U.S. Environmental Protection Agency
Region III/Mid-Atlantic States
EPA-903-R-99-005

The Challenge Ahead

Annual report photographs by S. C. Delaney/EPA. Attribution for additional photos is noted.

INTRODUCTION

Following the first Earth Day, in 1970, President Nixon made a commitment to protect our environment by creating the Environmental Protection Agency. On December 1 of that year, more than 5,500 people from five federal organizations were brought together to protect our environment and help make our country a better, safer and healthier place to live, work and play.

The Region III headquarters in Philadelphia is one of 10 EPA offices strategically located throughout the United States. For more than 25 years, the office has partnered with environmental agencies in Delaware, Maryland, Pennsylvania, Virginia, West Virginia and the District of Columbia to protect public health and the environment in the mid-Atlantic states.

There have been many significant accomplishments. Yet, every year, there are new challenges that threaten public health and the environment. The region's management identified five priority issues for 1999 — ozone smog; cities and the urban environment; bays and estuaries; acidification; and climate change. These priorities are featured in this report.

As regional teams began to address problems in these five areas, three other challenges emerged — how to environmentally handle animal waste; problems associated with mountaintop mining; and a multitude of water issues. Each of these challenges also is highlighted in this report.

protecting the environment

THE CHALLENGE AHEAD

The Environmental Protection Agency's Region III continued to provide leadership on those environmental and public health challenges confronting the mid-Atlantic states in 1998. As with the nation in general, this region reaped the rewards of the greatest economic progress in a generation. America's economy is strong due to the longest peacetime expansion in history, record productivity, and the lowest unemployment rate in four decades.

This healthy and robust economy — the top priority of the Clinton/Gore Administration — has been accomplished while maintaining a strong commitment to public health and environmental protection. Balancing the dual objectives of economic growth and environmental protection during this period of prosperity has never been more challenging nor more rewarding.

As we work with our partners in state government to implement and enforce environmental laws in resourceful ways, new challenges inevitably arise that demand increased attention and ingenuity.

While old manufacturing industries pollute less, expanding businesses like large-scale poultry and hog farms overload already stressed watersheds. Rivers and bays beginning to recover from decades of pollution face unforeseen new pressures.

Cities sprawl farther, consuming green space and farmland, and increasing the need for clean water

and proper sewage treatment. At the same time, there is more competition for limited funds to repair decaying urban centers.

Superfund sites, where our nation's worst pollution occurred, are being cleaned — 68 so far in the Mid-Atlantic region — and old industrial sites are being decontaminated and returned to use as brownfields. But groundwater impaired by toxic wastes leaching through the soil will need monitoring and remediation far into the future.

While our air contains less smoke from mills and factories, problems still remain from ozone-forming ingredients and microscopic particles being transported into our region from distant industrial boilers and power plants.

Progress is slowly being made in cleaning acid drainage from hundreds of miles of mining streams. But new protections are needed from strip mining methods that remove entire mountaintops and cover adjacent valleys with the spoils, destroying headwaters and anything living in them.

To meet these growing challenges, EPA's mid-Atlantic region has been working harder and smarter to protect public health and the environment. And the regional office is steadily fulfilling the Administration's directive to protect public health and improve environmental compliance through more flexible, cost-effective, and common-sense regulation. Regional staff has advanced results-oriented approaches for environmental protection, and Region III leads all others in developing innovative regulatory pilot projects under Project XL.

America has come a long way from the days of Donora, a Western Pennsylvania mill town where the clean air movement was born 50 years ago in a cloud of toxic fumes that killed 20 people and hospitalized 7,000. Last year, we honored the memory of those who tragically perished before there was an EPA, as we recalled their legacy of laws and programs enacted later to protect public health and the environment.

We take heart at our accomplishments to date and thank the public for entrusting us with this mission. This annual report showcases our best achievements in 1998. And it aspires to point the way to a clean, healthy future for us all. On behalf of the many dedicated employees of Region III, I offer this report on our progress in the past year and the challenges ahead.

Sincerely,

W. Michael McCabe
Regional Administrator
U.S. Environmental Protection Agency

“As a quarterback, I was always passing the ball to a receiver or handing it off to a running back. We can’t treat the environment that way and give the responsibility to another generation. We have to carry the ball to protect the future.”

— Sonny Jurgensen

Sonny Jurgensen was born in Wilmington, North Carolina, attended Duke University, played quarterback for the Philadelphia Eagles and Washington Redskins, and is in the Pro Football Hall of Fame. He now resides in northern Virginia.

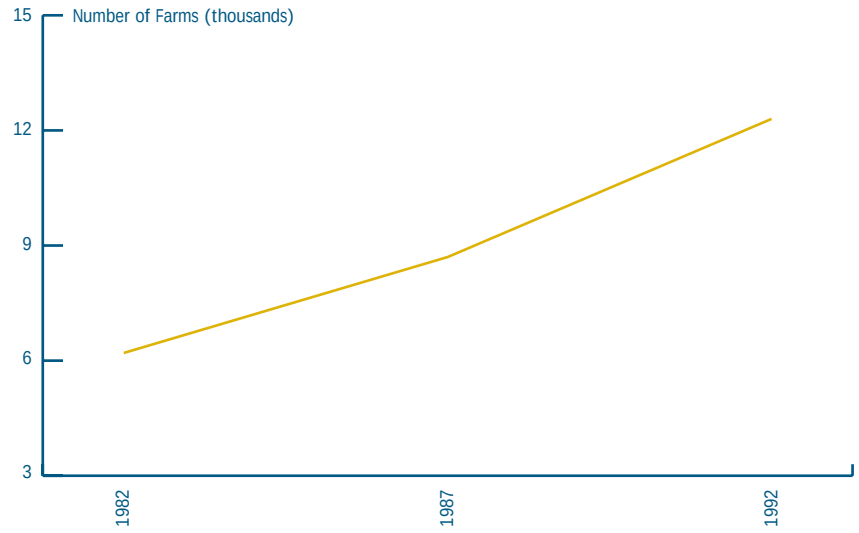
POULTRY WASTE POLLUTION:
A GROWING PROBLEM FROM A GROWING BUSINESS

EPA Region III faced one of its biggest challenges in working with the poultry industry to accept responsibility for farm runoff, and to help develop tougher state rules to protect waterways from rapidly growing factory farms in this region.

It's been a long time coming. In 1997, the health of the Chesapeake Bay received national media attention when the toxic micro-organism *Pfiesteria piscida* killed tens of thousands of fish in the Pocomoke River and several other bay tributaries on the lower Eastern Shore of Maryland. Tests linked the single-cell organism to lesions found on fish, and skin rashes and memory loss in fishermen and other people exposed to the microbe. These *Pfiesteria* outbreaks caused increased concern about the effects of agricultural waste runoff — manure and other nutrient sources draining from rural areas into streams and rivers.

Fifteen percent of the nation's chickens are grown and processed in the mid-Atlantic states. Annually, it is a $1.5 billion industry. The chicken industry is the largest agribusiness in Virginia. The industry makes a tremendous contribution to the region's economy, especially on the Delmarva Peninsula, where more than 250 million chickens are raised in Delaware alone. Attention turned to the impacts of nutrients from hundreds of millions of pounds of manure which is used as fertilizer and then seeps into nearby waterways, harming water quality and aquatic life. Finding practical and economical ways to better manage the industry's common use of nitrogen and phosphorous nutrients became a regional and national priority.
In October 1997, EPA Administrator Carol M. Browner asked Region III

Growth of Chicken Farms in Region III



Source: Census of Agriculture

Administrator W. Michael McCabe to represent the agency in national talks with the major poultry producers. The National Poultry and Egg Environmental Dialogue became the means for dealing with environmental problems from poultry production, and gave the industry a unique opportunity to design creative solutions. Led by the National Broiler Council — now the National Chicken Council — the talks helped define what needs to be done to correct and avoid further environmental damage.

As EPA's chief representative on the dialogue committee, McCabe also sought to increase the public's awareness about the harmful impacts of poultry waste pollution. In newspaper editorials and interviews with the press, McCabe and staff experts warned about the hundreds of millions of pounds of poultry waste generated each year, and the inability of crops to absorb the nutrients applied to farmland.

Most of this manure is spread as fertilizer on farmland near where it was produced, creating an imbalance in the amount of beneficial nutrients that can be absorbed by crops. The U.S. Department of Agriculture estimates that phosphorus and nitrogen in manure exceeded Delmarva crop needs by more than twice the load that could be absorbed. Excess nutrients, such as nitrogen and phosphorus, feed organisms that rob waterways of life-giving oxygen, leaving little room for diverse species of fin fish, shellfish and aquatic plants. Instead, undesirable plants, like algae and sea lettuce, proliferate; and other species, such as *Pfiesteria*, turn toxic. This not only adversely affects our waterways, but also has the potential to cause human health problems.

In the spring of 1998, a new Maryland law required virtually all of the state's farms to manage nutrients. The state law is designed to protect citizens and waterways by reducing nutrient levels in rivers and streams. Maryland also will test a four-year program to help poultry farmers transport manure from farms in areas where the land is over-enriched with phosphorus. Virginia also is moving toward adoption of a state-based regulatory program to require the nutrient management program on poultry farms.

After months of talks with the national dialogue committee, industry leaders crafted a comprehensive program to manage poultry waste and reduce associated environmental problems with many initiatives supported by EPA and consistent with the President's Clean Water Action Plan. Areas of the plan which need more emphasis are cost-sharing with poultry industry integrators and measures to monitor and assure compliance.

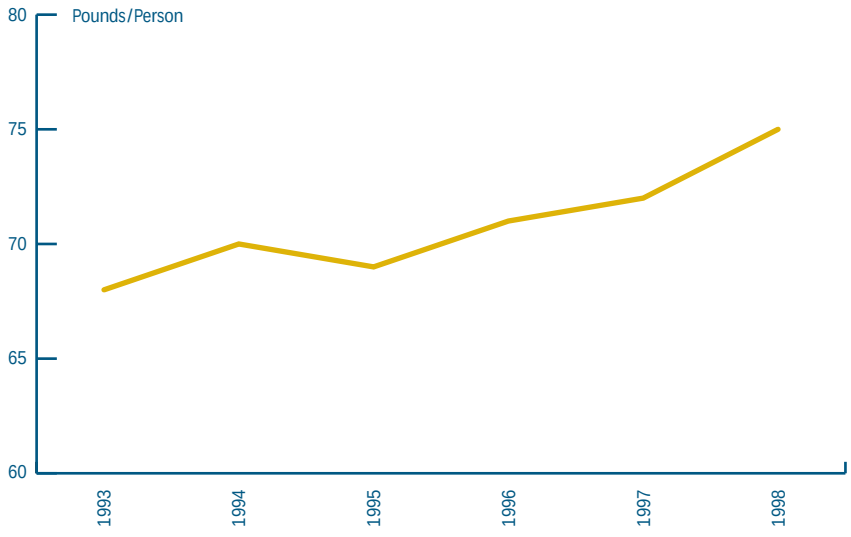
In September 1998, as part of the President's Clean Water Action Plan, the agency and the U.S. Department of Agriculture proposed a new national strategy to control animal waste pollution. The strategy offers fairness across the board in requiring the nation's largest animal feeding operations to obtain permits and develop plans to manage nutrients from animal waste. Smaller operations will be encouraged to manage nutrients to minimize water quality threats through state programs such as in Maryland and Virginia or effective voluntary programs. Nationally, animal waste from farms that raise cattle, hogs, poultry and dairy cows produce 1.37 billion tons of manure each year, or the equivalent of 5 tons for every person in the U.S. This is more than 130 times the amount of human waste produced in the country.

Regional Administrator W. Michael McCabe talks with Mr. Richardson, a Maryland poultry farmer.

A major breakthrough came in early 1999 when Perdue announced it would build a fertilizer plant in Delmarva that will pelletize 120,000 tons of chicken litter a year for transport to farms in other parts of the country that need fertilizer.

Implementing this strategy is a key environmental priority of the Clinton Administration aimed at protecting water quality. EPA and USDA are working together with state agencies, agricultural organizations and local conservation and watershed groups in understanding the strategy and assisting farmers with nutrient management work. In addition, EPA has received additional funding under the Clean Water Action Plan and will distribute about $18 million to states in the region to address problems of farm runoff and other non-point-source pollution.

People are Eating More Chicken in the United States



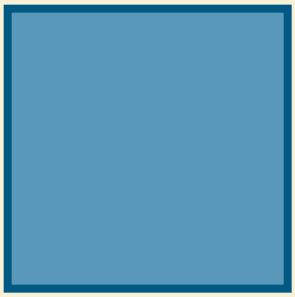
Source: National Chicken Council

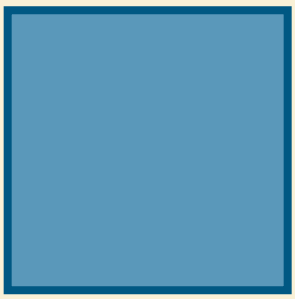
“All the beauty I dreamed about in West Virginia when I wrote ‘Country Roads’ is now disappearing. Mountaintops are being cut off and the valleys and streams below filled with rubble. It no longer will be ‘Almost Heaven!’ ”

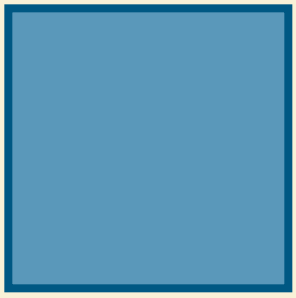
— Bill Danoff

Grammy-award-winning songwriter and recording artist Bill Danoff lives in Washington, D.C. A graduate of Georgetown University, he founded the Starland Vocal Band, and John Denver recorded a number of his songs, including “Country Roads.”

NEW TECHNOLOGY THREATENS TO RESHAPE THE MOUNTAIN STATE







A great deal of the region's resources in 1998 went to one of the least-populated, but naturally scenic areas, southern West Virginia. During the past year, the agency reached a major milestone in lessening the environmental impact of a new coal mining technology called mountaintop removal.

A legal settlement in the last week of 1998 calls for a comprehensive study by four federal agencies on the cumulative environmental impacts of mountaintop mining. During the two-year study, tough new rules will limit valley fills to better protect the environment and reduce destruction of streams.

For the first time, mining fills that drain more than 250 acres of watershed will be required to undergo an environmental review — and minimize harm to the environment — before they can be permitted.

Regional Administrator McCabe was quoted by the Associated Press describing the long-range effects of this sweeping agreement: "I think it's really going to change the way mountaintop mining is conducted in the Appalachian region."

Solving this problem involved a team of EPA regional and headquarters employees and four federal agencies — EPA, U.S. Army Corps of Engineers, Office of Surface Mining, and Fish and Wildlife Service.

The controversy has been reported by national media including *U.S. News & World Report, The Washington Post, The New York Times,* CNN and other networks, and almost daily by news media in the state.

In this form of surface mining, entire mountaintops are cut away by gigantic machinery, and waste soil and rocks are dumped into adjacent valleys, burying hundreds of miles of streams. Giant machines costing as much as $100 million, 20-stories high with buckets large enough to hold a dozen or more automobiles, work 24 hours a day, seven days a week. One man operating the machine can move over a million cubic yards of earth each month. Some of the valley fills are 1,000 feet wide, 500 feet deep and a mile long. Mining companies set production records in 1996 and 1997, relying increasingly on mountaintop removal/valley fill methods, as demand for West Virginia's low sulphur coal increased.

Miners, local residents and EPA talk outside. Over 1,000 people came to Logan, West Virginia, to hear public comments on two mountaintop mining permits. Photo by Dave Rider, EPA.

By October 1998, there were 21 pending permits for 90 new projects that would bury 50 miles of streams with mining rubble. Since 1986, more than 480 miles of West Virginia streams have been buried with millions of tons of rock and soil waste from this type of coal mining. EPA was concerned about the streams being lost, the environment being harmed and water quality degraded.

Echoing the concern of citizens in the state who filed suit challenging these valley fills, EPA held a public hearing in Logan in October. More than 1,000 people attended and 100 testified during the seven-hour meeting.

The interagency agreement announced in late December 1998 responded to citizen concerns about the cumulative effects of mountaintop mining as it has come to be practiced in southern West Virginia coal fields.

Changes in the topography leave some regions more vulnerable to flooding, while others lose

"West Virginia's greatest natural resource is its fantastic beauty. I love those hills, clean air, fresh water and green trees — as far as you can see. Let's keep it that way for our children and their future."

— Sam Huff

Sam Huff, born in Jameson Mine No. 9, West Virginia, was a consensus All-American tackle at West Virginia University, played for the New York Giants and Washington Redskins and is in the Pro Football Hall of Fame.

underground supplies of drinking water. Even the governor admitted that no one knows the long-term impact on streams, wildlife and supporting ecosystems.

A 1994 survey by the West Virginia Department of Water Resources reported that 76 percent of all streams and rivers in the state are polluted. The economic impact on the state's growing tourism business and the jobs it creates has not been evaluated, although there is widespread belief that tourism is the economy of the future in West Virginia. The state's former director of forestry, Bill Maxey, an opponent of surface mining, said that mountaintop removal had "destroyed" 250,000 acres of forest. He noted that timber is the state's only renewable natural resource, and the industry employs more than 30,000 people, compared to less than 18,000 by the coal industry.

