

*Annual Report*  
*1997*

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Kentucky  
Environmental Quality Commission

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**Commonwealth of Kentucky**  
**Governor Paul E. Patton**

For more information contact:

The Kentucky Environmental Quality Commission

14 Reilly Rd.

Frankfort, KY 40601

telephone: 502-564-2150 fax: 502-564-4245

e mail: EQC@mail.nr.state.ky.us

EQC Internet Web Page: <http://www.state.ky.us/agencies/eqc/eqc.html>

**Kentucky Environmental Quality Commission**  
**Current and Past Membership**

The Environmental Quality Commission members are appointed by the governor and serve four-year terms. EQC Commissioners represent a wide range of interests from across the state and serve essentially on a volunteer basis receiving only \$25 a meeting and travel expenses.

Aloma Dew, Owensboro Term - 1992 - 1999	Steven Schletker, Covington Term - 1991 - 1992	Gia Stanonis, Henderson Term - 1978 - 1984
Elizabeth Rudd Bennett, Lexington Term - 1994 - 1997	Benjamin Quinn, Glasgow Term - 1988 - 1992	Dr. Frank Stanonis, Henderson Term - 1983 - 1984
Robert L. Riddle, Georgetown Term - 1992 - 1999	Katherine Peden, Louisville Term - 1987 - 1991	Charles W. Martin, Paducah Term - 1981 - 1985
Patty Frasher Wallace, Louisa Term - 1993 - 2000	James Erv Jump, Dry Ridge Term - 1988 - 1992	Ted R. Richardson, Fort Mitchell Term - 1977 - 1985
Harold R. Benson, Frankfort Term - 1993 - 1999	Allan Holmstrom, Louisville Term - 1990 - 1994	Martha C. Dear, Henderson Term - 1978 - 1984
C.V. Bennett III, Harlan Term - 1996-1999	Kent Riggs, Catlettsburg Term - 1984 - 1989	Adelbert Roark, Lexington Term - 1979 - 1980
Gary Revlett, Shelbyville Term - 1997-2000	Patricia Dowling, Erlanger Term - 1985 - 1989	Robert C. Carter, Hopkinsville Term - 1976-1978
Gordon Garner, Louisville Term - 1989 - 1996	William H. Graddy, Versailles Term - 1984 - 1988	Oscar Gerald Jr., Lexington Term - 1977 - 1981
Wm. Horace Brown, Shelbyville Term - 1980 -1996	C. Frank Harscher III, Lexington Term - 1984 - 1988	Jon E. Rickert, Elizabethtown Term - 1976 - 1980
Henry Stephens, Fort Mitchell Term - 1991 - 1994	Mary C. Bingham, Glenview Term - 1982 - 1986	T.K. Stone, Elizabethtown Term - 1973 - 1976
H. Milt Patton, Georgetown Term - 1989 - 1993	Enno T. Sauer, Louisville Term - 1973-1986	Sterling Crawford, Hopkinsville Term - 1973 - 1976
Floyd Ellis, Rockfield Term - 1991 - 1995	William Gorman, Hazard Term -1983-1987	Jackie Swigart, Louisville Term - 1973 - 1980

**Kentucky Environmental Quality Commission Staff**

Leslie Cole, Executive Director

Scott Richards, Assistant Director

Erik Siegel, Research Analyst

Frances Kirchhoff, Administrative Assistant

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# Kentucky Environmental Quality Commission

## 1997 Annual Report

*Dear Governor Paul E. Patton, Secretary James E. Bickford, Members of the General Assembly, and Citizens of the Commonwealth of Kentucky:*

*The staff and members of the Environmental Quality Commission (EQC) respectfully present its 1997 Annual Report. EQC's highest priorities are to promote public understanding and common sense solutions to improve and protect the environment.*

*Since its creation by the Legislature in 1972, the Environmental Quality Commission, a seven-member citizen advisory board, has worked to promote environmental awareness and provide opportunities to involve business, government, and communities in seeking innovative and cooperative solutions to Kentucky's environmental challenges.*

*EQC's mission is more critical than ever and focuses on the following four goals:*

- *Facilitate public understanding, discussion, and resolution of environmental issues.*
- *Monitor environmental trends and conditions.*
- *Promote partnerships and information to improve and protect the environment.*
- *Advise state officials on environmental matters.*

*Attention to these goals has allowed EQC to operate in an effective and cost-efficient manner targeting its resources to the areas of greatest need.*

