 million people nationwide who lived in counties with monitored air quality levels that did not meet the primary National Ambient Air Quality Standards (NAAQSs) set to protect public health.

On May 14, 1999, the U.S. Court of Appeals for the District of Columbia Circuit issued an opinion (modified on October 29, 1999) that calls into question EPA's ability to adopt and enforce the new ozone and PM NAAQSs that were issued in July 1997. EPA strongly disagrees with this decision and, with the Department of Justice, has filed a petition asking the Supreme Court to overturn the decision. The case does not affect the pre-existing NAAQS, which have not yet been met in a number of areas.

To continue to reduce air pollution, the Clean Air Act sets specific targets for the mitigation of each air pollution problem. The Act also mandates the air quality monitoring that helps us measure progress. In addition, the Act lays out a specific roadmap for achieving those goals - what we the Agency and our partners -- states, tribes, and local governments -- have to do to clean up the air. One constant across the titles in the Act is that the pollution control strategies and programs it contains are all designed to get the most cost-effective reductions early on. The early reductions program in toxics, Phase 1 of the Acid Rain program, Tier I auto emission standards, more stringent standards on diesel exhaust from trucks and buses, the reformulated gasoline program, and the MACT standards program were all designed to achieve early reductions, making our air cleaner and safer to breathe. The problems that remain are some of the most difficult to solve.

We have developed strategies to address this difficult increment and overcome the barriers that have hindered progress in the past. We will use the flexibility built into the Clean Air Act, which is not wedded to hard and fast formulas or specific technological requirements.

We will focus our efforts on:

- *Coupling ambitious goals with steady progress* - The emphasis will be on the goal of achieving near-term actions towards meeting the standards, while giving states, tribes, and local governments time to come up with more difficult measures. We recognize that it will be difficult for some areas of the country to attain the new NAAQSs for ozone and fine particles, and we believe it will take more than individual state efforts to achieve the needed emission reductions. We will work with states, tribes, and local governments to identify ways to achieve interim reductions, principally through regional strategies, national measures, and the air toxics and acid rain programs by building on cross-pollutant emission reductions.

  These strategies will move many areas steadily toward the goal of achieving near-term attainment. For those areas where additional measures are required, this work will provide

steady progress toward the goal while providing the time to identify measures that will obtain the last increment to fully achieve the goal.

- *Maintaining accountability with flexibility* - Ensuring that there is no backsliding in the progress already made to meeting the Clean Air goal is critical. We will also use the Act's flexibility to develop innovative measures such as the NO_x trading program (which builds on the acid rain program) to help states, tribes, and local governments reduce ozone precursor emissions at the lowest cost. Under innovative provisions of Title II, EPA for the first time established vehicle emission standards and fuel quality standards simultaneously.

- *Promulgating regulations which maximize emission reductions while giving consideration to cost, lead time, safety, and energy impacts* - EPA will review existing standards where appropriate to ensure the long-term goals of the Clean Air Act are met.

- *Fostering technical innovations where they provide clear environmental benefits* - Market-based approaches provide "niches" for many types of technologies; no one size will fit all. Sources can improvise, innovate, and otherwise be creative in reducing emissions. We will promote such technological innovation and then disseminate it to others to show how they can get needed reductions.

- *Building partnerships* - There are numerous forms of partnerships, all of which we have used at one point or another in implementing the Clean Air Act: using public outreach to educate people on air problems and encourage them to work to solve them; involving broad-based groups, such as the multi-state Ozone Transport Assessment Group, to study a problem and provide recommendations to EPA on ways to solve it; working with organizations like the National Academy of Sciences (NAS) on both short-term and long-term research priorities; and engaging in regulatory negotiations to bring stakeholders to work on a problem and address a specific regulatory issue. We will continue to use these types of partnerships as appropriate to implement the Clean Air Act.

- *Anticipating upcoming issues* and ensuring that research is underway in those areas. For instance, the Agency is seeking to better understand the root causes of the environmental and human health problems created by air toxics in urban areas, thereby improving the ability to weigh alternative strategies for solving those problems. Research will be devoted to the development of currently unavailable health effects and exposure information to determine risk and develop alternative strategies for maximizing risk reductions. Based on this research we will be able to model and characterize not only the current toxics risks and compare national program alternatives, but also identify regional and local "hot spots," and model alternative strategies to assist states and localities in solving their air and water toxics problems.

Using these strategies, we will work with areas that have the worst problems to develop strategies accounting for unique local conditions that may hinder them from

reaching attainment. We also will work with states, tribes, and local governments to ensure that work they are doing on the PM and ozone standards effectively targets both pollutants, as well as regional haze, to maximize the effectiveness of control strategies. On the national level, we will continue to establish Federal standards to require cleaner motor vehicles, fuels and non-road equipment that are cost effective and technically feasible. We also will target source characterization work, especially development and improvement of emission factors, that is essential for the states, tribes and local agencies to develop strategies to meet the standards. We will look closely at urban areas to determine the various sources of toxics that enter the air, water, and soil and determine the best manner to reduce the total toxics risk in these urban areas. We will also focus on research that would inform and enhance our regulatory decisions as well as research that would explore emerging areas.

Research

To reach the objective of attaining the NAAQS for tropospheric ozone, additional research is planned to improve current models of emissions and atmospheric processes in order to identify effective control strategies. In 2001, EPA will develop tropospheric ozone precursor measurements methods, emissions-based air quality models, observation based modeling methods, and source emissions information to guide State Implementation Plan (SIP) development under the current NAAQS. In support of Agency efforts to attain the NAAQS for PM, in 2001, research will provide new information on the atmospheric concentrations, human exposure, health effects and mechanisms of toxicity of particulate matter, and will facilitate PM NAAQS review through the development and consultation process involved in the formulation of a PM Air Quality Criteria Document.

Air toxics research will seek to understand further the root causes of the air toxics environmental and human health problems in urban areas, thereby improving the ability to weigh alternative strategies for solving those problems. Efforts will focus on providing new information and methods to estimate human exposure and health effects from high priority urban air toxics, as well as on completing health assessments for the highest priority hazardous air pollutants, including fuel/fuel additives. With this information the Agency will be in a better position to determine risk and develop alternative strategies for maximizing risk reductions.

Highlights:

Ozone/Particulate Matter/Regional Haze

Ground-level ozone, fine PM and regional haze have many similarities. All three problems result from their formation under certain atmospheric conditions in the presence of gases, such as NOx and VOCs, emitted by the same types of sources. Because of these similarities, there are opportunities for integrated strategies for reducing pollutant emissions in the most cost-effective ways.

In 2001, EPA will assist states, tribes and local governments in devising additional stationary source and mobile source strategies to reduce ozone and particulate matter. Some specific activities and initiatives in this program will include:

Clean Air

- Implementation of reinstated 1-hour ozone NAAQS **B** Develop and approve measures to attain and maintain the 1-hour standard for nonattainment areas. Redesignate areas that meet standards to attainment.

- Completion of the process for designation of attainment and non-attainment areas for the 8-hour ozone NAAQS.

- Using the Clean Air Partnership Fund, demonstration of smart, multi-pollutant strategies that reduce ozone, PM, and other pollutants, including greenhouse gases.

- Implementation of ozone control measures through an Economic Incentive Program.

- Continuation of outreach efforts to promote public awareness of the Air Quality index and the effects of pollution.

- Continued implementation of the PM-10 standards, including the collection and review of air quality data, processing state clean air plans, and redesignating areas with clean air.

- Development and implementation of standards, plans, strategies, and actions to preserve air quality and prevent further degradation in areas with the potential to be designated nonattainment in the future.

- Development and refinement of analysis tools for use by states and tribes, including for development of mobile and stationary source emissions data and inventories.

- Implementation of the Tier 2 vehicle and fuel regulations. The Agency will make a substantial investment in developing and evaluating new technologies to reduce PM emissions from diesel engines, including engine design enhancements, alternative after-treatment controls and fuel reformulations.

- Demonstration of the feasibility of diesel-engine control technology, as recently done for gasoline powered sports utility vehicles as part of the Tier 2 rulemaking. Laboratory capabilities will be upgraded to keep pace with rapidly changing control technology, emissions reductions, and measurement needs and technology.

- Investigation and characterization of particulate formation during the combustion process, the impact of known trends in vehicle engine design and after treatment control techniques, and determination of the leading edge opportunities for additional controls.

  Assessments of the emission control potential of vehicles powered by technologies such as lean-burn and/or fuel-efficient technologies, including diesel engines equipped with advanced after-treatment systems, gasoline direct injection engines, and other technologies that show promise for significant advances in fuel economy and meeting the Tier 2 standards in the post-2004 time frame. In this assessment the Agency will maintain a "systems" perspective, considering the progress of advanced vehicle technologies in the context of the role that sulfur in fuels plays in enabling the introduction of these advanced technologies or max-

imizing their effectiveness.

- Initiation of in-use performance evaluations of national low emission vehicles (NLEVs) sold in northeast states to determine durability, predictive value for Tier 2, and potential recall for any emission system defects.

- Expansion of the efforts of EPA's Transportation Air Quality (TRAQ) Center in assisting state and local communities in developing transportation strategies and voluntary mobile source programs that respond to unique local conditions so that attainment can be reached. Specifically, the TRAQ Center will provide transportation program information and tools, technical assistance, key contacts and funding sources, and partnership opportunities.

- EPA will also operate the NO_X Allowance and Emissions Tracking Systems for the NO_X Budget Program, as requested by the 12 States of the Ozone Transport Region. The Acid Rain Program will also administer the Emission and Allowance Tracking Systems for a NO_X reduction program involving emissions trading across 22 States.

- Evaluation of state and tribal particulate monitoring.

- Working with states and tribes on technical analyses and activities related to regional planning and developing state and tribal implementation plans.

Targeting Air Toxics Risks in Urban Areas

In 2001, EPA will develop strategies and rules to help states reduce emissions and exposure to hazardous air pollutants, particularly in urban areas, and reduce harmful deposition in water bodies. Some specific activities and initiatives in this program include:

- Promulgating 25 MACT standards and a rule for heavy-duty highway diesel vehicles and cleaner diesel fuel.

- Ensuring compliance with the promulgated MACT standards including developing implementation tools for 10 MACT standards and building tribal capacity to address air toxics.

- Implementing an ambient air toxics measurement and monitoring program to better quantify ambient air toxic levels and characterize human exposures; updating and improving the National Toxics Inventory; evaluating and improving models of the impacts of air toxics on a national scale.

- In partnership with states, enhancing and expanding the existing toxics monitoring network, which will be implemented through a peer-reviewed strategy developed with the states. Soliciting HAP emission inventory information from states to improve the National Toxics Inventory.

- Completing residual risk assessments for all 2-year MACT standards; continuing residual risk assessments for all 4-year MACT standards.

- Completing regulatory determinations for electric utilities.

- Evaluating the need for further regulations to control mobile source air toxics as required by section 202(l) of

the Clean Air Act and promulgating regulations if needed and appropriate.

- Implementing the reformulated gasoline program in areas of 17 states and the District of Columbia.

- Using the Clean Air Partnership Fund to demonstrate smart, multi-pollutant strategies that reduce air toxics and other pollutants.

Carbon Monoxide, Lead, Nitrogen Oxide and Sulfur Dioxide

For all NAAQS pollutants, we will continue to redesignate areas to attainment as they meet the standards, carry out the regular review of the NAAQS using the most current science, and ensure the maintenance of NAAQSs in areas that have clean air. For the CO, SO_2, NO_x and lead NAAQSs, there are some states that have areas that cannot meet the standards because of some particular, source-specific problem. These sources are often high-profile and critical to the local economy. We will work cross-Agency to develop strategies that help them to comply while being sensitive to economic and other issues.

EPA has established a permitting program, run by the states, for air emission sources to bring all the regulatory requirements of a plant into one unified operating permit document. There are also permit programs for preconstruction review of facilities. EPA will continue to simplify and streamline the rules and guidance in implementing these programs to simplify their use by the industrial sources.

Acid Rain

In 2001, Phase II of the Acid Rain Program will be in its second year of operation, affecting 2,000 industrial and utility sources. The Program also intends to launch a multi-year effort to re-engineer the information technology support structure in order to meet current and future needs, including increased emissions reporting and verification, and allowance trading activities.

Research

EPA's Tropospheric ozone research program is focused on developing information, methods, models and assessments to support implementation of the current ozone NAAQS and the required review of the standard every five years. This research will produce an initial external review draft of the ozone Air Quality Criteria Document (AQCD) for public comment and Clean Air Scientific Advisory Committee (CASAC) review, which will help guide State Implementation Plans (SIPs) on the current NAAQS. In 2001, the Particulate Matter Research Program will complete the final PM AQCD, in addition to completing data collection for a PM longitudinal panel study. Efforts will also focus on completing a report on health effects of concentrated ambient PM in healthy animals and humans, in asthmatic and elderly humans, and in animal models of asthma and respiratory infection. This new information will help move the Agency toward its objective of reducing Americans' exposure to harmful particulate matter.

Air toxics research will provide effects information, as well as the exposure, source characterization, and other data to quantify existing emissions, key pollutants,

and strategies for cost effective risk management. In 2001, air toxics research will focus on completing three draft toxicological reviews and assessments of high priority air toxics for external review as well as validating a physiologically-based model for neurotoxic air toxics and developing microenvironment and neighborhood scale exposure models. These products will yield new information that will be essential to effectively and efficiently decreasing future risk to the American public through reduced air toxics emissions.

2001 Annual Performance Goals:

- In 2001, 5 million tons of SO2 emissions from utility sources will be reduced from the 1980 baseline.
- In 2001, 2 million tons of NOx from coal-fired utility sources will be reduced from levels before implementation of Title IV of the Clean Air Act Amendments.
- In 2001, air toxics emissions nationwide from stationary and mobile sources combined will be reduced by 5% from 2000 (for a cumulative reduction of 35% from the 1993 level of 4.3 million tons per year.)
- In 2001, maintain healthy air quality for 33.4 million people living in 43 areas attaining the ozone standard, increase by 1.9 million the number of people living in areas with healthy air quality that have attained the standard; and certify that 5 new areas have attained the 1-hour standard for ozone.
- In 2001, EPA will develop the infrastructure to implement the Clean Air Partnership Fund, which will demonstrate smart multi-pollutant approaches that reduce greenhouse gases, air toxics, soot, and smog.
- In 2001, maintain healthy air quality for 1.26 million people living in 13 areas attaining the PM standards, and increase by 60 thousand the number of people living in areas with healthy air quality that have attained the standard.
- In 2001, maintain healthy air quality for 28.8 million people living in 62 areas attaining the CO, SO2, NO2, and lead standards, and increase by 16.4 million the number of people living in areas with healthy air quality that have attained the standard.
- In 2001, provide new information on the atmospheric concentrations, human exposure, health effects and mechanisms of toxicity of particulate matter, and facilitate PM NAAQS review through Air Quality Criteria Document development and consultation.

Goal 1: Clean Air Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Acid Rain: CASTNET	$4,000.0	$4,000.0
Acid Rain: Program Implementation	$10,606.3	$12,287.1
Administrative Services	$4,250.4	$4,463.9
Air Toxics: Characterization	$8,452.9	$9,503.7
Air Toxics: Implementation	$5,081.7	$5,692.0
Air Toxics: Research	$18,121.7	$17,406.4
Air, State, Local and Tribal Assistance Grants	$209,758.8	$214,758.8
Children's Health	$1,000.0	$1,000.0
Clean Air Partnership Fund	$0.0	$85,000.0
Common Sense Initiative	$135.6	$237.2
EMPACT	$2,969.1	$2,720.6
Mobile Sources	$48,056.9	$56,123.8
Ozone	$29,696.0	$32,092.2
Particulate Matter	$26,421.2	$33,226.4
Particulate Matter Research	$62,300.5	$65,267.9
Project XL	$390.5	$0.0
Regional Haze	$1,851.5	$2,233.0
Regional Management	$244.2	$405.5
Rent, Utilities and Securities	$21,852.9	$23,917.2
Stationary Sources	$16,566.5	$17,812.9
Tropospheric Ozone Research	$6,273.7	$8,543.4
TOTAL	**$478,030.4**	**$596,692.0**

Clean Water

Strategic Goal: All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve public health, enhance water quality, reduce flooding, and provide habitat for wildlife.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 -FY 2000 Delta
Clean and Safe Water	**$3,491,587.3**	**$2,754,826.5**	**-$736,760.8**
Safe Drinking Water, Fish and Recreational Waters	$1,189,400.4	$1,099,270.9	-$90,129.5
Conserve and Enhance Nation's Waters	$381,485.2	$438,783.0	$57,297.8
Reduce Loadings and Air Deposition	$1,920,701.7	$1,216,772.6	-$703,929.1
Total Workyears:	2,722.8	2,672.7	-50.1

Means and Strategy:

To achieve the nation's clean and safe water goals, EPA will implement the watershed approach in carrying out its statutory authorities under the Safe Drinking Water Act Amendments of 1996 and the Clean Water Act. Protecting watersheds involves participation by a wide variety of stakeholders, a comprehensive assessment of the condition of the watershed, and implementation of solutions based on the assessment of conditions and stakeholder input. Full involvement of stakeholders at all levels of government, the regulated community, and the public is fundamental to the watershed approach. The watershed approach helps EPA, its Federal partners, states, tribes, local governments, and other stakeholders to implement tailored solutions and maximize the benefits gained from the use of increasingly scarce resources.

EPA will continue to implement the Safe Drinking Water Act (SDWA) Amendments of 1996 that chart a new and challenging course for EPA, states, tribes, and water suppliers. The central provisions of the Amendments include: 1) improving the way that EPA sets drinking water safety standards and develops regulations that are based on good science and data, prioritization of effort, sound risk assessment, and effective risk management; 2) establishing new prevention approaches, including provisions for operator certification, capacity development, and source water protection; 3) providing better information to consumers, including consumer confidence/right-to-know reports; and 4)capitalizing and managing the drinking water state revolving fund (DWSRF) program to assist public water systems in meeting drinking water standards.

Clean Water

EPA has increased efforts to provide states and tribes tools and information to assist them in protecting their residents from health risks associated with contaminated recreational waters and noncommercially-caught fish. These tools will help reduce health risks, including risks to sensitive populations such as children and subsistence and recreational anglers. EPA activities include development of criteria, enhanced fish tissue monitoring, risk assessment, and development of fish and shellfish consumption advisories. EPA will also establish improved safety guidelines and pollution indicators so that local authorities can monitor their recreational waters in a cost-effective way and close them to public use when necessary to protect human health. For beaches, EPA's three-part strategy is to strengthen beach standards and testing, improve the scientific basis for beach assessment, and develop methods to inform the public about beach conditions.

The President's Clean Water Action Plan (CWAP), announced in February 1998, calls for more than 100 specific key actions by EPA and by many other Federal agencies with either water quality responsibilities or activities that have an impact on water quality. These key actions cover most aspects of the water program at EPA. The Action Plan mobilizes Federal, state, and local agencies to achieve the Nation's clean water goals through the watershed approach, brings a sharp focus to the critical actions that are required, and establishes deadlines for meeting these commitments over the next several years. For 2001, EPA requests $762 million for the CWAP and an additional $21.5 million in related funding.

Key to the watershed approach is continuation of EPA-developed scientifically-based water quality standards and criteria under the Clean Water Act. Where water quality standards are not being met, EPA will work with states and tribes to improve implementation of total maximum daily load (TMDL) programs that establish the analytical basis for watershed-based decisions on the need for additional pollution reductions. EPA will continue to develop and revise national effluent guideline limitations and standards, capitalize and manage the Clean Water State Revolving Fund (CWSRF) program and other funding mechanisms, streamline the National Pollutant Discharge Elimination System (NPDES) permit program, and revise the NPDES and water quality standards regulations to achieve progress toward attainment of water quality standards and support implementation of TMDLs in impaired water bodies. The Agency will continue to work on reducing the NPDES permit backlog, in partnership with states, by targeting permitting activities toward those facilities posing the greatest risk to the environment. In addition, the Agency will continue to expand its training and electronic information activities to improve the efficiency and effectiveness of the NPDES program. These strategies and activities are particularly important as the NPDES program faces significant new demands with the implementation of the phase II storm water rule, the strategy for animal feeding operations and coverage of additional wet-weather sources contributing to pollution problems. EPA will

also continue reorienting its point source programs towards a watershed focus.

The CWSRF is a significant financial tool for achieving clean and safe water and for helping to meet the significant needs for wastewater infrastructure over the next 20 years. All 50 states and U.S. territories have benefitted from this and other wastewater funding. This budget request includes $800 million for the Clean Water State Revolving Fund (CWSRF). This investment keeps EPA on track with our commitment to meet the goal for the CWSRF to provide an average of $2.0 billion in annual financial assistance. Indeed, the President's Budget calls for cumulative additional capitalization of $3.2 billion in fiscal years 2002-2005, which will enable the program to exceed the Administration commitment. Over $17 billion has already been provided to capitalize the CWSRF, more than twice the original Clean Water Act authorized level of $8.4 billion. Total SRF funds available for loans since 1987, reflecting loan repayments, state match dollars, and other sources of funding, are approximately $30 billion, of which $26 billion having been provided to communities as financial assistance ($4.2 billion was available for loans as of June 1999).

To further support the objectives of the Clean Water Action Plan, the Agency proposes for 2001 to allow states to reserve up to an amount equal to 19% of their CWSRF capitalization grants to provide grants of no more than 60% of the costs of implementing eligible nonpoint source and estuary management projects. Projects receiving grant assistance must, to the maximum extent practicable, rank highest on the state's list used to prioritize projects eligible for assistance. States may make these grants using either a portion of their capitalization grant itself, or using other funds in their state revolving fund (e.g, state match, repayments, bond proceeds). Grants may also be combined with loans for eligible projects for communities which might otherwise find loans unaffordable.

EPA is assisting states and tribes to characterize risks, rank priorities, and implement a mix of voluntary and regulatory approaches through improved state nonpoint source management programs. Working with EPA, states and tribes are strengthening their nonpoint source programs to ensure that needed nonpoint source controls are implemented to achieve and maintain beneficial uses of water. States will continue to implement coastal nonpoint source programs approved by EPA and the National Oceanic and Atmospheric Administration under the Coastal Zone Act Reauthorization Amendments, and to work with the U.S. Department of Agriculture to promote implementation of Farm Bill programs consistent with state nonpoint source management needs and priorities. EPA will also provide tools to states to assess and strengthen controls on air deposition sources of nitrogen, mercury, and other toxics.