An article in the October 1998 "National Coal" issue of the *West Virginia University Law Review* notes that valley fills create a flattened and virtually treeless topography. "As a result, the tourist industry will suffer greatly because many tourists travel to West Virginia to see the mountains, valleys, streams and colorful trees," the writer, Jeffrey W. Lilly, added.

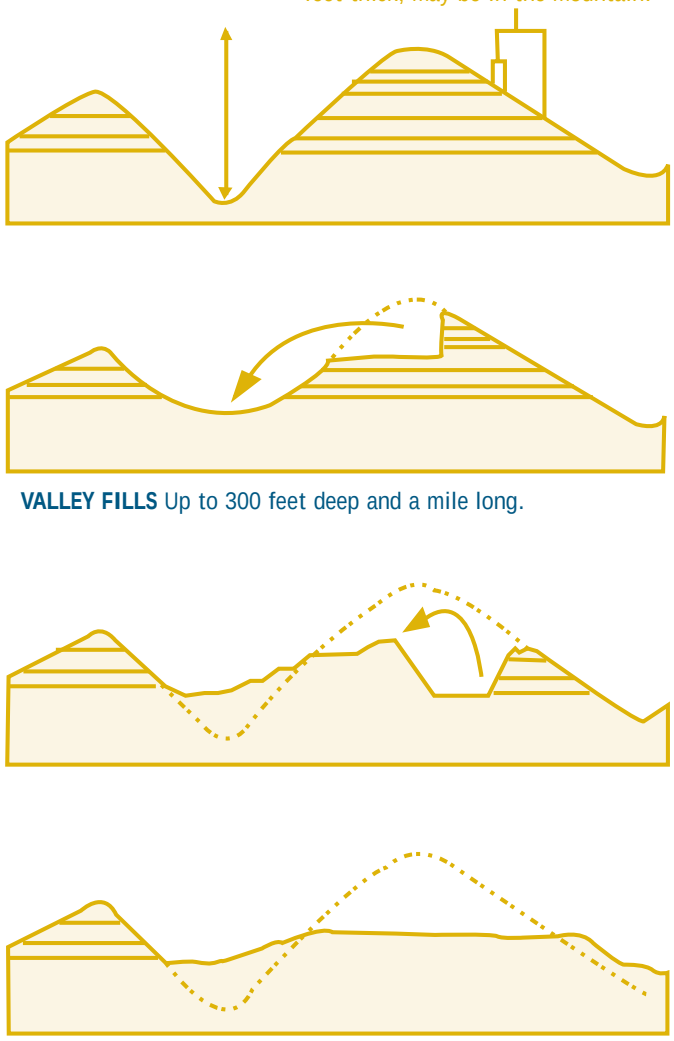
Thanks to EPA's watchfulness, mountaintop mining will be forced to take responsibility for repairing the damage it creates.

MOVING MOUNTAINS FOR COAL

In southern West Virginia, coal companies are using a type of strip mining called mountaintop removal to get at thin, low-sulfur coal seams.

HILLS AND VALLEYS
Average heights: 800 to 1,000 feet from the valley floor to the mountaintop

COAL SEAMS As many as six or seven layers of coal, from two to four feet thick, may be in the mountain.



1

ORIGINAL LANDSCAPE
Forested mountains and valleys

2

UPPER COAL REMOVED
Valley is filled with excess rock and soil

VALLEY FILLS Up to 300 feet deep and a mile long.

3

DEEPER COAL REMOVED
This time, the excess rock fills in the area just mined

4

GRADING AND RESTORATION
The area is smoothed and planted with grass

"The locals call the state of West Virginia 'Almost Heaven,' and if you've ever experienced the breathtaking physical beauty of the place, you'll know why. I grew up in the Kanawha Valley, where we took pride in being called 'the Chemical Capital of the World.' We could literally smell the river, and were not allowed to swim in it or eat its fish. In the years since, there have been massive cleanup efforts, and the Kanawha River is now a source of pride for the local residents. Our environment is our most valuable and irreplaceable asset, and we must remember that it is our responsibility to protect and take care of our home, and Mother Earth."

— Kathy Mattea

Grammy-winning vocalist Kathy Mattea was born in South Charleston, majored in engineering at West Virginia University, and has won numerous honors as a performer, including being named the Country Music Association's female vocalist of the year.

PROTECTING THE PUBLIC FROM HAZARDOUS WASTE AND TOXIC CHEMICALS

The mid-Atlantic region is one of the most industrialized areas of the country — from the chemical giants of West Virginia's Kanawha Valley and the oil refineries in Philadelphia to the massive paper mills that dot Virginia's rivers and the sprawling vacant lots where Pittsburgh's once-booming mills made steel. Industry's hazardous waste and toxic chemicals are facts of life in this part of the country.

The mid-Atlantic states are home to 10 percent of the U.S. population and produce 10 percent of the gross national product. A byproduct of that productivity is 50,000 tons of hazardous waste every day. With such a great concentration of people and production, protecting public health and the environment from the risks of hazardous waste and toxic chemicals is a constant and complicated challenge.

Enforcement, hazardous waste cleanups, emergency responses, underground storage tank requirements, chemical use reporting, spill prevention and pollution prevention — all providing overlapping protection.

Superfund — Cleanups and Emergencies

The region's Superfund program handles emergency spills, leaks and fires, and short-term and long-term cleanup of hazardous waste sites, usually where the polluters have abandoned the sites or are unwilling or financially unable to clean them up.

Out of the 183 long-term cleanup sites in the region, also known as National Priorities List sites, 68 cleanups were completed and 55

Tabletop simulation of a chemical emergency situation at the Chemical Emergency Prevention and Preparedness Conference in Pittsburgh last winter.

were underway in 1998. Local authorities called on the agency 160 times when crews had to take emergency action to eliminate a threat to human health.

At these emergency cleanup sites throughout the region, more than 10.5 million gallons of liquid hazardous waste, about the same quantity as the Exxon Valdez oil spill, have been disposed of safely. Some 351,535 cubic yards of soil, enough to fill 22,000 18-wheeler dump trucks, have been taken away to prevent human exposure. Fortunately, emergency spills dropped 30 percent in Pennsylvania and 49 percent in Maryland this past year compared to 1997.

Environmental engineers have used innovative and unorthodox techniques to clean up many sites. An agency dive crew donned wetsuits and air tanks to recover dozens of unmarked hazardous waste drums from the bottom of a water-filled quarry in Wilmington, Delaware. At the Drake Chemical site in Lock Haven, Pennsylvania, an on-site incinerator is burning 630 tons of contaminated soils each day until all 260,000 tons are burned. And at the Whitmoyer Laboratories site in Jackson Township, Pennsylvania, engineers are using the wastewater from steel production, known as pickle liquor, to treat groundwater contaminated with arsenic.

At the Naval Weapons Station in Yorktown, Virginia, the agency is overseeing the use of a unique technology and a unique funding arrangement to clean up leftover explosives. A three-way deal among the Navy, the Canadian Ministry of Environment and Grace Bio-Remediation Technologies will finance a technology which uses heavy oils for cleanup.

Underground Storage Tanks

A decade ago, Congress recognized that leaking underground storage tanks were threatening our nation's groundwater, which more than half of Americans use for drinking water. So, Congress gave tank owners 10 years to upgrade, remove or seal off their tanks. In December 1998, the time was up.

EPA and its counterpart agencies in the mid-Atlantic states are beginning the process of locating tank owners who missed the deadline. However, many of the roughly 106,000 active tank owners in the region have made the necessary investment or used state assistance to comply with the new regulation.

Toxic Release Inventory

The Toxic Release Inventory was established by the 1986 Emergency Planning and Community Right-to-Know Act. It contains information about the releases of more than 650 toxic chemicals in to the air, water and land, and tracks how wastes are recycled, used as fuel, treated and disposed of. The public uses the on-line inventory to learn about the potential health and environmental risks in their neighborhoods.

"A Civil Action" — An Everyday Drama at the EPA

When the feature film "A Civil Action" began playing in theaters Christmas Day 1998, it may have left moviegoers wondering what the EPA is doing to protect drinking water near their homes.

The motion picture dramatizes the lengthy and complex lawsuit surrounding the contamination of drinking water wells in Woburn, Massachusetts and the subsequent illnesses, including eight childhood leukemia deaths, among the families living there.

Problems like Woburn were the reason Congress created the Superfund in 1980, and gave EPA authority to address the health risks from improper disposal of hazardous waste.

In 1990, the agency negotiated a landmark $69.45 million settlement for the cleanup of municipal wells G and H, the sources of the contaminated drinking water in Woburn.

According to the settlement, the parties responsible for the cleanup — W. R. Grace & Co., UniFirst Corp., New England Plastics, Beatrice Co., Wildwood Conservation Corp. and John J. Riley, Jr. — must decontaminate their properties, finance EPA's oversight, perform a study of the area surrounding wells G and H, and reimburse the EPA for past site investigation costs.

The conflicts and challenges played out in the movie are part of everyday life at the agency charged with protecting America's environment and public health, including drinking water.

EPA approaches the problem of potential drinking water contamination from many angles, including the cleanup of Superfund hazardous waste sites, such as Woburn; the protection of groundwater from leaking underground petroleum storage tanks; and a new regulation that says water suppliers must provide annual reports to customers on the quality of each community's public water supply.

At the end of 1998, the mid-Atlantic regional office provided drinking water to nearby residents at 80 Superfund sites where contaminated water was not potable. Nationwide, drinking water wells have been shut down at about 360 Superfund sites and alternative water sources were supplied. At another 500 sites, wells located nearby are at risk, but still unaffected by contamination plumes moving through the groundwater.

Another source of widespread groundwater contamination is leaking underground petroleum storage tanks. Just a few drops of gasoline in an underground aquifer can taint a whole community's water supply.

An EPA rule gave tank owners 10 years to put safeguards onto their tanks to prevent leaks and spills. The 10-year deadline was up in December 1998, and inspectors have started looking for tanks that are not up to snuff. If a tank owner was not willing to upgrade tanks or install new ones, the tanks had to be shut down or removed from the ground.

Another new EPA rules goes into effect in 1999, requiring public water suppliers to include with their bills an annual water quality summary, known as a Consumer Confidence Report. This report must divulge the source of the drinking water, any contaminants that may be found in the water, and their potential health effects.

Anyone suspecting a property or groundwater of being contaminated can call the Region III Emergency Response Center at (215) 814-9016. For states outside the mid-Atlantic region, the National Emergency Response Center can be called at (800)424-8802.

"I've had the experience of breathing unhealthy ozone as a youngster in Philadelphia, and of flying through planet-saving stratospheric ozone as an astronaut. Our challenge is to preserve the latter while we eliminate the former. EPA and NASA, as partners, are moving us closer to meeting this challenge."

— Dr. Guy Bluford

Dr. Guy Bluford was the first African-American astronaut to fly in space. He flew on the space shuttle Challenger in 1983 and three other space shuttle missions, culminating a distinguished career as an aerospace engineer and pilot in the U.S. Air Force and NASA. A native of Philadelphia, he is now vice president of Federal Data Corporation in Cleveland, Ohio.

Since industries began tracking their toxics and wastes, they have learned it makes better business sense to reduce these chemicals up-front, or at least find ways to recycle them more effectively. Their efforts are beginning to pay off. The most recent inventory in 1996 revealed that, since 1988, plants in the region have cut their toxic air emissions by nearly 54 percent. It also showed that from 1992 to 1996, the amount of toxic waste created has decreased by nearly 29 percent, and 46 percent of that waste was recycled.

Speakers such as Mark Singleton from General Electric, focused on a range of topics including global chemical management and pollution prevention at the regional waste minimization conference. The conference brings together technical and non-technical audiences to discuss pollution solutions. Photo by Tad Radzinski, EPA.

Many of the huge industrial facilities throughout the region succeeded in reducing their toxic releases, according to the 1996 inventory reporting. By using methanol waste as fuel on-site, the Westvaco Corporation in Luke, Maryland was able to reduce its toxic output by 74 percent from 1988 to 1996. The Allied-Signal plant in Hopewell, Virginia managed 94 percent of its toluene waste by recycling on-site. Before nitrate compounds were added to the list of reportable chemicals in 1995, the Bayer corporation in New Martinsville, West Virginia had reduced releases by 51 percent through 1994.

The Toxic Release Inventory is under constant scrutiny and revision. New chemicals and new industries are added to the list every year. In 1998, seven new industries were added — metal mining, coal mining, electric generating plants, petroleum bulk terminals, chemical distribution, hazardous waste treatment, and commercial solvent recovery. They begin reporting their 1998 data in July 1999.

Chemical Emergency Planning

The agency responds well to emergencies, frequently mobilizing personnel on the first day of a response. However, EPA also is dedicated to educating industry, local firemen, police, paramedics, governments and emergency planners on preventing and preparing for emergencies.

For the past five years, Region III has sponsored the national Chemical Emergency Prevention and Preparedness Conference, held in a city in the mid-Atlantic states. The conference attracts attendees from every state and several foreign nations. More than 1,000 people attended the last conference, which was held in December 1997 in Pittsburgh. It featured a series of lectures and workshops, including a relatively new session on counter-terrorism. The conference provides hands-on training, from a mock overturning of a tractor-trailer hauling toxic chemicals to the tabletop simulation of a town experiencing a real emergency. The 1999 conference is scheduled for September 20-23 in Washington, D.C.

Helping Businesses Reduce Waste

The hazardous waste a company generates can cut into the profit margin. Not only do companies pay to manage, transport and dispose of waste, they also may be throwing away valuable resources while incurring potential liabilities. More and more, companies are taking steps to generate less hazardous waste, not only to save money, but also to reduce the financial burden of complying with hazardous waste regulations.

Across the nation, a long-term national effort is under way to reduce the quantity and toxicity of the most persistent, bioaccumulative, and toxic chemicals. Minimizing waste also reduces long-term threats to human health and the environment.

EPA developed a national plan to help companies reduce by half the amount of chemicals by the year 2005. This voluntary effort involves reducing waste at the source, recycling, and preventing chemical releases to air, water or soil, which can occur when wastes are managed rather than reduced.

The agency is working closely with the states in the mid-Atlantic region to help companies reduce their hazardous waste and to provide technical assistance to companies as it did when it sponsored a waste minimization pollution prevention technical conference in August 1998 in Philadelphia. More than 500 businesses from across the nation attended the conference to hear industry leaders describe waste minimization techniques and success stories. A highlight of the conference was the Mobile Outreach for Pollution Prevention Vehicle that demonstrated the latest waste minimization techniques by auto body, auto repair, and coating and surface-finishing industries.

An example of a company that has reduced wastes, Community Light and Sound, Inc. of Chester, Pa., which manufactures speakers and sound-projecting fiberglass horns, shared with the attendees at the conference how it used waste minimization techniques in spray painting to eliminate 421,180 pounds of waste, improve productivity, and save on workers' compensation and insurance premiums.

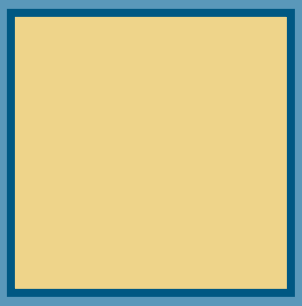
Businesses interested in reducing waste can get additional information by phoning 215/814-2394.

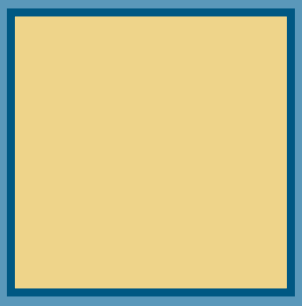
“There is no reason today that anybody should get sick from bad water. Six summers ago, 34 people suffered encephalitis and a little girl died in Cabin Creek because there were no sewers. Everybody deserves to live in a safe and healthy environment.”

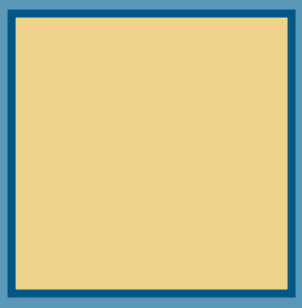
— Jerry West

Born in Cabin Creek, West Virginia, Jerry West was an All-American at West Virginia University and became one of basketball’s all-time greats with the Los Angeles Lakers. He now is vice president and general manager of the Lakers.

IMPROVING WATER QUALITY — A PRESIDENTIAL MANDATE







In his State of the Union Address in January 1998, President Clinton announced an initiative to speed the restoration of the nation's rivers, lakes and coastal waters, and to ensure that all Americans have safe drinking water. A month later, building upon the work done by Vice President Gore, the President announced the Clean Water Action Plan.

This year marks the 25th anniversary of the Safe Drinking Water Act, and since it first became law, there has been tremendous progress to restore and clean the nation's waterways. Clean waters provide environmental, recreational and economic benefits throughout the country, yet 40 percent of America's surface waters are still not safe for fishing and swimming. About half of the country's 2,000 major watersheds, including the Chesapeake Bay, have water quality problems that threaten living creatures and plant life and pose a public health risk.