*As we enter a new decade of environmental management, it is critical that Kentuckians continue to be informed and be provided opportunities to work together to find new cooperative approaches to achieve both a clean environment and healthy economy. EQC has accomplished much during the past year, and through this report we hope to give you an idea of our actions, achievements, and continuing efforts to make Kentucky an even better place to live.*



*Sincerely,  
Aloma Dew, Chairperson*

*facilitate public discussion and resolution of environmental issues . . .*



*More than 60 people attended an evening forum in Bowling Green to hear about water pollution issues confronting the Barren River Watershed.*



## **EQC 1997 Clean Water Campaign Builds Public Awareness and Identifies Opportunities to Address Water Pollution**

Each year, the Environmental Quality Commission (EQC) holds public forums for citizens, businesses, and other interested groups to discuss environmental problems in a constructive manner. During 1997, EQC focused these forums on water quality concerns and issues.

Water pollution remains one of the top environmental concerns of Kentuckians. More than 200 Kentuckians participated in three public forums held across Kentucky as part of the Environmental Quality Commission's (EQC) 1997 *Clean Water Campaign*. The commission embarked on the *Clean Water Campaign* to build public awareness and identify opportunities to address water pollution problems in the commonwealth.

The forums focused attention on three waterways impaired by pollution: the North Fork of the Kentucky River, the Barren River Watershed, and the Floyd's Fork Watershed. Issues reviewed included straight pipe sewage discharges, leaking septic tanks, runoff pollution from farmlands and construction sites, and improper wastewater treatment.

### **State Strategy Needed to Address On-Site Sewage Issues**

EQC developed a set of recommendations based on its findings from the *Clean Water Campaign* public forums as well as information gathered from water quality experts in the state.

One of the most pressing concerns expressed at the EQC forums was water pollution from illegal straight pipe sewage discharges and malfunctioning septic systems. In response, EQC recommended that a state on-site strategy be developed to ensure the consistent enforcement of on-site sewage rules among county health departments, promote cooperative ventures to inventory straight pipe problem areas, build public awareness, and create partnerships to develop



*Kentuckians listened to a discussion on the Floyd's Fork watershed during a Public Forum in Louisville.*



*EQC and local officials toured several areas in Perry County where straight pipe sewage discharges from homes were polluting waterways.*



*EQC toured a hog operation in Warren County as part of the Clean Water Campaign Public Forum on the Barren River Watershed.*

innovative solutions to treat on-site sewage.

EQC also recommends that a low-interest loan program be created to help finance small alternative wastewater systems and a hardship grant fund be established to help homeowners finance on-site treatment systems. The commission also supports passage of a bill in the 1998 legislative session to require proper sewer hookup or an approved on-site septic system prior to state approval of electrical wiring for a new dwelling.

### **Program to Better Control Runoff from Construction Sites**

Many forum participants expressed concern regarding development impacts to waterways. Each day, an average of 101 acres are converted to urban areas and roads in Kentucky. EQC recommends that a training and certification program for construction site workers be developed to promote conservation and prevent erosion from building sites. The commission also supports enactment of erosion control ordinances at the local level for new residential and commercial development.



*EQC and others toured the Floyd's Fork Watershed to view water pollution problems firsthand.*

### **Watershed Protection, More Water Inspectors Needed**

The commission made several other recommendations including:

- Mandate watershed protection to better monitor and target water pollution problems and ensure cooperation among agencies in implementing watershed protection plans.
- Increase the number of water quality inspectors by at least nine to enforce water quality rules and respond to complaints.
- Develop regional enforcement strategies for each Division of Water field office to target water pollution sources and identify needs.
- Establish a system to track problem package treatment plants and target enforcement efforts.
- Enact regulations to better track the disposal of sewage sludge.
- Support certification of loggers to ensure the proper use of best management practices to control runoff pollution.
- Increase funding for the Kentucky Soil and Water Conservation Fund which provides cost-share monies to help address runoff pollution.
- Create a blue ribbon panel to conduct an analysis of the economic, social, and environmental impacts of intensive swine and poultry factory farms.