With respect to wetlands, EPA will work with Federal, state, tribal, local, and private sector partners on protection and community-based restoration of wetlands, and with its Federal partners to avoid, minimize, and compensate for wetland losses through

the Clean Water Act Section 404 and Farm Bill programs.

Through continuing implementation of Clean Water Action Plan priorities, watershed restoration action strategies will be implemented in high priority watersheds across the nation that will enable local leaders to take a stronger role in setting priorities and solving water quality problems that affect the quality of life in their communities. EPA will work with states, tribes, municipalities, and the regulated community to ensure that the Phase II rules for the stormwater program are implemented to solve problems caused by sediment and other pollutants in our waters. EPA will also establish criteria for nutrients (i.e., nitrogen and phosphorus) so that more states can develop water quality standards that protect waters from harmful algal blooms such as *pfiesteria*, dead zones, and fish kills, which develop as a result of an excess of these nutrients. EPA will work with States to fund priority watershed projects through the CWSRF to reduce nonpoint and estuary pollution. The Agency will also work to reduce nonpoint source pollution from failing septic systems.

Research

EPA's research efforts will continue to strengthen the scientific basis for drinking water standards through the use of improved methods and new data to better evaluate the risks associated with exposure to chemical and microbial contaminants in drinking water. To support the Safe Drinking Water Act (SDWA) and its 1996 Amendments, the Agency's drinking water research will develop dose-response information on disinfected by-products (DBPs), waterborne pathogens, arsenic and other drinking water contaminants for characterization of potential exposure risks from consuming tap water, including an increased focus on filling key data gaps and developing methods for chemicals and microbial pathogens on the Contaminant Candidate List (CCL). The Agency will develop and evaluate cost-effective treatment technologies for removing pathogens from water supplies while minimizing DBP formation, and for maintaining the quality of treated water in the distribution system and preventing the intrusion of microbial contamination. By reducing uncertainties and improving methods associated with the assessment and control of risks posed by exposure to microbial contaminants in drinking water, EPA is providing the scientific basis necessary to protect human health and ensure that by 2005, 95 percent of the population served by community water systems will receive water that meets drinking water standards in place in 1994.

Research to support the development of ecological criteria will improve our understanding of the struc-ture, function and characteristics of aquatic systems, and will evaluate exposures to stressors and their effects on those systems. This research can then be used to improve risk assessment methods to develop aquatic life, habitat, and wildlife criteria. Through the development of a framework for diagnosing adverse effects of chemical pollutants in surface waters, EPA will be able to evaluate the risks posed by chemicals that persist in the environment and accumulate in the food chain, threatening wildlife and

potentially human health. This research will facilitate the assessment of ecological health of the nation's waters, providing water resource managers with a tool for determining whether their aquatic resources support healthy aquatic communities. The Agency also will develop cost effective technologies for managing contaminated sediments with an emphasis on identifying innovative *in situ* solutions. EPA will continue to develop diagnostic tools to evaluate the exposures to toxic constituents of wet weather flows, and develop and validate effective watershed management strategies for controlling wet weather flows, especially when they are high volume and toxic. This research will also develop effective beach evaluation tools necessary to make timely and informed decisions on beach advisories and closures.

Highlights:

So that all Americans have water that is safe to drink, EPA will work to ensure that 91 percent of the population will continue to receive drinking water from systems meeting all health-based standards in effect as of 1994. The Agency will also assist states in implementing the requirements of the Stage 1 Disinfection/Disinfection By-products (D/DBP) Rule and the Interim Enhanced Surface Water Treatment Rule, as well as various other new rules including radon, Unregulated Contaminant Monitoring (UCMR), and filter backwash rules. EPA will also continue to target resources for drinking water rule-making, as mandated by the 1996 SDWA Amendments, and for risk assessment and improved analytical methods on potential contaminants identified in the 1998 Contaminant Candidate List (CCL). EPA is also using the 1998 CCL for determining drinking water research priorities, in addition to rule-making and data collection priorities.

States are facing increasing workloads to expeditiously develop, in many cases consistent with Court-ordered deadlines, critically-needed total daily maximum loads (TMDLs) for their impaired water bodies. To assist states in addressing their TMDL needs, a targeted increase in Section 106 grants of $45 million is requested with a state cost-share requirement of 40 percent of project costs. These funds, coupled with state flexibility to use up to 20 percent of their increased Section 319 grants, and other funding sources are intended to provide sufficient resources to allow States to meet their TMDL obligations in 2001 based on the estimated cost of EPA's TMDL regulation proposed in August 1999.

EPA is requesting a significant new investment to restore water quality in the Great Lakes. Under this $50 million initiative, EPA would competitively award matching grants to state and local governments to clean up contaminated sediments, control stormwater, restore wetlands, acquire greenways and buffers, and control polluted runoff. States or municipalities would use the funds to address existing "areas of concern" (AOCs) that were defined in 1987 by the International Joint Commission - a joint partnership between the United States and Canada. These funds would support restorative and protective actions in the 31 AOCs that fall wholly or partly in U.S. waters,

and represent a dramatic increase in support for Great Lakes states' and communities' efforts to preserve and enhance their waterways.

The Administration's Clean Water Action Plan provides a comprehensive strategy for assessing and restoring the Nation's most impaired watersheds. Fundamental to the Agency's efforts to conserve and enhance the Nation's waters is the management of water quality resources on a watershed basis, with the full involvement of all stakeholders including communities, individuals, businesses, state and local governments, and tribes. A key priority for 2001 will be continued emphasis on development and implementation of Watershed Restoration Action Strategies (WRAS) in those waters identified by the states as most in need of restoration. By the end of 2001, the third year of its availability to states, incremental funding under the Clean Water Act Section 319 grants program will have provided $350 million in environmental improvement projects in these impaired waters. Starting in 2000, these incremental section 319 funds are only available to states with approved upgraded section 319 programs, as specified in the CWAP. EPA will also encourage, using a watershed approach, the establishment of additional planning groups or partnerships to develop local comprehensive plans for managing dredged material in an environmentally sound manner. Furthermore, EPA will be an active participant in the development of these plans.

Habitat restoration and protection is another key component of the Clean Water Action Plan. By 2001, with EPA's support, the National Estuary Program will have preserved, restored, or created an additional 50,000 acres of habitat, including sea grass and shellfish beds. In 2001, EPA will continue implementing the national assessments regarding the causes of, and appropriate management responses to, harmful algal blooms and hypoxia. EPA will also be working with the Invasive Species Council on the national and agency-specific action plan to implement the Invasive Species Executive Order.

A key element of the Agency's effort to achieve its overarching goal of clean and safe water is the reduction of pollutant discharges from point sources and nonpoint sources. The National Pollutant Discharge Elimination System program (which includes NPDES permits, urban wet weather, large animal feeding operations, mining, the pretreatment program for non-domestic wastewater discharges into municipal sanitary sewers, and biosolids management controls) establishes controls on pollutants discharged from point sources into waters of the United States. Key annual performance goals for 2001 are to reduce industrial discharges of toxic pollutants by 4 million pounds, nonconventional pollutants by 370 million pounds, and conventional pollutants by 386 million pounds as compared to 1992 reduction levels. To ensure that all point sources are covered by current permits, EPA has developed a backlog reduction strategy under which 89 percent of major permittees and 66 percent of minor permittees will have current permits in place by 2001. EPA will also begin evaluating data received from the first round of monitoring from All monitoring sites under the National

Marine Debris Monitoring Program. This program monitors marine debris in an effort to determine sources of the debris, much of which enters coastal waters through stormwater runoff.

States report that pollution from nonpoint sources is the largest cause of water pollution, with agriculture as a leading cause of impairment in 25 percent of the river miles surveyed. In order to restore and maintain water quality, significant loading reductions from nonpoint sources must be achieved. Because EPA has limited direct NPS authority under the Clean Water Act, state NPS programs are critical to our overall success. To achieve reductions in loadings, it is essential for EPA to work with states to expeditiously implement the nine key program elements in their strengthened nonpoint source programs. EPA will encourage states to make use of Clean Water State Revolving Funds and other Federal resources to finance projects that address polluted runoff.

Research

In 2001, EPA's drinking water research program will conduct research to reduce uncertainties and improve methods associated with the assessment and control of risks posed by exposure to microbial contaminants in drinking water, with a focus on emerging pathogens listed on the Contaminant Candidate List (CCL). As required by the SDWA amendments, the first CCL was published in 1998 and included nine microbial contaminants in its Research Priorities Category that require more data before a regulatory determination can be made. There are significant data gaps with regard to understanding the occurrence of these microbes in source and distribution system water, linkages between water exposure and infection, and the effectiveness of candidate treatment technologies to remove and inactivate these contaminants. The development of this crucial information will provide the scientific basis necessary to protect human health and ensure that 95 percent of the population served by community water systems will receive water that meets drinking water standards.

As part of EPA's effort to conserve and enhance the nation's waters, the aquatic stressors research program will develop a framework for diagnosing adverse chemical pollutants in surface waters. In 2001, EPA will publish a compendium of case studies illustrating the application of the Stressor Identification Guidelines, as well as reports on risk characterization for watersheds and sediment toxicity. These tools will enable water resource managers to identify critical stressors to aquatic ecosystems and better focus restoration and watershed management decisions.

Because almost 40 percent of rivers, lakes, and coastal waters surveyed by states do not meet water quality goals, effective watershed management strategies and guidance for Wet Weather Flow (WWF) dischargers is one of the key priority areas remaining to assure clean water and safe drinking water. In 2001, EPA will continue to develop and validate effective watershed manage-ment strategies for controlling WWFs, especially when they are high volume and toxic. This research will

also develop and provide effective beach evaluation tools necessary timely and informed decisions on beach advisories and closures.

2001 Annual Performance Goals:

- In 2001, water quality will improve on a watershed basis such that 550 of the Nation's 2,150 watersheds will have greater than 80 percent of assessed waters meeting all water quality standards, up from 500 watersheds in 1998.

- In 2001, 500 projects funded by the Clean Water SRF will initiate operations, including 300 projects providing secondary treatment, advanced treatment, CSO correction (treatment), and/or storm water treatment. Cumulatively, 6,200 SRF funded projects will have initiated operations since program inception.

- In 2001, restore and protect estuaries through the implementation of Comprehensive Conservation and Management Plans (CCMPs).

- In 2001, industrial discharges of pollutants to the nation's waters will be significantly reduced through implementation of effluent guidelines.

- In 2001, current NPDES permits reduce or eliminate discharges into the nation's waters of (1) inadequately treated discharges from municipal and industrial facilities; and (2) pollutants from urban storm water, CSOs, and CAFOs.

- In 2001, assure that states and tribes have effective, up-to-date water quality standards programs adopted

  in accordance with the Water Quality Standards regulation and the Water Quality Standards program priorities.

- In 2001, reduce exposure to contaminated recreation waters by increasing the information available to the public and decision-makers. (Supports CWAP)

- In 2001, maintain percent of the population served by water systems that will receive drinking water meeting all health-based standards that were in effect as of 1994.

Goal 2: Clean and Safe Water Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$7,123.3	$7,549.4
Chesapeake Bay (CWAP)	$20,308.9	$19,517.4
CWAP Related Research	$2,646.9	$2,611.2
Drinking Water Implementation	$29,668.5	$32,234.5
Drinking Water Regulations	$33,230.5	$37,809.8
Effluent Guidelines (CWAP)	$21,116.9	$23,610.1
EMPACT	$125.0	$937.6
Great Lakes Cleanup Grants	$0.0	$50,000.0
Great Lakes (CWAP)	$3,263.7	$4,111.1
Gulf of Mexico (CWAP)	$4,196.0	$4,019.5
Lake Champlain (CWAP)	$2,187.3	$1,000.0
Long Island Sound (CWAP)	$975.0	$500.0
Marine Pollution (CWAP)	$7,580.0	$8,059.8
National Estuaries Program/Coastal Watersheds (CWAP)	$18,029.2	$16,135.0
National Nonpoint Source Program Implementation (CWAP)	$15,401.1	$16,944.3
NPDES Program (CWAP)	$36,274.9	$41,592.0
Pacific Northwest (CWAP)	$1,043.2	$1,064.8
Pfiesteria (CWAP)	$100.0	$250.0
Project XL	$220.5	$232.7
Regional Management	$965.6	$1,117.2
Rent, Utilities and Securities	$40,847.0	$45,304.8
Rural Water Technical Assistance	$13,987.4	$688.0
Safe Drinking Water Research	$47,367.6	$48,872.5
Source Water Protection (CWAP related)	$10,302.3	$11,631.1
South Florida/Everglades (CWAP)	$2,923.0	$2,938.4
State Nonpoint Source Grants (CWAP)	$200,000.0	$250,000.0
State Pollution Control Grants (Section 106) (CWAP)	$115,529.3	$160,529.3
State PWSS Grants	$93,305.5	$93,305.5
State Underground Injection Control Grants	$10,975.0	$10,975.0
State Water Quality Cooperative Agreements (CWAP)	$19,000.0	$19,000.0
State Wetlands Program Grants (CWAP)	$15,000.0	$15,000.0
UIC Program	$9,594.9	$10,687.6
Water Infrastructure: Alaska Native Villages	$30,000.0	$15,000.0
Water Infrastructure: Bristol County	$2,000.0	$3,000.0
Water Infrastructure: CWSRF	$1,345,421.3	$800,000.0
Water Infrastructure: DWSRF	$820,000.0	$825,000.0
Water Infrastructure: New Orleans	$3,800.0	$10,000.0
Water Quality Criteria and Standards (CWAP)	$18,545.1	$22,765.0
Water Quality Monitoring and Assessment (CWAP)	$9,762.6	$11,778.7
Watershed Research	$7,481.8	$6,398.3
Wetlands (CWAP)	$15,730.0	$17,315.2
TOTAL	**$3,036,029.3**	**$2,649,485.8**

Safe Food

Strategic Goal: The foods Americans eat will be free from unsafe pesticide residues. Children especially will be protected from the health threats posed by pesticide residues, because they are among the most vulnerable groups in our society.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	2001 vs. 2000 Delta
Safe Food	**$82,285.2**	**$86,056.5**	**$3,771.3**
Reduce Agricultural Pesticides Risk	$35,826.0	$39,057.3	$3,231.3
Reduce Use on Food of Pesticides Not Meeting Standards	$46,459.2	$46,999.2	$540.0
Total Workyears:	701.0	711.8	10.8

Means and Strategy

The Agency works toward a two-fold strategy for accomplishing the objectives of the Safe Food goal:

- encouraging the introduction of new, reduced risk pesticide ingredients (including new biological agents) within the context of new pest management practices; and

- reducing the use of currently registered pesticides with the highest potential to cause adverse health effects.

In 2001, the Agency will accelerate the pace of new registrations for pesticides that offer improved prevention or risk reduction qualities compared to those currently on the market. Progressively replacing older, higher-risk pesticides is one of the most effective methods for curtailing adverse while preserving food production rates.

The 2001 request also expands efforts to evaluate existing tolerances for currently registered pesticides to ensure they meet the new Food Quality Protection Act (FQPA) health standards. This tolerance reassessment program also screens and requires testing of certain pesticides and chemicals to evaluate their potential for disrupting endocrine systems in animals or in humans. The emphasis will be on balancing the need for pesticides with the risks of exposure, and allowing for smooth transitions to safer pesticide alternatives.

EPA uses its authority under Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and Federal Food Drug and Cosmetic Act (FFDCA) to systematically manage the risks of such exposures by establishing legally permissible food-borne exposure levels, or tolerances. EPA manages the legal use of pesticides, up to and including the elimination of pesticides that present a

danger to human health and the environment. This task involves a comprehensive review of existing pesticide use as stipulated by the reregistration provision, as well as a comprehensive reassessment and update of existing tolerances within ten years, as required by FQPA.

Through developing and using the latest scientific advances in health risk assessment practices, EPA is ensuring current uses meet the test of a reasonable certainty of no harm, as stipulated by FQPA. This includes the incorporation of new scientific data relating to the effects of endocrine disruption.

New registration actions result in more pesticides on the market that meet FQPA standards, which brings the Agency closer to the objective of reducing adverse risks from pesticide use. tolerance reassessments may mean mandatory use changes because a revision in the allowable residue levels can involve changes in pesticide application patterns, changes in the foods the pesticides may be applied to, and other risk management methods. As measured by the number of tolerances that have been reassessed, the Agency's progress in the tolerance reassessment program directly serves the objective of reducing the use of pesticides that do not meet the new standards, on food.

Finally, in addition to setting the requirements of continued legal use of agricultural pesticides, EPA works in partnership with USDA, FDA and the states toward the broader effort to prevent the misuse of pesticides.

More information about EPA's food safety efforts is available on the Office of Pesticides Program's website at http://www.epa.gov/pesticides.

Research

Current approaches to human health risk assessment focus on single pesticides and do not adequately account for cumulative risks arising from complex exposure patterns and human variability due to age, gender, pre-existing disease, health and nutritional status, and genetic predisposition. Existing tools for controlling and preventing exposure are limited to certain processes and materials.

The FQPA identifies clear science needs consistent with the evaluation of all potential routes and pathways of exposures to pesticides, and resulting health effects, particularly for sensitive subpopulations and considering effects from cumulative exposures.

These needs are overtaxing existing tools. To meet them, in 2001, research will continue to focus on developing and validating methods to identify and characterize, and models to predict, the potential increased susceptibility to human health effects experienced by infants and children; identifying and understanding major exposure routes and pathways and processes, and developing theoretical and experimentally based multipathway exposure models for pesticides and other toxic substances; and addressing the adequacy of current risk assessment methods and providing the necessary risk assessment guidance. Pesticide exposure and effects data, risk

assessment methods and models for children, and control technologies developed by 2001 will help to improve the Agency's ability to fully comply with the requirements of FQPA, particularly requirements related to susceptible subpopulations and cumulative risk.

Highlights

Reduce Agricultural Pesticides Risk

The FFDCA and the FIFRA authorize EPA to set terms and conditions of pesticide registration, marketing and use. EPA will use these authorities to reduce the use of pesticides with the highest potential to cause cancer or neurotoxic effects, including those which pose particular risks to children.

New food/feed use pesticides are registered after an extensive review and evaluation of human health and ecosystem studies and data, applying the most recent scientific advances in risk assessment. The Registration program includes registration activities, such as setting tolerances, registering new active ingredients, new uses, and handling experimental use permits and emergency exemptions.

In 2001, the Agency will continue to decrease the risk the public faces from agricultural pesticides (from 1995 levels) through the regulatory review of new pesticides, including reduced risk pesticides and biopesticides. EPA expedites the registration of reduced risk pesticides, which pose lower potential dietary risks to consumers, lower risks to agricultural workers, and reduce potential risk to the earth's ozone layer, groundwater, aquatic organisms or wildlife. These accelerated pesticide reviews provide an incentive for industry to develop, register, and use lower risk pesticides. Additionally, the availability of these reduced risk pesticides provides alternatives to older, potentially more harmful products currently on the market.

Reduce Food Use of Pesticides Not Meeting Current Standards

FQPA requires the Agency to revise its risk assessment practices to incorporate additional safeguards to ensure the adequate protection of children's health and that of other vulnerable groups, such as tribes, and to reevaluate some 9,721 food residue tolerances approved before the passage of FQPA. The Agency has met its first statutory mandate, to reassess 33 percent of these tolerances by August 1999. In 2001, the Agency will continue toward its 10-year statutory deadline of reassessing all 9,721 tolerances by reassessing an additional 1,200 tolerances. The Agency will also continue screening and testing pesticides for their potential to disrupt the endocrine system.

The tolerance reassessment process strives to address the highest-risk pesticides first. Using data surveys conducted by the USDA, the FDA and other sources, EPA has identified a group of "top 20" foods consumed by children and matched those with the tolerance reassessments required for pesticides used on those foods. The Agency has begun to track its progress in determining appropriate tolerances for these pesticides under the new FQPA

standards. By 2001, EPA will reduce dietary risks to children by completing a cumulative 66 percent of these tolerances of special concern.

Organophosphates and carbamates have also been targeted as posing higher risks than many other pesticide types. These pesticides are widely used and limitations will mean changes in current farming practices. The need for broad input and participation lead to a special stakeholder process to address data, analysis and regulatory requirements, protocol, and scientific and public review as the Agency moves to reduce the risks posed by some of these pesticides.

The Agency's Pesticide Reregistration program is now in its final phase. The Reregistration program was established in the 1988 amendments to FIFRA and has similar goals to the FQPA's tolerance reassessment program. Through the Reregistration program, EPA also reviews pesticides currently on the market to ensure they meet the latest health standards set by FQPA. Pesticides not in compliance with the new standard will be eliminated or restricted in order to minimize harmful exposure. The issuance of a Reregistration Eligibility Decision (RED) for a pesticide under reregistration review summarizes the health and environmental effects findings of that pesticide. The findings determine whether the products registered under this chemical are eligible for reregistration.

FQPA has added considerably more complexity into the process of reregistering pesticides. New statutory requirements have made risk assessment more complex and lengthened the "front end" portion of reregistration. These requirements include considering aggregate exposure and cumulative risk, implementing new processes to increase involvement of pesticide users and other stakeholders, and ensuring a reasonable opportunity for agriculture to make the transition to new pest control tools and practices. Over the longer run, these changes will enhance protection of human health and the environment and should speed risk reductions.

EPA is now conducting reregistration in conjunction with tolerance reassessment, which FQPA mandates be completed by 2006. Reregistration of pesticide active ingredients and products will be completed prior to the statutory deadline for completing tolerance reassessment. However, there are increasing indications that all elements of reregistration, especially those elements also necessary to complete tolerance reassessment, will not be completed for all active ingredients by 2002.

In 2001, EPA will complete 30 REDs and approximately 750 product reregistrations. By 2006, all 9,700 of the tolerance reassessments mandated by FQPA will be completed. EPA has evaluated the two programs and consolidated analyses wherever possible while meeting the goals of both programs.