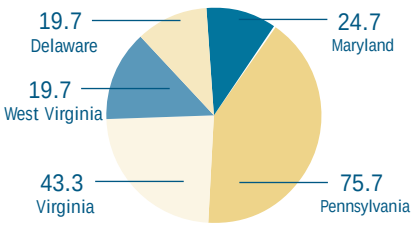
While more than 85 percent of all Americans receive safe, healthy drinking water from water supply systems that comply with federal standards for drinking water, the President has challenged EPA to raise this to 100 percent.

Water pollution in the region once was controlled factory-by-factory. Through the agency's enforcement of environmental laws with our state partners, most of the pollution from local factories has been controlled. But there are serious new threats, such as polluted stormwater runoff, overflowing sanitary sewers, and excess nitrogen and phosphorus from farm runoff.

To protect the source of much of our drinking water, effective operation of sewage treatment plants is essential.

The Clean Water Action Plan identifies initiatives to curb water pollution from a variety of sources. Agricultural runoff is the biggest source of pollution to the nation's waters, affecting 70 percent of rivers and streams, and 49 percent of lakes assessed by the states. The administration's plan targets poor land management and agricultural practices as areas of improvement

Funds Awarded to Region III States for Drinking Water Treatment Facilities in FY '97 & '98



$ Awarded (millions)

where reductions can be made in farm nutrients and animal waste which degrade water quality and harm public health. About 450,000 agricultural operations in this country keep and raise animals in confined conditions. These so-called animal feeding operations can range in size from small farms with fewer than 250 animals up to large farms with more than 1,000. A common practice by the farmers is to spread the manure on fields as fertilizer to help crops grow. Over the years, farmland has become saturated with nutrients which far exceed the ability of crops to absorb them. The excess nutrients then flow into rivers and streams, choking off the growth of bountiful aquatic life.

The average size of a U.S. farm is 491 acres, while the average size in the mid-Atlantic region is 189 acres. States in this region have only two percent of the total U.S. farmland, but six percent of the total number of farms. Since less land is available, controlling and properly managing the application of huge amounts of animal waste on farmland in this region is critical.

As part of the President's Clean Water Action Plan, last September, EPA and the U.S. Department of Agriculture released a national strategy to minimize water pollution from animal feeding operations. Farmers will benefit from site-specific plans which improve feed management, manure handling and storage, land application of manure, and overall land stewardship based on their own needs and operating conditions. This national strategy offers a way to gain significant environmental, public health and natural resources benefits, and also considers the importance of the nation's agricultural economy and sustaining a healthful food supply.

Sewer systems that combine wastewater and stormwater in one system are another problem. In a rainstorm or heavy snowmelt, the volume of water sometimes exceeds the capacity of the combined sewer systems or treatment plants, which overflow, discharging raw wastewater directly into rivers and streams. Modern sewer systems are separated, with wastewater in one system and storm water in another. Pennsylvania has the largest number of combined sewer overflows, not only in the region, but in the U.S. The District of Columbia has 60 outfalls to address. Seaford and Wilmington are the affected cities in Delaware, and Alexandria, Covington, Lynchburg and Richmond in Virginia.

Since 1994, the EPA has worked with states to help communities implement strategies, policies and controls to deal with combined sewer system overflows.

"Growing up in Youngstown, Pennsylvania — and playing golf in some of the most breathtaking places in the world — has given me a deep appreciation of our nation's environment and scenic beauty. Whether or not they play the game, all Americans have a stake in preserving our outdoor treasures."

— Arnold Palmer

Professional golfer and businessman Arnold Palmer was born and raised in Youngstown, Pennsylvania. He is one of America's golfing legends, having won nearly 100 tournaments, including the Masters four times, the British Open twice, and the U.S. Open and U.S. Amateur. His company has designed and overseen the construction of more than 200 golf courses throughout the world. He is the recipient of numerous honors and awards.

Pennsylvania and West Virginia have developed their own strategies. Maryland has adopted nine controls as part of its statewide enforcement. A task force in Delaware completed a report in May 1998 that will be used in drafting new permits. EPA is providing financial support to the District of Columbia and Virginia. The four Virginia cities are receiving a combination of federal and state money to separate their sewer systems. Richmond is targeted to receive $20 million, and Lynchburg will get $2.5 million and an additional $20 million from the U.S. Army Corps of Engineers for a project that may take 20 years to complete.

Involving All Stakeholders

The administration's clean water plan calls for local, state and federal partners to work closely with citizens, businesses and industry leaders to assess the health of each watershed and set priorities to restore and protect them. This cooperative approach considers the characteristics of individual

watersheds for planning restoration goals. For example, comprehensive efforts to reduce polluted runoff, protect drinking water sources, restore wetlands, and control point-source pollution will incorporate solutions developed by stakeholders.

To begin the important dialogue to meet this and other goals of the plan, the agency initiated meetings with each state in the region. These meetings brought together state and federal agencies, local organizations, and environmental advocates to discuss strategies for improving water quality and sustaining the existing healthy waterways.

In October 1998, each state submitted a unified watershed assessment which identified the watersheds where work will begin during 1999-2000. Based on these priorities, EPA will provide states additional funding in fiscal year 1999 to start their restoration actions. The assessments also will be used to develop a national map depicting impaired waters across the country and priorities for cleaning them up.

Agricultural runoff results in nutrient over-enrichment of rivers, bays and streams.

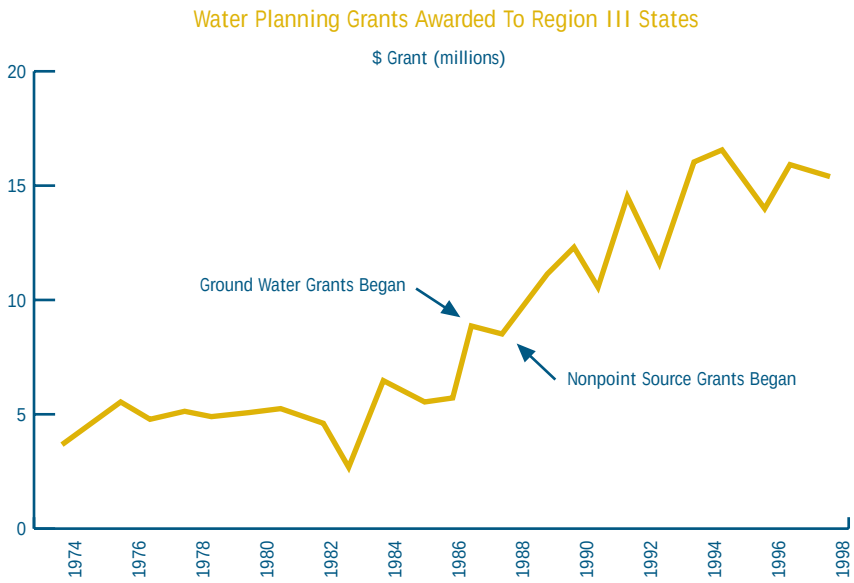
W. Michael McCabe presents Governor Thomas R. Carper a $12.5 million grant for safe drinking water programs in Delaware. Photo by Ron Gough.

The EPA and its state counterparts today look at all of the pollutants entering a watershed and who contributes what. A water quality management plan called Total Maximum Daily Loads, or TMDL, is used now. The total amount of pollutants is calculated with the sum of all individual reductions needed from point sources that dump into a river, such as factories or sewage plants, plus nonpoint sources, such as agriculture and urban runoff, plus an additional margin for safety. This will result in healthier and more productive watersheds by controlling pollution and restoring streams and lakes on a much larger scale than has been done traditionally.

Safe Drinking Water

Safe drinking water is the cornerstone of public health protection. One of the primary goals of the Environmental Protection Agency is to ensure safe drinking water for all Americans. The agency's responsibility is to oversee the state programs, help pay to build new systems, upgrade old systems, set new drinking water standards, and deal with the worst polluters.

There are 20,742 water systems in the mid-Atlantic states providing drinking water to 25.7 million consumers every day. Only 17 percent of public water is supplied by the 19,844 small systems that serve 50,000 or fewer customers. Most violations are committed by small water suppliers who sell water to 100 or fewer customers. Many are monitoring violations, which are critical, because the first step in clean water is knowing what is in the water. To ensure that no problem goes unnoticed, federal and state regulators require water suppliers to monitor and report all types and quantities of contamination, including bacteria,



minerals like lead and copper, and hundreds of chemicals.

The last step in ensuring safe, healthy drinking water is President Clinton's recent announcement of the Consumer Confidence Rule, which requires all community water suppliers to annually tell customers— on their bills, via the Internet, or by other means — what is in their water; the source of their water; the quality of their water source; possible sources of any contaminants; health education statements for children, the elderly and people with immune system disorders such as leukemia and AIDS; and phone numbers for additional sources of information, including the EPA's Safe Drinking Water Hotline, (800)426-4791.

Teamwork the Key

Teamwork is the principal focus of the President's Clean Water Action Plan — getting the myriad of federal, state and local governments, environmental partnerships, businesses and industry groups to tackle the nation's remaining water pollution problems as a team.

While independent approaches may have worked in the past, the President's plan provides an opportunity for organizations to combine resources, leverage funding, and develop solutions on a watershed basis. Congress approved $145 million in EPA fiscal '99 spending to carry out the 111 key actions in the plan. In the mid-Atlantic region, EPA and the Natural Resources Conservation Service are leading efforts to strengthen partnerships and build on the success of clean water programs in the states. The two agencies will join with other federal partners as an interagency team to work closely with state and community representatives. The regional interagency team will improve coordination and communication, and serve as a direct link between the national action teams, states, and locally led watershed groups.

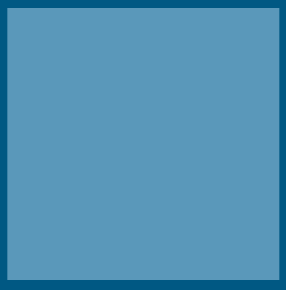
Reservoirs, like Springton Reservoir in Pennsylvania store water for residential and commercial use.

"We've played games with Mother Nature and the environment too long. It's our responsibility to do everything possible to insure that our children and future generations have a safe and healthy world with clean air and water."

— Katie Couric

Katie Couric, co-anchor of NBC News' *Today*, is a native of Washington, D.C. The Emmy-award-winning journalist graduated with honors from the University of Virginia.

THE EARTH IS GETTING WARMER.



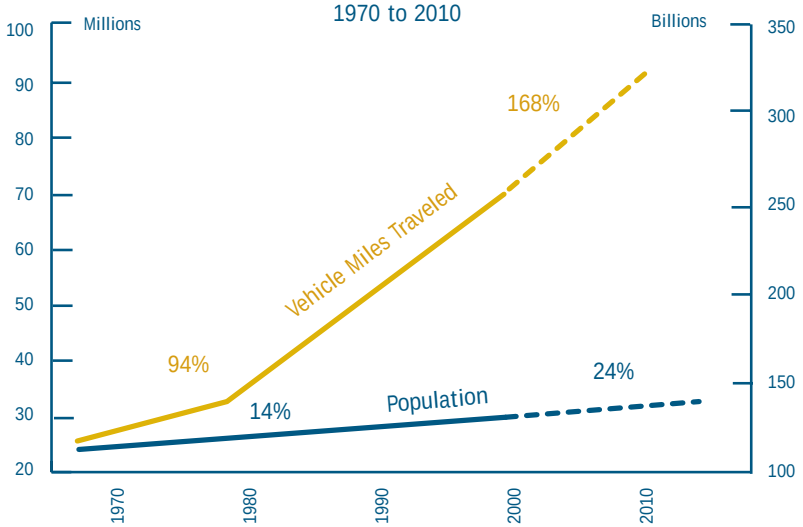
Another of EPA's most sweeping challenges came from President Clinton, who negotiated a treaty signed in December 1997 in Kyoto, Japan, to reduce greenhouse gases and slow global climate change. All developed nations agreed to reductions by the years 2008-2012.

The regional office responded to the President's call to think globally and act locally by hosting several conferences on climate change that included satellite television links to The College of William & Mary and Carnegie Mellon University from a White House conference, and a February symposium in Philadelphia. The conferences, which emphasized solutions, received extensive media coverage. The agency outlined how businesses and families are successfully participating in many voluntary programs, and how its Business Assistance Center provides technical assistance to help small- and medium-sized businesses reduce costs while protecting the environment.

The primary greenhouse gases and their sources are carbon dioxide from fossil fuel combustion — automobiles and trucks, and electric power plants. Energy use accounts for at least half of the world's greenhouse gases. This country is the largest energy consumer in the world, and accounts for 22 percent of carbon dioxide emissions.

Other greenhouse gases include methane from landfills, coal mines, natural gas systems and livestock; and hydrofluorocarbons and petrofluorocarbons from various industrial processes. The combustion of fossil fuels also results in other pollution, including nitrogen oxides, which in addition to being greenhouse gases, are also involved

Region III Car and Truck Traffic Increases Dramatically Compared to Population
1970 to 2010



Source: U.S. Census Bureau and EPA Region III (Projected from 1994 to 2010)

in acid rain and ground-level ozone. These gases prevent the sun's energy from escaping back into space, and trap heat close to the Earth's surface, raising global temperatures and turning the planet into a greenhouse.

Those skeptics who still questioned global climate change after 1997, should pause to reconsider 1998. Mother Nature unleashed all of her devastating fury, leaving almost no geographic area unscathed. July 1998 was the hottest month ever recorded, and the seventh consecutive month in which global temperatures set records. The 10 hottest years in history have all occurred in the past 12 years, with 1998 the hottest since record-keeping began in 1880. And, every year sees a new record for land and water temperatures. Nobel Prize-winning scientists and members of the National Academy of Sciences tell us these extreme weather changes are consistent with global warming.

Extreme and erratic weather has brought more frequent and more severe hurricanes and tornadoes; flooding; drought; deadly heat waves; fire storms; and violent electrical, ice, snow and hail storms, and blizzards. Thousands of people were left homeless; and since 1992, damage to property and agricultural crops is approaching $100 million.

Catastrophic wildfires in Florida, Mexico, Brazil and Indonesia only made matters worse, by releasing carbon dioxide into the atmosphere from burning forests. The Indonesian fires alone released more carbon dioxide in three months than all of Europe's industry does in a year.

Over the past century, the average global temperature has increased by about 1º Fahrenheit. Carbon dioxide concentrations in the atmosphere are the highest they have been in the last 160,000 years. Temperatures have also risen and fallen during that period as a result of carbon dioxide

"Ozone smog is dangerous to just about everyone, regardless of how healthy we are. People who spend a lot of time exercising, playing or working can experience fatigue and breathing problems from ozone smog. Before using a car on those ozone-alert days, ask yourself, 'Is this trip necessary?' "

— Mary Lou Retton

Olympic champion Mary Lou Retton was born and raised in Fairmont, West Virginia.

levels, which may double or triple in the next 100 years, with a corresponding rise in temperature from 1.8º to 6.3º Fahrenheit. Global sea level has risen 4-10 inches and is projected to rise another 20 inches in the next century. Mountain glaciers are melting worldwide. Glacier National Park has lost 70 percent of its ice area in the last 100 years.

A warmer atmosphere absorbs more water from the oceans and makes more moisture available to storms, increasing the likelihood of floods and crop damage in some places. On land, moisture evaporates quickly in warm weather, and droughts are likely to be more severe. Changes in rain and snowfall combined with increased evaporation from higher temperatures can affect water supplies and water quality, threatening hydropower, irrigation, fish migration and spawning, other wildlife, and drinking water.

Every time a light, a computer, an appliance or a motor is turned on, a utility power plant burns fuel to generate electricity, and releases large quantities of carbon dioxide and nitrous oxide into the atmosphere. Utilities are responsible for 35 percent of carbon dioxide emissions. Reduced energy use and conservation are essential to reduce greenhouse gases. Almost 99 percent of carbon dioxide emissions are associated with converting fossil fuels to energy. More than 96 percent of nitrogen oxide emissions and 88 percent of sulfur dioxide emissions are associated with energy for utility companies, furnaces and boilers, and transportation.

Cars, trucks, minivans, sport utility vehicles and other forms of transportation account for 32 percent of all carbon dioxide Americans put into the atmosphere. Every gallon of gasoline burned releases 22 pounds of carbon dioxide into the air. While autos have become more fuel efficient, more people are driving more cars more often. Seventy percent of all trips today in a car or van are with only one or two people. Increased use of mass transit and car pools is needed to reduce vehicle use. Oceans and plants live on carbon dioxide. Planting trees and keeping oceans free of pollution will help these carbon dioxide users better absorb carbon dioxide.

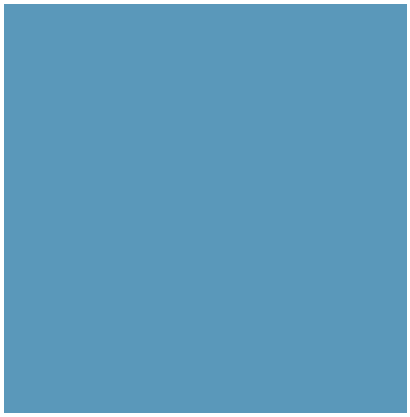
EPA's Superfund program saves as many trees as possible when covering landfills. Pictured here near Towanda, in northeastern Pennsylvania, trees make the area an attractive habitat for wildlife, and protect against water and wind erosion. Photo by R.A. Roman, EPA.

