

Our concerns about the state of the Chesapeake Bay more than 10 years ago led us to a unique agreement to solve pollution problems on a watershed basis. Pennsylvania recognized that the activities in our own neighborhoods were having an environmental impact on the bay. The Commonwealth understands the importance of being a good upstream neighbor. Over the past two years we've made great strides in identifying our environmental priorities for the Commonwealth for the next century, including our work on the protection and restoration of watersheds. The following are highlights:

21st Century Environment Commission: Gov. Tom Ridge created the 21st Century Environment Commission in 1997 to establish Pennsylvania's environmental priorities for the next century. The commission also developed criteria by which to measure progress toward those goals, involving the public throughout the process. Among the more than 240 recommendations and priorities mentioned in its 1998 final report, the commission's 40 members identified land use as the single most important environmental issue for the 21st Century.

Over the past year, we have begun to reinvent Pennsylvania's environmental future. In 1999, Gov. Tom Ridge signed an executive order that set up more than 50 forums throughout the Commonwealth to share land-use success stories and concerns. The Pennsylvania Center for Local Government Services is compiling recommendations from those forums and will issue a report in January, along with a catalogue of best land use practices.

Growing Greener Budget Initiative: To address the critical environmental issues of the 21st century, Gov. Tom Ridge in 1999 proposed the "Growing Greener" budget initiative to provide \$500 million dollars over the next five years to priority environmental programs. Growing Greener will help Pennsylvania clean up abandoned mines and restore watersheds, protect open space and provide opportunities for recreation, eliminate the maintenance backlog in our State Parks and provide new and upgraded water and sewer systems. The proposal shifts funding priorities from the state to communities, county conservation districts, watershed groups and authorities across the Commonwealth.

Pollution Prevention: 1999 marked the four-year anniversary of the Department of Environmental Protection (DEP) Office of Pollution Prevention and Compliance Assistance. The office is the cornerstone of DEP's coordinated and user-friendly approach to environmental Page 1 of 5 protection. The goal for

the future is to further enhance pollution prevention and energy efficiency thinking in all that DEP does. It's also the second year for the Governor's Green Government Council, created to assist all state agencies in adopting environmentally sustainable practices. Hundreds of projects are underway.

Our best examples that a healthy environment, a dynamic economy and the well being of our communities are directly linked are the winners of our Governor's Award for Environmental Excellence. Over the last three years, award winners have reduced electricity use by more than 21 million kilowatt-hours; solid waste by 27 million tons; air pollution by 24 million tons; and wastewater by more than 1.6 billion gallons. At the same time, they saved more than \$142 million in annual operating costs.

Environmental Protection Compliance Tracking System: For more than a year, DEP has been working on new performance measurements that focus on compliance rates rather than enforcement activities, on outcomes, impacts and results rather than traditional counts, such as the number of permits issued, number of inspections performed, number of enforcement actions taken or the total fines and penalties collected. This approach provides compliance data not only in traditional program specific formats, but also in a new facility-wide format. DEP is the first environmental protection agency in the country that is able to show air, water, waste and other program activities in a single integrated compliance view. Compliance data is available to the public on the DEP website at www.dep.state.pa.us (choose Compliance Reporting).

Nutrient Management: One of Pennsylvania's major initiatives to help control runoff into the Chesapeake Bay is the Nutrient Management Act. The act requires farms that meet the definition of Concentrated Animal Operation (CAO) to develop and implement a nutrient management plan. Five to 10 percent of Pennsylvania farms fall into this category, with more than half of these in Southcentral Pennsylvania.

Since the program went into effect in October 1997, more than 700 regulated farmers are developing nutrient management plans that must be implemented within three years of their final approval by a conservation district or the State Conservation Commission. Financial assistance to develop plans is available. The Agriculture Linked Investment Program offers \$25 million in low interest loans of up to \$75,000, and efforts are underway to establish a grant program for financially distressed operations. A new training and certification program for nutrient management specialists was established in 1996, and 279 specialists have received certification. More than 125 farmers have received individual certification to develop nutrient management plans for their own operations.

In 1999, DEP finalized environmental standards to protect ground and surface water from the impacts of large animal feeding operations. Pennsylvania is the first state to comprehensively address the water-quality impacts of the design, construction and operation of large-scale animal2 feeding facilities; manure storage structures; and the application of manure from these operations to farm fields.

The most stringent requirements are reserved for concentrated animal feeding operations of 1,000 or more animal equivalent units that are of most concern to the public. Farmers with smaller operations are covered by the same environmental performance standards, but have simplified, less expensive paperwork.

Watershed Protection and Restoration: DEP has been working with a network of volunteers to help them meet their own goals in collecting data on Pennsylvania's thousands of miles of streams. Citizen monitors collect water quality data on at least 3,000 sampling stations in watersheds throughout the state. They also participate in the annual springtime Water Quality Snapshot collecting information about physical, chemical and biological indicators of water quality. In 1999, more than 200 groups participated in the event. DEP also is preparing a technical handbook for community-based monitoring, publishes a quarterly newsletter and holds numerous training workshops for volunteers to give them the latest information about monitoring and data collection techniques.