FQPA requires that EPA establish a process for periodic review of pesticide registrations. This requires the updating of all pesticide registrations using current scientific data, risk assess-

ment methodology, program policies and effective risk reduction measures. In 2001, the Agency will continue developing the framework for the registration review program.

Research

In 2001, research will continue to develop pesticides exposure and effects data, risk assessment methods and models for children, and control technologies needed to comply with the requirements of FQPA. One area of increased attention will be cumulative risk. Research will be enhanced to address some of the complex issues and uncertainties in this area. The Agency will begin to develop a systematic approach for determining cumulative risk for a given set of exposure conditions, beginning with less complex paradigms and building toward the more complex, including consideration of different temporal dimensions of exposure.

FY 2001 Annual Performance Goals

- In 2001, complete reassessment of a cumulative 66 percent (560) of these 848 tolerances of special concern in protecting the health of children.

- In 2001, EPA will reassess an additional 1,200 of the 9,721 existing pesticide tolerances to ensure that they meet the statutory standard of "reasonable certainty of no harm" (for a cumulative 60 percent).

- In 2001, decrease adverse risk from agricultural uses from 1995 levels and assure that new pesticides that enter the market are safe for humans and the environment.

Goal 3: Safe Food Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$977.1	$1,014.7
Endocrine Disruptor Screening Program	$6,565.3	$5,741.4
Pesticide Registration	$21,126.3	$25,014.4
Pesticide Reregistration	$25,316.6	$28,945.2
Pesticide Residue Tolerance Reassessments	$11,597.8	$7,722.7
Rent, Utilities and Securities	$4,118.3	$8,197.5
TOTAL	**$69,701.4**	**$76,635.9**

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

Strategic Goal: Pollution prevention and risk management strategies aimed at cost-effectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this Nation.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001-FY 2000 Delta
Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems	$277,597.3	$301,046.3	$23,449.0
Reduce Public and Ecosystem Exposure	$51,892.2	$55,971.7	$4,079.5
Reduce Lead Poisoning	$27,390.6	$28,213.9	$823.3
Safe Handling and Use of Commercial Chemicals	$66,866.8	$70,983.3	$4,116.5
Healthier Indoor Air	$39,915.5	$41,159.0	$1,243.5
Improve Pollution Prevention Strategies, Tools	$23,649.5	$24,505.5	$856.0
Decrease Quantity and Toxicitiy of Waste	$15,056.6	$16,016.6	$960.0
Assess Conditions in Indian Country	$52,826.1	$64,196.3	$11,370.2
Total Workyears:	1,176.1	1,186.5	10.4

Means and Strategy:

The diversity and fragility of America's environments (communities, homes, workplaces and ecosystems) requires EPA to adopt a multi-faceted approach to protecting the public from the threats posed by pesticide and toxic chemicals. The underlying principle of the activities in this goal is the application of pollution prevention, which is cheaper and smarter than costly cleanup and remediation, as evidenced with Superfund, the Resource Conservation and Recovery Act (RCRA), and polychlorinated biphenyls (PCB) cleanups.

Under this Goal, EPA ensures that pesticides and their application methods do not present unreasonable risk to human health, the environment, and ecosystems. In addition to the array of risk-management measures entailed in the registration authorities under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) for individual pesticide ingredients, EPA has specific programs to foster worker and pesticide-user safety, ground-water protection, and the safe, effective use of antimicrobial agents. These programs work to ensure the comprehensive protection of the environment and wildlife in general, endangered species in particular, and to reduce the contribution of pesticides to ecological threats such as pollutant loading in select

geographic areas. Within this context, EPA pursues a variety of field activities at the regional, state and local levels, including the promotion of pesticide environmental stewardship. EPA is also addressing emerging threats such as endocrine disruptors by developing and implementing new screening technologies to assess a chemical's hormonal activity. Finally, EPA promotes the use of sensible Integrated Pest Management (IPM) and the prevention of misuse in the panoply of uses within both the urban and rural environments.

Much remains to be done to safeguard our Nation's communities, homes, workplaces and ecosystems. Preventing pollution through regulatory, voluntary, and partnership actions -- educating and changing the behavior of our public -- is a sensible and effective approach to sustainable development while protecting our nation's health. Two groups with significant potential to effect environmental change are industry and academia and the Agency pursues a number of these pollution prevention programs with both of the these groups. Likewise, improved understanding of the risks to health from airborne toxic chemicals indoors may strengthen our ability to reduce residents' exposure through voluntary changes in behavior and through potential product reformulation.

Preventing pollution through partnerships is central to the Administration's Chemical Right-to-Know initiative launched in 1998. This initiative provides the public with information on the basic health and environmental effects of the 2,800 highest production volume (HPV) chemicals in the U.S. Most residents come into daily contact with many of these chemicals, yet relatively little is known about their potential impacts. Getting basic hazard testing information is the focus of a the "HPV Challenge Program", a voluntary program recognizing industry's contribution to the public knowledge base on these prevalent chemicals. More than 211 companies have committed to voluntarily provide these test data for more than 1,152 of the HPV chemicals, a remarkable expression of partnership between government and the private sector. Risks to children is a particular focus, and the Agency will supplement the information from industry with additional testing to identify and address chemicals of concern for children's health.

Children's health is also the continuing focus of the multi-agency initiative begun in 2000 to combat asthma in children. Efforts in 2001 will target reductions in the presence of indoor triggers of asthma, such as environmental tobacco smoke and biological contaminants, by educating the public about the disease and the steps they can take to reduce the severity and frequency of asthma attacks. Additional voluntary work will be undertaken by schools to empower their students to manage their asthma symptoms better, by school personnel to improve the indoor environments of their schools, and by health-care personnel to incorporate education about managing environmental asthma triggers into asthma treatment plans for their patients. Partnerships with non-profit environmental and public health organizations with a particular focus on children are

being used to bring about voluntary reductions in exposure to asthma triggers found indoors.

Reducing indoor air pollution is a high priority for the Agency. U.S. residents spend most of their time indoors and the pollutants indoors can be in much higher concentrations than what occurs outside. Further, poor indoor air quality is implicated in childhood asthma. Recent studies indicate nearly 1 of 13 school age children have asthma. Over the last 20 years the number of deaths from asthma has increased three-fold. Partnerships, technology transfer and public awareness are key tools in reducing indoor air pollution.

Also central to the Agency's work under this goal in 2001 will be increased attention on documenting and taking action to reduce risk from persistent, bioaccumulative and highly toxic chemicals (PBTs) and from chemicals that have endocrine disruption effects. PBT chemicals are of particular concern not only because they are toxic but also because they may remain in the environment for a long period of time, are not readily destroyed, and may build up or accumulate in plant or animal tissue, and in cases involving mercury, polychlorinated biphenyls (PCBs) and lead, in human tissue. Pollution prevention and controlling releases are the mainstays of protection for chemicals that exhibit these effects.

The Agency mixes both regulatory and voluntary methods to accomplish its job. For example, each year the New Chemicals program reviews and manages the risks of 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 immediate threats of harmful chemicals, like PCBs, from entering the marketplace 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. This awareness has led industry to produce safer "greener" alternative chemicals and pesticides. Fewer harmful chemicals are entering the marketplace and our environment today because of the New Chemical Program.

The Design for the Environment (DfE) and Green Chemistry Programs build on and expand the new chemistry efforts. They target industry and academia to maximize the impact of the Agency's pollution prevention efforts. Our DfE program forms partnerships with industry to find sensible solutions to prevent pollution. In one example, taking a sector approach, EPA has worked with the electronics industry to reduce the use of formaldehyde and other toxic chemicals from the manufacture of printed wiring boards.

The Pollution Prevention (P2) Framework developed in 1998 and 1999 is another example of EPA successfully influencing industry's approach to chemical selection prior to commercialization. The P2 Framework integrates analytical methods and tools that help predict risks of chemicals, based on chemical structure; allows stakeholders to evaluate and compare chemical choices and to identify environmentally preferable products and processes; and

helps industry identify risk issues early in product development, when pollution prevention opportunities are most cost-effective.

In several cases, achieving the strategic objectives under this goal is a shared responsibility with other Federal and state agencies. For example, EPA's role in reducing the levels of environmental lead exposure involves promotion of federal-state partnerships to lower specific sources of environmental lead, such as lead-based paint and other lead-content products. These partnerships emphasize development of a professional infrastructure to identify, manage and abate lead-based paint hazards, as well as public education and empowerment strategies, which fit into companion Federal efforts (e.g., Centers for Disease Control (CDC), and Department of Housing and Urban Development (HUD)) to monitor and reduce environmental lead levels. Likewise, achieving the goals of the multi-agency effort to substantially increase the government's efforts to combat asthma in children requires effective collaboration between EPA and other Federal agencies.

Intrinsic to the effort to prevent pollution is the minimization of the quantities of waste generated by industry, municipalities and hazardous-waste management operations. Strategies range from fostering materials reuse and recycling and other resource-recovery processes to broad- based campaigns to re-engineer the consumption and use of raw materials or personal conservation of resources. Effective and sustainable programs reduce the need for storage, treatment or disposal of hazardous or municipal wastes, while reducing costs to industry and municipalities.

Since this Goal focuses on how Americans live in communities, it features the Agency's commitment of fulfilling its responsibility for assuring human health and promoting environmental protection in Indian Country. EPA's policy is to work with tribes on a government-to-government basis that affirms the vital trust responsibility that EPA has with 554 tribal governments and remains cognizant of the Nation's interest in conserving the cultural uses of natural resources.

Research

Currently, there are significant gaps with regard to understanding of actual human exposures to pesticides and toxic substances in consumer products in residential environments and potential human health risks from such exposures to the general population and susceptible subpopulations, such as infants and children. Methods for detecting and estimating human exposures to these chemical stressors are extremely limited. Health effects information is not available for most of these stressors. Tools that are currently available to control or prevent exposures are also limited to certain processes or materials. Research is needed to improve the characterization of health risks associated with community exposures to environmental chemical stressors and to develop more advanced

control technologies to mitigate and eliminate human exposures to these stressors. To meet this need, the 2001 research program will develop exposure data, health risk assessment methodologies, and control technologies to improve the characterization of health risks and reduce community exposures to environmental chemical stressors.

Highlights:

EPA seeks to prevent pollution at the source as the first choice in managing environmental risks to humans and ecosystems. Where pollution prevention at the source is not a viable alternative, the Agency will employ risk management and remediation strategies in a cost effective manner. Reducing pollution at the source will be carried out using a multi-media approach in the following environmental problem areas:

- *Reduce Public and Ecosystem Exposure to Pesticides*

Reducing risk from exposure to pesticides requires a multi-faceted approach. Beyond being exposed through the food we eat, the general public, applicators, and farm workers may be exposed through direct handling, groundwater contamination or aerial spray. One intent of the Food Quality Protection Act (FQPA) is to protect the public by shifting the nation toward safer pesticide use. Appropriate transition strategies to safer pesticides are important to the nation to avoid disruption of food supply or sudden changes in the market that could result from abruptly terminating the use of a pesticide before well-targeted safer equivalents can be identified and made available. For these reasons, the Strategic Agricultural Partnership initiative continues to be an important priority in 2001. The Strategic Agricultural Partnership assists in developing alternative pest management tools and effective implementation approaches. The Agency will work closely with industry, agricultural pesticide users and other stakeholders to develop an effective transition to the safer pesticides and pest management practices envisioned by the FQPA. In 2001, the initiative will expand efforts to reach more farmers, encourage them to adopt safer pesticides, use environmental stewardship and integrated pest management practices, and adopt a "whole farm" approach to environmental protection.

In 2001, through the Certification and Training (C&T) and Worker Protection (WP) programs, EPA will continue increasing agricultural workers' awareness and knowledge of the dangers of pesticides and good worker safety practices. EPA will continue to protect the Nation's ecosystems and reduce impacts to endangered species through the Pesticide Environmental Stewardship Program (PESP), and integrated pest management (IPM). The Agency will emphasize efforts with our tribal partners to address pesticide issues and enhance the development of tribal technical capacity, particularly in the areas of risk management, worker safety, training, and pollution prevention.

Together, the WP and the C&T programs address the problem of worker pesticide exposure. These programs safeguard workers from occupational exposure to pesticides by providing

training for workers, employers, and pesticide applicators and handlers. Training and certification of applicators

of restricted use pesticides further ensures that workers and other vulnerable groups are protected from undue pesticide exposure and risk. Recertification requirements keep their knowledge current with label changes and application improvements. The Groundwater Strategy, a cooperative effort with states and regions to develop Pesticide Management Plans (PMPs), will further efforts to prevent pesticide pollution of surface and groundwaters. The Endangered Species program will enlist the support of the agricultural community and other interested groups to protect wildlife and critical habitats from pesticides. This voluntary program is carried out through communications and outreach efforts and in coordination with other Federal agencies. The PESP and IPM play pivotal roles in moving the nation to the use of safe pest control methods, including reduced risk pesticides. These closely related programs promote risk reduction through collaborative efforts with stakeholders to utilize safer alternatives to traditional chemical methods of pest control.

Antimicrobial sterilants and disinfectants are used to kill microorganisms on surfaces and objects in hospitals, schools, restaurants and homes. Antimicrobials require appropriate labeling and handling to ensure safety and efficacy. EPA remains focused on accurate product labeling and product efficacy and on meeting other requirements for antimicrobial sterilants set forth by FQPA.

♦ *Reduce Lead Poisoning*

EPA is part of the Federal effort to address lead poisoning and elevated

blood levels in children by assisting in, and in some cases guiding, Federal activities aimed at reducing the exposure of children in homes with lead-based paint. During FY 2001, EPA will continue implementing its comprehensive program to reduce the incidence of lead poisoning and elevated blood levels in children nationwide. The Agency has established a national program to oversee the training and certification of lead-based paint abatement and inspection professionals. Many states and several tribes have been authorized by EPA to administer and enforce this program. EPA is responsible for administering and enforcing the program in the remainder of the states and tribal lands.

In 2001, EPA will finalize two new proposed regulations addressing renovation activities in housing, and lead paint removal from buildings, bridges and steel structures. EPA will also issue final regulations that will allow for safe and cost-effective disposal of lead painted debris. EPA, the Department of Housing and Urban Development (HUD), and the Department of Justice (DOJ) continue to enforce regulations requiring the disclosure of information about lead-based paint during real estate transactions. EPA recently issued a final rule that requires contractors to provide lead hazard information to consumers before renovation or remodeling in homes built before 1978.

Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems

In 2001, EPA will continue its program to educate the public about childhood lead poisoning. These activities are coordinated with other Federal agencies such as HUD and the Center for Disease Control (CDC), as well as state, tribal and local governments.

- *Safe Handling and Use of Commercial Chemicals and Microorganisms*

Under TSCA, EPA identifies and controls unreasonable risks associated with chemicals. In 1998, the Vice-President called on EPA to launch the Chemical Right-to-Know Initiative, addressing a critical gap in the nation's knowledge about the health and environmental hazards of high production volume chemicals (HPVs). EPA is working with industry to put information about those chemicals into the hands of the public, communities, environmental groups, states and the regions.

Another Agency priority is implementation of the Endocrine Disruptor Screening Program (EDSP). The EDSP is based on the recommendations of the Endocrine Disruptor Screening and Testing Advisory Committee (EDSTAC), which provided advice and counsel to the Agency on a strategy to screen and test chemicals and pesticides that may cause endocrine disruption in humans, fish, and wildlife. In 1999, EPA began the validation of EDSP screening test protocols which will be completed in 2001. By 2005, EPA anticipates that all high production volume chemicals will be screened for endocrine disrupting potential. The resulting priority chemicals will be tested using the approach and test methods developed from recommendations of the EDSTAC.

In 2001, EPA will also continue efforts in three important program areas: existing chemicals; new chemicals; and national program chemicals (including lead, fibers, dioxin, PCBs, and mercury). The Agency reviews chemicals already in commerce, along with chemicals or microorganisms before commercial-ization (i.e., "new" chemicals) to determine whether they can be handled and used safely. Another key focus is green chemistry, which identifies opportunities for increasing the design, development and use of inherently safer or "greener" chemicals and chemical processes. For those chemicals whose significant risks are well established (such as PCBs, asbestos, and dioxin), reductions in use and releases are important to reducing exposure of the general population as well as sensitive sub-populations. EPA's PCB control efforts will shift from enforcing PCB use standards toward encouraging phase-out of PCB electrical equipment, ensuring proper waste disposal methods and capacity, and fostering PCB site cleanups. An Agency-wide dioxin strategy will respond to the latest science and address dioxin risk management in a more comprehensive cross-media approach. EPA is also continuing work on its Dioxin Exposure Initiative which focuses on identifying and quantifying the link between dioxin sources and the general population exposure.

♦ *Achieving Healthier Indoor Air*

In 2001, the Indoor Environments program will continue to emphasize children's health with an emphasis on implementing steps to reduce the number of children affected by asthma from indoor environmental continue its education and outreach activities which implement portions of "Asthma and the Environment: An Action Plan to Protect Children," the inter-agency plan developed under the President's Task Force On Environmental Health Risks and Safety Risks to Children. EPA's activities are directed at increasing the extent to which children with asthma, parents/caregivers, and schools understand and take action on the links between the condition of their indoor environments and asthma. EPA works in close collaboration with CDC and the National Institutes of Health (NIH) to help ensure that each organization is conducting discrete activities that complement those being conducted by other organizations. In addition, the Agency will continue its efforts to improve indoor air quality in Tribal lands. While many of the issues are the same, radon, Environmental Tobacco Smoke (ETS), increasing incidents of asthma, Agency efforts often require a greater focus on capacity building and sensitivity to customs and culture.

♦ *Decrease the Quantity and Toxicity of Waste*

Pollution prevention and waste minimization require a comprehensive effort of minimizing the quantity and toxicity of waste generated by industries, the government and individual citizens. EPA's role includes several specific activities addressing industrial hazardous waste and municipal and industrial solid waste.

In the hazardous waste arena, regulated under RCRA Subtitle C, the RCRA program focuses on the most persistent, bioaccumulative and toxic (PBT) chemicals, consistent with the national and international priority on reducing the presence of PBTs in the environment. In 2001, the Agency will encourage and support implementation activities to meet our GPRA commitment of reducing PBT chemicals in RCRA hazardous waste, thereby decreasing human and environmental exposure to toxic wastes. This will include waste reuse and recycling efforts which preserve natural resources and enhancement of industry partnerships to minimize hazardous wastes by building on the tools and coordination activities already established.

The Agency will continue reducing the barriers to safe recycling of hazardous waste through changes to recycling regulatory standards, and ongoing outreach to stakeholders to explore additional options.

EPA is also a leader in reducing generation of municipal and industrial solid waste regulated under RCRA Subtitle D and improving the recovery and conservation of materials through source reduction and recycling. With our stakeholders, we have promoted financing and technology opportunities for recycling/reuse businesses. In 2001, the Agency will serve as a catalyst for innovative source reduction and

recycling in many industrial sectors, including waste reduction opportunities for construction and demolition debris, food wastes, tires, electronics equipment, carpet, transport packaging, and plastic beverage packaging.

♦ *Assess Conditions in Indian Country*

EPA places particular priority on working with Federally recognized tribes on a government- to-government basis to improve environmental conditions in Indian country in a manner that affirms the vital trust responsibility that EPA has with some 554 Tribal governments. The Agency will concentrate on building Tribal infrastructure and completing a documented baseline assessment of environmental conditions in Indian country to enable EPA/Tribes to identify high priority human health and environmental risks. These assessments will provide a blueprint for planning future activities through the development of Tribal/EPA Environmental Agreements (TEAs) or similar tribal environmental plans to address and support priority environmental multi-media concerns in Indian country. By the end of 2001, EPA expects to complete key reforms to the Agency's data infrastructure to address tribes. By the end of 2001, EPA will also complete a baseline assessment of 38 percent of Indian country using existing information. EPA anticipates that existing information will provide a sufficient basis for sound environmental planning and program implementation in some areas. In other areas, EPA anticipates the baseline assessment will identify key data gaps for resolution. By the end of 2000, EPA will have invested $2.1 million in these activities.

In 2001, EPA is requesting an additional $10 million (total of $52.6 million) for Indian General Assistance Program grants. These resources will allow at least 80 additional tribes to support at least one or two persons working in their community to build a strong, sustainable environment for the future. These people perform vital work by assessing the status of a tribe's environmental condition and developing the infrastructure for an environmental program tailored to that tribe's needs. Another key role of this workforce is to alert EPA of serious conditions requiring attention in the near term so that, in addition to assisting in the building of tribal environmental capacity, EPA can work with the tribe to respond to immediate public health and ecological threats.

In accordance with the President's 1994 Memorandum and its own longstanding policy, EPA is considering additional approaches for how EPA and tribes might work together to protect public health and the environment in Indian country. As part of that effort, EPA is proposing appropriations language that would provide another tool to implement its Federal programs while removing existing legal and procedural impediments to working directly and effectively with tribal governments. The proposed language would allow EPA to award cooperative agreements to federally recognized tribes or intertribal consortia if authorized by their tribal members to assist the Administrator in implementing Federal environmental programs for tribes. The proposed language would improve environmental protection while also building the

capacity and expertise of the tribes to run their own environmental programs.

Research

In 2001, research will continue to develop exposure data, health risk assessment methodologies, and control technologies to improve the characterization of health risks and reduce community exposures to environmental chemical stressors. For example, health effects research will continue to focus on developing mechanistically-based predictive models for human health risk assessment, such as structure-activity relationship (SAR) models to help determine testing needs under Section 5 of TSCA, which addresses new chemicals. The Agency will also issue guidance on the use of SAR computer technologies in 2001.

2001 Annual Performance Goals:

- In 2001, 890,000 additional people will be living in healthier residential indoor environments.
- In 2001, 2,580,000 students, faculty and staff will experience improved indoor air quality in their schools.
- In 2001, baseline environmental information will be collected by 34% of tribes (covering 50% of Indian Country).
- In 2001, administer Federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states and on tribal lands, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.
- In 2001, ensure that of the up to 1,800 new chemicals and microorganisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses.
- In 2001, protect homes, communities, and workplaces from harmful exposure to pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction (to be determined) in the incidences of pesticide poisonings reported nationwide.
- In 2001, the quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery, (normalized for changes in industrial production) will be reduced by 200 million pounds, or 2%, from 2000 reporting levels.
- In 2001, EPA will initiate safety reviews on chemicals already in commerce by obtaining data on an additional 10% of the 2,800 HPV chemicals on the master test list, as part of the implementation of a comprehensive strategy for screening, testing, classifying and managing the risks posed by commercial chemicals.