Voluntary Programs

Three successful EPA voluntary programs that help conserve energy and reduce greenhouse gases are WasteWi$e, Energy Star® and Green Lights®. WasteWi$e encourages businesses to reduce solid waste through waste prevention, recycling, and buying or manufacturing products with recycled content.

New homes and buildings with Energy Star® products use 20 to 40 percent less energy than those with standard new products, and considerably less than with older products. Products that bear the Energy Star® label include computers, copiers and many types of office equipment; refrigerators, washers, dryers and other home appliances; furnaces and air conditioners; and lighting fixtures. Television sets and VCRs with the Energy Star® label use up to 75 percent less energy than conventional models when switched off, without any sacrifice in quality or reliability.

Energy Star® Buildings & Green Lights® Partnership is a voluntary program where business and organizations upgrade their buildings with energy-efficient lighting. A total of 506 participants in the mid-Atlantic states represent 975 million square feet of space and save $32 million a year in energy costs. The yearly elimination of 768 million pounds of carbon dioxide, 8.5 million pounds of sulfur dioxide and 92.7 million pounds of nitrogen oxides has the same environmental benefit as planting 100,000 acres of trees and removing 75,000 cars from highways each year.



EPA Administrator Carol M. Browner

If every commercial and industrial building in the country between now and 2010 adopted Energy Star®, utility bills would be cut $130 billion and greenhouse gas emissions would be reduced from 350 to 500 million metric tons of carbon equivalent. This is equal to the pollution produced by 20 million automobiles.

Businesses and industries are becoming more energy-efficient. Here are other solutions to the greenhouse gas problem:

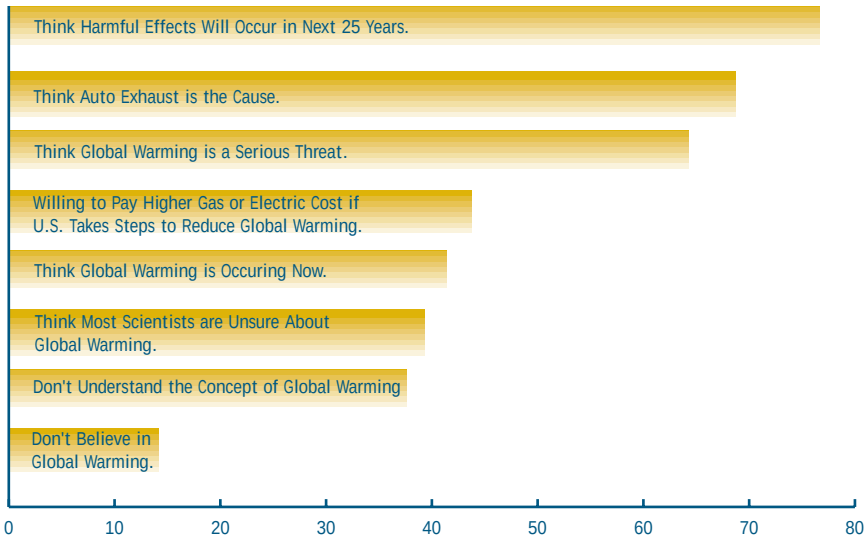
Alternative Sources of Energy — Choose green power, which is electricity that comes mostly or entirely from renewable sources such as solar, wind and geothermal. Used now in California, the Pacific Northwest and New England, homeowners there can cut at least 50 percent of the carbon dioxide from their consumption and slash utility bills. Another source is biomass, which uses crops and trees specifically grown as fuel sources or converts waste products from agricultural crops, forestlands and municipal solid wastes into liquid and gas fuels for heat or electricity generation. As production and availability increase, and prices of solar and photovoltaic cells and fuel cells become more competitive, there needs to be widespread acceptance and greater use.

Fuel-Efficient Automobiles and Trucks — The average new vehicle today gets double the number of miles per gallon that cars got in 1973. Manufacturers are working to produce automobiles three times more fuel-efficient than today's models. Many businesses and individuals are beginning to rely on vehicles that run efficiently on natural gas or electricity. Driving less and driving more efficiently and keeping a vehicle properly tuned will substantially reduce pollution.

Reforestation — Trees absorb carbon dioxide, and leaves filter dangerous pollutants from the air. Trees shade homes, buildings and pavements in hot weather and shield them from winds in cold weather, cutting energy costs for heating and cooling. A reforestation strategy also offers many valuable ecological and economic benefits, including production of forest products, maintenance of biodiversity, watershed protection and recreation.

Regardless of what happens in the decades ahead, people will have to change lifestyles. Decisions and commitments now will affect the quality of life for their children, grandchildren and future generations of all living things. Otherwise, changes most will consider unacceptable may occur in a world disrupted by climate change.

Public Concerned About Global Warming



Source: Gallup Organization

The Consequences of Climate Change

If Earth's climate continues changing, with increasing temperatures, precipitation and rising sea levels, the mid-Atlantic states may be severely affected in many ways.

Bays and Coastal Areas — Rising sea levels may erode beaches, inundate coastal lands and wetlands, and threaten resort communities along the Atlantic coast and Chesapeake Bay. The barrier islands and their natural resources and economies would be threatened. A one-foot rise in sea level at Ocean City, Maryland would put under ocean surf more than 200 feet of shoreline. Projects needed to maintain the beach would cost between $60 and $85 million. Many recreational areas may be lost. By 2100, 5,000 square miles of dry land and many coastal wetlands would no longer exist.

Flooding of Cities — The nation's capital, built on former swampland adjacent to the Potomac River, is especially vulnerable to flooding from changing sea levels. National Airport, the Jefferson Memorial, the Mall, the Reflecting Pool and other landmarks are all susceptible to flooding. Severe flooding in 1985 led to the deaths of 47 people in the region and cost more than $900 million in damages.

Health Impacts — Global warming means more prolonged heat waves. Heat-related illnesses and deaths would increase. The very young, the elderly and the poor will be most at risk. Increased temperatures may lead to greater risk of hantavirus, a fatal respiratory infection, and exotic mosquito-borne diseases associated with the tropics, including malaria, dengue fever and eastern equine encephalitis, which attacks both horses and humans.

Agriculture — Crop yields and geographic distribution of crops would change. Some states may gain, but others would lose. It would be expensive for farmers to adapt, and may alter land-use patterns by converting forests into farmlands. Reduced crops would mean increased prices and a drop in exports that could be expensive for consumers, U.S. trade balances and global food security.

Water Resources — Changes in water flow and water quality could occur with the potential for more severe water shortages in some areas. An increased demand for irrigation from farmers could further exacerbate current water shortages.

Loss of Forests and Species — A temperature increase of 3°F could threaten between 7 and 11 percent of North America's plant species. There would be a shift in ecological zones for birds, fish and other wildlife. Natural and man-made barriers would block migration for some animals. Recreational hunting and fishing could dwindle in certain parts of the country. Fish and shellfish recovering in the Chesapeake Bay would be decimated. If coldwater streams become too warm, it would mean the end of trout fishing in most mid-Atlantic states. Red spruce, hemlock, beech and other trees would grow only in Canada. Trees and vegetation in forests in drier areas would die from drought, insects and increased disease. Projected summer heat would increase the risk of forest fires, especially where forests are already under stress. Commercial timber production, recreational areas and wildlife habitat are all threatened.

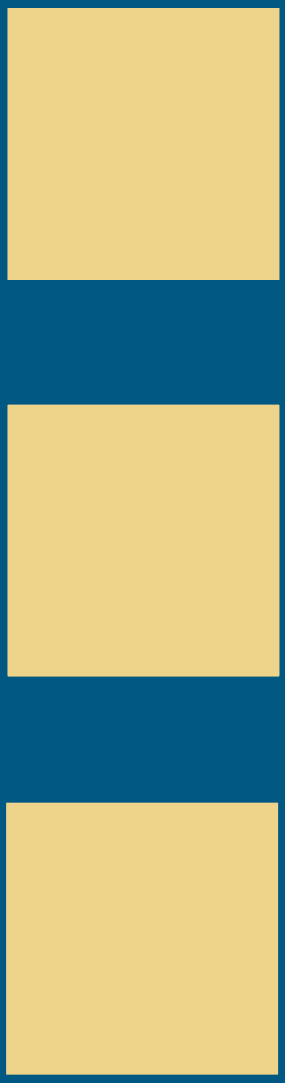
For more information:
Access EPA's global warming Internet site at http://www.epa.gov/globalwarming.

"Breathing deeply and freely is especially important to me, and ozone can create serious problems. Industrial and automobile pollution combine with sunlight in hot weather to produce ozone, which can cause permanent lung damage and aggravate heart disease, emphysema and asthma. On ozone alert days, help us all breathe easier and sing better by limiting daytime driving and combining errands."

— Jessye Norman

Jessye Norman, one of the world's leading opera prima donnas, grew up in Augusta, Georgia and graduated from Howard University in Washington, D.C. She is also recognized and has been widely honored for her singing versatility that includes American spiritual and folk songs. In December 1997, she was invested with our country's highest award in the performing arts, The Kennedy Center Honors, making history as the youngest recipient in the Honors' 20-year existence.

THE CHALLENGE OF REDUCING AIR POLLUTION



Another area in which the mid-Atlantic region excelled during the past year was in taking bold action against air pollution through a regional approach to reducing nitrogen oxide emissions, by aggressive enforcement and requiring cleaner vehicles.

The agency fights to protect the air we breathe by enforcing the Clean Air Act. EPA has established air quality standards for six pollutants — carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter and sulfur dioxide — to prevent harmful impacts to public health and the environment. More than 13 million people in the mid-Atlantic states live in areas that don't meet the health-based standard for ozone.

On September 24, 1998, EPA Administrator Carol Browner announced new and tougher, health-based smog controls for 22 states from Missouri to Massachusetts. The new regulations, designed to reduce air pollution that blows from the Midwest into the mid-Atlantic and the Northeast states, will help prevent thousands of cases each year of smog-related illnesses like bronchitis and exacerbated cases of childhood asthma.

The new controls were based on research and analysis done by the Ozone Transport Assessment Group, a group of representatives from 37 states, industry and environmental organizations. Under the plan, nitrogen oxide emission limits were assigned to the states.

By 2007, the states involved must reduce emissions of nitrogen oxide by 1.1 million tons, or 28 percent. These reductions also will help

New emissions testing equipment used here in a Pennsylvania auto emissions test helps reduce ground-level ozone.

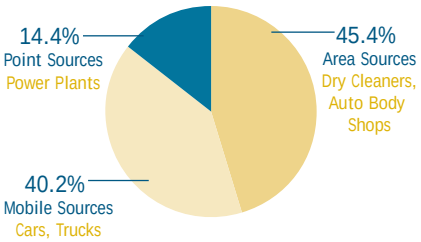
reduce acid-rain damage, pollution in waterways like the Chesapeake Bay, and greenhouse gases that contribute to global warming.

States in the mid-Atlantic region have spent millions of dollars to reduce unhealthy levels of smog, only to have pollution from sources hundreds of miles away blow in and make it impossible to meet federal clean air standards locally.

Under the Browner plan, the states will have the flexibility to decide how best to make the reductions and, by September 1999, must submit a state implementation plan or "SIP." EPA urges this be done in the most cost-effective way. For instance, the cost of reducing a ton of nitrogen oxide from a power plant is $1,500, compared with $3,400 per ton from automobile exhaust.

The Region III office worked closely with its partner agencies in the mid-Atlantic states to help further reduce ozone smog pollution through inspection and maintenance of motor vehicles. Cars and trucks are the single largest source of volatile organic compounds, called VOCs, that interact with nitrogen oxide, or NOX, to create smog.

Most VOCs in Region III From Area Sources



Source: Emission Trends Viewer CD, OAQPS, EPA

EPA staff helped states develop programs best suited for their needs. Delaware, Maryland, Pennsylvania and Virginia all have improved auto inspection and maintenance programs to see that a car's emission control system is working properly. Poorly maintained vehicles, or those with malfunctioning emission control systems, are major polluters. The District of Columbia will begin testing in 1999.

With urban sprawl and low-cost gasoline, vehicle traffic is getting worse. Since 1987, the number of miles motorists have driven has increased 35 percent. Last year, 70 percent of urban freeways were clogged during rush hours, compared with 55 percent in 1983. In 1969, 82.7 percent drove to work in Washington, D.C., and this increased to 91.4 percent in 1990, despite the fact that the area has an excellent rapid transit system. Between 1970 and 1987, the number of cars on the road more than doubled, and increased faster than the number of people.

Suburb-to-suburb commuting now accounts for 44 percent of all metropolitan traffic versus 20 percent for suburb-to-downtown travel. Clogged urban freeways are projected to spread from crowded cities to less developed areas that do not have traffic jams that increase air pollution.

New Air Quality Standards

In July 1997, EPA issued new air quality standards for ground-level ozone and particulate matter that will provide additional protection to nearly 133 million Americans, including 40 million children. The new standards are expected to save

"When I was growing up in Pittsburgh, we didn't know all of the dangers of ozone. But today, we know how it can cause shortness of breath, congestion, chest pain, coughing and wheezing. Our children, the elderly, and those who suffer from asthma are especially vulnerable. When we have those red-alert days, we can all breathe easier by limiting daytime driving, combining errands, car pooling and riding public transportation."

— Johnny Unitas

Johnny Unitas was born in Pittsburgh and now lives in the Baltimore area. He quarterbacked the Baltimore Colts to two NFL championships and is in the Pro Football Hall of Fame.

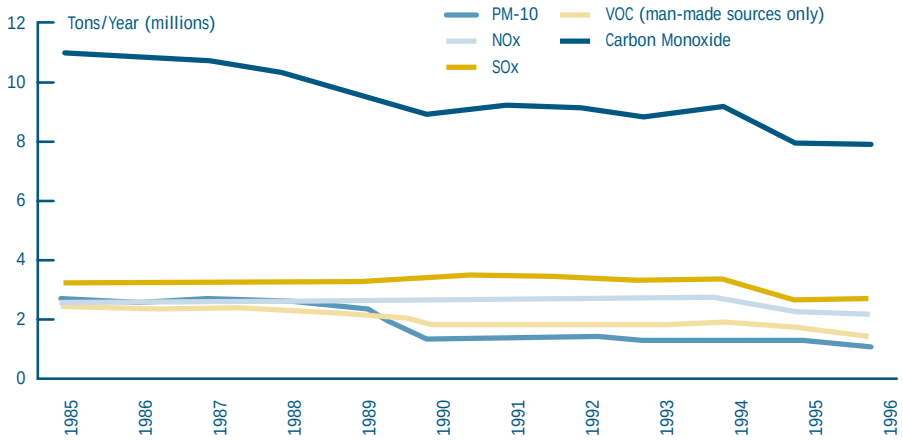
as many as 15,000 lives a year, cut annual serious respiratory-related problems in children by 250,000 cases, cut overall hospital admissions by 9,000 per year, and reduce the number of chronic bronchitis cases by 60,000 a year.

Particulate matter consists of the solid particles and liquid droplets found in the air, invisible to the naked eye, that appear as clouds or a fog-like haze. These fine particles come from many different sources, including industries and vehicles.

Ozone smog hurts just about everyone, regardless of how healthy they may be. Breathing smog can cause shortness of breath, congestion, chest pain, coughing and wheezing. Especially vulnerable are children, whose respiratory systems are not fully developed, the elderly, and people with lung diseases such as asthma, chronic bronchitis and emphysema. Smog is linked to 10 to 20 percent of all summertime respiratory-related hospital admissions in the northeastern United States. Similar to a bad sunburn, ozone can cause permanent lung damage. Even relatively low amounts of smog can affect healthy adults who work or exercise outdoors. Ozone smog reduces the body's immune system defenses, making people more susceptible to respiratory illnesses, including bronchitis and

Vice President Al Gore teaches children about the environment.

Air Emissions in Region III



pneumonia. The American Lung Association, says that 14.2 million people in the U.S. suffer from chronic obstructive lung disease, the fourth-ranking cause of death. Most suffer from either emphysema (1.7 million people) or chronic bronchitis (12.5 million people). Another 12 million Americans, equal to the population of Pennsylvania, suffer from asthma. Four million asthmatics are children under 18 years of age.

Medical and health care costs associated with chronic respiratory ailments exceed $7 billion a year and are rising. This cost goes up more when the hours of work people miss because of such illnesses is taken into consideration.

Smog Also Affects Plants and Animals

Ozone impairs the ability of plants to produce and store food. This inhibits growth and reproduction, and plants become more susceptible to diseases, insect attacks and extreme weather. Ozone can reduce agricultural yields and damage economically important crops.

Adverse affects on plants and animals disrupt ecological functions, including water movement and cycling of mineral nutrients. Nitrogen oxide is one of the air pollutants that also causes acid rain. Nitrogen pollution also affects the water quality of streams, rivers, lakes and bays, robbing oxygen from the water, which weakens fish populations. More than 20 percent of the nitrogen entering the Chesapeake Bay is linked to air pollution.