The 1997 *Clean Water Campaign* recommendations are available by contacting EQC at 502-564-2150, ext. 160 or can be viewed at the EQC web site at <http://www.state.ky.us/agencies/eqc/eqc.html>



*EQC participated in the dedication of the \$7.5 million Hazard wastewater treatment plant during the Clean Water Campaign held on the North Fork of the Kentucky River.*

# monitoring environmental trends and conditions . . .

# EQC Publishes 1996-97 Series of 7 Reports on State of Kentucky's Environment

In 1990, the Kentucky Legislature directed EQC to determine if the investments made to protect the environment were achieving results. The *State of Kentucky's Environment*, produced biennially by EQC, provides an independent and comprehensive assessment of environmental trends and conditions.

EQC has been reporting on environmental conditions since 1992. During 1996-97, the commission published its third trends update through a series of seven reports detailing drinking water, air quality, waste management, toxics, water quality, natural resources, and resource extraction conditions and trends.

## 1996-97 Report Highlights

- Some of the findings from the 1996-97 report series include the following:
- 81% of households in Kentucky have access to public drinking water. However, access varies greatly by county. For example, in 23 counties fewer than 50% of the households are served by public water systems.
- 51% of the 767 public water systems in Kentucky violated drinking water rules in 1995.
- Half of the 3,423 private drinking water wells sampled in 1995 by local health departments tested positive for bacterial contamination.
- Levels of sulfur dioxide in the air, a pollutant primarily emitted by coal-fired plants and linked to the formation of acid rain, has fallen 29% in the past 20 years. Sulfur dioxide emissions from Kentucky power plants dropped 41% between 1980 and 1995.

Safe Drinking Water - June 1996



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Reporting on Environmental Trends and Conditions in Kentucky

1996 Report Series  
■ Safe Drinking Water  
■ Air Quality  
■ Waste Management  
■ Toxics  
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■ Natural Resources  
■ Resource Extraction

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Ben Ralicki, Midway  
Harold Rummel, Frankfort  
Betsy Bennett, Lexington  
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1996 State of Kentucky's Environment

## 1996 State of Kentucky's Environment Safe Drinking Water

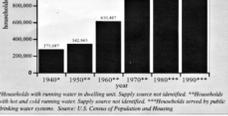
There is no doubt that the quality of the nation's and Kentucky's public drinking water has improved since the passage of the federal Safe Drinking Water Act in 1974. For the most part, water treated by the state's 767 public systems and piped to homes and businesses is considered safe. But the vulnerability of public drinking water supplies to contamination cannot allow us to take its quality for granted.

The national Centers for Disease Control and Prevention (CDC) estimate 400,000 people become ill each year from consuming contaminated water, and 400 people die as a result. Major waterborne disease outbreaks in Wisconsin, Georgia, and Texas in the past three years have caused more health and environmental professionals to question the safety of the country's public drinking water. In addition, an estimated 15% of U.S. population depend on private wells for drinking water, which are not normally tested for contaminants.

So how safe is Kentucky's drinking water? This State of Kentucky's Environment Report will present data and trends to determine the quality of drinking water. The intent is to provide state policy makers and the public with a better understanding of drinking water problems and help report resources to achieve safe drinking water for all Kentuckians.

**Access to Public Drinking Water Varies by County**  
An estimated 76% of the state's households now have access to drinking water treated by 767 public water systems (Figure 1). Nationwide, about 84% of the population has treated drinking water piped to their homes. Half of the 767 public systems in Kentucky are supplied by surface water sources such as rivers, lakes, and reservoirs. These systems serve 92% of households with drinking water. The

**Figure 1: Kentucky Households Served by Public Drinking Water**



Households not receiving water in this table are not included. Supply sources not identified. \*Households with no access to public drinking water. Source: U.S. Census of Population and Housing.

Air Quality - August 1996



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State of Kentucky's Environment Series

## 1996 State of Kentucky's Environment Air Quality

Efforts to clean up Kentucky's and the nation's air have been ongoing since the passage of the federal Clean Air Act of 1970. And the results have been dramatic. During the past two decades, concentrations of many air pollutants in Kentucky have declined, in one case by 97%. But the job is far from over. Air pollution generated by industries — along with tailpipe emissions from an ever-growing number of automobiles and other sources — continue to contribute to environmental degradation and public health risks.

This State of Kentucky's Environment report will assess the state's progress in providing Kentucky citizens with healthy air to breathe. This includes an analysis of data collected from 113 air quality monitors in 34 counties across the state. This monitoring network is the best health indicator for air quality and regional concentrations of various air pollutants in Kentucky (Figure 1). This report will also review air toxics emission trends, greenhouse gas and ozone-depleting chemical releases, as well as indoor air quality, which is considered a high health risk in Kentucky.