- In 2001, divert an additional 1% (for a cumulative total of 30% or 67 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.

Goal 4: Preventing Pollution Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$1,766.8	$1,871.3
Air, State, Local and Tribal Assistance Grants: Other Grants	$8,158.0	$8,158.0
Children's Health	$14,680.2	$15,056.7
Common Sense Initiative	$379.5	$386.1
Design for the Environment	$4,741.9	$4,946.9
Endocrine Disruptor Screening Program	$5,988.5	$4,474.0
Environmental Monitoring and Assessment Program	$0.0	$174.4
Existing Chemical Data, Screening, Testing and Management	$20,394.5	$24,412.4
Grants to States for Lead Risk Reduction	$13,712.2	$13,712.2
Indoor Air: Buildings	$1,672.7	$1,693.4
Indoor Air: Homes	$1,955.1	$3,388.5
Indoor Air: School	$4,288.4	$5,120.9
Lead Risk Reduction Program	$12,807.1	$13,573.2
National Program Chemicals (PCBs, Asbestos, Fibers and Dioxin)	$5,753.6	$5,648.5
New Chemical Review	$13,261.4	$13,697.6
Pesticide Applicator Certification and Training	$9,391.2	$10,587.0
Pesticide Program Implementation Grant	$13,114.6	$13,114.6
Pesticide Registration	$11,346.3	$12,053.5
Pesticide Reregistration	$4,517.3	$3,037.4
Pollution Prevention Incentive Grants to States	$5,999.5	$5,999.5
Pollution Prevention Program	$8,333.2	$8,534.4
RCRA State Grants	$3,073.0	$3,073.0
Recycling	$3,639.3	$3,880.5
Regional Management	$62.3	$76.8
Rent, Utilities and Securities	$3,858.3	$7,938.7
Source Reduction	$1,950.9	$2,069.1
Tribal General Assistance Grants	$42,628.4	$52,585.4
Waste Minimization	$1,913.3	$1,966.5
TOTAL	**$219,387.5**	**$241,230.5**

Better Waste Management, Restoration of Contaminated Waste Sites and Emergency Response

Strategic Goal: America's wastes will be stored, treated, and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restoring them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 - FY 2000 Delta
Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response	**$1,622,372.6**	**$1,679,847.6**	**$57,475.0**
Reduce or Control Risks to Human Health	$1,451,859.3	$1,500,675.5	$48,816.2
Prevent , Reduce and Respond to Releases, Spills, Accidents or Emergencies	$170,513.3	$179,172.1	$8,658.8
Total Workyears:	4,455.4	4,402.3	-53.1

Means and Strategy:

EPA and its partners will continue their efforts to achieve this goal by promoting better waste management, cleaning up contaminated waste sites, and preventing waste-related or industrial accidents. To date, EPA and its partners have made significant progress toward achieving its two primary objectives that address human health and the environment at thousands of Superfund, Brownfield, Resource Conservation and Recovery Act (RCRA), underground storage tank (UST), and oil sites. Brought together by our common interest to protect our health, environment, and livelihoods, EPA and its partners have established an effective structure to manage the nation's hazardous and solid wastes.

One of the objectives of this goal is to reduce or control the risks posed to human health and the environment through better waste management and restoration of abandoned waste sites. In partnership with states, tribal governments, the public, and other stakeholders, EPA will reduce or control the risks to human health and the environment at thousands of Superfund, Brownfield, RCRA, and UST sites. EPA's strategy is to apply the fastest, most effective waste management and cleanup methods available, while involving affected communities in the decision making process. The Agency will employ enforcement efforts to further assist in reducing risk to humans from hazardous waste exposure.

To accomplish its Superfund objectives, EPA works with states, tribes, and other Federal agencies to protect human health and the environment and to restore sites to uses appropriate for the nearby communities.

Better Waste Management, Restoration of Contaminated Waste Sites and Emergency Response

Site assessment is the first step in determining whether a site meets the criteria for placement on the National Priorities List (NPL) or for removal action to prevent, minimize or mitigate significant threats. The Agency also provides outreach and education to the surrounding communities to improve their direct involvement in every phase of the cleanup process and understanding of potential site risk, such as risks posed by radioactive materials.

One of Superfund's major program goals is to have responsible parties pay for and conduct cleanups at abandoned or uncontrolled hazardous waste sites. The Superfund enforcement program maximizes Potentially Responsible Party (PRP) participation and is committed to reforms, which increase fairness, reduce transaction costs and promote economic redevelopment. The Agency also seeks to recover costs associated with a site cleanup from responsible parties when trust fund monies have been expended.

Brownfields are abandoned, idled, or under-used industrial and commercial properties and are not traditional Superfund sites as they are not generally highly contaminated and present lesser health risks. Economic changes over several decades have left thousands of communities with these contaminated properties and abandoned sites. In several important ways, the Agency's Brownfields Initiative encourages the redevelopment of these sites by addressing concerns such as environmental liability and cleanup, infrastructure declines, and changing development priorities.

A significant number of industrial sites are addressed by the RCRA corrective action program, administered by EPA and the authorized states. These include some of the most intractable and controversial cleanup projects in the country. Approximately 3,500 industrial facilities must undergo a cleanup under the RCRA program. Out of these facilities, the Agency has identified 1,712 facilities as high priority – where people or the environment are likely to be at significant current or potential risk. The Agency is pursuing a strategy for addressing the worst facilities first, as reflected in the strategic goal.

The leaking underground storage tank (LUST) program promotes rapid and effective responses to releases from USTs containing petroleum by enhancing state, local and tribal enforcement and response capability. Corrective actions at sites where UST releases have contaminated soil and/or groundwater is a key element of the UST/LUST program. Nearly all corrective actions are undertaken by UST owners and operators under the supervision of state or local agencies. EPA oversees these activities on Indian lands.

The other objective of this goal is to prevent, reduce, and respond to releases, spills, accidents or emergencies. Through the UST and RCRA permitting and inspection programs, the Agency and its partners manage the practices of thousands of facilities. When releases do occur, EPA employees and those of its partners, who are properly trained and properly equipped, will ensure that the Agency's

objective is met by having the capability to successfully respond.

The goal of the UST program is to prevent, detect, and correct leaks from USTs containing petroleum and hazardous substances. The strategy for achieving this goal is to promote and enforce compliance with the regulatory requirements aimed at preventing and detecting UST releases. States have the primary responsibility for ensuring that UST facilities (except those on Indian lands) are brought into compliance. The Agency's primary role is to provide technical and financial support to states' UST programs. EPA has the primary responsibility for implementation of the UST program on Indian lands.

For facilities that currently manage hazardous wastes, EPA ensures human health and environmental protection through the issuance of RCRA hazardous waste permits. The RCRA program reduces the risk of exposures to dangerous hazardous wastes by establishing a "cradle-to-grave" waste management framework. This framework regulates the handling, transport, treatment, storage, and disposal of hazardous waste, ensuring that communities are not exposed to hazards through improper management. Significant progress has been made by hazardous waste management facilities having appropriate controls in place to minimize the threat of exposure to hazardous substances. To date, 47 of 50 states, Guam and the District of Columbia are authorized to issue permits. The authorization of states for all portions of the RCRA program, including regulations that address waste management issues included in permits, is an important Agency goal. In addition, the Agency has developed a strategy to address solid waste and hazardous waste on Indian lands. A highlight of this strategy is the interagency project to address issues surrounding open dumps and their cleanup, the primary waste management concern for tribes.

The Agency's chemical emergency preparedness and prevention program addresses the risks associated with the manufacture, transportation, storage and use of hazardous chemicals to prevent and mitigate chemical releases. The program also implements right-to-know initiatives to inform the public about chemical hazards and encourages actions at the local level to reduce risk. Section 112(r) of the Clean Air Act requires an estimated 36,000 facilities to develop comprehensive risk management plans (RMPs) and submit them to EPA, state agencies, and Local Emergency Planning Committees. The Agency believes that states are best suited to implement the RMP program because they benefit directly from its success and they often have established relationships with the communities that may be at risk.

The oil spill program prevents, prepares for, and responds to oil spills mandated and authorized in the Clean Water Act and Oil Pollution Act of 1990. EPA utilizes its appropriated monies to protect inland waterways through oil spill prevention, preparedness, and enforce compliance at 450,000 non-transportation-related oil storage facilities that EPA regulates. When necessary, the Agency undertakes oil spill response, which is funded

through a reimbursable agreement with the U.S. Coast Guard.

Research

The 2001 research program supports the Agency's objective of reducing or controlling 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. The research program will: 1) provide improved methods and dose-response models for estimating risks from complex mixtures contaminating soils and groundwater; 2) provide improved methods for measuring, monitoring, and character-izing complex waste sites in soils and groundwater; and 3) develop more reliable technologies for cleanup of contaminated soils and groundwater. In 2001, EPA will also deliver the annual Superfund Innovative Technology and Evaluation (SITE) report to Congress, which provides program/project status and cost savings information.

Waste identification, combustion, and waste management constitute the three major areas of research in 2001 as the Agency works towards preventing releases by proper facility management. Waste identification research will conduct multimedia, multi-pathway exposure modeling and environmental fate and transport-physical estimation in support of the hazardous waste identification rule (HWIR). Waste management research will work on developing more cost-effective ways to manage/recycle non-hazardous wastes and will examine other remediation technologies while combustion research continues to focus on characterizing and controlling releases of nickel from waste combustion.

Highlights

In 2001, EPA and state cleanup actions will protect human health by reducing the effects of uncontrolled releases on local populations and sensitive environments. The Agency will continue to build on past successes in cleaning up sites. The following accomplishments provide examples of what has been done by the Agency to achieve its goal:

- cleaned up more than 670 Superfund National Priority Sites;
- secured PRP commitments, over the life of the Superfund program, with an estimated value of $16.2 billion ($13.5 billion in response settlements and $2.7 billion in cost recovery settlements);
- resolved potential liability of 21,000 small volume waste contributing parties through 1999;
- completed about 6,000 Superfund removal response actions from 1982 through 1999;
- saved more than $277 million in potential costs by working closely with Department of Defense to clean up or close contaminated bases;
- signed 307 agreements for brownfields assessment pilots through 1999;
- targeted 1,712 high priority RCRA sites for aggressive risk reduction;
- brought more than 80 percent (approximately 600,000) of the regulated USTs into compliance with new regulatory standards;

- responded to an average of 70 oil spills and monitored 130 oil spill cleanups in a typical year; and
- worked closely with states to prevent or reduce risks from chemical accidents.

In 2001, EPA will complete construction at 75 Superfund sites and will take action to address contamination at 275 sites using removal authorities. The Superfund enforcement program will also obtain PRP commitments to initiate work at 70% of construction starts at non-Federal facility sites on the NPL and to conduct or fund removals.

In 2001, the Superfund redevelopment initiative will facilitate the return of additional Superfund sites to productive reuse. More than 170 sites have already been brought back into productive use and are generating approximately 11,000 jobs and $255 million in annual income. The initiative builds on administrative reforms to explore future use opportunities with local stakeholders before selecting a cleanup remedy.

Enhancing the Agency's current ability to respond to a terrorist event is an important element of the Agency's 2001 Superfund request. Terrorist threats could include biological, chemical and radiological attacks on populations in the United States. The Agency is strengthening its anti-terrorism capabilities. The focus is on improving the Agency's response capability, improving workforce safety, and working effectively with our Federal and local partners.

The Brownfields initiative coordinates a federal approach to assist our partners in better addressing environmental site assessment and cleanup. In 2001, the Agency will provide additional funding and technical support to 50 existing assessment demonstration pilots. These pilots provide states (including U.S. territories), political subdivisions (including cities, towns, and counties), and federally recognized tribes with useful information and new strategies for promoting a unified approach to environmental site assessment and characterization, and redevelopment. In addition, the Agency and its Federal partners will select 10 new showcase community pilots to serve as models to demonstrate the benefits of interagency cooperative efforts in addressing environmental and economic issues related to brownfields. Similar to the 16 showcase communities designated in 1998, the 10 new showcase communities will capitalize on a multi-agency partnership designed to provide a wide range of support depending on the particular needs of each community.

The Agency will also provide funding to states for activities that are part of brownfields site assessment pilots. These activities include facilitating communication among brownfields pilots and with state environmental authorities. In addition, the Agency will provide funding for the development and enhancement (or augmentation) of state voluntary cleanup programs. To further enhance a community's capacity to respond to brownfields redevelopment, the Agency will also make 70 awards to capitalize brownfields cleanup revolving loan

funds (BCRLF). Communities completing their brownfields site assessment demonstration pilot activities and communities completing targeted brownfields assessments are eligible to apply for BCRLF pilots. To augment the communities' capacities to clean up brownfields sites, EPA will fund 10 job training pilots for community residents and will provide $3,000,000 to the National Institute of Environmental Health Sciences to supplement its minority worker training programs that focus on brownfields workforce development activities. In addition, EPA will continue to explore connections between RCRA low-priority corrective action efforts and cleanup of brownfields properties.

In 2001, 172 additional high priority RCRA facilities will have human exposures controlled and 172 additional high priority RCRA facilities will have toxic releases to groundwater controlled. To accomplish the Agency's RCRA objectives, in 2001, the Agency will implement RCRA cleanup reforms through the regions and authorized states. This initiative will reform the current RCRA corrective action program to be faster, safer and promote smarter cleanups. The initiative will also ensure RCRA's strategic goals are met and that millions of people who live or work in the vicinity of RCRA facilities will be protected. The RCRA cleanup reforms intend to: reduce impediments to achieving the Agency's objective; enhance state and stakeholder involvement; and, promote innovative approaches to cleanup actions. Implementation of this initiative will be the key to a successful corrective action program for 2001 and beyond.

In 2001, the RCRA hazardous waste permits program will have permits or other approved controls in place for 106 additional RCRA hazardous waste management facilities for a cumulative total of 70 percent of the universe (2,900 facilities). These efforts minimize the threat of exposure to hazardous substances because the RCRA program's comprehensive framework regulates the handling, transport, treatment, storage, and disposal of hazardous waste.

The Agency has several efforts underway to reform the RCRA program so that it better reflects actual levels of risk. The hazardous waste identification rule seeks to exclude lower risk wastes from hazardous waste regulation. In 2001, the Agency will continue work to develop concentration-based exemption levels for constituents occurring in hazardous wastes. The Agency is working to improve test methods under its toxic constituent leaching procedure to better evaluate waste leaching potential for assessing whether a waste should be classified as hazardous, how effective a treatment is, and whether land disposal is an appropriate method for managing particular wastes. Another risk evaluation effort, the surface impoundment study, will be completed in March 2001.

Phase I of the maximum achievable control technology (MACT) standards under the Clean Air Act (CAA) was finalized in 1999. Phase I revised standards for incinerators and cement and lightweight aggregate kilns that burn hazardous waste. As the MACT standards are implemented, by 2002, the Agency will reduce the emissions of dioxins, furans, heavy

metals, acid gases and particulate matter from these sources. These efforts will further reduce the indirect exposure (primarily through the food chain) to hazardous constituents in emissions, especially to children. Phase I implementation efforts accelerate in 2001 and focus on the transition from RCRA to CAA air emissions permitting and tracking of facility progress. In 2000, EPA will initiate work on Phase II MACT standards for hazardous waste burning boilers. In 2001, the Agency will continue efforts to pursue development of the Phase II rule. Like Phase I, the Phase II rule will address emissions of dioxins, furans, heavy metals, and particulate matter.

In 2001, the Agency will work with states and industry to complete the development of voluntary guidelines for industrial non-hazardous waste management. These voluntary guidelines address a range of issues including groundwater contamination, air emissions, and alternatives to waste disposal. Although the states implement the municipal solid waste (MSW) landfill regulatory programs, the Agency establishes minimum national standards for state compliance. The Agency also reviews and approves state MSW landfill permit programs. The Agency will continue to work with states to ensure that facilities have approved controls in place to prevent dangerous releases to air, soil, groundwater and surface water. These activities will provide a uniform application of minimal safe management standards to help ensure that sufficient controls are in place.

In 2001, the Agency's priorities in the UST program are to: 1) prevent leaks from USTs; 2) ensure that USTs are managed properly and meet appropriate technical requirements; and 3) clean up releases from LUSTs. The Agency will work to ensure that 70% of USTs are in compliance with EPA and state leak detection requirements and that 93% of USTs are in compliance with the December 22, 1998, requirements to upgrade, close, or replace substandard tanks. The Agency also plans to complete 21,000 LUST cleanups under the supervision of EPA and its state, local, and tribal partners.

Reducing chemical accidents is vital to ensure that communities are not exposed to hazardous materials. The Agency continues its efforts to help states and local emergency planning committees implement the risk management plan (RMP) program. EPA has made steady progress in this area and in 2001 it will delegate the program to seven additional states for a cumulative total of 20. To reach this goal, EPA will provide technical assistance grants, technical support, outreach, and training to state and local emergency planning committees. Through these activities, states, local communities and individuals will be better prepared to prevent and prepare for chemical accidents.

Oil spills pose risks to human health and the environment. The Federal oil spill program prevents, responds to and monitors oil spills that occur in the waters of the United States and adjoining shorelines. Over 24,000 spills are reported annually, about half of these in the inland zone which is EPA's jurisdiction. EPA responds to approx-

imately 70 significant spills a year and monitors the work of others at approximately 130 additional spills a year. To reduce the risk of hazardous exposure to people and the environment, the Agency aims to prevent oil spills from occurring, prepare for oil spills that do occur, and respond to spills when necessary.

Research

In 2001, exposure research will be conducted to reduce uncertainties associated with soil/groundwater sampling and analysis and to reduce the time and cost associated with site characterization and site remediation activities. Assessment research will evaluate the magnitude of the risks posed by contaminants to human health and the ecosystem, the contributions of multiple exposure pathways, the bioavailability of adsorbed contaminants and treatment residuals and the toxicological properties of contaminant mixtures. Risk management research will be conducted to develop and demonstrate more effective and less costly remediation technologies involving complex sites and hard-to-treat wastes.

Research in support of the hazardous waste identification rule (HWIR) will focus on reducing the uncertainty associated with exposure assessment model predictions by providing improved process level data and models for quantifying pollutant interactions in a variety of natural systems. The research also provides consultation on sampling and sample design related to compliance with proposed exit levels in support of the proposed HWIR. In 2001, EPA will update the HWIR99 modeling methodology for delisting hazardous wastes. Additionally, waste management research will be conducted to improve the management of both solid and hazardous wastes. This includes development and/or evaluation of more cost-effective waste treatment, containment, and recycling processes, along with technical guidance on their design and implementation.

2001 Annual Performance Goals:

- In 2001, 106 more hazardous waste management facilities will have approved controls in place to prevent dangerous releases to air, soil, and groundwater, for an approximate total of 70% of 2,900 facilities.

- In 2001, 172 (for a cumulative total of 821 or 48 percent) of high priority RCRA facilities will have human exposures controlled and 172 (for a cumulative total of 784 or 46 percent) of high priority RCRA facilities will have groundwater releases controlled.

- In 2001, complete 21,000 Leaking Underground Storage Tank (LUST) Cleanups for a cumulative total of 271,000 cleanups since 1987.

- In 2001, EPA will provide additional site assessment funding to 50 communities, resulting in a cumulative total of 2,100 sites assessed, the generation of 5,400 jobs, and the leveraging of $1.8 billion in cleanup and redevelopment funds.

Better Waste Management, Restoration of Contaminated Waste Sites and Emergency Response

- In 2001, 70 percent of USTs will be in compliance with EPA/State leak detection requirements; and 93 percent of USTs will be in compliance with EPA/State December 22, 1998 requirements to upgrade, close or replace substandard tanks .

- In 2001, EPA and its partners will complete 75 Superfund cleanups (construction completions) to achieve the overall goal of 900 construction completions by the end of 2002.

- In 2001, ensure trust fund stewardship by getting PRPs to initiate or fund the work and recover costs from PRPs when EPA expends trust fund monies. Address cost recovery at all NPL and non-NPL sites with a statute of limitations (SOL) on total past costs equal to or greater than $200,000.

- In 2001, maximize all aspects of PRP participation which includes maintaining PRP work at 70 percent of the new remedial construction starts at non-Federal Facility Superfund, and emphasize fairness in the settlement process.

- In 2001, continue to make formerly contaminated parcels of land available for residential, commercial, and industrial reuse by addressing liability concerns through the issuance of comfort letters and Prospective Purchaser Agreements (PPAs).

- In 2001, sign Interagency agreements (IAGs) in 18 months or less from final listing on the NPL (but no later than 180 days after completion of the first remedial investigation /feasibility study (RI/FS)).

- In 2001, provide technical information to support scientifically defensible and cost-effective decisions for cleanup of complex sites, hard-to-treat wastes, mining, oil spills near shorelines, and Brownfields to reduce risk to human health and the environment.