Other Programs

EPA is helping control smog in other ways. The reformulated gasoline program is one of the most important advances made against air pollution since lead was phased out of gasoline. Compared to conventional gasoline, reformulated burns more cleanly, does not evaporate as easily, and produces 15 to 17 percent less pollution. Since 1995, it has been sold throughout Delaware and the District of Columbia as well as parts of Maryland, Pennsylvania and Virginia. Phase one of the program is expected to save 1.3 million tons of ozone-forming emissions and reductions will be even greater during phase two, beginning in 2000.

In July 1998, Pennsylvania lowered the vapor pressure at which distributors and retailers pump gasoline, to reduce volatile organic compound (VOC) emissions in Pittsburgh. RVP, or Reid Vapor Pressure, measures a fuel's volatility, which affects the rate gasoline evaporates and emits VOCs, a major component of smog. Distributors and retailers pump the cleaner, low-RVP gasoline in Pittsburgh during the summer months when ozone levels are at their highest.

Voluntary programs were another area where the agency helped businesses reduce energy demand and cut costs. The region's Business Assistance Center provides technical assistance to small- and medium-size businesses through trade associations, and particularly helped reduce volatile organic compounds such as gasoline, oil,

At the annual meeting of the Chesapeake Executive Council, December 8, 1998 at the National Aquarium in Baltimore (left to right), John F. Wood, Jr., Chairman of the Chesapeake Bay Commission and member of Maryland House of Delegates; James M. Seif, Secretary, Pennsylvania Department of Environmental Protection, representing Governor Tom Ridge; Marion Barry, Mayor, District of Columbia; Peter D. Robertson, EPA Deputy Administrator, Parris N. Glendening, Governor of Maryland; and James S. Gilmore III, Governor of Virginia.

paint and solvents used by dry cleaners, printers and auto body shops. GreenLights® and other voluntary programs are explained in the section on climate change.

Educating the Public

Smog levels generally are highest during the summer months. Now ozone forecasting and ozone action alerts are publicized in all major cities throughout the region. This forecasting provides timely information to susceptible people (asthmatic children and the elderly) about the dangers of ozone, and helps them avoid exposure. When there is an alert, avoid strenuous outdoor exercise. Individuals can help reduce ozone levels by doing the following:

Conserve electricity.

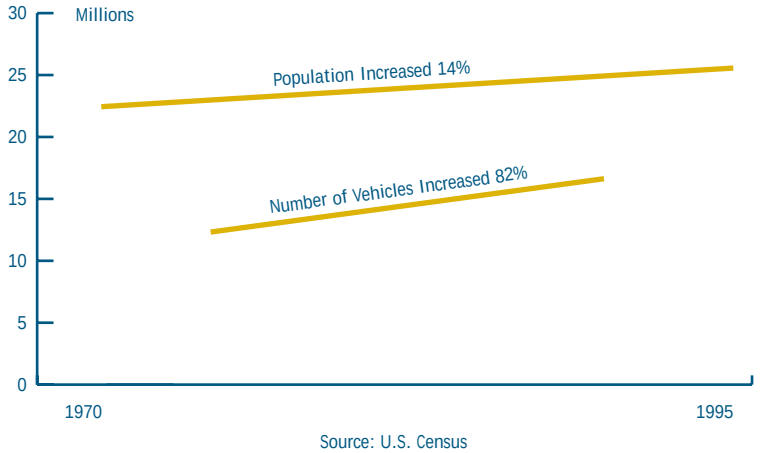
Wait until evening to use lawnmowers or other gas-powered equipment, and delay lighting grills and campfires until the cool of the evening.

Use latex paint or paint with low volatile organic compounds when possible. Avoid oil-based paints, paint thinners, solvents and charcoal lighter fluids.

Limit daytime driving and combine errands to avoid unnecessary trips.

Walk, bike, carpool or take public transportation. Wait until evening to refuel your car, and don't top off the tank.

Number of Vehicles is Increasing Faster than People



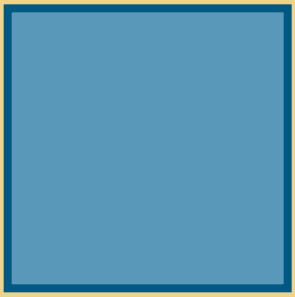
Source: U.S. Census

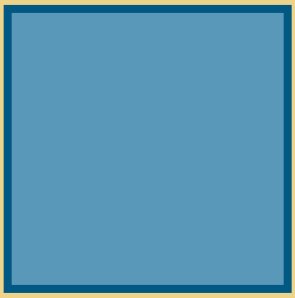
"There's so much young and great athletic talent today in the inner city. Kids need a safe, clean environment to live, grow and play in. When I was growing up in Philadelphia, we'd spend hours playing basketball on courts in our neighborhood."

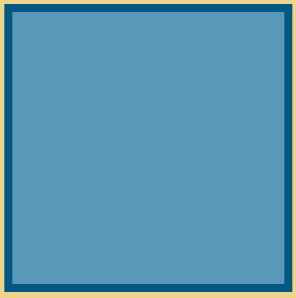
— Dawn Staley

Basketball superstar and Olympic gold medalist Dawn Staley was born and raised in Philadelphia. An All-American at the University of Virginia, she now plays professionally in the Women's National Basketball League.

PROTECTING OUR CITIES AND THE URBAN ENVIRONMENT







Challenged with a myriad of complex environmental problems in its cities and urban areas, the agency took major steps during the year to protect the health of children, ensure environmental justice, restore economically viable abandoned buildings and vacant lots that were contaminated with hazardous waste, and help cities become Green Communities.

Cities have unique problems because environmental problems are concentrated in densely populated areas — smog, indoor and outdoor air quality, asbestos, radon, lead, drinking water, sewer overflows and pesticides. Nearly two-thirds of the people who reside in the region's cities are especially vulnerable to health problems caused by poor environmental practices — including children, the elderly, minorities and those at the poverty level.

Children's Health — Many factors impact the health of children growing up in cities. Asthma is a severe problem among school-age children who are particularly affected by smog and air quality. The agency helped create an asthma task force in Philadelphia to study conditions that cause high incidents of asthma attacks. Additionally, a community-based environmental project with minority asthmatic children in 20 Philadelphia homes is studying indoor factors such family pets, molds and roaches.

The agency recommended that a bus staffed by trained medical professionals be equipped with the latest medical devices and educational information about asthma and sent to tour schools in Pittsburgh and Philadelphia. Private funding is being sought through medical colleges.

Children also risk lead poisoning as well as the hazards of asbestos and radon. Older urban housing that contains high

concentrations of deteriorating lead-based paint represents the single greatest source of lead exposure to children. Children six years and younger are most vulnerable to lead poisoning, and there are more than two million living in the region, 16 percent of whose families live below the poverty level. There are more than 7.5 million houses in the mid-Atlantic states that have lead-based paint. Cities with the highest numbers include Philadelphia, 524,008; Baltimore, 240,115; Washington, D.C., 220,523; and Pittsburgh, 154,249.

The agency issued civil complaints against two Philadelphia area landlords over lead disclosure violations. The complaints were two of the first four to be issued in the nation under a new requirement, and involved landlords who did not disclose the presence of lead to tenants, whose children became lead-poisoned from living in the rented apartments. In addition to enforcement, EPA joined the Philadelphia Department of Public Health in mailing information about the regulations to 35,000 licensed landlords in the city. The new Real Estate Notification and Disclosure Rule requires landlords and owners to provide tenants and buyers of pre-1978 properties with lead-based paint information to prevent exposure of children six years and younger to lead-based paint hazards.

Lead poisoning damages children's brains and nervous systems, stunts growth, affects hearing, and causes a number of developmental difficulties. In adults, high lead levels can cause high blood pressure, headaches, digestive problems, memory and concentration problems, kidney damage, nerve disorders, and other health problems, such as affecting the ability of both men and women to have healthy children.

Another hazard is radon, a colorless, odorless gas formed by the radioactive decay of radium atoms. While it is a problem in some cities, it also is prevalent throughout many parts of the mid-Atlantic states. Some 2.6 million people are in areas of potentially high exposure. Radon is the second leading cause of lung cancer, and is responsible for 12 percent of lung cancer deaths.

Grants for radon education and services have been given to state radon offices to reduce levels of unacceptable indoor radon and to educate both parents and children about the dangers of radon. All Region III states except Maryland have radon programs underway. Efforts have included extensive public outreach at health fairs and PTA meetings. Radon activities have been coordinated with the Tools for Schools program, a voluntary pilot program that offers technical assistance to schools to assess, maintain and improve indoor environmental quality. More than 200 schools in all states in the region are now involved with some type of program. EPA has cooperative partnerships with organizations including the American Lung Association, National Environmental Health Association and National Parents and Teachers Association.

Recycling Land — In the region's largest communities, there are acres of abandoned land and decrepit buildings where vital industries once stood, left behind by urban sprawl. Most hazardous waste sites that require Superfund cleanup actions are right in the middle of places where people live and work: the auto repair shop down the street that used toxic solvents to clean engines; the dry cleaner in a ground-floor apartment building who used volatile chemicals in the laundering process; the plant that manufactured metal goods; or the garbage dump just outside of town that accepted industrial waste before it was more strictly regulated.

Historically, these sites did not appeal to developers and lenders because of the perceived liability for potential contamination. At the end of 1998, the agency awarded 17 pilot grants of $200,000 to cities in the region to inventory and assess abandoned industrial sites for potential redevelopment. In the last year, 37 assessments were completed at sites where contamination hindered redevelopment. The long-term benefits of the program include eliminating environmental hazards and making the property usable, which generates new jobs, an increased tax base and a better partnership between public and private sectors.

Most large cities received grants, including Baltimore, Philadelphia, Pittsburgh, Richmond and Washington, D.C. Smaller rural communities have also received pilot money — places like Phoenixville,

"Urban sprawl has been a major contributor to polluting our environment. We need to green our cities and guarantee everyone clean air to breathe and safe water to drink."

— Kevin Bacon

Actor and director Kevin Bacon was born in Philadelphia, where he trained at the Manning Street Actor's Theatre. His career includes both stage and feature films.

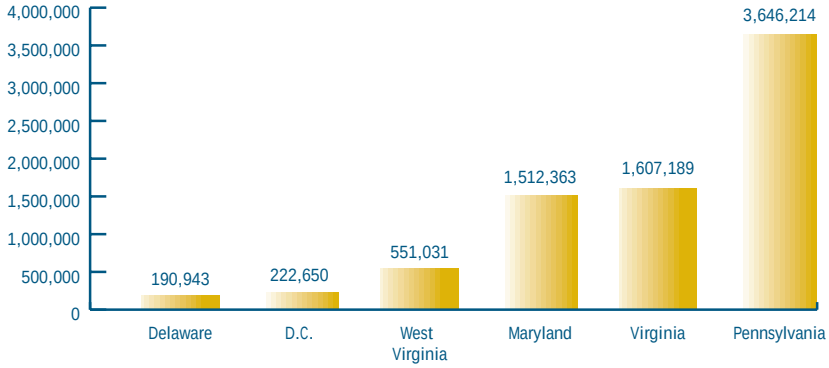
Pennsylvania, where the borough government plans to transform abandoned industrial properties into a recreational greenway. In Shenandoah, Virginia, the Big Gem Cast Iron Furnace, once the principal producer of iron in the area, shut down, leaving a vacant tract in the town center. Shenandoah aims to develop a recreational center and historical park on the land.

In addition to the pilot grants, in March 1998, Vice President Gore announced 16 communities to be designated Brownfields Showcase Communities. In the mid-Atlantic states, Baltimore was chosen as a showcase community to receive $1.6 million in federal funding. To date, the city has inventoried 1,000 acres of potential Brownfields ranging in size from less than an acre to 60 acres. The city has done environmental testing on more than 30 sites in three years and is working to redevelop four city-owned sites. Several private investors have shown interest in 48 vacant waterfront acres, a 14-acre former meat processing plant, and a former incinerator that sits on 19 acres in east Baltimore. More information about Brownfields can be obtained by phoning 215/814-3129.

The region is currently developing a partnership program involving 15 other federal agencies to serve as a model for regional-level cooperation. Creating partnerships between federal and state agencies and the private sector to redevelop formerly contaminated sites is one of the greatest challenges facing the region's cities. The closure of military bases in urban areas is another cleanup challenge because of the contaminants that were left behind. The region's Superfund federal facilities team is assisting with this process at 32 closed bases.

Improving air quality, reducing lead-poisoning, and providing safe drinking water will add to the quality of life in urban neighborhoods.

Estimated Number of Houses in Region III Containing Lead-Based Paint



Source: U.S. Census Bureau

Environmental Justice — Through enforcement and grant programs, the agency has helped protect children, elderly and minorities from high-density sources of industrial activity that concentrate pollution, including toxic chemical releases that contaminate urban air, water and land.

The region has had long and continuing relationships with the citizens of Chester, Pennsylvania, and is actively addressing environmental justice issues there. Using an innovative settlement of a lawsuit called a supplemental environmental project, EPA reached agreement with the former Westinghouse Electric Corp. In addition to paying a fine to reduce lead paint hazards in the playground equipment in Chester, Westinghouse will remove contaminated soil, plant shrubbery to prevent children from playing in suspected soil, and repaint equipment at several public parks and playgrounds.

In addition to 28 enforcement actions taken, the agency is pursuing positive environmental results through grant programs.

Green Communities — The region developed the Green Communities Program to help local communities protect their environmental resources. A Green Community strives to be environmentally correct, promote economic vitality and a high quality of life, and incorporate local values in the government-community decision-making process.

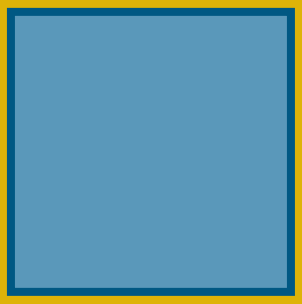
The regional office has developed an assistance kit, provides tools and information, and develops partnerships with community-based service providers to help create sustainable Green Communities. The partnership coalition includes financial institutions, economic development organizations, and educational and environmental organizations. The complete package can be accessed on the Internet at <http://www.epa.gov/region3/greenkit/>.

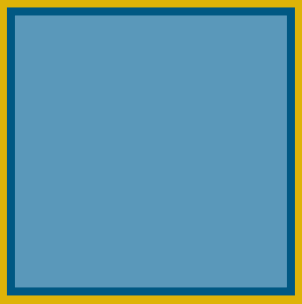
“When I attended West Virginia University, the last thing I ever thought I would see in Morgantown was a waterfront park on the Monongahela. Now there’s even a riverside avenue named Don Knotts Boulevard. That’s just one more reason we not only must protect our environment, but restore it to its pristine beauty.”

— Don Knotts

Motion picture, television and stage actor Don Knotts was born in Morgantown, West Virginia, and graduated from West Virginia University.

ACID POLLUTION — IN THE AIR AND WATER





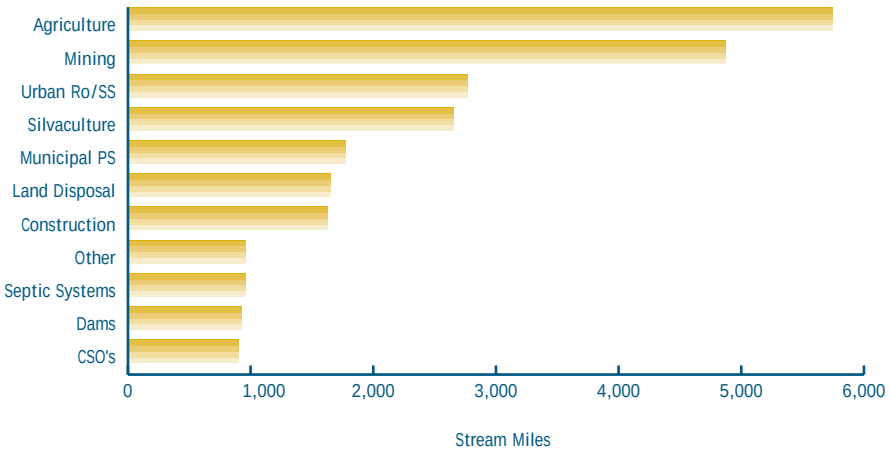
The mid-Atlantic states have more acid rainfall than any other region in the United States, and EPA has been working to significantly reduce the greatest source of pollution. Since 1990, 25 power plants in the mid-Atlantic states have reduced emissions of sulfur dioxide by 40 percent. Beginning in 2000, another 50 energy-producing plants will provide additional reductions. This downward trend is expected to continue providing cost and environmental benefits.

Acid rain forms when sulfur, nitrogen and other substances combine in the atmosphere, get carried far from their original sources, and then fall on rivers, lakes, bays, forests, wetlands and even urban environments. When the compounds fall as rain, snow and fog, it is called “acid rain.” In a dry form, they are acidic gases or particulates.

This fallout kills trees and vegetation in forests, destroys habitat for wildlife, and creates an imbalance in surface water, killing and endangering plant and fish life.

Through its outreach and education programs, the agency is working to reduce demands for energy. Consumers are encouraged to become more conscious of reducing utility use and costs in their homes. Business, industry and other organizations are encouraged to participate in voluntary energy-saving programs including Energy Star® and GreenLights®. Any reduced burning of fossil fuels by utility power plants will also help achieve goals in two other regional priorities — ozone smog and climate change.

