

EPA REGION IV
OFFICE OF PUBLIC AFFAIRS
ENVIRONMENTAL EDUCATION & PUBLIC OUTREACH



1994 ENVIRONMENTAL EDUCATION REPORT



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EPA REGION 4 1994 ENVIRONMENTAL EDUCATION REPORT

INTRODUCTION

The Environmental Education and Public Outreach Staff was created in 1991 in the Office of Public Affairs, EPA, Region 4. Its main objectives are to:

- increase public understanding of EPA's mission and activities;
- promote public awareness of environmental issues;
- advance and develop environmental education and training; and
- solicit personal and corporate commitment to environmental protection through education and outreach.

BACKGROUND

On November 16, 1990, the National Environmental Education Act became law (Public Law 101-619). It builds upon environmental education efforts previously undertaken by the EPA and establishes formal communication and advisory links with educational institutions and other federal agencies.

Specific provisions of the law implemented include:

- awarding environmental education grants to support projects that design, demonstrate, and disseminate environmental education activities;
- awarding internships for college students and fellowships for in-service teachers to work with the professional staff of federal agencies involved in environmental activities; and

- providing for national and regional awards that recognize outstanding contributions to environmental education.

ONGOING ACTIVITIES

To implement and administer a comprehensive environmental education and outreach program in EPA Region 4, the following is done:

- Contact and cultivate working relationships with major educational, business, and civic organizations, as well as print and broadcast media to disseminate information about EPA's operations and activities.
- Coordinate outreach activities to provide environmental education information to the public at exhibits, expos, and conventions at the local, state, regional, and national levels.
- Coordinate a Region 4 Speakers Bureau to meet public requests for speakers on environmental issues.
- Coordinate the President's Environmental Youth Awards (PEYA) Program for Region 4 to recognize youth projects that promote local environmental awareness and channel that awareness into positive community involvement.
- Staff a toll-free hot-line to respond to public requests for environmental information.

The following report is published by the EPA Region 4's Environmental Education and Public Outreach Staff, based upon information provided by EPA Region 4's program offices, states, and laboratories. Its main purpose

is to report on the state of environmental education in Region 4 during 1994 and share ideas and activities in education and outreach that others may use to build effective partnerships and further the goals of environmental education.

The report is not intended to capture all of the many environmental education efforts currently underway, but should provide a summary of some of the most significant outreach activities taking place in environmental education in Region 4.

By sharing these environmental education activities and successes, we hope to generate ideas, facilitate communication among environmental education professionals, provide networks for information and resource sharing, facilitate the identification of gaps in environmental education resources and encourage strategies to eliminate them, and avoid the fragmentation and duplication of activities. We hope to increase the success of environmental education in the Region and mobilize the public to greater environmental awareness, understanding, and action.