Goal 5: Waste Management Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$16,213.0	$16,215.9
Assessments	$83,857.7	$83,204.7
ATSDR Superfund Support	$70,000.0	$64,000.0
Brownfields	$92,215.1	$91,626.7
Civil Enforcement	$1,298.5	$1,360.1
Community Right-to-Know (Title III)	$4,797.5	$5,137.5
Compliance Assistance and Centers	$867.5	$726.3
EMPACT	$35.5	$436.0
Federal Facilities	$27,750.6	$29,803.8
Federal Preparedness	$11,028.2	$12,854.8
Hazardous Substance Research: Haz Sub Research Centers	$2,504.7	$2,594.5
Hazardous Substance Research: (SITE)	$7,017.3	$5,932.0
Hazardous Waste Research	$5,379.8	$6,880.8
Leaking Underground Storage Tank Cooperative Agreements	$56,466.8	$58,050.0
NIEHS Superfund Support	$60,000.0	$48,526.7
Oil Spills Preparedness, Prevention and Response	$11,820.4	$12,560.3
Other Federal Agencies Superfund Support	$10,000.0	$10,585.0
Planning and Resource Management	$0.0	$31.8
Project XL	$117.4	$126.7
RCRA Corrective Action	$36,610.5	$40,062.8
RCRA Permitting	$15,724.4	$16,311.6
RCRA State Grants	$52,302.5	$60,302.5
Regional Managment	$1,398.6	$1,328.1
Rent, Utilities and Securities	$52,610.5	$55,061.1
Risk Management Plans	$7,242.8	$7,913.5
Superfund Remedial Actions	$499,799.0	$543,682.9
Superfund Removal Actions	$200,860.3	$199,218.0
Superfund: Cost Recovery	$30,269.1	$32,886.4
Superfund: Justice Support	$28,663.5	$28,663.5
Superfund: Maximize PRP Involvement (including reforms)	$82,009.6	$86,040.1
Underground Storage Tanks State Grants	$11,944.7	$11,944.7
Underground Storage Tanks (UST)	$6,203.9	$6,906.4
Waste Combustion	$4,438.3	$4,677.5
TOTAL	**$1,491,447.7**	**$1,545,652.7**

Reduction of Global and Cross-Border Environmental Risks

Strategic Goal: The United States will lead other nations in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 FY 2000 Delta
Reduction of Global and Cross-Border Environmental Risks	**237,865.8**	**$425,070.5**	**$187,204.7**
Reduce Transboundary Threats: Shared North American Ecosystems	$70,624.6	$119,926.7	$49,302.1
Climate Change	$132,115.1	$257,909.6	$125,794.5
Stratospheric Ozone Depletion	$17,832.2	$27,998.0	$10,165.8
Protect Public Health and Ecosystems From Persistent Toxics	$4,857.4	$5,482.8	$625.4
Achieve Cleaner and More Cost-Effective Practices	$12,436.5	$13,753.4	$1,316.9
Total Workyears:	511.7	533.1	21.4

Means and Strategy

Pollutants do not stop at geographic and political boundaries, and their propensity to migrate threatens human health and the environment, demanding coordinated international action. The United States addresses global environmental problems, such as climate change and stratospheric ozone depletion, through bilateral and multilateral consultations and agreements and capacity building programs. Other problems are not necessarily of a global scale but cross our borders and require a geographic approach to direct environmental action.

EPA will use a variety of approaches to prevent harm to the global and regional environments and ecosystems including: 1) using regional or global negotiations to form bilateral and multilateral environmental agreements and environmental policy initiatives; 2) cooperating with other countries to ensure that domestic and international environmental laws, policies, and priorities are recognized and implemented; 3) working with other federal agencies, states, business, and environmental groups to promote the flow of environmentally sustainable technologies and services worldwide, facilitate cooperative research and development programs, and provide technical assistance, training and information internationally; and 4) promoting public/private partnership

programs to reduce emissions of greenhouse gases and other pollutants.

U.S. leadership is also required to initiate international agreements and actions to reduce or eliminate the environmental releases of persistent toxic substances such as DDT, PCBs or dioxins, which travel great distances in the environment and threaten human health and the environment. Although the U.S. has controlled many of these substances domestically for some time, we remain vulnerable to them in part because many other countries still use them, thus contributing to transboundary flows back into the U.S. By marshaling and coordinating government and private sector programs with other developed countries and key international organizations (i.e., the Organization for Economic Cooperation and Development and United Nations Environmental Program), EPA is leading the way for international action to control the use and transboundary migration of these substances. EPA has made significant progress in negotiating a legally binding global convention on persistent organic pollutants (POPs) and in helping to establish international capacity building programs which will facilitate meaningful developing country compliance with this convention.

Climate Change

Carbon dioxide and other greenhouse gases are produced by burning coal, oil, and natural gas to heat our homes, power our cars, and illuminate our cities. Deforestation and land clearing also contribute to the production of greenhouse gases. These gases which persist in the environment may have several environmental effects: rising atmospheric and ocean temperatures may ultimately change weather patterns; thereby increasing droughts, precipitation, flooding, heat waves and raising sea levels. Although the precise magnitude, timing, and regional patterns are uncertain, it is likely that climate change will have adverse consequences for human health, including: increasing the number of deaths associated with heat waves and other weather pattern disruptions; increasing incidence of allergic disorders; and increasing diseases that thrive in warmer climates, such as malaria, yellow fever, dengue fever, encephalitis, and cholera.

Since the early 1990s, EPA has been building partnerships with businesses in all sectors to meet the 1992 Framework Convention on Climate Change (FCCC) objective to stabilize greenhouse gas emissions. EPA also plays a major role in the President's Climate Change Technology Initiative (CCTI), which is designed to stimulate the adoption of energy efficient technologies and the use of renewable energy.

Stratospheric Ozone Depletion

In the stratosphere, ozone protects us from harmful sun rays. Anthropogenic chemicals are responsible for depleting ozone in the stratosphere. Depletion of this ozone layer means more exposure to these harmful rays, particularly ultraviolet radiation. The human health consequences are increases in skin cancers and cataracts, and impairment to the immune system. Ecologically, crop

yields fall and plant and animal life is threatened.

The United States is committed to honoring the 1989 Montreal Protocol Treaty by phasing out domestic production of ozone-depleting substances (ODSs). EPA's role stems from the Protocol and Title VI of the Clean Air Act Amendments of 1990. EPA helps other countries find suitable alternatives to ODSs , informs the public about the dangers of overexposure to UV radiation, and uses pollution prevention strategies to require the recycling of ODSs and hydroflourocarbons.

Research

EPA is working to provide the capability to assess the vulnerability of human health and ecosystems to climate-induced stressors at the regional scale, and to assess mitigation and adaptation strategies. Research into the consequences of global change (particularly climate change and climate variability) on human health and ecosystems will improve our understanding of the nature and extent of global change. The knowledge gained from these assessments (e.g. the impacts climate change could have on the spread of vector-borne and water-borne disease, changes in landscape cover and the migration of plant and animal species, and changes in farm productivity and food distribution), will allow policy makers to find the most appropriate, science-based solutions to reduce greenhouse gasses and to reduce significant risks to human health and ecosystems posed by climate change.

Highlights:

EPA's continued leadership is necessary to build international co-operation and technical capacity essential in preventing harm to the global environment and ecosystems we share with other nations. In 2001, EPA will use a variety of approaches to prevent harm to the global environment and ecosystems.

To reduce environmental and human health risks along the U.S./ Mexico border, EPA is working with the border states and Mexico to target the quality of air, drinking water and wastewater treatment and hazardous waste management and disposal. Nine working groups will address key issues while working closely with state and local agencies on both sides of the border. EPA will also support the financing and construction of water, wastewater treatment and solid waste facilities.

EPA, through the Great Lakes National Program Office (GLNPO), will coordinate implementation of the ecosystem approach in the Great Lakes by its Federal, state, tribal and local partners, fully implementing a "community-based" approach. GLNPO and its partners will act consistently with goals of a new Great Lakes Strategy and the Agency's Strategic Plan. EPA, states and local communities will strategically target reductions of critical pollutants through Remedial Action Plans for Areas of Concern and through Lakewide Management Plans for Lakes Ontario, Michigan, Superior, and Erie.

Recognizing that no single country can resolve the problem of

global climate change, EPA will help facilitate the international cooperation necessary to achieve the stabilization of greenhouse gas concentrations. The 1992 Framework Convention on Climate Change (FCCC) set the objective of stabilizing greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system. On the domestic side, EPA will encourage voluntary partnerships, provide technical assistance and promote state and local efforts to achieve future greenhouse gas emission reductions. Administration-wide, the programs launched in the 1993 Climate Change Action Plan (CCAP) have the potential to reduce U.S. greenhouse gas emissions by more than 160 million metric tons of carbon equivalent (MMTCE) annually by the year 2010.

The Agency will contribute to the science underpinning U.S. policy, including the assessment of consequences of climate change and climate variability. Particular attention will be given to the potential benefits and consequences of climate variability and change for human health, ecosystems, and economic systems at the regional, state and local levels. EPA will play a major part in peer-reviewed economic and policy analyses that serve U.S. policymakers and international negotiators.

EPA will also continue its efforts in focusing on climate change activities that would provide "co-benefits" to a specific country. Specifically, EPA will implement partnership activities with industrial and other priority countries by: 1) encouraging energy efficiency through the introduction of government policy incentives and environmental management practices; 2) introducing transportation planning and management; 3) implementing vehicle emissions testing programs; 4) planning and funding methane capture and utilization programs; and, 5) planning and funding sulfur dioxide trading programs.

To protect the earth's stratospheric ozone layer, EPA will continue to regulate ozone-depleting compounds and foster the development and use of alternative chemicals in the U.S. and abroad. The United States' response to the harmful effects of stratospheric ozone depletion is its commitment to honor the Montreal Protocol by phasing out domestic production of ozone-depleting substances (ODSs). EPA's role originates from the Montreal Protocol and Title VI of the Clean Air Act Amendments of 1990. EPA helps other countries find suitable alternatives to ODSs, informs the public about the dangers of overexposure to UV radiation, and uses pollution prevention strategies to require the recycling of ODSs and hydroflourocarbons.

Reduced risks from toxics, especially persistent organic pollutants (POPs) and selected metals that circulate in the environment at global and regional scales, will be achieved by working with the Department of State and with other countries to control the production or phase-out from the use of targeted chemicals. EPA is also working to reach agreement on import and export requirements applicable to certain chemicals, an expansion of pollutant release and transfer registers and the harmonization of chemical testing,

assessment and labeling procedures. The goal of international harmonization of test guidelines is to reduce the burden on chemical companies of repeated testing in satisfying the regulatory requirements of different jurisdictions both within the United States and internationally. Harmonization also expands the universe of toxic chemicals for which needed testing information is available, and fosters efficiency in international information exchange and mutual international acceptance of chemical test data. For test guideline harmonization, EPA will continue to cooperate closely with other Federal agencies and with other industrialized nations within the program framework of the Organization for Economic Cooperation and Development (OECD) in harmonizing testing guidelines.

The U.S. is working with other OECD member countries to implement the International Screening Information Data Set (SIDS) program, a voluntary international cooperative testing program begun in 1990. The program focuses on developing base-level test information (including data on basic chemistry, environmental fate, environmental effects and health effects) for international high production volume chemicals. SIDS data will be used to screen chemicals and to set priorities for further testing and/or assessment. The Agency will review testing needs for 50 SIDS chemicals in 2001.

In 2001, EPA and its U.S. government partners will conclude a legally-binding global convention on persistent organic pollutants (POPs), substances such as DDT, PCBs and dioxins which travel great distances in the environment and thus threaten humans and the ecosystem in the U.S. even though we have long worked domestically to reduce releases into the environment. This convention will require most other countries around the world to reduce and/or eliminate their production, use and trade of specified POPs, as well as improve their own POPs risk management practices. To ensure that developing countries comply with obligations under this convention, the U.S. is working with the Global Environment Facility (a joint funding program run by the World Bank, the United Nations Environment Program, and the United Nations Development Program) to carry out capacity building programs in developing countries. To do this, EPA will establish emission inventories and other needed data which will help foster an understanding and track the release contribution of the listed POPs.

In 2001, EPA will initiate the next stage of assisting Russia in its goal of total elimination of CFCs by assisting in the development of a post phase-out monitoring program. Activities would be coordinated with the World Bank, donor countries and agencies in facilitating training and other forms of technical exchange. In addition, EPA will begin targeting countries for specific enforcement capacity enhancement of custom officials to prevent the illegal entry of banned CFC's into the United States.

EPA will also establish a new international monitoring program, assisted by the State Department, which aims to promote higher environmental standards worldwide. Specific objec-

tives of the program are to monitor and report on other countries implementation of environmental laws and regulations, identify technical assistance needs and coordinate its provision, and counsel U.S. firms on local environmental laws and conditions. By identifying targets for technical assistance, EPA will help developing countries apply cleaner and more cost-effective environmental practices and technologies. For both the U.S. and other countries, the program will demonstrate that global economic integration and environmental protection can go together.

Research

EPA will assess the possible effects of global change, such as changes in climate and climate variability, changes in land use, changes in UV radiation and changes on air quality, water quality, ecosystem health, and public health. EPA will also examine possible adaptation strategies that could enable communities to take advantage of opportunities and reduce the risks associated with global change. The outcome of these assessments will help inform decision-making regarding strategies to address these possible changes.

Annual Performance Goals:

- In 2001, greenhouse gas emissions will be reduced from projected levels by approximately 66 MMTCE per year through EPA partnerships with businesses, schools, State and local governments, and other organizations thereby offsetting growth in greenhouse gas emissions above 1990 level by about 20%.
- In 2001, provide assistance to at least 75 developing countries to facilitate emissions reductions, and toward achieving the requirements of the Montreal Protocol.
- In 2001, restrict domestic consumption of class II HCFCs below 15,240 Ozone Depleting Potential (ODP)-weighted metric tonnes (ODP MTs) and restrict domestic exempted production and import of newly produced class I CFCs and halons below 60,000 ODP MTs.
- In 2001, reduce energy consumption from projected levels by more than 70 billion kilowatt hours, resulting in over $9 billion in energy savings to consumers and businesses.
- In 2001, for 60% of children in SunWise Schools, the dose of ultraviolet radiation (UVR) to which they are exposed will be reduced by 50% thus decreasing the risk of future UV-related health effects, including skin cancer, eye damage, and suppression of the immune system.
- In 2001, demonstrate technology for an 80 MPG mid-size family sedan that has low emissions and is safe, practical, and affordable.
- In 2001, assist 10 to 12 developing countries and countries with economies in transition in developing strategies and actions for reducing emissions of greenhouse gases and enhancing carbon sequestration.
- In 2001, provide analysis, assessment, and reporting support to

Administration officials, the Intergovernmental Panel on Climate Change, and the Framework Convention on Climate Change.

- In 2001, in close cooperation with USDA, identify and develop specific opportunities to sequester carbon in agricultural soils, forests, other vegetation and commercial products, with collateral benefits for productivity and the environment, with carbon removal potential of up to 40 MMTCE by 2010.

- In 2001, Great Lakes ecosystem components will improve, including progress on fish contaminants, beach toxics, air toxics, and trophic status.

- In 2001, increase the number of residents (approximately 11 million total) of the Mexico border area who are protected from health risks, beach pollution and damaged ecosystems from nonexistent and failing water and wastewater treatment infrastructure by providing improved water and wastewater service.

- In 2001, assess the consequences of global change (particularly climate change and climate variability) on human health and ecosystems.

- In 2001, successfully conclude international negotiations on a global convention on persistent organic pollutants (POPs), and initiate priority capacity building projects in key developing countries.

- In 2001, complete pilot reports on the implementation of environmental laws and regulations in four developing countries.

- In 2001, enhance environmental management and institutional capabilities in priority countries.

Goal 6: Global and Cross Border Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$2,405.8	$2,556.3
CCTI: Buildings	$42,640.9	$80,063.8
CCTI: Carbon Removal	$1,000.0	$3,410.0
CCTI: Industry	$21,991.7	$63,686.1
CCTI: International Capacity Building	$5,594.4	$10,576.2
CCTI: State & Local Climate Change	$2,508.0	$4,525.0
CCTI: Transportation	$29,604.8	$65,084.0
Climate Change Research	$20,592.2	$22,726.3
Commission for Environmental Cooperation - CEC	$3,222.5	$3,263.5
EMPACT	$947.8	$76.5
Environment and Trade	$518.0	$4,606.4
Global Toxics	$535.0	$588.4
Great Lakes National Program Office (CWAP)	$15,077.6	$13,196.7
International Brownfields	$168.0	$173.0
International Safe Drinking Water	$793.0	$848.0
Multilateral Fund	$12,000.0	$21,000.0
Partnership with Industrial and Other Countries	$6,855.6	$5,776.3
Rent, Utilities and Securities	$4,298.7	$4,747.7
U.S. - Mexico Border	$4,142.3	$5,176.2
Water Infrastructure: Mexico Border	$50,000.0	$100,000.0
TOTAL	**$224,896.3**	**$412,080.4**

Expansion of Americans' Right-to Know About Their Environment

Strategic Goal: Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001-FY 2000 Delta
Expansion of Americans' Right-to-Know About their Environment	**$159,640.1**	**$185,109.1**	**$25,469.0**
Increase Quality/Quantity of Education, Outreach, Data Availability	$98,700.3	$120,751.8	$22,051.5
Improve Public's Ability to Reduce Exposure	$37,839.7	$39,605.9	$1,766.2
Enhance Ability to Protect Public Health	$23,100.1	$24,751.4	$1,651.3
Total Workyears:	818.4	809.5	-8.9

Means and Strategy:

The purpose of this goal is to empower the American public with information, enabling them to make informed decisions regarding environmental issues in their communities. EPA will accomplish this goal through three strategic objectives: expand environmental education, outreach and data availability; improve the public's ability to reduce exposure; and enhance the public's ability to protect health and the environment. These objectives will be met by expanding the range of data it collects and improving the quality and usability of the data. The Agency will also ensure the data are widely available through the Internet, mass media and other sources.

Right-to-Know has become a part of EPA's mission. The Agency has accelerated its efforts to improve the accuracy of its data, and to reduce the burdens to industry associated with reporting. Also, the Agency is working to enhance the coordination of data collection activities with states and to improve data collection methods and the use of the latest technologies to consolidate information on a single Internet site.

The Agency has redesigned its internal structure to better meet information demands. EPA's new approach to information management employs a single program manager and office responsible for information management, policy and information technology stewardship across the Agency. This Office is responsible for

developing and implementing information standards and accountability systems that will improve environmental information within the Agency and the information provided to the public. This Office is focusing its work on reducing information collection and reporting burden; filling significant data gaps; and providing integrated environmental and public health information and statistics to the public.

Research

The research program supports this goal through the Integrated Risk Information System (IRIS) and the Risk Assessment Forum (RAF). IRIS is an EPA database of Agency consensus health information on environmental contaminants. The database is used extensively by EPA, the states, and the general public where consistent, reliable toxicity information is needed for credible risk assessments. In 2001, the Agency has a goal of completing 21 chemical assessments and making them available in IRIS. The Risk Assessment Forum promotes Agency-wide consensus on difficult and controversial risk assessment issues and ensures that this consensus is incorporated into appropriate Agency risk assessment guidance. In 2001, the RAF will be developing technical papers to provide initial guidance on difficult cumulative risk assessment issues and a framework for cumulative risk assessment to serve as a foundation for the potential future development of cumulative risk assessment guidelines. These efforts provide data/guidance to improve the scientific basis for environmental decision making.

Highlights:

The increasing public access to electronic media offers unprecedented opportunities for EPA to provide citizens with the information necessary to effect substantial environmental improvements. In support of this objective and the President's "Right-to-Know" goals, EPA will continue to increase the amount and quality of publicly available information on environmental programs. EPA also realizes that while it is important to provide up-to-date, accurate information, it must also ensure that the public finds the information useful. The Agency collects data in a variety of systems, on diverse environmental pollutants that impact land, air, water, as well as data on potential health effects of chemicals in food and manufactured products. EPA is aggressively seeking to integrate all relevant sources of data and information to enhance user-friendliness for the non-technical user and to support comprehensive approaches to environmental protection.

In 2001, EPA will continue to coordinate with the National Advisory Council on Environmental Policy and Technology (NACEPT) and its standing committees to identify and foster new environmental technologies. Other activities include facilitating and monitoring the Agency's response to NACEPT recommendations that are accepted by the Administrator, and managing statutorily-mandated advisory committees dealing with the North American Free Trade Agreement (NAFTA) implementation and U.S./ Mexico border issues. The advisory committees are: the National Advisory Committee/Governmental Advisory

Expansion of Americans' Right-to Know About Their Environment

Committee and the Good Neighbor Environmental Board.

The Agency will establish a Federal environmental information system that will integrate environmental information. The system will be fully compatible with state and tribal systems, allow for electronic receipt and dissemination of information and incorporate data quality and error correction processes.

Key to achieving high quality will be the Information Integration Initiative. In partnership with the States and Tribes, and in close consultation with our environmental information stakeholders, we will develop a single integrated multi-media core of environmental data and tools – an integrated environmental information system. Under the new system, EPA's individual media programs (i.e, air, water, hazardous waste, etc.) will maintain flexibility to develop "plug-in" modules that will incorporate program-specific requirements. However, at its core, the new system will be a single, shared and integrated system.

Efforts to allow better integration with our state and local partners will continue, including support to the Local Government Advisory Committee and the Small Town Advisory Sub-committee. In addition, EPA will design and manage meetings and conference calls and work with states and state associations to ensure that state concerns are considered in Agency policies, guidance, and regulations.

In partnership with states, the Agency will continue its efforts to expand publicly available information, both electronically via the Internet and through other non-electronic media. This includes the One-Stop Reporting initiative, the Reinventing Environmental Information (REI) initiative, and the Envirofacts database. In 2001, the Agency will accelerate its efforts to promote public access. The program will continue to support data integration projects such as Integrated Data for Enforcement Analysis (IDEA), which makes integrated compliance data from several media-specific databases available nationally in an interactive, online mode. The Agency will continue to work to increase states' use of IDEA by demonstrating its analytical capabilities to support targeting and screening based on risk and other compliance concerns. Another data integration project, the Sector Facility Indexing Project (SFIP), will be continued in 2001. SFIP, a White House Reinvention initiative, allows the public to monitor the records of nearby facilities, provides the regulated community with a means of comparing performance against competitors, and assists government agencies in making cross-media comparisons. EPA is committed to increasing use of the SFIP by increasing public awareness of the project, ensuring customer satisfaction with the information provided, and sustaining the utility of the SFIP as a compliance and analytical tool. EPA believes that these efforts will yield an increase in web site user sessions over the 1999 levels.

The Agency will continue to contribute to the Agency-wide Enhanced Public Access Project. This Project is

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intended to make all significant Agency guidance, policy statements and site-specific inter-pretations of the regulated entities' environmental management practices electronically accessible to the Regions, states, industry and the public. In 2001, 90% of enforcement and compliance policy and guidance will be available on the Internet within thirty days of issuance. EPA intends to add summaries of all significant cases available on the Internet by April 2001. Further, by the end of 2001, all ten EPA regional offices will have an enforcement and compliance website. EPA will continue to manage telephone hotlines, disburse brochures and reports via the National Service Center for Environmental Publications (NSCEP), respond to public inquiries and maintain our national library networks to serve those without personal computers.