**Figure 1: Air Quality Control Regions and Monitored Sites**



Monitored sites monitoring one or more air pollutants operated by the KY Dept. for Air Quality and the Jefferson County Air Pollution Control District. Source: KY Division for Air Quality.

### Air Quality Improvements Continue Into the 1990s

There are many sources that contribute to air pollution including industries, automobiles, and small businesses. The principal law enacted to control air pollution is the federal Clean Air Act of 1970, which was later amended in 1990. Missouri of the Clean Air Act provisions have focused on controlling six pollutants: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), particulate (PM 10), lead, and sulfur dioxide (SO<sub>2</sub>). For example, in 1995, sulfur dioxide emissions in Kentucky dropped 36% from 1980 levels largely due to the installation of scrubbers, pollution control devices used to remove sulfur dioxide, at 12 coal-fired power plants. Measures to control automobile tailpipe emissions have also contributed to improving air quality. Air quality trends indicate steady reductions in the concentrations of seven air pollutants in Kentucky (Figure 2). These improvements have been accomplished while our economy has grown, representing important progress in achieving economic growth while maintaining a safe environment.

# High lead levels widespread among Kentucky kids

Associated Press  
**FRANKFORT, KY** Lead has been taken out of gasoline and paint, but it's still in thousands of homes across Kentucky and it represents a real risk to children, a report released yesterday said.  
The Environmental Quality Commission said state tests of 41,325 youngsters in 1995 found that nearly 7,000 of them, or 17 percent, had potentially hazardous levels of lead in their blood. Lead is especially dangerous to young children, whose brains develop until age 6 and who can suffer learning disabilities as a result of lead poisoning. Lead also can prompt health problems ranging from kidney and liver

damage to reduced growth.  
"I personally find this statistic intolerable," said Alma Dew, vice chairman of the Environmental Quality Commission.  
The lead statistics were part of the commission's report on toxic chemicals in Kentucky.  
While lead problems exist across Kentucky, they are especially troublesome in the urban areas of Louisville and Northern Kentucky.  
Local health departments routinely test youngsters in those two areas for lead. In other areas of the state, tests are conducted if informal surveys indicate a potential for lead exposure, such as living in older housing.  
Although lead was banned from

paint in 1978, it is still common in houses of that generation and before.  
Sarah Wiling, a nurse with the state Health Department, said test results are only from public officers; although private physicians have to report lead-poisoning cases, there are generally fewer than two dozen of these a year.  
We suspect a lot of physicians are not routinely testing in their practices," Wilding said.  
Federal rules that went into effect this year require home sellers and landlords to disclose any known lead hazards in housing.  
*Courier-Journal, Jan. 17, 1997. Reprinted with permission of the Associated Press, New York*

- Toxics in the home remain a concern, particularly lead-based paint. In 1995 health departments found unsafe lead blood levels in 14% of the children tested.
- Kentucky ranks second in the nation in the release of ozone-depleting chemicals to the air.
- The state now has 25.3 years of permitted municipal solid waste landfill capacity, compared to less than five years of capacity just four years ago.
- About 80% of the state's households now participate in a garbage collection program.
- In 1994, 423 industrial facilities generated 585.8 million pounds of toxic chemicals. This amounts to 154 toxic chemicals for every Kentuckian.
- One third of the state's monitored waterways are impaired by pollution. Coal mines, agriculture, and sewage plants are the leading sources of pollution.
- Lumber production was near record levels in 1995 indicating that timber from private forestland is being harvested at increasing rates due to timber demand and availability.
- Six percent of the state's land has been permitted for coal mining
- Kentucky has an estimated 11,595 abandoned oil and gas wells of which 1,162 have been plugged.

## Many Groups Involved in Preparing 1996-97 Reports

*The State of Kentucky's Environment: 1996-77 Series* involved many Kentuckians in its review and development. Each report had its own review committee which included industry, environmental, university, and government representatives. Among the individuals reviewing the various EQC reports were:

- Steve Hubbs, Louisville Water Co.
- Bill Caylor, KY Coal Assn.
- Tom FitzGerald, KY Resources Council
- Bob Bauer, KY Forest Industry Assn.
- Jim See, American Electric Power
- Jonathan Miller, Dupont-DOW
- Jack Baker, Addington Resources
- Hank Graddy, Sierra Club
- Laura Knoth, KY Farm Bureau
- Carolyn Embry, Am. Lung Assn.
- Dr. Hugh Spencer, Univ. of Louisville

Copies of the seven reports are available from EQC or can be viewed at the EQC web site at <http://www.state.ky.us/agencies/eqc/eqc.html>

Waste Management - October 1996



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EQC Staff: Leslie Cole, St. Director; Scott Kichler, Asst. Dir.; Erik Siegel, Research Asst.; Frances Kitchner, Admin. Asst.