In 1999, DEP gave more than \$1.1 million to 61 groups under the department's Watershed Restoration and Assistance Program. These grants were established in 1998 to assist locally managed watershed restoration and protection projects that focus on nonpoint source pollution. Watershed associations and other nonprofit groups, local governments and county conservation districts are eligible.

Also in 1999, the Department of Conservation and Natural Resources (DCNR) awarded \$1 million in Rivers Conservation grants. Twelve of these grants help communities develop river conservation plans. The plans outline local strategies that municipalities, residents and river support groups can use to effectively implement river conservation initiatives such as streambank stabilization and Stream ReLeaf riparian forest buffers; acid mine remediation; water-quality monitoring; public accessibility for recreational opportunities; and citizen participation. Seven river conservation implementation grants also were approved. The grants help accomplish the projects outlined in approved rivers conservation plans.

Protecting Stream Banks: To improve water quality by reducing soil erosion and nutrient deposition caused by livestock, the DEP Stream Bank Fencing Program manages livestock access to streams by erecting fences and crossings or ramps. More than 54 miles of streams has been fenced controlling 7,800 cattle on 123 farms in 32 counties, while simultaneously improving and protecting about 400 acres of valuable riparian habitat. Between 1989 and 1996, Pennsylvania funded a stream bank fencing program in cooperation with the state Game Commission. More than 145 miles of streams were fenced. By 1999, more than 70 miles of streamside buffers were restored under Pennsylvania Stream ReLeaf. Stream ReLeaf was begun in 1997 to coordinate and promote stream buffer efforts statewide, as well as private initiatives.

Community Conservation Partnership: Launched in 1995, the Ridge administration's Community Conservation Partnership initiative provides funding and technical assistance to help communities and non-profit organizations conserve natural and cultural resources, provide outdoor recreation, enhance tourism and foster community and economic development. Highlights of the program include grants for community

recreation, rivers conservation, rails-trails, open space protection and recreational trails. In 1999, more than \$21 million was awarded for projects that protected precious open space and critical natural habitat, built trails and greenways, established parks and playgrounds and conserved river resources.

Fish Passage and Shad Restoration: Fish passage and shad restoration have been the focal points of Pennsylvania's commitments under the living resources goals. All four major hydroelectric dams on the Susquehanna River between Conowingo, Md., and Middletown, Pa., have installed fish ladders at a cost of \$59 million; 435 miles of the Susquehanna River are reopened to natural runs of shad and herring for the first time in almost 100 years.

Pennsylvania also has re-opened spawning habitat on tributaries that are blocked by small to mid-sized water supply dams. Many of these dams once supplied water for mills, industrial needs, small water systems and recreation and are now in disrepair or have been abandoned. DEP and the Fish and Boat Commission are working to either breach or remove non-beneficial dams -- more than 200 dams have been identified for possible removal in the Susquehanna basin. Since 1995, 18 low-head dams have been removed on tributaries to the Susquehanna River and one fish ladder has been constructed, providing access to more than 75 miles of tributary streams.

Forest Protection and Beautification: Pennsylvania launched an aggressive program to clean up illegal pdumpsites on state forest and park lands in 1999. The five-year, \$7.5 million effort hopes to eliminate the thousands of tons of appliances, tires, furniture, building materials, household hazardous waste, car parts and other garbage that is illegally dumped on these remote state lands. Some of the waste is undoubtedly leaching into the groundwater and affecting local water quality.

Environmental Education: Gov. Tom Ridge began a new chapter in Pennsylvania's efforts to promote environmental education by launching the Pennsylvania Center for Environmental Education. The center is a partnership of 11 state agencies set up to identify unmet environmental education needs and develop programs to meet those needs.

Pennsylvania also provides an Environmental Education Grant Program. The program is funded through 5 percent of the fines and penalties collected by DEP. In 1999, 34 grants totaling \$302,064 were distributed to promote environmental stewardship and awareness across the Commonwealth. More than \$2 million has been provided for the expansion and support of environmental education over the past five years.

Land Recycling: Pennsylvania's Land Recycling Program marked its fourth anniversary in 1999 by celebrating the clean up of its 500th site. In the four years since its inception, the program has grown to be a national leader in turning old sites into new opportunities for economic growth and environmental progress. More than 15,000 people now work on old industrial sites in the Commonwealth.

Air Quality: Gov. Tom Ridge has been leading an effort since 1995 to get states from the Midwest and South to reduce the nitrogen oxides into the Commonwealth and Northeast. In 1997, he was joined by seven other Northeastern states in petitioning EPA to reduce transported emissions. Although the issue is currently under litigation, Pennsylvania will continue its efforts to get all states to do their fair share.

As part of the state's fair share plan, in May 1999, Pennsylvania implemented an air pollution control program that reduces nitrogen oxide emissions from power plants by 55 to 65 percent. In 1997, Pennsylvania implemented an annual enhanced vehicle emissions inspection program in the Philadelphia and Pittsburgh metropolitan areas. In the program's first six months, emissions were reduced by the equivalent of removing 600,000 vehicles from the road. Through Stakeholder Working Groups, Pennsylvania is currently exploring reducing more air emissions from the Southcentral region and the Lehigh Valley.