Mining is the Second Largest Pollution Source in Region III's Rivers and Streams



By switching to low-sulfur coal or installing smokestack scrubbers, power plants have significantly reduced the hazards of acid rain and deposits on land and water. Some companies even found they could buy low-sulfur coal at prices less than they had been paying under older, existing contracts. The challenge now is to reduce demands for energy.

Reducing emissions from power plants helps to reduce acidification of rivers, lakes and streams, and slow global climate change.

The agency also works with the states and local agencies to routinely audit air monitoring systems at air pollution sources and to ensure that the data tracking these reductions is valid.

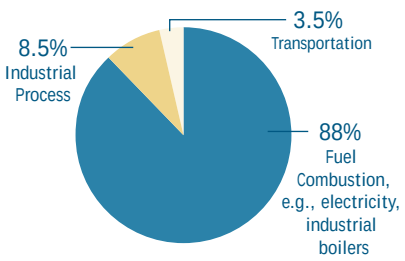
Closed Mines Create A Serious Problem

Acid pollution comes in many forms. Abandoned coal mines are a major problem in many areas of Appalachia. When these mines close, they frequently flood. Acid water drains out of these mines into neighboring streams and rivers, turns them orange, red and yellow, and often kills fish, vegetation and all other forms of life. These mines account for approximately 70 percent of existing acid mine drainage in Appalachia. Some 3,239 miles of streams in Pennsylvania and 1,100 miles in West Virginia are polluted from acid water flowing from mines.

EPA created the Eastern Mine Drainage Federal Consortium, a coalition of 14 federal agencies and bureaus that have a common interest in water quality and the problems created by mine drainage. The coalition identified a potentially serious problem with the once heavily polluted Monongahela River. Today, the river is used for recreation and fishing. The group is studying thousands of acres of flooded underground mines to get a handle on this problem before the polluted water breaks out into surface waters.

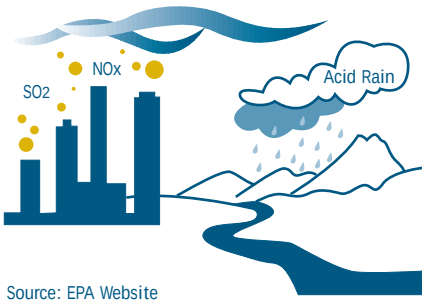
During the mining process, the mineral pyrite is exposed to oxygen and water. The oxygen, water and pyrite react to form sulfuric acid that dissolves toxic concentrations of metals, including iron and aluminum, from the surrounding soil. As large underground mines close and shut down their water treatment facilities, the mine shafts fill with water and overflow. The exact locations and environmental consequences of these discharges cannot always be predicted. Some coal companies are planning to install large acid treatment facilities and may have to operate them indefinitely.

SO_2 Emissions by Source — 1996



Source: EPA's National Air Quality and Emissions Trends Report — 1996

Acid Rain Formation



Source: EPA Website

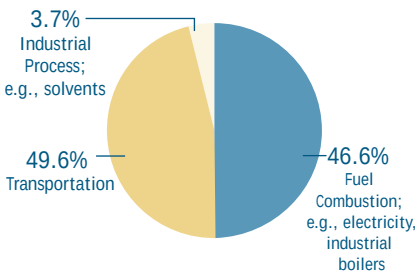
There are success stories from grants made by the regional office. EPA granted money to some Cheat River Watershed groups in West Virginia to help restore a portion of a watershed. Acid runoff from a mine abandoned 50 years ago was pouring into Sovereign Run, which emptied into the Big Sandy Creek River and ultimately into the Cheat River. Fish were unable to live and breed in 20 miles of the stream because of the high aluminum content in the water from the mine. A $50,000 reclamation project constructed a small dam at the mine opening, creating a pond that backed the water level up into the mine. Water from the mine now flows over the dam and runs down a hill through a rock-filled channel that filters out the acid and other impurities. Fish are now returning to their native habitat.

West Virginia has more than 5,000 mine sites that present public health and safety threats in various ways, including subsidence, underground fires, and acid mine drainage affecting water quality.

Based on the local approach the region was taking to restore streams and rivers polluted by acid mine drainage, the Western Pennsylvania Conservancy has partnered with other committed conservation groups, the Pennsylvania Coal Association, and the United Mine Workers to push for funding of projects in Pennsylvania. The state has 250,000 acres of unreclaimed lands, and 45 of the state's 67 counties are affected by abandoned mine lands. The cleanup cost is estimated at $15 billion.

The coalition is seeking at least $75 million a year from the $1.6 billion surplus in the Abandoned Mine Reclamation Fund. Established in 1977 with the federal Office of Surface Mining and Reclamation Enforcement, this fund was designed to remove safety and health problems at old mines, but has been under-used. Companies pay fees for every ton of coal mined, and this fund is growing at the rate of $300 million a year. In recent years, the director of the Office of Surface Mining changed policies to allow this fund to address environmental problems.

NOx Emissions by Source — 1996



Source: EPA's National Air Quality and Emissions Trends Report — 1996

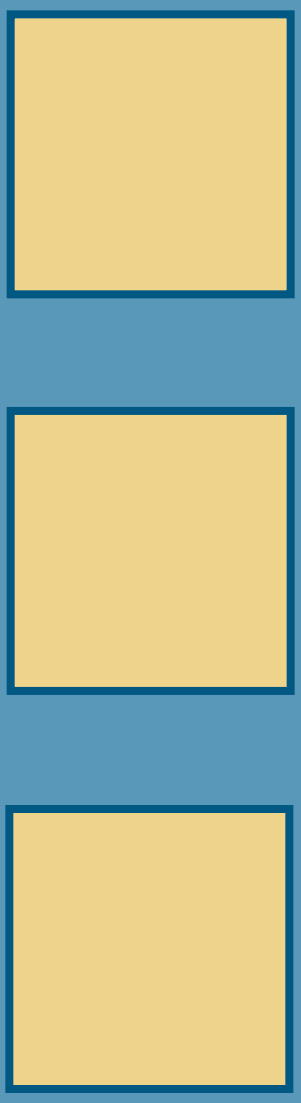
Drainage from abandoned mines turns rivers orange, red and yellow, and often kills fish and vegetation. Photo by Region III Acid Mine Drainage Program.

"I love sailing. And I especially love sailing on the Chesapeake Bay. For many years, I have enjoyed its beauty and bounty. It truly is one of America's treasures. And that's the way it is."

— Walter Cronkite

Walter Cronkite was considered America's most trusted journalist when he anchored the *CBS Evening News*. He is an award-winning author and radio and television news correspondent, and has been honored with the Peabody award and several Emmys.

PROTECTING BAYS, COASTAL WATERS AND HISTORIC RIVERS



The EPA is charged with protecting some of the nation's most important and historic bodies of water. The Chesapeake and Delaware bays and their tributaries, and the coastal waters of the Delaware-Maryland-Virginia peninsula are important waterways for commercial navigation and shipping, productive and bountiful resources for fish and shellfish, and a habitat for abundant wildlife. These waters also are enjoyed each year by millions of recreational boaters, fishermen and other visitors. But they have experienced major ecosystem changes due to a variety of activities, including urban sprawl and changing land uses, habitat and wetland destruction, pollution from agriculture and urban areas, overfishing, and the discharge of toxics from point sources.

The most significant problems affecting the region's estuaries are excess nutrients that cause excess growth of algae; toxics in localized areas that affect the ecological health of the water and result in fish consumption advisories; and sprawl and land use changes which increase non-point-source pollution and destroy habitat and wetlands.

In cooperation with the EPA's Office of Research and Development and a host of federal, state and academic scientists, Region III published a ground breaking report on the condition of estuaries in the region. In late November, the agency sponsored the Mid-Atlantic Integrated Assessment Conference in Baltimore to publicly report on its findings and

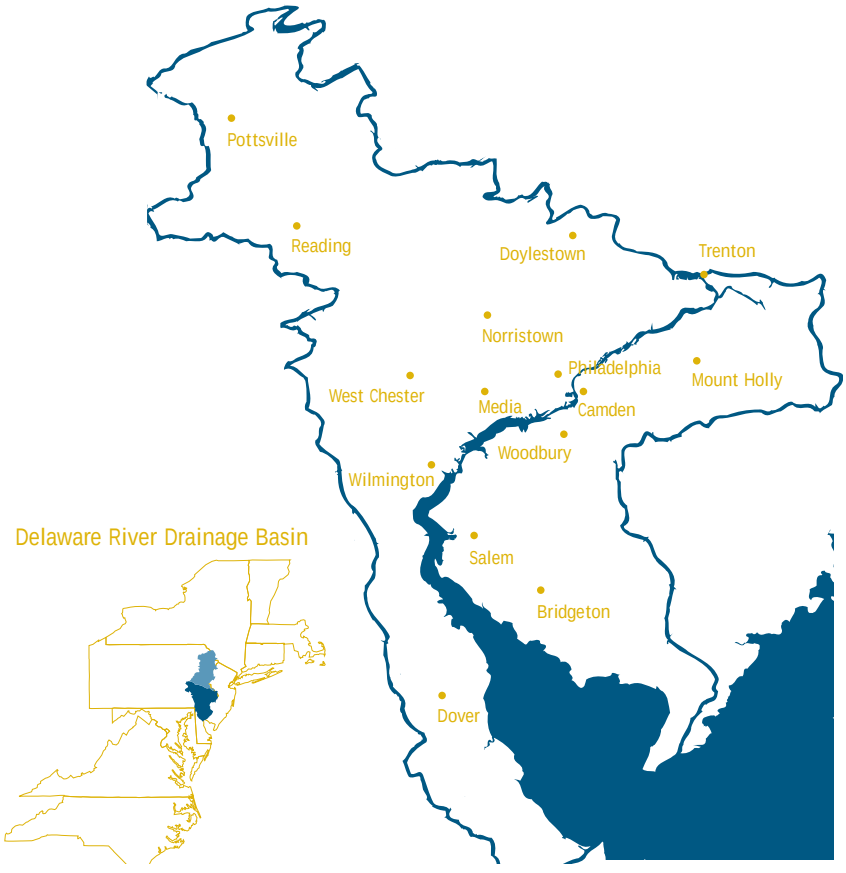
look at a wide range of ecological features in the region.

The report also noted that smaller yet significant estuaries are the least degraded in the region, but are threatened by encroaching urbanization of barrier islands at Rehoboth Beach and Bethany Beach, Delaware; Ocean City and Assateague Island, Maryland; and the eastern shore of Virginia.

Further threatening the Chesapeake is a new finding — the bay waters are rising more than one inch per decade, which is twice as fast as sea levels are rising due to global warming.

Estuaries are transitional coastal areas such as bays, mouths of rivers, salt marshes, wetlands and lagoons, where salt water from the ocean mixes with fresh water from streams and rivers. There are more than 5,467 square miles of estuaries in the mid-Atlantic states that are constantly being affected by inflowing rivers, the ocean, the shoreline and air, and the changes of seasons and tides.

Delaware Estuary Watershed



Scientists have long recognized the importance of estuaries for both their biological and habitat values. Estuaries also provide for many diverse human uses, supplying water for municipalities, industry and agriculture; supporting commercial and sport fishing; and supporting tourism and recreation.

This year, President Clinton designated as American Heritage rivers the Upper Susquehanna and Lackawanna, which supply about half of the Chesapeake Bay's fresh water, and the Potomac, which also flows into the bay. Communities along these rivers will receive priority federal assistance to restore and protect the adjacent watersheds and waters.

To many observers, the steady restoration of the Chesapeake system over the past 15 years is a success story, although there clearly is a great deal more to do to meet the region's Year 2000 goals to reduce by 40 percent levels of nitrogen and phosphorus nutrients that flow into the bay. Impressive progress has been made toward meeting the goals set 10 years ago. Maintaining the reduced levels beyond 2000 will be a huge challenge in the face of predicted population growth for the region.

To filter out nutrients that might reach the bay, a Riparian Forest Buffer Initiative is committed to planting new trees to restore forests on 2,010 miles of stream and shoreline by the year 2010. The ultimate measure of success will be determined by increased

EPA trained 350 people from around the region and nationally, on wetlands protection at the annual Wetlands Regulatory Workshop. The next conference will be held November 2 - 5, 1999.

water quality that allows fish, oysters, the $60 million crab harvest, waterfowl, bay grasses and other living resources to return to abundance.

In early November, EPA Administrator Carol M. Browner announced an important initiative where 19 federal agencies pledged to match steps being taken by states, local government and private landowners throughout the region. The government agencies agreed to write plans by 2000 to reduce fertilizers flowing into the bays from farm fields, golf courses, parade grounds and construction sites on federal lands. They also pledged to create 100 acres of wetlands per year on their lands and open 200 miles of bay shoreline to the public.

The Challenge

Agricultural runoff and municipal point sources are the two largest contributors of nitrogen and phosphorus nutrients and pollution to the bays and estuaries. Virtually all individuals and many industries in the watershed also contribute to the problem. The large rivers that drain the watershed dump increasing volumes of wastewater into the bays from a growing population.

Scientists continue to investigate a toxic microorganism, *Pfiesteria piscicida,* which killed tens of thousands of fish in the Pocomoke River and several other tributaries on the lower eastern shore of Maryland in 1997. Fish suffered from lesions, and the organism was linked to human health problems, including skin rashes and memory loss. In 1998, however, there were no confirmed cases of fish kills from *Pfiesteria* in the Chesapeake

"Growing up in Baltimore, I had a great love for the ocean, beaches and bay waters long before *Baywatch.* These waters were my recreational playground and gave us fish, oysters, crabs and other fabulous seafood. We've got to protect them from pollution."

— David Hasselhoff

David Hasselhoff, a Baltimore native, is a television, motion picture and recording star. He is best known for his *Knight Rider* and *Baywatch* television series, and was named by *TV Guide* as one of "TV's ten most powerful stars."

Bay watershed or anywhere else in the region's coastal waters.

Delaware requested $6.4 million of the more than $200 million of Department of Agriculture funds released by the Clinton administration to control animal waste and pesticide runoff from fields. The funds will be used to rent farmland near ditches and streams and take the land out of production.

Urban Sprawl

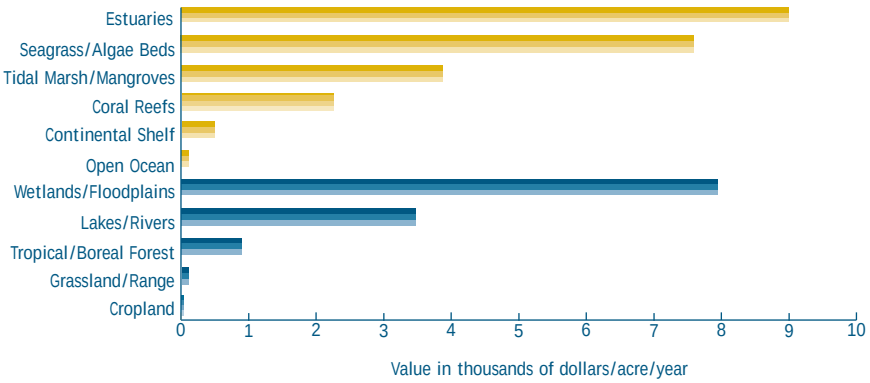
Urban sprawl and development of waterfront acreage have further threatened inland waters, estuaries and bays. Concrete, asphalt, houses and other buildings cover large areas of land, forcing water to run off into rivers and streams instead of letting it soak naturally into the ground. Lost are the buffer zones of forests and vegetation to filter out nutrients. Runoff from rainstorms is one of the nation's leading causes of water pollution. This runoff from parking lots, streets, farms and lawns contains many pollutants, including nitrogen, phosphorus and other chemicals. Three of the region's largest metropolitan areas — Washington, Baltimore and the Hampton Roads area of Virginia — were on the Sierra Club's national "worst" list for urban sprawl.

Population growth is the single most important factor underlying various impacts on the mid-Atlantic estuaries. The population of the region has grown from 13 million residents in 1950 to 21 million in 1990, and is estimated to be at 25 million by 2020.

The coastal bays of Delaware, Maryland and Virginia on the Delmarva Peninsula are threatened by encroaching development and urbanization. These bays and their adjacent oceanfront barrier islands are a major vacation destination for many in the mid-Atlantic region, and are attracting many year-round retirees.

To further protect the

Coastal Environments Tops in Value



Source: Bay Journal, June 1998 Institute for Ecological Economics, Costanza et al

environment, the state of Maryland paid a private developer $25.3 million for 1,850 acres of land on a Chesapeake Bay tributary. This eliminated 500 houses that would otherwise have been built on a riverside tract at the Chapman's Landing housing project. Environmental groups have a one-year option to buy an additional 375 acres for $2 to $4 million. The state also has launched a Smart Growth program to slow the advance of development to the suburbs and at the same time rebuild older, decaying neighborhoods.
Working in the eastern shore counties of Virginia, the Nature Conservancy is pioneering innovative efforts to help protect seaside farmlands, rural fishing villages and the barrier islands from ill-planned suburban sprawl. The core areas of their efforts have been designated as an international biosphere reserve by the United Nations.