State of Kentucky's Environment Series

## 1996 State of Kentucky's Environment

### Waste Management

Managing Kentucky's waste has long been a challenge. But during the past decade, the state has met this challenge head on and passed numerous laws and regulations to further promote the proper disposal of waste. Kentucky has 24 years of the state municipal solid waste landfills. More Kentuckians are participating in garbage collection and recycling programs. The amount of hazardous waste sites cleaned up now number more than 500. And renewed efforts to target illegal dumping sites to the state's continued commitment to tackling the tough waste issues confronting Kentucky.

Yet with all these efforts, improper disposal of solid and hazardous waste still threatens our environment. This State of Kentucky's Environment trends report will measure the state's progress in properly managing its waste. Included in this indicator report is a review of solid waste generation, disposal, and recycling trends, how workers generate and reduce activities, and the clean up of contaminated waste sites and leaking underground storage tanks.

### Solid Waste

Kentuckians continue to produce more garbage than ever before. The average person now generates 4.4 pounds of garbage daily. In Kentucky, the average person generates an estimated 1.7 million pounds of garbage daily. Most of the solid waste produced in paper, comprising 39% of the waste stream, followed by yard waste at 14% (Figure 1). The typical person discards about 1.4 pounds of waste each day after recycling and composting, according to the U.S. Environmental Protection Agency (U.S. EPA).

Solid Waste Landfills in KY Decline 68% Since 1992, 24 State-of-the-Art Landfills Permitted

About 61% of the nation's solid waste is disposed of in landfills. But now there are fewer, larger landfills in which to dispose of waste with the closing of many old sites. The strictest construction and operating standards which took effect in 1993, known as Subtitle D of the federal Resource Conservation and Recovery Act (RCRA), have reduced the number of solid waste landfills from 5,345 in 1992 to 3,581 in 1995.

In Kentucky, solid waste laws and regulations passed in 1990 and 1991 resulted in the closure of more than half of the 75 municipal solid waste landfills by 1992 (Figure 2). Since then, six more facilities have closed, leaving 24 state-of-the-art municipal solid waste (MSW) landfills (Figure 3). These landfills must meet stringent standards including plastic and clay composite liners (20 inches thick or double composite liners), leachate recovery, and the use of comprehensive systems to monitor groundwater for up to 75 different parameters.

### Toxics

Every day, the typical person comes in contact with some of the 70,000 chemicals registered for commercial use in household cleaners used in our homes to the gasoline we put in our cars. Nearly six trillion pounds of these chemicals are produced each year. The potential public health and environmental risks posed by industrial and other chemicals used in society are just beginning to be understood. However, most have not been tested to determine their short- and long-term effects or combined effects on people, wildlife, and ecosystems. And new chemical threats are discovered each year. For example, in 1996 after testing 100 new toys, the U.S. Consumer Product Safety Commission alerted the public that these toys present a lead poisoning hazard for young children.

This State of Kentucky's Environment Report reviews the risks posed by toxic chemicals. The report includes information on the generation and release of industrial toxic chemicals to the environment, pollution prevention trends, agricultural and lawn-care chemical-use trends, and toxics in the home.

### Industrial Toxic Chemicals

Industrial toxic chemicals are produced as by-products of the manufacturing process. One source of data to measure industrial toxic generation and emissions is the Toxic Release Inventory (TRI). The inventory was established in 1988 as part of the federal Emergency Planning and Community Right-to-Know Act of 1986. The act requires certain large manufacturers to self-report to the public the amount of more than 300 toxic chemicals generated, disposed in landfills, released to the air or water, or off-site.