The Agency will continue to participate in the Environmental Monitoring for Public Access and Community Tracking (EMPACT) program. A Presidential initiative begun in 1998, EMPACT to date has set up systems to provide real-time data to the nations' 86 largest metropolitan cities. EPA is working with four EMPACT cities to implement the Office of Enforcement and Compliance Assurance's Clean Water Compliance Watch in those cities. EPA will provide reliable, accurate, and user-friendly information in a time- relevant period to the cities' residents regarding the environmental/public health condition in the communities' water bodies during urban wet weather events and 24-hour National Pollutant Discharge Elimination System (NPDES) wastewater non-compliance events reported by the regulated entity. In 2001 the Agency will focus on the technology transference of this project to other EMPACT metropolitan cities.

The Agency's environmental justice program will help communities access information to ensure that they do not experience a disproportionate amount of pollution. Since 1994, more than 500 grants have been awarded to community organizations. As a result of these grant awards, community-based organizations (i.e., grassroots groups, churches, and other nonprofit organizations) have expanded citizen involvement and given residents the tools to learn more about exposure to environmental harms and about associated risks, and, consequently, to protect their families and their communities as they see fit. These small grants have served as the "seed-money" for empowerment of the residents of these communities, allowing them to speak for themselves and make their own decisions. In 2001, the program will continue to assist community-based organizations through the community small grants program.

Under the Emergency Planning and Community Right-To-Know Act (EPCRA), EPA is committed to expanding environmental release information gathered under the Toxic Release Inventory (TRI). In 2001, EPA will process 110,000 facility reports and issue the TRI Public Data Release for reporting year 1999. EPA will continue to expand the use of the Internet for delivering this information, and we are making information available by zip code and facility. Over the last ten

Expansion of Americans' Right-to Know About Their Environment

years, there has been a significant decrease in the amount of toxic materials released into the environment, according to TRI reporting by facilities.

In October 1999, EPA finalized a rule to lower the TRI reporting threshold for certain persistent bioaccumulative toxics (PBT) chemicals and to add other PBT chemicals to the section 313 list of toxic chemicals reported under TRI. PBT chemicals are of particular concern not only because they are toxic but also because they may remain in the environment for a long period of time, are not readily destroyed, and may build up or accumulate in plant, animal tissue, and in cases involving mercury, polychlorinated biphenyls (PCBs) and lead, human tissue. Currently, facilities that manufacture or process less then 25,000 pounds or otherwise use less than 10,000 pounds of a listed chemical do not need to report releases. Lowering these thresholds for PBTs will assure that we get reporting on a larger fraction of the releases of these chemicals. In August 1999, EPA proposed a rule to lower the threshold for reporting lead releases to TRI. Lead remains in the environment for long periods of time and, at high levels, is toxic to humans. Currently, facilities are not required to report their lead and lead compound releases unless they manufacture or process more than 25,000 pounds or use more than 10,000 pounds. Under the proposed rule, the reporting threshold would be lowered to 10 pounds. This would substantially increase TRI reporting by industry by about 1,390 facilities or about 15,000 reports.

EPA will ensure that small, minority and women-owned businesses receive a "fair share" of Agency procurement dollars. This "fair share" may be received either directly or indirectly through EPA grants, contracts, cooperative agreements, or interagency agreements. Pursuant to P.L. 102-389, the Agency has a national goal of 8% utilization of minority and women-owned businesses in the total value of Agency procurements and financial assistance agreements. This activity will enhance the ability of small, minority and women-owned businesses to participate in the Agency's objective to protect public health.

Research

In 2001, the Agency will provide guidance for risk assessment to improve the scientific basis for decision making. To achieve this goal, the Agency's Risk Assessment Forum will focus in three areas: cumulative risk assessment, ecological risk assessment, and risk assessments for children. Efforts will result in technical guidance on the identification of appropriate age groupings for exposure assessments for children, technical issue papers, and a framework for preparing cumulative risk assessments. The Agency will also collect, manage, and present environmental information for the benefit of the Agency and the public in order to enhance the availability and utility of data, information, and tools for decision making. To that end, the Agency will develop new and/or update Agency consensus human health assessments of 21 environmental substances of high priority to EPA and make them publicly available on IRIS.

Expansion of Americans' Right-to Know About Their Environment

2001 Annual Performance Goals:

- In 2001, ensure that EPA's policies, programs and activities address disproportionately exposed and under-represented population issues so that no segment suffers disproportionately from adverse health and environmental effects.

- In 2001, improve public access to compliance and enforcement documents and data through multimedia data integration projects and other studies, analyses and communication/outreach activities.

- In 2001, provide guidance for risk assessment to improve the scientific basis of environmental decision making.

- In 2001, process all submitted facility chemical release reports; publish annual summary of TRI data; provide improved information to the public about TRI chemicals; and maximize public access to TRI information.

Goal 7: Right-to-Know Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$2,024.7	$2,128.2
Congressional Projects	$1,968.5	$2,173.3
Congressional/Legislative Analysis	$3,119.0	$3,274.6
Direct Public Information and Assistance	$4,248.9	$4,789.3
Drinking Water Consumer Awareness	$1,537.2	$1,595.8
EMPACT	$9,691.5	$11,089.6
Environmental Education	$7,271.1	$9,390.7
GLOBE	$1,000.0	$1,000.0
Integrated Information Initiative	$866.7	$30,936.0
NACEPT Support	$1,822.5	$2,166.7
NAFTA Implementation	$507.2	$603.7
National Association Liaison	$322.4	$337.4
Pesticide Registration	$4,019.3	$4,446.1
Pesticide Reregistration	$4,018.1	$4,446.1
Regional Management	$254.3	$405.5
Regional Operations and Liaison	$598.3	$613.5
Reinvention Programs, Development and Coordination	$0.0	$2,152.5
Rent, Utilities and Securities	$849.8	$878.5
SBREFA	$777.3	$801.9
Small Business Ombudsman	$1,120.3	$1,162.6
Small, Minority, Women-Owned Business Assistance	$2,188.3	$2,367.4
System Modernization	$13,692.9	$13,692.9
Toxic Release Inventory / Right-to-Know	$17,671.8	$17,647.7
TOTAL	**$79,570.1**	**$118,100.0**

Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems

Strategic Goal: EPA will develop and apply the best available science for addressing current and future environmental hazards, as well as new approaches toward improving environmental protection.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 vs FY 2000 Delta
Sound Science, Improved Understanding of Env. Risk and Greater Innovation to Address Env. Problems	**$330,510.3**	**$328,757.7**	**-$1,752.6**
Research for Ecosystem Assessment and Restoration	$120,401.8	$115,130.3	-$5,271.5
Research for Human Health Risk Assessment	$53,678.0	$58,324.7	$4,646.7
Research to Detect Emerging Risk Issues	$46,106.5	$54,357.3	$8,250.8
Pollution Prevention and New Technology For Environmental Protections	$68,172.4	$52,564.4	-$15,608.0
Increase Use of Integrated, Holistic, Partnership Approaches	$9,286.8	$17,088.5	$7,801.7
Increase Opportunities for Sector Based Approaches	$19,703.4	$15,921.3	-$3,782.1
Regional Enhancement of Ability to Quantify Environmental Outcomes	$6,089.0	$7,756.8	$1,667.8
Science Advisory Board Peer Review	$2,861.7	$2,674.0	-$187.7
Incorporate Innovative Approaches to Environmental Management	$4,210.7	$4,940.4	$729.7
Total Workyears:	1,057.5	1,048.6	-8.9

Means and Strategy:

EPA is continuing to ensure that it is a source of sound scientific and technical information, and that it is on the leading edge of environmental protection innovations that will allow achievement of our strategic objectives. The Agency consults a number of expert sources, both internal and external, and uses several deliberative steps in planning its research programs. As a starting point, the Agency draws input from the EPA Strategic Plan, available research plans, EPA program offices and regions, Federal research partners, and outside peer advisory bodies such as the Science Advisory Board (SAB) and others. This input is used internally by cross-office teams that prioritize research areas using risk and other factors such as National Science and Technology Council (NSTC) research and development priorities, client office

priorities, court orders and legislative mandates. EPA's research program will increase our understanding of environmental processes and our capability to assess environmental risks – not only to human health, but also to ecosystems.

In the area of ecosystem protection research, EPA will strive to establish baseline conditions from which changes, and ultimately trends, in the ecological condition of the Nation's estuaries can be confidently documented, and from which the results of environmental management policies can be evaluated at regional scales. Currently, there is a patchwork of monitoring underway in the estuaries of the U.S. Due to differences in objectives, methods, monitoring designs and needs, these data cannot be combined to estimate, with known confidence, the magnitude or extent of improvement or degradation regionally or nationally in this economically critical resource. Therefore, the ability to demonstrate success or failure of increasingly flexible watershed management policies, regionally and nationally, is also not possible. By the end of 2001, the methods, designs and summary of existing monitoring programs will be in place to develop the baseline required to address these weaknesses. This work is an important step toward providing the scientific understanding to measure, model, maintain, or restore, at multiple scales, the integrity and sustainability of ecosystems.

In order to improve the scientific basis to identify, characterize, assess, and manage environmental exposures that pose the greatest health risks to the American public, EPA is committed to developing and verifying innovative methods and models for assessing the susceptibilities of populations to environmental agents, aimed at enhancing current risk assessment and management strategies and guidance. The Agency will develop initial measurements, methods, and models to evaluate exposures and effects of environmental contaminants, particularly in children. Many of the current human health risk assessment methods, models, and data bases are based on environmental risks for adults. The goal of this research is to address the risks of environmental contaminants in children. This information will be useful in determining whether children are more susceptible to environmental risks than adults and how to assess risks to children.

EPA's leadership role in environmental protection requires a continuing, vigilant search for emerging issues to protect both human and ecosystem health. The Agency will continue to strive to establish research capability and mechanisms to anticipate and identify environmental or other changes that may portend future risk. EPA is currently attempting to focus some of its planning processes and research more expansively on the future. EPA is currently investigating with the help of the National Academy for Public Administration (NAPA) a number of futures methodologies for their potential use in strategic, multi-year, and annual planning efforts. Benefits will include

an improved framework for decision-making, increased ability to anticipate and perhaps deter serious environmental risks, and enhanced communication with the public and other stakeholders.

The Agency also seeks to develop and verify improved tools, methodologies, and technologies for modeling, measuring, characterizing, preventing, controlling, and cleaning up contaminants associated with high priority human health and environmental problems. In order to do this, EPA will develop, evaluate, and deliver technologies and approaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Emphasis will be placed on preventive approaches for industries and communities having difficulty meeting control/emission/effluent standards. The Agency is accumulating data on performance and costs of environmental pollution prevention and control technologies which will serve as a basis for EPA as well as other organizations to evaluate and compare effectiveness and costs of technologies developed within and outside the Agency.

EPA's strategy for solving environmental problems and improving our system of environmental protection includes developing, implementing and institutionalizing new policy tools, collaborative community-based and sector-based strategies, and the capacity to experiment and test innovative ideas that result in better environmental outcomes. In each area, EPA is looking to advance the application of the innovative tool or approach by promoting broader testing and incorporation into our system of environmental protection. For example, EPA's Permit Action Plan outlines a broad strategy for building the next generation of environmental permitting. This strategy will harmonize requirements across media and will make permitting more accessible to the public and more flexible for facilities.

EPA's community-based approach works to provide integrated assessment tools and information and direct assistance for environmental protection in partnership with local, state, and tribal governments. The work focuses on building the capacity of communities to work effectively at identifying and solving environmental issues in ways that support healthy local economies and improved quality of life.

Sector strategies complement current EPA activities by allowing the Agency to approach issues more holistically; tailor efforts to the particular characteristics of each sector; identify related groups of stakeholders with interest in a set of issues; link EPA's efforts with those of other agencies; and craft new approaches to environmental protection. The experience gained in working with six industry sectors on the Common Sense Initiative provides the basis for moving forward with sector-based approaches to environmental protection.

Sustainable industry programs serve as incubators and developers of innovative approaches to environmental policy-making, testing alternative

regulatory and programmatic approaches through regional projects, and multi-stakeholder processes.

Project XL provides regulated entities a gateway to work with EPA, its co-regulators, and other stakeholders to develop and implement alternative environmental management strategies that achieve superior environmental performance in exchange for regulatory flexibility. These initiatives offer a balance between the uncertainty in testing promising new approaches and safeguards to ensure the protection of human health and the environment. These pilots, if successful, will be integrated into our system of environmental protection. Sector-based and facility-based approaches will offer valuable supplements to traditional media-specific environmental policy and, along with place-based and pollutant-based approaches, offer a menu of solutions to environmental issues.

Highlights:

Research for Ecosystem Assessment and Restoration

In order to balance the growth of human activity and the need to protect the environment, it is important to understand the current condition of ecosystems, what stressors are changing that condition, what are the effects of those changes, and what can be done to prevent, mitigate, or adapt to those changes. By the end of 2001, EPA will establish baseline conditions from which changes, and ultimately trends, in the ecological condition of the Nation's estuaries can be confidently documented, and from which the results of environmental management policies can be evaluated at regional scales. As part of this effort, EPA will issue a report describing the condition of the Nation's estuaries. This report will provide EPA with information needed to determine existing conditions and to develop baseline information from which we can demonstrate the success of watershed management policies.

Research for Human Health Risk Assessment

An important aim of human health research in 2001 will be development of initial measurements, methods and models to evaluate exposures and effects of environmental contaminants, particularly in children. The Agency will continue to support a children's research program specifically targeted to address major areas of uncertainty and susceptibility. An important element of the program is the children's research centers. These nine university-based research centers explore a range of children's risk issues, including childhood asthma and development disorders. Other children's research focus on data gaps and endocrine disruptors. A major product of this research in 2001 will be guidance on improving pharmacokinetic model usage for children. The research undertaken in this goal supports the ongoing efforts of the Interagency President's Task Force on Environmental Health Risks and Safety Risks to Children.

Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems

Research to Detect Emerging Risk Issues

In recent years, EPA has begun moving beyond environmental regulation to environmental protection in its broadest sense, including anticipating and preventing problems before they mushroom into major concerns. In 2001, research will focus on improving our understanding of the impact on human health and the environment of exposure to potential environmental pollutants and developing approaches to reduce human health and ecological risks. This research will result in accessible, common methodologies for combined human health and ecological risk assessments, and sound approaches for risk management so that decision-makers will have the integrated view of risk needed to make intelligent decisions.

Pollution Prevention and New Technology for Environmental Protections

EPA supports pollution prevention (P2) as a necessary and logical strategy for dealing with high-risk human health and environmental problems that are addressed by Federal, environmental, and health, and safety regulations. P2 research will test the ability of risk assessors and risk managers to develop tools and methodologies which are meaningful and understandable to the public in terms of the costs and benefits associated with the magnitude of the risk that is identified. In the area of new technologies, the Agency also looks to test the performance of commercial-ready technologies through its Environmental Technology Verification (ETV) program. With broad support from industry and other Federal partners, the ETV program will continue to verify the environmental performance characteristics of technologies in all media (e.g., industrial pollution prevention, recycling and waste treatment; field monitoring technologies; and air pollution control and greenhouse gas reduction technologies) under its twelve pilots. In 2001, the Agency will deliver a report to Congress on the status and effectiveness of the ETV program during its first five years.

A cornerstone of EPA's ability to collect, manage and provide access to information is a strong commitment to data quality, which is a key foundation in the work of the Office of Environmental Information. Building on the initial work in EPA's Data Quality Action Plan, we will work to create a more comprehensive and clear understanding of data quality, and its application to our environmental and public health mission. Creating this understanding will be an early focus of the Office of Environmental Information and it's Quality Staff. We will use a Quality Board which will have broad responsibility for leadership, coordination, and oversight of issues related to quality. The Board, which will be supported by a full-time staff, will serve as the EPA focus for ensuring that data quality policies are developed and implemented in EPA programs and applied throughout the life cycle of information that EPA generates and uses.

Sound Science, Improved Understanding of Environmental Risk, and Greater Innovation to Address Environmental Problems

Increased Community-Based Approaches

In 2001, EPA will continue to strengthen local partnerships to address serious environmental risks to human health and ecosystems. Regional Geographic Initiatives (RGI) are an approach EPA Regional offices use to partner with states, local governments, private organizations, and others to solve environmental problems. The work targets specific environmental problems identified as high risks to human health and ecosystems, which are not adequately addressed by other Agency resources.

Increased Facility and Sector-Based Strategies

EPA's strategy for improving our system of environmental protection is to pilot innovative approaches designed to achieve better protection at less cost and, if successful, integrate those pilots into our core practices. Through Project XL, the Agency has a number of innovative ideas that are being tested or implemented in various environmental programs that will lead to changes in rules, permits, information management, environmental stewardship, enforcement and compliance assurance, stakeholder involvement and Agency culture. For example, in Project XL, EPA is testing ways to streamline permitting so manufacturers can respond more quickly to market demands. In another XL project, EPA is testing alternative ways to implement air regulations to encourage downtown redevelopment and reduce the pressure for sprawl.

A sector-based approach to solving environmental issues complements EPA's analytic toolbox, including community-based, pollutant-based, and traditional media-based approaches. Sector approaches can be used to solve environmental issues as a sole approach, or can be used to complement other approaches to focus on a particular source of a particular pollutant in a particular ecosystem. By using these approaches together to target Agency efforts, focused results are achieved in the most cost-effective and efficient manner possible. By utilizing a sector approach in a collaborative manner, one can garner the information and resources to deal with issues more holistically; tailor efforts to the particular characteristics of each sector; identify related groups of stakeholders with interest in a set of issues; link EPA's efforts with those of other agencies; and craft new approaches to environmental protection. Sustainable industry programs serve as incubators and developers of innovative approaches to environmental policy-making, and test alternative regulatory and programmatic approaches through regional projects and multi-stakeholder processes.

Science Advisory Board Peer Review and Consultations

The Agency will continue to support the activities, principally peer reviews, of the Science Advisory Board (SAB), which provides independent technical advice to Congress and the Administrator on scientific, engineering, and economic issues that serve as the underpinnings for Agency positions,

from research direction to regulations.

The agenda of SAB activities is derived from requests from Congress and the Agency, as well as some self-initiated activities aimed at highlighting attention to areas of concern that may have escaped Agency attention or may be incompletely addressed by individual Agency office programs.

The SAB's broad objective is to help the Agency to "do the right science" and to use the results of that science appropriately and effectively in making regulatory decisions. In so doing, the SAB promotes sound science within the Agency and a wider recognition of the quality of that science outside the Agency. In this regard, the SAB is active in consulting with the Agency on how to incorporate science appropriately and effectively into the new approaches the Agency is using to make environmental decisions.

The use of the SAB for peer reviews also supports the Agency-wide commitment to sound science based on rigorous peer-review, a commitment that has been re-emphasized as a result of GAO findings in 1997 that such efforts are applied unevenly within the Agency. In addition, the SAB's activities provide the kind of support described in the 1999 National Academy of Sciences report, "Evaluating Federal Research Programs: Research and the Government Performance and Results Act", which concludes that the most effective way of evaluating a federal research program is by expert review, which includes quality review, relevance review, and bench-marking.

2001 Annual Performance Goals:

- In 2001, establish baseline conditions from which changes, and ultimately trends, in the ecological condition of the Nation's estuaries can be confidently documented, and from which the results of environmental management policies can be evaluated at regional scales.

- In 2001, develop, evaluate, and deliver technologies and approaches that eliminate, minimize, or control high risk pollutants from multiple sectors. Emphasis will be placed on preventive approaches for industries and communities having difficulty meeting control/emission/ effluent standards.

- EPA will implement significant improvements to core Agency functions identified as high environmental or economic impact identified during FY 2000 priority setting (Project XL).

Goal 8: Sound Science Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$3,436.1	$3,680.4
Coastal Environmental Monitoring	$6,954.0	$7,255.4
Common Sense Initiative	$1,646.8	$3,482.2
CWAP Related Research	$4,440.6	$5,298.7
Endocrine Disruptor Research	$8,038.0	$13,241.1
Environmental Monitoring and Assessment Program (EMAP)	$30,543.5	$30,157.8
Environmental Technology Verification (ETV)	$6,392.6	$6,699.5
Exploratory Grants Program	$10,803.5	$10,669.0
Human Health Research	$48,883.9	$52,988.6
Innovative Community Partnership Program	$309.8	$4,841.5
Pollution Prevention Tools and Technologies	$27,442.0	$19,469.3
Project XL	$1,750.5	$1,791.6
Regional Geographic Program	$11,989.8	$12,193.1
Regional Science and Technology	$6,111.3	$7,156.8
Reinvention Programs, Development and Coordination	$19,421.4	$21,351.5
Rent, Utilities and Securities	$20,804.1	$16,591.9
Science Advisory Board	$2,860.6	$2,674.0
STAR Fellowships Program	$8,952.6	$10,089.9
Urban Environmental Quality and Human Health	$0.0	$3,395.0
TOTAL	**$220,781.1**	**$233,027.3**

A Credible Deterrent to Pollution and Greater Compliance with the Law

Strategic Goal: EPA will ensure full compliance with laws intended to protect human health and the environment.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 – FY 2000 Delta
A Credible Deterrent to Pollution and Greater Compliance with the Law	**$372,755.6**	**$403,771.5**	**$31,015.9**
Enforcement Tools to Reduce Non-Compliance	$323,338.2	$351,306.7	$27,968.5
Increase Use of Auditing, Self-Policing Policies	$49,417.4	$52,464.8	$3,047.4
Total Workyears:	2,570.8	2,572.7	1.9

Means and Strategy:

Many of the environmental improvements in this country during the past three decades can be attributed to a strong set of environmental laws and EPA's aggressive enforcement of them. Due to the breadth and diversity of private, public, and federal facilities regulated by EPA under various statutes, the Agency needs to target its enforcement and compliance assurance activities strategically 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. A strong enforcement program identifies non-compliance problems, punishes violators, strives to secure a level economic playing field for law-abiding companies, and deters future violations. 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 risks to human health or the environment, display patterns of non-compliance and include disproportionately exposed populations.

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. Further, EPA cooperates with other nations to enforce and ensure environmental regulations compliance. At the Federal level, EPA addresses its responsibilities under the National Environmental Policy Act (NEPA) by seeking remedies for potentially adverse impacts of major actions taken by EPA and other Federal agencies.