Chesapeake Bay Watershed

The Anacostia

Also on the region's priority list is the restoration of the Anacostia River and its watershed. The Anacostia, which flows in the backyard of the nation's capital and through an economically depressed, minority-populated neighborhood, has been called the "forgotten river." It empties into the Potomac River and eventually the Chesapeake Bay. In 1993, the American Rivers organization listed it as one of the nation's "top 10 degraded rivers." No portion of the tidal Anacostia meets Clean Water Act quality standards.

With an urban watershed in the District of Columbia and in Montgomery and Prince Georges counties in Maryland, during heavy rainstorms, the Anacostia receives most of the runoff from streets, combined with raw sewage. There are 60 overflow drains releasing the discharge into the city's surface streets. This is combined with trash, erosion of stream banks, sediment, toxics and high bacteria counts. Trash and visual pollution are a drain on community pride. The community cannot use the river either as a source of recreation or for sustenance fishing.
In spite of the many problems of the Anacostia, EPA can point to many positive signs of change today. There is growing activism throughout the Anacostia's watershed. There are showcase restoration projects of wetlands. Stormwater regulations control the impact of new development, and enforcement actions have been completed at a number of hazardous waste sites.

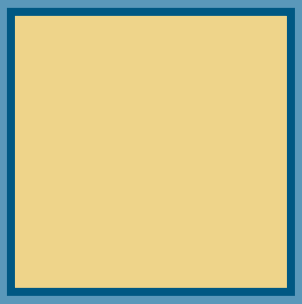
Thanks to EPA's efforts, the Anacostia River has a future.

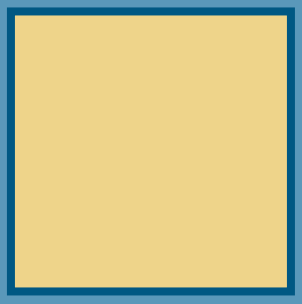
“Because of the concentration of people, environmental risks are greater in our urban cities. Senior citizens, children and families living at or below poverty levels are especially vulnerable. We need to protect all of our resources from any form of pollution.”

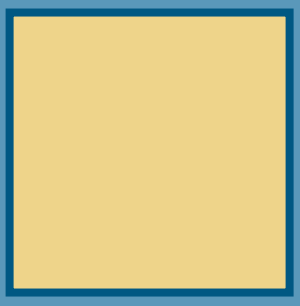
— Montel Williams

A native of Baltimore, Montel Williams is the Emmy-award-winning host of the daily television show that bears his name. He authored the best-selling autographical/motivational book, “Mountain Get Out Of My Way.” A graduate of the U.S. Naval Academy, he is a decorated former naval intelligence officer and has been honored with numerous professional and humanitarian awards.

ENFORCING LAWS PROTECTS THE ENVIRONMENT







Americans expect their fellow citizens to obey the nation's air, water and hazardous waste laws, and they expect the EPA to enforce the laws. Compliance with the laws not only protects public health and the environment, it's also a matter of fairness. Companies that do not spend money to control pollution gain an unfair economic advantage over their law-abiding competitors. EPA's job is to take the profit out of pollution through aggressive enforcement of environmental laws.

EPA and its state partners obtain compliance from the hundreds of thousands of pollution sources in the region through both voluntary programs and enforcing the law. Fortunately, most companies want to comply with environmental regulations.

The agency has greatly expanded information available, particularly on the Internet, to help businesses comply. Region III posts updates on compliance assistance resources on its website and provides hotlinks to small business information. The region's Business Assistance Center networks with many organizations and helped promote a dry-cleaning mentoring program this year.

An audit policy encourages businesses to conduct regular environmental self-audits. This policy allows reduced or no penalties for companies that promptly report and correct violations uncovered during self-reviews. In 1998, the region waived nearly $400,000 in penalties for such cases.

The agency also had a strong enforcement presence during the year. Preliminary figures show that

the region filed 115 administrative complaints, 23 more than in 1997. During 1998, as a result of the region's enforcement efforts, parties responsible for contamination at Superfund sites signed on to do cleanups valued at $63 million and reimbursed the agency for $35 million in Superfund expenditures. The agency also resolved 131 penalty cases against companies, government agencies, and individuals, resulting in $2,543,592 in penalties and another $4,683,448 in supplemental environmental projects.

On the criminal side, successful environmental prosecutions in the mid-Atlantic states resulted in 23 defendants being sent to prison or sentenced to probation, fined $215,500, and ordered to pay $8.1 million in fines, restitution and environmental restoration costs.

Summaries of some of this year's diverse cases tell more of the story about how enforcement is used to address environmental issues.

Delaware

• The region collected $125,000 from Star Enterprises, Delaware City, for discharging oil, grease, solids, chlorine, ammonia and other refinery pollutants into the Delaware River.

• BFI Services Group, a subsidiary of Browning Ferris Industries, and six employees were charged in a 23-count indictment with conspiracy, mail fraud and Clean Water Act violations involving the disposal of wastewater treatment sludge and grease at five municipal sewage treatment plants in northern Delaware and southeastern Pennsylvania. In addition to the individuals who paid fines, BFI paid $3 million in fines, $642,000 in restitution to four treatment plants, and $1.5 million to programs or organizations which address environmental concerns in the local area.

• EPA reached a settlement with Nipa Laboratories of Wilmington for violations of the federal pesticide law. The settlement includes a project to reduce air emissions by at least 50 percent and a $26,500 penalty.

Maryland

• In the largest Clean Water Act settlement in Maryland history, Hudson Foods Inc., a subsidiary of Tyson Foods, agreed to spend $2 million to control water pollution at poultry farms and processing facilities on the Delmarva Peninsula, and paid a $4 million penalty.

• The salvager of two former navy vessels, Kerry Ellis of Pasadena, Maryland, and his company, Seawitch Salvage, Inc. were sentenced to 30 months' imprisonment and fines for knowingly violating asbestos regulations.

• Domino Sugar Corporation spent nearly $500,000 to reduce its discharge and agreed to pay a $35,000 penalty in settlement for spilling raw sugar into the Patapsco River. The EPA coordinated its enforcement efforts with the Maryland Department of Environment.

Pennsylvania

• Working with the state, industry, and local citizens' groups, EPA resolved two cases in economically distressed Chester. The U.S. and Pennsylvania Department of Environmental Protection settled their cases against Westinghouse Electric Corp. for air pollution violations at two waste incinerators with a $100,000 penalty and $300,000 in environmental projects in the affected communities, including a project to clean up possible lead contamination in three of the city's playgrounds. The EPA helped settle a lawsuit brought by a Chester citizens' group against the Delaware County Regional Water Quality Control Authority for violations at its incinerator. Negotiations involving EPA, the Pennsylvania and Delaware County agencies, and the Chester residents group resulted in a consent decree that corrected the violations, assessed a $120,000 penalty, and provided $200,000 to fund a lead-poisoning and prevention project focusing on newborns.

• The U.S. and Pennsylvania resolved a joint action against the Municipality of Penn Hills for diverting raw sewage and excess pollutants from its treatment plant into the Allegheny and Monongahela Rivers. The municipality must spend $50 million to upgrade its sewer system, pay a $525,000 penalty, and perform three environmentally beneficial projects.

• The agency settled an administrative case against the U.S. Mint in Philadelphia, the first Clean Air Act penalty action filed against a federal facility. The Mint paid a $16,000 penalty and spent $90,427 to upgrade pollution control from its chromium electroplating operations, used in production of commemorative coins.

Federal facilities must comply with environmental laws too.

• As part of the settlement over cleanup costs at the Keystone Sanitation Landfill Superfund site in Union Township, Adams County, the government resolved the potential liability of third- and fourth-party defendants brought into the litigation by the big polluters. The U.S. settled for $4.25 million with 376 such parties, many of which are small businesses — including apartment buildings, pizza shops, and theaters — that could not afford the expense of litigation. A further settlement in December 1998 removed 34 other parties that sent very small amounts of trash to the site. They paid $1 apiece. This brought to 577 the number of third- and fourth-party claims settled.

• Sun Company Inc. agreed to pay $125,000 for hazardous waste storage violations at its Philadelphia refinery for violating leak detection regulations for underground fuel storage tanks. Sun also agreed to spend $50,000 to plant trees along city streets in the Girard Estates and Packer Park neighborhoods, and to construct a park in the Passyunk Homes Housing Project.

• Grant Paper Co. and its former general manager were prosecuted for dumping asbestos-contaminated debris near an elementary school in a predominantly African-American neighborhood in Philadelphia. The company cleaned up the site at a cost of $1.5 million.

Virginia

• EPA waived all of the $102,000 potential penalties against Sampson Coatings of Richmond, Virginia, and all $58,537 against Alcatel Telecommunications in Roanoke, Virginia, because both companies disclosed the violations and met all of the criteria under the audit policy. The violations involved failure to report the release of certain chemicals in various years.

• Colonial Pipeline agreed to pay a $1.5 million fine, to spend up to $2.5 million for new outdoor recreation facilities, and to restore natural resources in and around Sugarland Run and the Potomac River, repairing damage from a massive 1993 oil spill from the company's pipeline in Reston.

• EPA worked with the Virginia Department of Environmental Quality on a case involving the Washington, D.C. correctional facility in Lorton, Virginia. Complaints by the two agencies alleged hazardous waste, oil spill prevention, and underground storage tank violations.

Washington, D.C.

• EPA issued a complaint against Walter Reed Army Medical Center, Washington, D.C., for alleged hazardous waste violations, including storage without a permit, receiving hazardous waste from a foreign source without a permit and without proper notifications. The complaint asks for $201,600 in penalties.

• The EPA settled complaints against the U.S. Navy for alleged underground fuel tank violations at the Washington Navy Yard and Anacostia Naval Station. The Navy

EPA enforcement action leads to cleanup.

agreed to remediate any contamination caused by leaking tanks at the installations and to correct unresolved underground storage tank violations.

West Virginia

• Frederick Q. Blizzard was sentenced to 12 months in jail and two years of supervised release, and his Sisterville asbestos abatement company, SAK Environmental, Inc., was fined $15,000. The criminal conduct included falsifying state licenses for workers and failure to properly remove and dispose of asbestos. One of the sites where asbestos was dumped was an elementary school.

• A West Virginia coal operator, Wayne Fortney, president of Valley Mining, pled guilty to violating the Clean Water Act. Fortney admitted negligently discharging acidic wastewater. Acid mine drainage is a major water quality problem in Region III.

• EPA reached a settlement with a West Virginia air conditioner repair company which reduced the proposed $17,000 penalty by 75 percent to $4,250 because the company voluntarily disclosed its violations to EPA under the audit policy.

Environmental Justice and Urban Revitalization

In February 1994, President Clinton issued an executive order directing federal agencies to ensure environmental justice for minority and low-income citizens.

Both regionally and nationally, the EPA is committed to promote environmental justice and remove regulatory obstacles to revitalizing abandoned industrial sites in blighted urban communities. In the field of environmental justice, EPA realizes that it must listen to the concerns of minority and low-income communities that have too often borne the brunt of the nation's pollution.

Employees from the region's Criminal Investigations Division helped develop a computer-assisted "demographic mapper" that will be used by EPA regions nationwide as a case-screening tool to identify cases implicating environmental justice concerns. EPA also is helping to restore contaminated industrial sites in cities to productive economic use. Through "prospective purchaser" agreements, the agency is working with owners and potential buyers to address the liability concerns that sometimes impede redevelopment.

EPA'S REGIONAL HEADQUARTERS — A GREEN OFFICE

The new offices of EPA's mid-Atlantic regional headquarters in Center City Philadelphia provided the agency with an opportunity to paint the future green. So managers developed environmentally sensible criteria for their new space.

These criteria were included in bids for the new office space and became known as the GreenLease Rider. EPA now recommends the GreenLease to building owners. The plan is to reuse as many materials as practical in developing the new space, recycle as much construction and demolition debris as economically feasible, and use low-environmental-impact materials in the process.

EPA's goal was to demonstrate to businesses and organizations that the design and development of valuable commercial and institutional space is feasible without sacrificing environmental considerations.

All solicitations were restricted to Philadelphia's central business district to promote the use of public transportation by the regional staff. As it turns out, the 25-year-old building selected for the new Region III offices is located above a major rail transit station, which is convenient for employees and encourages use of regional rail lines.

EPA announced the award of the lease to the 1650 Arch Street Building in November 1997, and began the hectic race to design and build offices that would occupy 16 of the 27 floors of the building by the summer of 1998.

Care was taken to salvage and reuse as many materials as possible from the existing space. Some examples included:

- Heating, ventilation and air conditioning components were retrofitted and reused where feasible.
- All existing ceiling grid and 70 percent of the existing ceiling tiles were refurbished and reused. This amounted to more than 170,000 square feet, or the equivalent of four acres of ceiling tile.
- Approximately 260 oversized solid-core wood doors were refinished and reused.
- Bathroom tiles, fixtures and stalls were reconditioned and reused.
- Venetian blinds were cleaned and reused. Each floor is encased with floor-to-ceiling windows.
- 3,000 lighting fixtures — 80 percent of the exsisting fixtures — were retrofitted with energy-efficent electronic ballasts and reused.

In cases where items could not be reused, efforts were made to recycle. Recycled materials included 11,000 fluorescent tubes and all of the steel studs removed from the space that was demolished. Markets were not locally available to recycle the gypsum board.

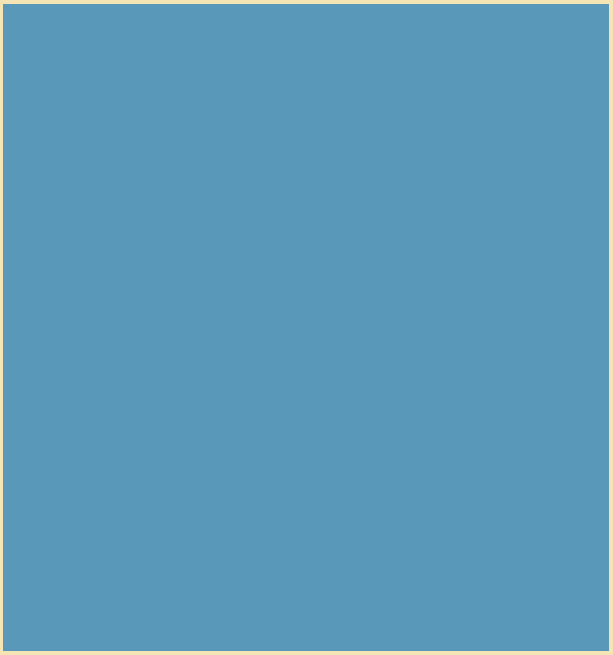


Photo by Jeff Alper.

Environmental considerations also were included in the design of the interior space. Modular furniture provided flexibility and reduced the need to furnish individual offices. To safeguard and enhance indoor air quality, low-emission paints and adhesives were used; no vinyl materials were used for wall or floor covering or base molding; and copy rooms and spray room were directly vented to the outside. Electronic lighting sensors save energy by turning lights off in areas not being used. Low-flow plumbing fixtures reduce water use.

While attempts to use carpet with recycled content were thwarted because of a lack of information on the impact of these products on indoor air quality, conventional three-foot carpet squares were installed, so wear or damage could be fixed on a small scale. No endangered, tropical woods were used in construction, furniture or accents. The only woods used were from sustainable sources.

Recycling rooms were located next to all break rooms to support the office recycling program. To promote ecologically sensible alternative transportation, secure interior bicycle parking facilities, with showers, were also provided.

The new offices have proved to be efficient and comfortable. A brochure that explains the details of the GreenLease process is being developed so others can benefit from this experience.

GOOD SCIENCE, BUSINESS ASSISTANCE AND EDUCATION ALL HELP PROTECT THE PUBLIC AND THE ENVIRONMENT

Good science is basic to protecting public health and the environment. It is an important and integral part of all programs in the region. Science provides the agency with important environmental indicators, environmental data and the means to measure the extent of problems.

In early 1999, the mid-Atlantic region plans to open its new $48 million state-of-the-art environmental science center and laboratory at Fort George G. Meade, Maryland. The new facility will house more than 160 scientists and administrators.

The 140,000-square-foot, 2-story building located on a 24-acre site consolidates six leased offices into one government-owned building. The new center will house three groups from Annapolis, and EPA pesticide laboratories from Beltsville, Maryland and Cincinnati.

The concrete and steel structure has a brick exterior, and aluminum and glass curtain walls. Two laboratory wings are linked by a central office block to form an open U-shaped complex that will have 70 chemistry, biology and microbiology laboratories, a library, conference rooms, and telecommunications and computer operations.

The offices and laboratories are flexible, and workstations are designed to be modified to meet changing analytical needs. The entire complex was designed using green construction technology that includes maximum use of natural light for labs and offices, recycled asphalt for parking and roadway surfaces, water-saving innovations, environmentally friendly heating and air conditioning systems, natural

New Environmental Science Center at Fort George G. Meade, Maryland.

landscaping with a heavy emphasis on retaining existing mature trees, and wood laboratory cabinets manufactured from sustainable forests. The latter also are less expensive than comparable metal cabinets.

The region also has a laboratory in its Wheeling, W. Va. field office that concentrates on freshwater biology.

State and federal employees learn about innovative cleanup technologies. Photo provided by Superfund Remedial Program.

Additionally, a ship, the Peter W. Anderson, does marine research along the eastern seaboard; and low-flying aircraft are used to study pollution and habitat changes along the Atlantic coast from New Jersey to North Carolina.