In 1994, the most recent year which data is available, 22,744 facilities in the U.S. reported generating 4.1 billion pounds of toxic chemicals. In Kentucky, 423 industrial facilities reported generating 585.8 million pounds of TRI chemicals that year (Figure 4). This amounts to 154 pounds of toxic

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Water Quality - March 1997



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State of Kentucky's Environment Series

## 1996-97 State of Kentucky's Environment

### Water Quality

Kentuckians are greatly concerned about the quality of their waterways. Year after year public opinion polls rank water pollution among the top environmental problems facing the Commonwealth. While many waterways are degraded by pollution, there are continuing signs of improvement. This State of Kentucky's Environment Report documents whether federal, state, local, and private efforts to clean up our waterways are achieving results. The report includes information on water quality trends and conditions of rivers, lakes, and groundwater. The report also looks at how well sewage treatment plants, industries, and other water pollution sources are meeting state and federal clean water rules.

### Water Quality of Streams, Lakes, and Groundwater

Thirteen major river basins lie within Kentucky (Figure 1). These basins contain 80,411 miles of waterways. In addition, there are an estimated 2,271 lakes and reservoirs in Kentucky, of which 953 are greater than 10 acres in size. The quality of these waterways varies from severely degraded by pollution to clean enough for fishing, swimming, or for use as a drinking water supply.

To measure the water quality of streams and rivers, data from the Division of Water's 44 stream monitoring stations and other monitoring data were reviewed. Waterways are monitored for 25 different parameters including pH, mercury, lead, and fecal coliform bacteria. Unfortunately, the monitoring system can only assess a small portion, about 7% of the total stream and river miles in the state. While this data may not represent a statistically valid sample of water quality statewide, it does provide a general indicator of water quality trends and pollution sources in Kentucky. Data on lake and groundwater quality were also reviewed to assess conditions.

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Natural Resources - June 1997



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### Natural Resources

Kentucky's landscape and biological diversity have undergone significant changes during the past two centuries. Vast forests and free-flowing rivers have provided habitat to large herds of buffalo and elk, great numbers of black bear, and thousands of species of native plants and animals. Since settlement began, more than 200 years ago, the state's 13 major rivers have been impounded and millions of acres of forests cleared to make way for farms, coal mines, highways, and small and large urban areas. Kentucky's natural landscape has been greatly altered, affecting the biological diversity of our natural communities, and in some cases, resulting in the loss of species and entire ecosystems.

### Land Use: Cropland Declines by 1.5 Million Acres; 101 Acres a Day Converted to Urban Areas and Roads

Kentucky's 25.8 million acres of land are now primarily composed of cropland and pasture lands. With the remainder covered by roads, urban areas, water, and federal lands (Figure 1). Land use shifts seen during the past 25 years creates are largely a reflection of a growing population and economic pressure. For example, during the past 25 years cropland declined by 1.5 million acres. Cropland loss is attributed to urban building, conversion to water areas, and an increase in crop production costs resulting in the conversion of marginal cropland to pasture. In addition, 29% of these croplands (422,000 acres) were retired from use under the federal Conservation Reserve Program.

Land use changes are occurring more rapidly in some regions of the state than others.

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Resource Extraction - October 1997



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### Resource Extraction

The mineral resources of Kentucky contribute greatly to meeting the state's energy needs. For example, each day the average Kentuckian consumes 1.2 million Btu of energy at home, work, and play—that's 270 more than the national average of 954,000 Btu. Kentucky ranks 8th in the nation in energy consumption per person.

Kentucky's mineral resources also help to support the state and local economies. During 1995, the value of the coal, natural gas, petroleum, and other minerals mined in Kentucky was approximately \$4.4 billion. The mining and quarrying industry employed 25,300 people that year, earning \$905 million in wages and income. A majority of which was attributed to the coal industry.

Efforts to address and minimize pollution impacts from coal mines and oil and gas operations activities remain a major source of water pollution in Kentucky. Efforts to address and minimize pollution impacts from coal mines and oil and gas operations activities remain a major source of water pollution in Kentucky. Efforts to address and minimize pollution impacts from coal mines and oil and gas operations activities remain a major source of water pollution in Kentucky.

### Coal Mining

Kentucky Ranks Third in Nation in Coal Production

U.S. production reached record levels in 1996 at 1,057 million short tons. Kentucky's production ranked third in the nation in coal production, supplying 15% of the nation's coal of 158 million tons (Figure 1 & Figure 2). More than 85% of Kentucky's coal is sold out-of-state.