The Agency's enforcement and compliance assurance program uses

A Credible Deterrent to Pollution and Greater Compliance with the Law

voluntary compliance assistance and incentive tools to ensure compliance with regulatory requirements and reduce adverse public health and environmental problems. Because government resources are limited, maximum compliance requires the active efforts of the regulated community to police itself. EPA supports the regulated community by assuring that requirements are clearly understood and by helping industry find cost-effective options to comply through the use of pollution prevention and innovative technology. EPA will continue to investigate options for encouraging self-directed audits and disclosure; measure and evaluate the effectiveness of Agency programs in improving compliance rates; provide information and compliance assistance to the regulated community; and develop innovative approaches to meeting environmental standards through better communication, cooperative approaches and application of new technologies.

Highlights

Compliance Monitoring and Civil and Criminal Enforcement

EPA will continue to support deterrence and compliance activities by devoting a vast majority of its compliance monitoring resources for on-site inspections and investigations including monitoring, sampling and emissions testing. In 2001, the compliance monitoring program will continue the cross-cutting, multi-media initiatives begun in 1999 which make full use of the Agency's statutory authorities.

The civil and criminal enforcement program, in contributing to EPA's goal to protect public health and the environment, targets its actions based on health and environmental risk. Further, the program aims to level the economic playing field by ensuring that violators do not realize an economic benefit from non-compliance and seeks to deter future violations. In 2001, the Agency's enforcement initiatives include continued enforcement of regulated sources contributing to beach and shellfish area closings, in support of the Clean Water Action Plan (CWAP), enforcement of the lead paint rules, and modernization of its data systems to assist in targeting compliance and enforcement efforts.

Compliance Incentives and Assistance

The Agency will continue to support the regulated communities' compliance with environmental requirements through voluntary compliance incentives and assistance programs. In 2001, the compliance incentives program will continue to implement the policy on Incentives for Self-Policing as a core element of the enforcement and compliance assurance program. In addition, the Agency will provide information and technical assistance to the regulated community through the compliance assistance program to increase its understanding of all statutory or regulatory environmental requirements, thereby reducing risk to human health and the environment and gaining measurable improvements in compliance. The program will also continue to develop strategies and

compliance assistance tools that will support initiatives targeted toward improving compliance in specific industrial and commercial sectors or with certain regulatory requirements.

State and Tribal Capacity

A strong state and tribal enforcement and compliance assurance presence contributes to creating deterrence and to reducing non-compliance. In 2001, the enforcement and compliance assurance programs will work with and support state agencies implementing authorized, delegated, or approved environmental programs. Consistent with regulations and EPA policy, the Agency will provide an appropriate level of oversight and guidance to states to ensure that environmental regulations are fairly and consistently enforced across the nation.

The Agency provides grant funding, oversight, training and technical assistance to states and tribes. The state and tribal grant programs are designed to build environmental partnerships with states and tribes and strengthen their ability to address environmental and public health threats. These threats include contaminated drinking water, pesticides in food, hazardous waste, toxic substances and air pollution.

2001 Annual Performance Goals

- In 2001, maintain and improve the quality and accuracy of EPA's enforcement and compliance data to identify noncompliance and focus on human health and environmental problems.

- In 2001, improve the capacity of states, localities and tribes to conduct enforcement and compliance programs. EPA will provide training as well as assistance with state and tribal inspections to build capacity, including implementation of the inspector credentials program for tribal law enforcement personnel.

- In 2001, EPA will direct enforcement actions to maximize compliance and address environmental and human health problems; 75% of concluded enforcement actions will require environmental or human health improvements such as pollutant reductions and/or changes in practices at facilities.

- In 2001, EPA will conduct 15,000 inspections, 550 criminal investigations, and 150 civil investigations targeted to areas that pose risks to human health or the environment, display patterns of non-compliance or include disproportionately exposed populations.

- In 2001, increase opportunities through new targeted sector initiatives for industries to voluntarily self-disclose and correct violations on a corporate-wide basis.

- In 2001, promote the use of Environmental Management Systems (EMS) to address known compliance

and performance problems.

- In 2001, ensure compliance with legal requirements for proper handling of hazardous waste imports and exports.

Goal 9: Credible Deterrent Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Services	$5,144.2	$5,444.6
Civil Enforcement	$82,350.9	$92,090.1
Civil Enforcement - CWAP/AFO Related	$935.6	$1,008.6
Common Sense Initiative	$448.6	$471.8
Compliance Assistance and Centers	$22,549.7	$23,711.8
Compliance Incentives	$5,195.7	$5,679.1
Compliance Monitoring	$56,404.2	$67,519.5
Criminal Enforcement	$37,128.8	$41,530.2
Enforcement Training	$5,705.4	$5,728.2
NEPA Implementation	$9,901.4	$10,711.9
Project XL	$2,635.4	$2,880.0
RCRA State Grants	$43,222.7	$43,222.7
Regional Management	$1,058.8	$1,101.7
Rent, Utilities and Securities	$38,719.6	$44,878.2
State Pesticides Enforcement Grants	$19,911.6	$19,911.6
State Toxics Enforcement Grants	$7,364.2	$7,364.2
TOTAL	**$338,676.8**	**$373,254.2**

Effective Management

Strategic Goal: EPA will establish a management infrastructure that will set and implement the highest quality standards for effective internal management and fiscal responsibility.

Resource Summary
(dollars in thousands)

	FY 2000 Enacted	FY 2001 Request	FY 2001 - FY 2000 Delta
Effective Management	**$447,231.0**	**$464,598.9**	**$17,367.9**
Executive Leadership	$33,547.1	$37,066.7	$3,519.6
Management Services, Administrative, and Stewardship	$198,776.4	$220,125.2	$ 21,348.8
Building Operations, Utilities and New Construction	$171,375.0	$161,518.1	-$9,856.9
Provide Audit and Investigative Products and Services	$43,532.5	$45,888.9	$2,356.4
Total Workyears:	2,228.4	2,256.2	27.8

Means and Strategy:

The Agency will continue to provide vision and leadership as well as direction and policy oversight for all its programs and partnerships. In doing so, EPA's strategy will focus on:

- Recognizing the special vulnerability of children to environmental risks and facilitating the intensified commitment to protect children's health;
- Preparing EPA for future challenges by building the skills of its workforce and fostering diversity;
- Building and managing safe and healthy workplaces;
- Ensuring a high level of integrity and accountability in the management of grants and contracts;
- Encouraging testing and adopting innovative tools and technologies to achieve better protection of human health and the environment at less cost;
- Changing the way we do business by working collaboratively with stakeholders, cutting red tape and finding ways to work smarter and more efficiently, and managing for better results; and
- Performing independent evaluations of Agency programs.

The Agency will continue its commitment to protect children's health

by targeting resources towards its many diverse children's activities, including working to assure that EPA's health-based standards consider risks to children and to continue to develop sound scientific methods for addressing risks to children from exposure to environmental pollutants. The Agency will also provide policy direction and guidance on equal employment opportunity and civil rights. The Agency's Administrative Law Judges and its Environmental Appeals Board Judges will issue decisions on administrative complaints and environmental adjudications, respectively, in a timely manner.

To achieve effective management of and accountability for EPA's fiscal resources, the Agency will improve capabilities to make cost-effective investments for environmental results. EPA will build on the success of its integrated planning, budgeting, analysis and accountability program while continuing to enhance its ability to provide the highest quality fiscal resources management. EPA collaborates extensively with partners and stakeholders to forge the partnerships required for shared approaches to meeting the challenges of the Government Performance and Results Act (GPRA). EPA consults with internal customers on fiscal management services to meet their needs for timeliness, efficiency and quality.

The Agency will continue to invest in human resources to ensure that it has the scientific and technology skills needed for the future, and that the workforce reflects the talents and perspectives of a growing multi-cultural society. This strategy will enable EPA to attract, retain and further develop a diverse workforce prepared to meet the Agency's current and future challenges.

The Agency will provide a quality work environment that places high value on employee safety and security and the design and establishment of state-of-the-art laboratories. These facilities provide the tools essential for researching innovative solutions to current and future environmental problems and enhancing our understanding of environmental risks. Plans for building operations and new construction support existing infrastructure requirements that ensure healthy, safe and secure work environments and reflect pollution prevention values of EPA, in addition to fulfilling the scientific and functional requirements of our programs. EPA has adopted an aggressive strategy to utilize energy savings performance contracts in order to reduce energy consumption significantly over the next five years.

In the contracts area, Agency efforts focus on selecting the appropriate contract vehicle to deliver the best value for the taxpayer. Performance based contracts allow the Government to manage for results, not process. Under this system the Government pays for results, not effort or process, and contractors are encouraged to determine the best and most cost effective ways to fulfill the Government's needs. Performance based contracts save time and money for the Agency by reducing unnecessary contract administration costs. This is accomplished by moving away from cost reimbursement and level of effort to fixed price completion

contracts. In addition, the Agency will put increased emphasis on contract oversight, including speeding up the contract processes through fast-track system enhancements and automation efforts.

Audit, investigative, and advisory services contribute to effective management by facilitating the accomplishment of the Agency's mission. Specifically, audits and advisory services lead to improved economy, efficiency, and effectiveness in EPA business practices and assist in the attainment of environmental goals. Investigations detect and deter fraud and other improprieties that undermine the integrity of EPA programs and resources.

Highlights:

Agency management provides vision and leadership, and conducts policy oversight for all Agency programs. The effectiveness of EPA's management will determine, in large measure, how successful we will be in pursuit of the other goals identified in the Agency's annual plan. Sound management principles, practices, results-based planning and budgeting, fiscal accountability, quality customer service, rational policy guidance and careful stewardship of our resources are the foundation for everything EPA does to advance the protection of human health and the environment.

In keeping with our commitment to protect children's health, the Agency will direct resources toward the programs that will protect children from a range of environmental hazards. In 2001, the Agency will focus on reducing asthma through reduction and avoidance of key asthma triggers, including environmental tobacco smoke, prevalent indoor allergens and ambient air pollution. Childhood lead poisoning is increasingly a problem that is occurring in isolated pockets, such as low-income minority neighborhoods, and areas of older housing. Inspection and enforcement can be targeted to address these areas with the most vulnerable children. EPA will focus inspection and enforcement efforts in these targeted communities since, outside of federally-assisted and federally-owned housing, there is no mandate for hazard evaluation and control in approximately 3 million low-income units built before 1946. Disclosure should provide an incentive for action; enforcement and compliance assistance is needed to ensure that the disclosure program works to inform the residents of potential hazards in these units. EPA will ensure that its standards address the heightened risks faced by children and that all covered regulations being revised or developed in EPA address children's environmental health issues.

The Agency expects to achieve cost effective investment in environmental protection and public health through responsible management, increased analysis and accountability, and high quality customer service. In 2001, EPA will build on its progress in linking resources to environmental results through goals-based fiscal resources management. The Agency will provide more useful cost accounting information that will better inform environmental decision making. EPA will make continued progress in

evaluating the environmental results of its program activities. Highlights of expected Agency 2001 achievements in effective management are:

- The Agency will continue to improve the accountability process that provides timely performance information used in strategic and annual planning and budget formulation.

- EPA will maintain a clean audit opinion of the Agency's financial statements that demonstrates the highest caliber resource stewardship and gives credibility and reliability to the Agency financial information.

- EPA will substantially complete the implementation of a new payroll system that will reduce processing costs and burdens through use of efficient technology.

- EPA will begin implementation of a long term solution for the replacement of the Agency's major financial system and ancillary specialized systems that will better integrate these systems with other Agency resource databases and administrative systems.

The Agency will continue to strengthen pre-award and post-award management of assistance agreements. For example, by 2001, in addition to planning to eliminate the close-out backlog of non-construction grant ending before September 30, 2000, EPA will eliminate the entire close-out backlog for interagency agreements that ended before September 30, 1997. In addition, in 2001, the Agency will continue to improve efficiencies in the contract process, while saving taxpayers dollars, through use of performance-based contracts and reduced use of cost reimbursable contracts. All new contracts will be evaluated for possible award or conversion to performance based contracts. In addition, the Agency will put increased emphasis on contract oversight, including speeding up the contract process through fast-track system enhancements and automation efforts.

In 2001, the Agency will continue its workforce development strategy. The purpose of this initiative is to attract, recruit, develop and deploy EPA's employees to address the critical environmental issues of the 21st century. This initiative will implement a support staff development pilot to improve the professionalism and performance of our clerical workforce; will identify and develop career tracks for employees skills and tools requirements needed to fully develop in their chosen occupation; and will develop leadership skills in employees throughout the organization while improving the managerial competencies of our line managers. A significant component of the initiative is the EPA Intern Program that is designed to hire diverse, high performing individuals who will become part of the Agency's future leadership.

The Agency's building operations and new construction budget ensures a healthy, safe and secure work environment for its employees, and integrates pollution prevention and state-of-the-art technology into its daily activities. The Agency will complete construction of the new consolidated

research lab at Research Triangle Park in North Carolina. New construction and renovation activities will continue at the New Headquarters project. EPA will also address critical repairs in EPA facilities related to employee health and safety. These facilities provide the tools essential for researching innovative solutions to current and future environmental problems and enhancing our understanding of environmental risks. The Agency will also implement a Laboratories for the 21st Century "Labs 21" initiative, which will include a demonstration fuel cell project at EPA's Ft. Meade laboratory. This is an initiative in accordance with the Executive Order issued on June 3, 1999, that set energy and pollution targets for all federal facilities, including laboratories.

The Office of Inspector General (OIG) will conduct and supervise independent and objective audits and investigations relating to Agency programs and operations. The OIG will also review and make recommendations regarding existing and proposed legislation and regulations. The Office of Audit will conduct four types of audits: program, financial statement, assistance agreement, and contract audits. The Office of Investigations will perform four types of investigations: program integrity, assistance agreement, contract and procurement, and employee integrity investigations. In addition, the OIG will provide advisory/consulting services and program evaluations. Combined, these activities promote economy, efficiency, and effectiveness within the Agency, and prevent and detect fraud, waste, and abuse. The OIG will keep the EPA Administrator and Congress fully informed of problems and deficiencies identified in Agency programs and operations and the necessity for corrective actions.

2001 Annual Performance Goals:

- In 2001, EPA will install a demonstration fuel cell at Ft. Meade Laboratory.
- In 2001, EPA will ensure personnel are relocated to new space as scheduled.
- In 2001, EPA will ensure that all new and ongoing construction projects are progressing and completed as scheduled.
- In 2001, EPA continues improving how it measures progress in achieving its strategic objectives and annual goals by increasing external performance goals and measures characterized as outcomes by 4% in the 2002 Annual Performance Plan.
- In 2001, EPA's fiscal management, processes, operation, and systems reflect sound financial management principles.
- In 2001, evaluate the effectiveness of the economic guidance issued in 2000, "A Practical Guide to Valuing Children's Health Effects."
- In 2001, provide independent audits, evaluations, and advisory services, responsive to customers and clients, leading to improved economy, efficiency and effectiveness in

Agency business practices and attainment of its environment goals.

Goal 10: Effective Management Key Programs

(dollars in thousands)

Key Program	FY 2000 Enacted	FY 2001 President's Budget
Administrative Law	$2,470.3	$2,465.0
Administrative Services	$35,053.0	$38,993.7
Assistance Agreement Audits	$7,349.3	$5,363.9
Assistance Agreement Investigations	$2,762.8	$2,771.1
Civil Rights/Title VI Compliance	$1,331.7	$1,404.5
Contract and Procurement Investigations	$3,005.1	$2,986.3
Contract Audits	$5,439.5	$5,358.0
EMPACT	$599.7	$526.1
Employee Integrity Investigations	$991.8	$923.2
Environmental Appeals Board	$1,880.8	$1,865.2
Environmental Finance Center Grants (EFC)	$1,250.0	$480.0
Financial Statement Audits	$4,334.3	$4,256.6
Immediate Office of the Administrator	$3,729.8	$3,008.2
Information Technology Management	$15,689.9	$14,641.4
Planning and Resource Management	$44,079.9	$53,739.9
Planning, Analysis, and Results - IG	$0.0	$1,615.8
Program Audits	$11,025.6	$12,791.6
Program Evaluation - IG	$1,636.3	$2,774.1
Program Integrity Investigations	$1,471.7	$1,486.3
Regional Management	$6,080.0	$6,762.1
Regional Program Infrastructure	$29,883.3	$28,670.4
Regional Science and Technology	$1,372.5	$1,372.5
Rent, Utilities and Securities	$30,616.8	$37,867.7
TOTAL	**$212,054.1**	**$232,123.6**

ADDITIONAL INFORMATION

Better America Bonds

As one feature of the Administration's comprehensive Livable Communities Initiative, Better America Bonds will help communities grow in ways that ensure sustainable economic growth. The President's budget proposes a new, innovative, financing tool providing $10.75 billion in bonding authority to state, local, and tribal governments over five years funded through Federal tax credits. In lieu of interest payments from state and local governments, the Better America Bond program will provide to bond holders approximately $1.5 billion in net tax credits over the 15 year life of the $2.15 billion in proposed 2001 bond authority.

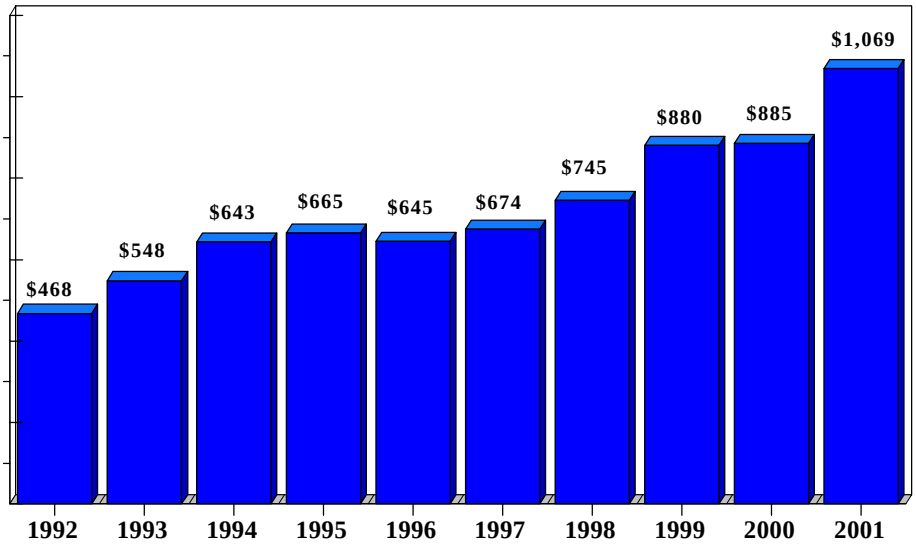
EPA will be at the forefront of giving local communities maximum flexibility and resources to address the most pressing environmental needs. This new tool will allow communities to preserve green space, create or restore urban parks, protect water quality, and clean up Brownfields. Communities will, for instance, be able to protect land either by acquiring title or purchasing permanent easements. Bond proceeds can also be used for reforestation, and replanting. Pressure to develop green space from previously undeveloped properties can be lessened by cleaning up alternative land for redevelopment such as Brownfields for new economic uses. Rivers, lakes, coastal waters, and wetlands can be restored or protected from polluted runoff through land acquisition and/or other measures.

State, local and tribal governments will submit proposals to EPA for initial review in consultation with other Agencies. EPA will award bond authority in conjunction with the Vice President's Community Empowerment Board and other Agencies. Preferences will be given to regional proposals that reflect collaborative planning by neighboring communities, particularly partnerships among cities, suburbs, and rural areas.

Through the availability of these bonds supported by federal tax credits, EPA will assist in building healthy, livable communities for the 21st century. Better America Bonds will enable states, tribes and local governments to reconnect with their land and water, preserve green space and provide attractive settings for economic development.

Categorical Program Grants (STAG)

(dollars in millions)



In 2001, the President's Budget requests a total of $1,069.0 million for 20 'categorical' program grants for state and tribal governments. This is an increase of $184.0 million over 2000. These grants are part of EPA's Operating Programs even though they are funded in the State and Tribal Assistance Grant (STAG) appropriation account. EPA will continue to pursue its strategy of building and supporting state, local and tribal capacity to implement, operate, and enforce the Nation's environmental laws. Most environmental laws envision establishment of a decentralized nationwide structure to protect public health and the environment. In this way, environmental goals will ultimately be achieved through the actions, programs, and commitments of state, tribal and local governments, organizations and citizens.

In 2001, EPA will continue to give more flexibility to state and tribal governments to manage their environmental programs as well as provide technical and financial assistance. First, EPA and its state and tribal partners will continue implementing the National Environmental Performance Partnership System (NEPPS). NEPPS is designed to allow states more flexibility to operate their programs with less interference from the Federal government, while increasing emphasis on measuring and reporting environmental improvements. Second, Performance Partnership Grants (PPGs) will continue to allow states and tribes funding flexibility to combine categorical program grants to address environmental priorities.

HIGHLIGHTS:

Water Quality Grant Programs

In 2001, the President's Budget requests a total of $494.5 million for water quality program grants to help state and tribes implement their water

pollution control programs. This amount represents a total increase of $145.0 million over 2000 for three specific initiatives:

♦ *Great Lakes Grant Program*

A new initiative in the amount of $ 50 million is requested to increase the pace of achieving cleanups and restoring the Nation's Great Lakes. Funds will support matching grants (with the Federal share not to exceed 60 percent of project costs) to state and local governments to implement a variety of activities including cleanup of contaminated sediments, storm water controls, wetlands restoration, acquisition of green ways and buffers, and other polluted runoff control measures in designated Aareas of concern.@

♦ *Water Pollution Control Grants*

A $45 million increase is requested for section 106 water quality program management grants targeted specifically to help states develop Total Maximum Daily Loads (TMDLs) for their impaired waterbodies. These TMDL allocations will serve as the basis for comprehensive implementation plans that integrate both point and nonpoint source controls to achieve water quality objectives. States would be required to provide at least 40 percent of state TMDL program costs.

♦ *Nonpoint Source Grants*

A $50 million increase is requested for non-point source (Section 319) grants. This will enable states with approved, upgraded nonpoint source programs to receive additional funding to implement Water Restoration Action Strategies. These strategies are response plans for waters not meeting Clean Water Act requirements.