Roles of the Office of Environmental Data

The inherent complexity of even the best scientific data can detract from its usefulness as a tool for selecting and championing environmental programs. In the courtroom, meeting room, Congress or the voting booth, the message carried by scientific evidence is effective only if that message is conveyed clearly and simply.

By visually portraying environmental relationships, the Office of Environmental Data creates pictures and graphs which help people better understand why environmental conditions are important to their personal health and welfare. In addition, the information is formatted to help the region's environmental managers see existing problems, select pollution control targets and measure the effects of their decisions.

Helping Businesses With Compliance

The region works with state and local governments, chambers of commerce, and industry trade associations to help small- and medium-sized businesses understand and comply with environmental regulations. Representatives from the Business Assistance Center worked with the Greater Washington, D.C. and Baltimore chapters of the Korean Dry Cleaners Association and the Pennsylvania Dry Cleaners Launderers Association to assist and educate the owners and operators of these businesses to understand and comply with federal environmental regulations.

The center participated in the first business and industry compliance assistance workshop held by the Maryland Department of the Environment to learn how best to teach environmental compliance to workers from several different business sectors in the state.

In cooperation with the Pennsylvania Department of Environmental Protection, programs were held to address a wide range of topics directed to the metal finishing industry. Seminars titled "Waste Day — Meet the Regulators" and "Air Day — Meet the Regulators" were held in cooperation with the Northeast Pennsylvania Industrial Resource Center to help regional manufacturers increase their level of regulatory compliance. Other seminars and conferences were held throughout the region on a variety of

issues for different businesses and industries, and representatives exhibited at important trade fairs and conventions.

International

From its headquarters office in Philadelphia, the mid-Atlantic regional office of EPA organizes and administers a comprehensive international program that is now in its eighth year. The region's international office provided technical assistance and training in a diverse range of environmental areas for a number of foreign countries. Funding was made possible by the World Bank, U.S. Agency for International Development, U.S. Information Agency, and the countries involved.

In 1998, engineers, scientists and other professionals traveled to China, Czech Republic, Ghana, Hungary, India, Poland, South Africa, Chinese Taipei and Thailand to train and work with their counterparts. The office also coordinated visits to the U.S. for representatives from China, Japan, Poland, South Africa and Chinese Taipei, arranging meetings with their counterparts in the region in business, industry, government and academia.

Subjects included hazardous waste management; underground storage tank management; brownfields; quality assurance and quality control laboratory procedures; enforcement and compliance; solid waste management (recycling); environmental impact assessment; environmental justice; mining waste water treatment; pollution prevention and cleaner production; risk management; and risk and crisis communications. The regional office continued to be a partner in two environmental sister cities, programs with the city of Philadelphia and Lincoln High School. These projects have a focus on environmental education and involve student exchanges between Lincoln High School and counterpart schools in China and Israel. This year, the partners hope to begin an exchange program with South Africa that will highlight environmental justice and pollution prevention.

Toll-Free Customer Service Hotline

The region handles more than 30,000 calls a year from the public on the toll free hotline, (800) 438-2474. Trained staff members give callers information on a wide range of environmental subjects and all aspects of government programs. If the staff cannot answer the caller's question, an appropriate specialist in the region is found who can give the answer. Phone numbers also are provided for a variety of local, state and federal programs.
The region also has hotlines for its Business Assistance Center, (800) 228-8711, and Superfund, (800) 553-2509.

Environmental Education

For the fifth straight summer, the regional headquarters in Philadelphia sponsored a community-based, cross-cultural program to teach inner-city children about environmental issues prevalent in urban communities. Field trips reinforced classroom skills taught by EPA employees and a Philadelphia middle school science teacher. The program also develops communications skills. The goal is for the students to take their knowledge back to their own schools and communities and teach others, especially elementary school children, about environmental issues that affect their lives.

South African delegation interested in environmental education learns firsthand from instuctors and students at the Lincoln High School's Environmental Academy. Photo provided by: Region III's International Program.

At a Superfund site, EPA planted trees to contain contaminated groundwater. Now they are monitoring with state-of-the-art technology to ensure that this green technology is working and chemicals are not being transferred from the groundwater into the air. Photo provided by Superfund Remedial Program.

More than 100 children have graduated from the summer program. Based on its success, the agency plans to expand this program in 1999 to Chester, Pennsylvania and the Anacostia area of Washington, D.C.

Through a grants program, the agency provides financial support for projects which design, demonstrate or disseminate environmental education practices, methods or techniques. This year, 30 grants totaling $204,000 were given to schools and grassroots organizations throughout the region. The typical grant was approximately $5,000, with $25,000 the largest. The agency also works with the environmental education directors in each state to develop curriculum, find sources of funding for programs, and provide assistance where possible.

Additionally, as computers are replaced and considered excess government property, they are donated to public schools, science centers, museums and other non-profit organizations. To date, more than 250 computers have been distributed to recipients in every state in the region. As part of an Earth Day 1998 event, in April, the agency "adopted" Pulaski Middle School in Chester, Pennsylvania and donated 10 computers to be used in two science classes. Reading and reference materials were provided to the library, and flowers, trees and shrubs from the agency's award-winning exhibit at the annual Philadelphia Flower Show were given for landscaping.

As a public service, the region sends an average of 35 speakers every week to schools, clubs, organizations, PTAs, environmental groups and recreational centers to talk about a wide variety of environmental subjects.

The region's Public Environmental Education Center is located in the lobby of the Region III building. Visitors — primarily students and teachers from the greater Philadelphia metropolitan area — learn about pollution prevention, water quality, wetlands, radon, pesticides, air quality, biodiversity, endangered species, household hazards and cleanup of hazardous waste sites. Nearly 4,000 students from some 80 different schools visited the center at its former location at 8th and Chestnut Streets. With the move to a high-traffic area with even greater exposure to sidewalk traffic, this number is expected to increase in future years. The center is being redesigned with state-of-the-art technology.

Lala Rukh Qadir, a high school student from LaPlata, Maryland, received the agency's 1997 President's Environmental Youth Award for her project that demonstrated the use of ultrasound energy to treat contaminated waste-water with high explosives. Under the direction of Dr. Elizabeth Atkinson of the Naval Research Laboratory in Washington, D.C., Ms. Qadir worked with contaminated synthetic wastewater samples. Her project resulted in the successful breakdown of a nitroglycerin compound.

Setting An Example: 95% of Region III Employees Take Public Transportation

Region III employees in Philadelphia are setting a fine example of environmental protection, with 95 percent using public transportation to commute to work in 1998.

Of the 909 employees in the Philadelphia office, 864 took advantage of the Delaware Valley Regional Planning Commission's TransitChek program, a fantastic incentive whereby employers subsidize up to $65 per month of each employee's public transportation costs.

"Now that we receive TransitCheks, I wouldn't consider driving to work. Public transportation makes more economic sense than ever, on top of its environmental benefit to urban air quality. It's important for the EPA to set an example in this regard," said Ruth Podems, a public affairs specialist in the Region III press office.

Employers throughout the Delaware Valley are following suit. When the TransitChek program started back in 1992, only 92 companies participated. In 1998, 223 companies were helping employees take mass transit. A recent TransitChek user survey revealed that an additional 15 percent of users started taking public transportation as a result of the subsidy. Another 17 percent who said they used public transportation only occasionally now say they take it every day.

Until June 2, 1998, TransitCheks were provided to employees as part of their compensation package, in addition to salary. To encourage greater employer participation, companies may now provide TransitCheks as a benefit, in lieu of salary, and deduct the amount — pre-tax — from an employee's paycheck. Information can be obtained by calling the Delaware Valley Regional Planning Commission at (215) 592-1800.

awards and honors

MID-ATLANTIC STATES REGION AWARDS AND HONORS — 1998

Region III Special Awards

EEO AWARD
African-American Cultural Exchange Committee (ESD)

INSTRUCTOR OF THE YEAR
David M. Kargbo (HSCD)

SECRETARIAL EXCELLENCE AWARD
Sonia Maldonado-Jiminez (HSCD)
Anita J. Wright (HSCD)

REGIONAL ADMINISTRATOR'S AWARD FOR EXCELLENCE
Virginia J. Cody (ORC)

HUMAN RESOURCES ACHIEVEMENT AWARD
Joseph J.C. Donovan (ORC)

LORRAINE URBIET COMMUNICATOR OF THE YEAR AWARD
Terri A. White (WPD)

GLEN WITMER AWARD
Francisco Cruz (WPD)

COMBINED FEDERAL CAMPAIGN AWARD
Clark S. Conover (WPD)

PUBLIC SERVICE AWARD
Beverly E. Baker (CBPO)

CUSTOMER SERVICE AWARD
Judith L. Braunston (OCGR)

EPA SERVICE AWARD
Joan M. Johnson (ORC)

Bronze Medals For Group Achievements

Air Compliance Data Team
Bernard E. Turlinski (APD)
Paul G. Dressel (APD)
Robert F. Chominski (APD)
James M. Baker (APD)

ASTM Risk-Based Corrective Action Team
Deborah R. Goldblum (WCMD)
Elizabeth Ann Quinn (WCMD)
Jack C. Hwang (WCMD)
Joel W. Hennessy (WCMD)
Ruth Prince (WCMD)

Baltimore Grants Negotiation Team
David McAdams (WPD)
Michael Puzdrak (WPD)
Christopher Day (ORC)
Edward J. Hopkins (OPM)
David W. Buntz (HQ-OARM)
Marie M. Cullerton (HQ-OIG)

Bethlehem Steel Environmental Achievement Team
Robert E. Greaves (WCMD)
Joel W. Hennessy (WCMD)
Elizabeth Ann Quinn (WCMD)
Diane B. Schott (WCMD)
Susan T. Hodges (ORC)
Virginia J. Cody (ORC)
Michael I. Ioff (APD)
Williams Hutchins (DOJ)

CAA Section 112(r)(9) Order
James Kenney (APD)
John Ruggero (APD)
Robert Langel (HSCD)
Bill McHale (HSCD)
William Steuteville (HSCD)
Mikhal Shabazz (HSCD)
Louis Ramalho (ORC)
Donna Mastro (ORC)

Comfort Letter Policy Work Group
Heather Gray Torres (ORC)

Controlled Correspondence Team Leaders
Angela R. Cochnar (OCGR)
Dionne L. Stokes (ORA)

Early Total Maximum Daily Load (TMDL) Development Team for Delaware and West Virginia
Matthew T. Murawski (WPD)
Thomas M. Henry (WPD)
Carol Ann Davis (WPD)
Christopher Day (ORC)
Bruce E. Byrd (ORC)
Charles A. Kanetsky (ESD)

Eastern Mine Drainage Federal Consortium
Raymond C. George (OCGR)
Gary V. Bryant (ESD)
Daniel D. Sweeney (WPD)
Deborah A. Storch (OCGR)
Bernard D. Sarnoski (WPD)

EPA Green Communities Team
Susan G. McDowell (ESD)
Nancy A. Grundahl (ESD)
Joan H. Goodis (ESD)
Dominique Lueckenhoff (ESD)
Mindy Lemoine (CBP)
Stephanie Wilding (ESD)
Lawrence Martin (HQ-ORD)
Jacques Kapuzinsky (HQ-OARM)

EPCRA Section 312 Emergency Preparedness Compliance/ Enforcement Sector Initiative
Carole Dougherty (HSCD)

Fairmont Pool Team
Daniel D. Sweeney (WPD)
Gary V. Bryant (ESD)
Anthony D. Meadows (WPD)
Joyce A. Howell (ORC)
Catherine Rojko (DOJ)
Robert H. Miller (DOJ)
Kewal K. Kohli (DOI)
Patrick F. McCann (DOI)

GRTS Nonpoint Source Team
Marion Y. White (WPD)
Eugene A. Mattis (WPD)
Hector Gerena (OPM)
Andrea Parker (OPM)
Raymond Kvalheim (R2)
Donald J. Kunkoski (HQ-OWOW)

Lead-Based Paint Compliance & Enforcement
Dan Gallo (WCMD)

Lost Source Exercise — Radiation Emergency Response
William E. Belanger (APD)
William D. Steuteville (HSCD)

New National Ambient Air Quality Standards (NAAQS) Team
Maria A. Pino (APD)
Kristeen A. Gaffney (APD)
Thomas Casey (APD)

Nutrient Goal Reevaluation Team
Allison P. Wiedeman (CBP)
Peter J. Marx (CBP)
Lewis C. Linker (CBP)
Gary W. Shenk (CBP)
Richard A. Batiuk (CBP)
Ana M. Sylvester (CBP)
Russ Mader (USDA)
Jim Hannawald (USDA)

OSi XL Project Team
Maria Parisi Vickers (WCMD)
Beth A. M. Termini (ORC)
Cheryl Atkinson (WCMD)
Robin M. Moran (APD)
Michele Aston (OAQPS)
L. Nancy Birnbaum (HQ-OR)
Sherri L. Stevens (HQ-OR)
Brian P. Grant (HQ-OGC)
Amey C. Marrella (HQ-OGC)
John P. Fogarty (HQ-OECA)
Charles A. Openchowski (HQ-OGC)

Regional Emergency and Rapid Response Acquisition Team
Jack L. Downie (HSCD)
Douglas P. Fox (HSCD)
Harry T. Daw (WCMD)
Denise L. Harris (ORC)
Andrew J. Blaney (OPM)
H. Lorrie Murray (OPM)

PSD/NSR Training Course Workgroup
Patrick Foley (APD)

Pfiesteria Rapid Response Team
Carin P. Bisland (CBP)
Lois L. Woodward (CBP)
Lori A. Mackey (CBP)
Jon M. Capacasa (CBP)
Charles W. App (ESD)
James R. Butch (ESD)
Dominique Lueckenhoff (ESD)
Mary G. Zielinski (OPM)
Timothy J. Kasten (HQ-OWOW)
Betsey Tam Salter (HQ-OWOW)
Brian Melzian (HQ-ORD)
John J. Heisler (HQ-OWOW)
Ronald B. Landy (HQ-ORD)
Bess Gillelan (NOAA)

Region III Response Action Contract (RAC) Acquisition Team
Reed E. Grimenstein (OPM)
James M. Clark (OPM)
Andrew J. Blaney (OPM)
David R. Senderling (OPM)
Alphonse A. Pinero, Jr. (OPM)
Susan A. Janowiak (HSCD)
Walter S. Graham (HSCD)
Martin T. Kotsch (HSCD)
Gerald Heston (HSCD)
Frederick MacMillan (HSCD)
Denise L. Harris (ORC)

SPC Corp./Camden Iron Case Settlement Team
Daniel E. Lucero (APD)
Wendy A. Miller (ORC)
Hilda Burgos (ORC)
Marilyn May (U.S. Attorney)
Matthew Morrison (DOJ)

State Audit Amendment Team
Neil Bigioni (ORC)
Janet Viniski (OECEJ)

State of the Estuaries Assessment Team
Charles W. App (ESD)
Edward Ambrogio (ESD)
Thomas B. DeMoss (ESD)
Richard A. Batiuk (CBP)
John Paul (HQ-ORD)
Brian Melzian (HQ-ORD)
Jim Latimer (HQ-ORD)
John Kiddon (HQ-ORD)
Dan Campbell (HQ-ORD)
Patricia Gant (HQ-ORD)
Frederick Kutz (HQ-ORD)
Charles Strobel (HQ-ORD)
Barbara Brown (HQ-ORD)

Superfund Oversight Billing Team Leaders
James N. Webb (HSCD)
Noel Schleifman (OPM)
Veronica Kuczynski (OPM)
Bevin Esposito (ORC)
Steven X. Pandza (OPM)

EPA Headquarters Honor Awards

PRESIDENTIAL RANK AWARD OF MERITORIOUS EXCELLENCE
Thomas J. Maslany (WPD)

LEE M. THOMAS EXCELLENCE IN MANAGEMENT
Dennis P. Carney (HSCD)

PAUL G. KEOUGH AWARD FOR ADMINISTRATIVE EXCELLENCE
Betty Ann Jeffery (ESD)

GLENDA A. FARMER AWARD FOR PROFESSIONALISM
Anita J. Wright (HSCD)

Gold Medal

Smithfield Litigation Team
Stephanie Branche (OCGR)
Maria Goodine (ORC)
R. Catherine King (OECEJ)
Leonard Nash (WPD)
Ruth Podems (OCGR)
Lorraine Reynolds (WPD)
Yvette Roundtree (ORC)
David Sternberg (OCGR)

Silver Medal

A.C.T.I.O.N. IN EPA AWARD
Merck XL Team
Robin Moran (APD)
Cecil Rodrigues (ORC)
Marcia Spink (APD)
Hope Williams (ORC)

BRONZE MEDALS FOR INDIVIDUAL ACHIEVEMENTS
Catherine C. Brown (ESD)
Robert A. Koroncai (WPD)
Lawrence A. Whitson (OPM)
Francesca DiCosmo (DRA)
Jeffrey Burke (ESD)
Thomas C. Voltaggio (DRA)
Francisco Cruz (WPD)
John Armstead (WCMD)
Reginald Harris (OECEJ)
Robert Kramer (APD)
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region III directory

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