State of Kentucky's Environment Series



*EQC testified before the legislative Environment Subcommittee in May on water quality trends and conditions.*

*advise state officials on environmental matters . . .*

## **EQC Advises State Officials on Forestry, Factory Farms, and Pollution Prevention**

The Environmental Quality Commission provides the governor, the secretary of Natural Resources and Environmental Protection Cabinet, and other government officials high-quality advisory recommendations on a wide range of environmental matters. These recommendations are intended to assist officials develop sound and reasonable solutions to Kentucky's environmental challenges.

EQC bases its recommendations on input from the regulated community, environmental organizations, and the general public regarding proposed environmental regulations, plans, and policies as well as actions necessary to support a thriving future for Kentucky's environment, economy, and citizenry.



*EQC reviewed logging practices during a tour of a private woodlot in August.*

### **Pollution Prevention : A Win-Win Proposition**

EQC brought together Kentuckians at a public forum to view opportunities to promote pollution prevention in Kentucky. At the public forum, cosponsored by the KY Pollution Prevention Center, EQC found strong agreement among the regulated and environmental community that preventing pollution is preferable to trying to manage, treat, or dispose of pollution after it is created.

Based on its findings from the forum, EQC issued several recommendations aimed at promoting pollution prevention in Kentucky. Among the recommendations were:

- Adoption of fees on generators of certain toxic chemical to promote the reduction and generation of chemical wastes.
- Initiation of a statewide campaign to increase awareness and build support for waste reduction and pollution prevention in the private sector.
- Establishment of guidelines and criteria for more fully intergrating pollution prevention activities into state environmental programs and decisions.
- Provision of funding to the state Cancer Registry to assess the relationships between cancer clusters and toxic hotspots in the state.

### **Other EQC Recommendations**

EQC offered advisory recommendations throughout 1997 to government officials. Among some of the actions taken by EQC during the past year are:

- *Proposed Regulations* - EQC reviewed and offered its advisory recommendations on 63 proposed environmental regulations.
- *Hog and Chicken Factory Farms* - EQC recommended a moratorium be imposed on new and expanded poultry and factory hog operations until a full assessment of environmental impacts and regulatory needs is conducted.
- *Daniel Boone National Forest* - EQC expressed support to the governor and Kentucky's Congressional delegation for the Daniel Boone National Forest FY1998 federal land acquisition request.
- *Kentucky Forest Conservation Act* - EQC endorsed the proposed forest conservation act to provide landowner education, forest management incentives, use of best management practices to control water pollution, forest inventory, and training and certification of loggers.



*EQC toured a Perdue contract farmer chicken house in July.*

*promote partnerships and information . . .*

# EQC Creates Partnership to Rank Risks; Builds Awareness Through Information

Recognizing that government alone cannot solve all our environmental problems, EQC builds cooperative partnerships among business, governmental, environmental, and other interests to facilitate effective and workable solutions to improve and protect Kentucky's environment.

## Partnership Ranks Environmental Risks

During 1997, the 42-member Public Advisory Committee, staffed and chaired by EQC, finalized its report ranking environmental risks in Kentucky.

The Comparative Risk Project, funded by the U.S. Environmental Protection Agency and coordinated by the Natural Resources and Environmental Protection Cabinet, was initiated to better evaluate the health and ecological risks posed by environmental problems. The goal of the project is to better target resources to address the most serious environmental problems and shape policies for reducing environmental risks.

## Lexington Community College Partnership

EQC coordinated an effort within the Natural Resources and Environmental Protection Cabinet to assist the Lexington Community College (LCC) raise funds to match a \$100,000 Knight Foundation grant to establish an Environmental Science Technology program. EQC helped to collect 516 documents for donation to the LCC Environmental Technology library.

## Public Information

EQC publishes a bimonthly newsletter to inform Kentuckians about meetings, permits, proposed regulations and other matters of public interest. This free single-page newsletter provides timely information to 4,000 people on the EQC mailing list and is considered a valuable resource by business, state and local officials, and the general public.

## Referral/Problem Solving

With so many different state agencies and programs it is often difficult for citizens to know how to access information or report concerns. EQC has assumed a role in helping the general public identify the appropriate program or agency to address an inquiry or particular problem. During 1997, EQC responded to 180 inquiries ranging from environmental careers to reporting pollution problems.