Elimination of Tribal Cap on Non-Point Sources

In 2001, the President's Budget is proposing to permanently eliminate the stautory one-third-of-one-percent cap on Clean Water Act Section 319 Nonpoint Source Pollution grants that may be awarded to tribes. Tribes applying for and receiving Section 319 grants have steadily increased from two in 1991 to 11 in 1999. Twenty-two tribes have met the eligibility requirements to receive Section 319 grants. This proposal recognizes the increasing demand on the limited pool of Section 319 grant funds for tribal nonpoint source program needs.

Information Integration Initiative

In 2001, the President's Budget requests $16.0 million to help establish an integrated environmental information system. This initiative will provide a fundamentally new approach to management of environmental data and information. Building on work already begun in several states, EPA would work with our State partners and the private marketplace to build a single, integrated multi-media information system that would reduce the burden of environmental reporting, while providing the highest quality of environmental data at the national level. The majority of the requested funds would go to the states to advance the development of this system. The new approach will also accelerate EPA's

ability to have performance-based reporting, which will provide improved information for environmental assessment and decision-making.

Indian General Assistance Program Grants

In 2001, the President's Budget requests a total of $52.6 million for the Indian Environmental General Assistance Program (GAP). This amount represents an increase of $10 million over 2000 to primarily significantly increase the number of Federally recognized tribes that have at least one or two persons in their community to build a strong sustainable environment for the future. Tribes that already have an environmental presence will be able to develop more sustainable and comprehensive core environmental programs.

Air and Radiation Program Grants

In 2001, the President's Budget requests a total of $222.9 million for Air and Radiation Program grants to help state and tribal governments address air and radiation program requirements. This amount represents an increase of $5.0 million over 2000 to specifically support state and regional planning on regional haze. Since 1999, when a rule was issued addressing regional haze problems, states have been working through regional planning groups to reduce haze pollution prevalent in many of our national parks and wilderness areas. These increased funds are requested to strengthen state and regional groups' planning efforts to develop control strategies to reduce multi-state particulate matter pollution problems.

Hazardous Waste Financial Assistance

In 2001, the President's Budget requests a total of $106.6 million for the Hazardous Waste Financial Assistance Program. An increase of $8.0 million is requested to advance the pace of Resource Conservation and Recovery Act (RCRA) corrective action clean-ups. Through the RCRA clean-up reforms initiative, states and stakeholder involvement will be enhanced, impediments to clean-up actions will be reduced, and re-use of RCRA facilities will be encouraged.

Categorical Program Grants (STAG)

(dollars in thousands)

	FY 1999 Enacted	FY 2000 Enacted	FY 2001 President's Budget
Air & Radiation			
State and Local Assistance	$195,533.0	$198,690.0	$203,690.0
Tribal Assistance	$11,068.8	$11,068.8	$11,068.8
Radon	$8,158.0	$8,158.0	$8,158.0
	$214,759.8	**$217,916.8**	**$222,916.8**
Water			
Great Lakes	$0.0	$0.0	$50,000.0
Pollution Control (Section 106)	$115,529.3	$115,529.3	$160,529.3
Non-point Source	$200,000.0	$200,000.0	$250,000.0
Wetlands Program Development	$15,000.0	$15,000.0	$15,000.0
Water Quality Cooperative Agreements	$19,000.0	$19,000.0	$19,000.0
	$349,529.3	**$349,529.3**	**$494,529.3**
Drinking Water			
PWSS	$93,780.5	$93,305.5	$93,305.5
UIC	$10,500.0	$10,975.0	$10,975.0
	$104,280.5	**$104,280.5**	**$104,280.5**
Hazardous Waste			
H.W. Financial Assistance	$98,598.2	$98,598.2	$106,598.2
Underground Storage Tanks	$10,544.7	$11,944.7	$11,944.7
	$109,142.9	**$110,542.9**	**$118,542.9**
Pesticides & Toxics			
Pesticides Program Implementation	$13,114.6	$13,114.6	$13,114.6
Lead	$13,712.2	$13,712.2	$13,712.2
Toxic Substances Compliance [1]	$5,150.0	$5,150.0	$5,150.0
Pesticides Enforcement	$19,511.7	$19,911.6	$19,911.6
	$51,488.5	**$51,888.4**	**$51,888.4**
Multimedia			
Integrated Information Initiative	$0.0	$0.0	$16,000.0
Pollution Prevention	$5,999.5	$5,999.5	$5,999.5
Enforcement and Compliance [1]	$2,214.2	$2,214.2	$2,214.2
Indian General Assistance Program	$42,585.3	$42,628.4	$52,585.4
	$50,799.0	**$50,842.1**	**$76,799.1**
GRAND TOTAL:	**$880,000.0**	**$885,000.0**	**$1,068,957.0**

[1] In prior years, these grants were displayed as Toxic Enforcement Grants. They are both part of the Toxics Enforcement Key Program (Goal 9, Objectives 1 and 2).

Water and Air Infrastructure Financing

(dollars in millions)

Water and Air Infrastructure Financing	FY 2000 Enacted	FY 2001 President's Budget
Clean Water State Revolving Fund (CWSRF)	$1,345.4	$800.0
Drinking Water State Revolving Fund (DWSRF)	$820.0	$825.0
Mexican Border Projects	$50.0	$100.0
Special Needs Projects	$345.3	$28.0
Clean Air Partnership Fund	$0.0	$85.0
TOTAL:	**$2,560.8**	**$1,838.0**

Water and Air Infrastructure Funds

EPA's Clean Air Partnership Fund and Water Infrastructure Financing request totals $1,838.0 million. Funds in these programs support three goals in 2001: Clean Air, Clean and Safe Water, and Reducing Cross-Border Environmental Threats.

Clean Air Partnership Fund

In 2001 the Administration is launching an investment of $85.0 million for the Clean Air Partnership Fund – a program that provides financing for smart, multi-pollutant control strategies that will reduce air pollution as well as greenhouse gases, and provide healthy clean air to local citizens as soon as possible. Funds will be for projects demonstrating simultaneous early reductions in smog, soot or air toxics, as well as greenhouse gases.

Recognizing that cost restraints often play a part in businesses and municipalities investing in short-term, single pollutant strategies, the Clean Air Partnership Fund will encourage many industries to demonstrate long-range comprehensive pollution reduction strategies. Grants will be made available to states, local governments, and tribes under existing authority.

Water Infrastructure Financing

EPA's water infrastructure financing efforts support two of EPA's strategic goals: Clean and Safe Water, and Reducing Global and Cross-border Environmental Risks. The Nation's cities face a challenge to keep our rivers, streams, and beaches free from untreated sewage. Vast quantities of pollution contaminate residential areas and wildlife habitats along our border with Mexico. In Alaska native villages, more than 20,000 households lack even the most rudimentary 20th century sanitation facilities and technology.

In hundreds of cities and towns, the systems for ensuring safe drinking water lag behind modern demands. In some cases, the costs associated with meeting national standards for drinking water quality ('maximum contaminant levels') have outstripped a community's investment in drinking water treatment and distributions systems. In other cases, aging and deteriorated systems need to be restored to ensure

continued protection of public health.

The State and Tribal Assistance Grants (STAG) Appropriation provides financial assistance to states, municipalities and tribal governments to fund a variety of drinking water, water, and wastewater infrastructure projects. These funds are essential to fulfill the federal government's commitment to help our state, tribal and local partners obtain adequate funding to construct the facilities required to comply with federal environmental requirements. States and localities rely on a variety of revenue sources to finance their environmental programs and to pay for the facilities needed to keep the water clean and safe from harmful contaminants.

Providing STAG funds through State Revolving Fund (SRF) programs, EPA works in partnership with the states to provide low-cost loans to municipalities for infrastructure construction. SRF funds are also provided as grants to tribal governments to help them address their water, drinking water, and wastewater needs. Special Needs projects also provide focused wastewater grant assistance to local areas facing extraordinary needs.

The President's Budget requests a total of $1,753.0 million in 2001 for EPA's Water Infrastructure programs, a decrease of $807.8 million from 2000. Of the total water infrastructure request, $1,653.0 million will support EPA's Goal 2: Clean and Safe Water, and $100.0 million will support EPA's Goal 6: Reduction of Global and Cross-border Environmental Risks. The $807.8 million decrease is the net result of a $540.4 million reduction in the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) programs, a $309.5 million reduction in 2000 Congressional earmarks, a net $7.8 million decrease for Special Needs projects, including $15.0 million for water and wastewater projects for Alaska native villages and a $50.0 million increase for the U.S./Mexico Border Fund.

The resources requested in this budget will enable the Agency, in conjunction with EPA's state, local, and Tribal partners, to achieve several important goals for 2001. Some of these goals include:

- Maintain the percent (91) of the population served by community drinking water systems that will receive drinking water meeting all health-based standards that were in effect as of 1994. This represents an increase, up from 83% in 1994;

- 500 projects funded by the Clean Water SRF will initiate operations, including 300 projects providing secondary treatment, advanced treatment, Combined Sewer Operation correction (treatment), and/or storm water treatment. Cumulatively, 6,200 State Revolving Fund funded projects will have initiated operations since program inception.

Goal 2: Enhancing Human Health through Clean and Safe Water

Capitalizing Clean Water and Drinking Water State Revolving Funds

The Clean Water and Drinking Water State Revolving Fund programs demonstrate a true partnership between states, localities, and the federal government. These programs provide Federal financial assistance to states,

localities, and tribal governments to protect the nation's water resources by providing funds for the construction of drinking water and wastewater treatment facilities. The SRFs are two of the Agency's premier tools for building the financial capacity of our partners.

Capitalizing the CWSRF

As part of the President's environmental initiatives, the Administration will continue to capitalize the CWSRF. Through this program, the federal government provides financial assistance for wastewater and other water projects, including nonpoint sources, estuaries, stormwater, and combined sewer overflows. Water infrastructure projects contribute to direct ecosystem improvements by lowering the amount of nutrients and toxic pollutants in all types of surface waters.

This budget request includes $800 million for the Clean Water State Revolving Fund (CWSRF). This investment keeps EPA on track with our commitment to meet the goal for the CWSRF to provide an average of $2.0 billion in annual financial assistance. Indeed, the President's Budget calls for cumulative additional capitalization of $3.2 billion in fiscal years 2002-2005, which will enable the program to exceed the Administration commitment. Over $17 billion has already been provided to capitalize the CWSRF, more than twice the original Clean Water Act authorized level of $8.4 billion. Total SRF funds available for loans since 1987, reflecting loan repayments, state match dollars, and other sources of funding, are approximately $30 billion, of which $26 billion having been provided to communities as financial assistance ($4.2 billion was available for loans as of June 1999).

Using the CWSRF to Address the Highest Priority Threats to our Waters

Pollution from nonpoint sources is the largest cause of water pollution. In order to better address the Nation's most pressing water quality problems, the Federal government needs to provide incentives to encourage more SRF resources to high priority non-point projects.

In the Clean Water Action Plan (CWAP), EPA committed to continue its work with states to increase the number and dollar amount of loans made through the CWSRF for priority projects to prevent polluted runoff. In 2001, the Agency is proposing to allow states the option to reserve up to 19 percent of their annual CWSRF capitalization grants to provide grant funding for implementation of non-point source and estuary management projects. Projects receiving grants assistance must, to the maximum extent practicable, rank highest on the state's list of prioritized projects eligible for funding assistance. Grants may also be combined with loans for eligible projects to help communities which might otherwise find loans unaffordable.

Appropriations language is also proposed in the President's Budget for an increase to the tribal share of the CWSRF from 0.5 to 1.5 percent.

Capitalizing the DWSRF

In 2001, the President is requesting $825.0 million for the DWSRF, which is an increase of $5.0 million over 2000. Through the DWSRF program, states will provide loans to finance improvements to community water systems and to restructure small systems so that they can achieve

compliance with the mandates of the Safe Drinking Water Act (SDWA) Amendments. Some non-state recipients, such as the District of Columbia and the tribes, will receive their DWSRF allocations in the form of grants. The DWSRFs will be self-sustaining in the long run and will directly help offset the rising costs of ensuring safe drinking water supplies and assist small communities in meeting their responsibilities. The Administration's goal for the DWSRF is for the fund to provide an average of $500.0 million in annual financial assistance.

Supporting Alaska Native Villages

The President's Budget requests $15.0 million for Alaska native villages for the construction of wastewater and drinking water facilities to address very serious sanitation problems. EPA will continue to work with the Department of Health and Human Services' Indian Health Service, the State of Alaska, and local communities to provide needed financial and technical assistance.

Assisting Needy Communities

The President's Budget requests $13.0 million for the construction of wastewater treatment facilities for Bristol County, MA, and New Orleans, LA. Funds are targeted to these areas because of special circumstances including financial hardship and unique sewer system problems.

Goal 6: Reducing Cross-border Environmental Risks – U.S./Mexico Border

The President's Budget requests a total of $100.0 million for water infrastructure projects along the U.S./ Mexico Border - an increase of $50.0 million from 2000. The goal of this program is to reduce the incidence of waterborne diseases and enhance water quality along the Mexico border. The communities along both sides of the Border are facing unusual human health and environmental threats because of the lack of adequate wastewater and drinking water facilities. EPA's U.S./Mexico Border program provides funds to support the planning, design and construction of high priority water and wastewater treatment projects along the U.S./Mexico Border and for wastewater projects.

Trust Funds

(dollars in millions)

	FY 2000 Enacted	FY 2000 Enacted FTE	FY 2001 President's Budget	FY 2001 President's Budget FTE
Response	$917.6	1,701.9	$964.0	1,680.8
Enforcement	$140.0	1,144.9	$148.6	1,137.4
Management & Support	$124.7	547.5	$138.1	544.0
Other Federal Agencies	$168.7	0.0	$151.8	0.0
Transfers				
IG	$11.0	100.0	$11.7	95.4
R&D	$38.0	123.9	$35.9	121.6
Superfund Total	**$1,400.0**	**3,618.2**	**$1,450.0**	**3,582.2**
LUST	**$70.0**	**82.3**	**$72.1**	**81.9**
Trust Funds Total:	**$1,470.0**	**3,700.5**	**$1,522.1**	**3,661.1**
Superfund Orphan Shares	$0.0	0.0	$150.0	0.0

SUPERFUND

In 2001, the President's Budget requests a total of $1,450.0 million in discretionary budget authority, $150.0 million in mandatory budget authority and 3,582.2 workyears for Superfund. Currently, 91 percent of 1,412 sites on the Superfund final national priorities list (NPL) are either undergoing cleanup construction (remedial or removal) or are completed.

The 2001 Budget provides $964.0 million and 1,680.8 workyears for Superfund cleanups and Brown-fields redevelopment. The Agency's Superfund cleanup program addresses public health and environmental threats from uncontrolled releases of hazardous substances. In 2001, EPA and its partners will complete 75 Superfund cleanups at NPL sites to achieve the overall goal of 900 construction completions by the end of 2002. The 2001 Budget provides funding for the Brownfields Initiative. Brownfields are abandoned, idled, or under-used industrial and commercial properties, and are not traditional Superfund sites as they are not generally highly contaminated and present lesser health risks. The Agency's Brownfields Initiative encourages the redevelopment of these sites by addressing concerns such as environmental liability and cleanup, infrastructure declines and changing development priorities.

The 2001 President's Budget requests $148.6 million and 1,137.4 workyears for the Superfund Enforcement program. The Agency will continue its efforts to maximize all

aspects of potentially responsible parties (PRPs) at 70 percent of the new remedial construction starts at non-Federal facility Superfund sites on the National Priorities List (NPL), and emphasize fairness in the settlement process. Where PRP negotiations fail, the Agency will either pursue enforcement action to compel PRP cleanup or use Trust Fund dollars to remedy sites.

The 2001 President's Budget requests $150.0 million in mandatory budget authority to pay for Orphan shares at Superfund sites. The Administration will support Superfund legislative reforms that allow costs attributable to identifiable but nonviable parties at sites, and certain other categories of costs, to be paid from the Trust Fund in some cases where viable PRPs are performing or paying for cleanup under a settlement agreement. In 1999, EPA made offers to compensate settling parties, through forgiveness of past costs and future oversight costs, for orphan shares at all eligible remedial design/remedial action and removal sites.

Management and Support, other Federal agencies, Research and Development and Inspector General form the remaining portion of the Superfund 2001 President's Budget request. The President's Budget requests $138.1 million and 544.0 workyears for management and support activities. These resources support Agency-wide resource management and control functions including: essential infrastructure, contract administration, financial accounting and other fiscal operations. The President's Budget requests $151.8 million for our Federal agency partners. The Agency works with several other Federal agencies to perform essential services in areas where the Agency does not possess the specialized expertise. The three largest transfers from the Superfund program are the Agency for Toxic Substances and Disease Registry (ATSDR), National Institute of Environmental Health Sciences (NIEHS), and Department of Justice (DOJ). The President's Budget also requests $47.6 million and 217.0 workyears transferred to Research and Develop-ment for innovative cleanup technology testing and the Inspector General for program auditing.

LUST

The 2001 President's Budget requests $72.1 million and 81.9 workyears for the Leaking Underground Storage Tank (LUST) program. Approximately 85 percent of this will be used for state cooperative agreements and support for tribal cleanup. The Agency's highest priorities in the LUST program over the next several years will be to address the backlog of 168,900 cleanups (as of September 1999), and to address LUST sites that are difficult to remediate because they are contaminated by methyl tertiary butyl ether (MTBE) and other oxygenates. In 2001 the Agency's goal is to complete 21,000 cleanups under the supervision of EPA and its State, local and tribal partners.

21st Century Research Fund

The President's Budget continues the *21st Century Research Fund*, which demonstrates the Administration's commitment to science and technology and to enhancing high-priority civilian research and development activities.

BACKGROUND:

- This Fund supports key environmental and research programs, and promotes stability and growth for the highest priority research efforts.

- EPA's entire research and development program and the Climate Change Technology Initiative are included in the *21st Century Research Fund*.

- The Fund includes major research and development performed by Federal agencies and includes National Science and Technology Council initiatives.

21st Century Research Fund

(dollars in millions)

	FY 2000 Enacted	FY 2001 Pres Bud
Goal 1: Clean Air		
Attain NAAQS for Ozone and PM	$69.2	$73.8
Reduce Emissions of Air Toxics	$18.1	$17.4
Goal 2: Clean and Safe Water		
Safe Drinking Water, Fish and Recreational Waters	$47.7	$48.9
Conserve and Enhance Nation's Waters	$30.6	$30.6
Reduce Loadings and Air Deposition	$7.5	$6.4
Goal 3: Safe Food		
Reduce Use on Food of Pesticides Not Meeting Standards	$8.1	$10.5
Goal 4: Preventing Pollution and Reducing Risk in Communities, Homes, Workplaces and Ecosystems		
Safe Handling and Use of Commercial Chemicals & Microorganisms	$16.7	$18.2
Goal 5: Better Waste Management, Restoration of Contaminated Waste Sites, and Emergency Response		
Reduce or Control Risks to Human Health	$47.7	$40.8
Prevent , Reduce and Respond to Releases, Spills, Accidents or Emergencies	$6.3	$6.9
Goal 6: Reduction of Global and Cross-border Environmental Risks		
Climate Change	$20.6	$22.7
Goal 7: Expansion of Americans' Right to Know About their Environment		
Enhance Ability to Protect Public Health	$5.3	$5.9
Goal 8: Sound Science, Improved Understanding of Environmental Risk and Greater Innovation to Address Environmental Problems		
Research for Ecosystem Assessment and Restoration	$111.6	$106.1
Research for Human Health Risk Assessment	$49.1	$53.4
Research to Detect Emerging Risk Issues	$37.5	$45.5
Pollution Prevention and New Technology for Environmental Protections	$60.2	$42.8
Office of Research & Development	**$536.3**	**$530.0**
Climate Change Technology Initiative	**$103.3**	**$227.3**
Total	**$639.6**	**$757.3**

Environmental Protection Agency
Summary of Agency Resources

(dollars in thousands)

Agency Programs by Goal	FY 2000 Enacted	FY 2001 President's Budget	Delta FY 2001 vs. FY 2000
1. Clean Air	$540,965.5	$562,514.2	$21,548.7
2. Clean & Safe Water	$980,822.0	$1,101,826.5	$121,004.5
3. Safe Food	$82,285.2	$86,056.5	$3,771.3
4. Preventing Pollution	$277,597.3	$301,046.3	$23,449.0
5. Better Waste Management	$252,700.1	$268,637.0	$15,936.9
6. Global & Cross Border	$187,865.8	$325,070.5	$137,204.7
7. Right-to-Know	$155,931.6	$181,421.2	$25,489.6
8. Sound Science	$326,055.8	$323,990.6	($2,065.2)
9. Credible Deterrent	$355,924.5	$384,236.1	$28,311.6
10. Effective management	$372,137.8	$381,703.4	$9,565.6
Subtotal Operating Programs	**$3,532,285.6**	**$3,916,502.3**	**$384,216.7**
5. Better Waste Management	$1,369,672.5	$1,411,210.6	$41,538.1
7. Right-to-Know	$3,708.5	$3,687.9	($20.6)
8. Sound Science	$4,454.5	$4,767.1	$312.6
9. Credible Deterrent	$16,831.1	$19,535.4	$2,704.3
10. Effective Management	$75,093.2	$82,895.5	$7,802.3
Subtotal Trust Funds:	**$1,469,759.8**	**$1,522,096.5**	**$52,336.7**
1. Clean Air	$0.0	$85,000.0	$85,000.0
2. Clean & Safe Water	$2,510,765.3	$1,653,000.0	($857,765.3)
6. Global and Cross Border	$50,000.0	$100,000.0	$50,000.0
Subtotal Water and Air Infrastructure Financing	**$2,560,765.3**	**$1,838,000.0**	**($722,765.3)**
Grand Total Discretionary	**$7,562,810.7**	**$7,276,598.8** 1\	**($286,211.9)**
Superfund Orphan Share (mandatory)	$0.0	$150,000.0	$150,000.0
GRAND TOTAL Budget Authority	**$7,562,810.7**	**$7,426,598.8**	**($136,211.9)**
Better America Bond Authority	**$0.0**	**$2,150,000.0**	**$2,150,000.0**

1\ Does not include $20 million in offsetting receipts

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