### Leading Environmental Risks in Kentucky

- Sewage Pollution
- Safety of Drinking Water
- Water Pollution from Agriculture, Urban Areas, Mining
- Illegal and Open Dumps
- Brownfields and Superfund Sites
- Toxic Air Releases
- Habitat Loss
- Forests and Silviculture
- Lead and Children's Health

*Source: Public Advisory Committee, Kentucky Outlook 2000*

## EQC 1997 Earth Day Awards Program Honors Kentuckians

EQC has established a tradition of recognizing successful efforts to protect and enhance the environment through its annual Earth Day Awards Program. Kentuckians from business, environmental, educational, and governmental sectors are honored for outstanding achievements. The public nominates Kentuckians deserving commendation. The award winners in 1997 were:

- Emilie Strong Smith - Louisville, Jefferson County
- Kahn's Hillshire Farms of Claryville, Campbell County
- Sister Dorothy McCannon, Columbia, Adair County
- Doug Germann, Stonewall Elementary, Lexington, Fayette County
- Friends of Anglin Falls, Berea, Madison County
- John Swack, Bowling Green, Warren County
- Kentucky Crushed Stone Association
- Mary J. Nicher, Fisherville, Jefferson County
- Victor Scoggin, Pegram, Tenn.
- Julie Dicken and the Gifted Student Program, Bondurant Middle School, Frankfort
- Cam Metcalfe and the KY Pollution Prevention Center, Univ. of Louisville
- Southwestern H.S. Environmental Club, Somerset, Pulaski County
- Louisa Elementary Fourth-Grade Class, Lawrence County
- EQC Public Servant Award - Gordon Garner, Director, Louisville Jefferson County Metropolitan Sewer District

## *What Some People are Saying About the Environmental Quality Commission . . .*

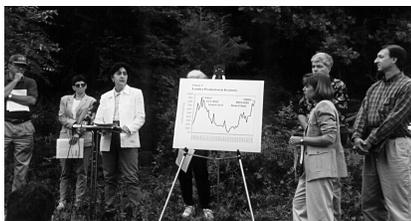


*EQC releases the findings of its Water Quality Trends Report to the press and interested parties.*

"I am a faculty member at the University of Kentucky's Department of Forestry. Given that my primary teaching responsibility will be to instruct a new course in conservation biology, I was quite captivated when I had a chance to read the 1996-97 reports on the State of Kentucky's Environment. I was very impressed with the quality and readability of the publications. These are excellent and understandable documents that put Kentucky's environment in modern and historical perspectives. You and your staff deserve accolades for this project. I would like a set of reports for 30 to 40 students to supplement our main textbook. I believe this would help to effectively promote the educational objectives of the Commission while helping to develop responsible future environmental leaders in Kentucky". . . David S. Maehr, Asst. Professor, University of Kentucky

"I wanted to express my appreciation for the work your commission has done to improve environmental education in Kentucky". . . Laura Webb, Christian Appalachian Project, Salyersville, KY

"I support and admire the excellent work EQC is doing. It is good to see that the EQC commissioners all seem truly concerned with environmental issues and united in seeking real solutions to current problems". . . J.W. Roberts, Bowling Green, KY



*EQC reports on forest and wildlife conditions at a press conference.*

"I have found the air and water quality reports very interesting and informative reading. I think the EQC fills an extremely valuable niche in state government and serves to disseminate information that would take a lifetime for an individual to assemble. Keep up the good work" . . . Jim Hays, London

" Thank you for sending me the State of Kentucky's Environment. My work with various groups across the state have convinced me of this document's value to Kentucky science teachers. I have witnessed the report's use in developing instruction units and classroom assessment items. As a member of the Kentucky Department of Education's Content Advisory Committee for the statewide KIRIS assessment, I know that various graphs and charts in the report have served as inspiration for several items on the test. As president of the Kentucky Science Teachers Association, I have heard my colleagues reference this report quite often as a wealth of information and an excellent resource. I commend the efforts of EQC in compiling these data and making them easily accessible to Kentucky teachers". . . Kevin Stinson, KDE, PRISM

### **Other comments about the 1996-97 State of Kentucky's Environment Series:**

"Information used by our environmental health assessment committee to develop community environmental health indicators."

"I use the information in my human ecology classes and a course on solid and hazardous waste."

"This is a very useful document and worth the cost."

"I use this information as a PRIDE coordinator and environmental educator."

"Great job! The information helps to expand our knowledge on environmental issues."

"Good job. Industry needs to know if we are being good corporate citizens by protecting the environment. All Kentuckians need to know if everyone is properly taking care of this state, this nation, and this planet."



*EQC Commissioners and staff review environmental issues at a meeting in Frankfort.*