U.S. Environmental Protection Agency Region 4 Organization

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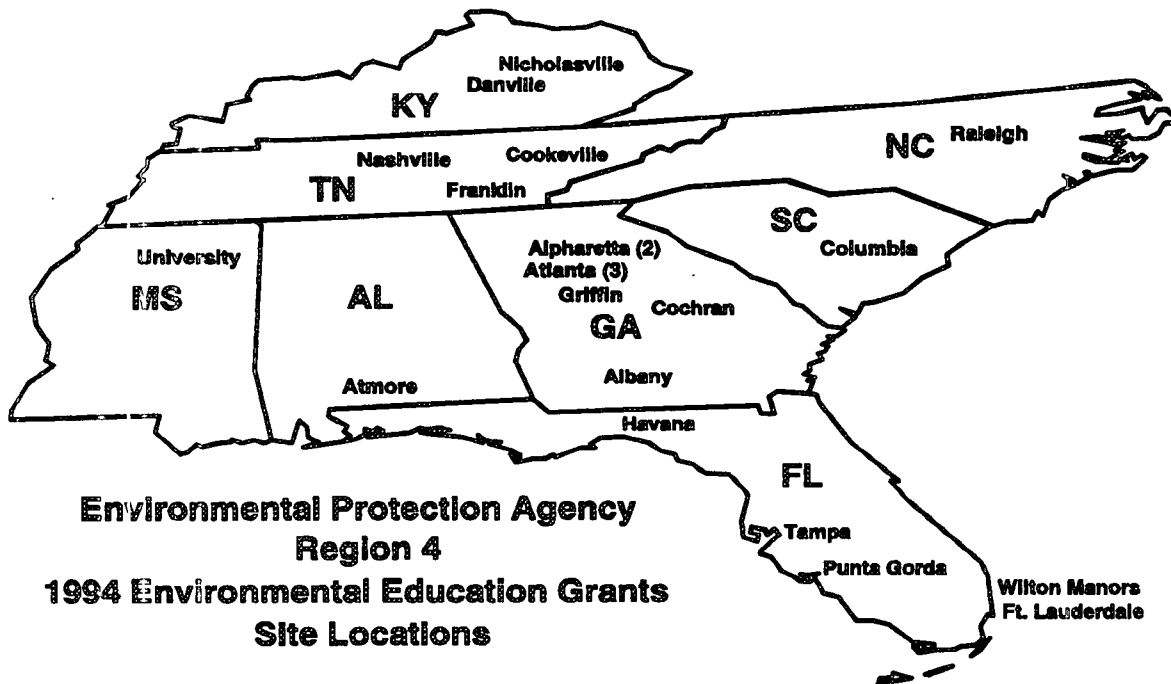
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*National Environmental Education Act (NEEA)
- Grants
- Internships/Fellowships
- Awards



EPA REGION 4 PROGRAM OFFICES

ENVIRONMENTAL EDUCATION & PUBLIC OUTREACH STAFF, OFFICE OF PUBLIC AFFAIRS

Environmental Education Grants

Contact: Norman Black/Fred Thornburg,
404-347-3555, ext. 6746

In 1994, \$180,000 in grants were awarded to 22 eligible organizations in the eight states in Region 4 for environmental education projects. Eighteen of these awards were for \$5,000 or less and were made to K-12 schools, non-profit environmental and educational organizations, and local youth organizations. Projects included a wide range of environmental education activities intended to improve students awareness, knowledge, and understanding of environmental issues. In addition, East Carolina University was awarded \$36,551 by the EPA's Office of Environmental Education in Washington, D.C., to provide elementary and junior high school science teachers with knowledge and instructional skills to teach students about coastal environmental problems in eastern North Carolina. Profiles of the 1994 projects can be obtained by contacting the office at the above number.

Grants Writing Workshop

Contact: Alice Chastain, 404-347-3555, ext. 6747

Three grants writing workshops were conducted: one in Roswell, Georgia, and two in Raleigh, North Carolina, to a total of 75 teachers and PTA leaders. This gave attendees skills to write



Photo by Norman Black

Students from Williamson County schools, in Tennessee, gather samples of aquatic life, in a branch of the Harpeth River, near Franklin, Tennessee, during the 1994 Fall semester. The cross-curriculum project includes advanced, average, and problem youths and uses environmental studies to teach Biology, Chemistry, Ecology, Life Science, English, and other subjects.

grants, or look for alternative funding for their projects.

President's Environmental Youth Awards (PEYA) Program

Contact: Alice Chastain, 404-347-3555, ext. 6747

The PEYA Program recognizes youth projects that promote local

environmental awareness and channel that awareness into positive community involvement. The best projects are given an award by the President. The PEYA Program in Region 4 had 11 entries in 1994, of which 6 were eligible to be judged on the national level. Nearly 14,000 PEYA applications were mailed out in 1994 within the region. The

student members of the Morgan County High School FFA Chapter, in Madison, Georgia, won the 1994 PEYA award for Region 4. The group planned, built, and organized the first county recycling center, an outdoor study area, and a wildlife habitat.

Speakers Bureau

Contact: Alice Chastain, 404-347-3555, ext. 6747

The Region 4 Speakers Bureau coordinates the services of 104 full-time Region 4 employees. Each media and program is represented. Created in 1990, this program sends EPA speakers on environmental topics to industry, community, and civic groups, as well as to universities and K-12 public and private schools. In 1994, 53 presentations were made by volunteer speakers.

Environmental Education Mailing List Database

Contact: Alice Chastain/Fred Thornburg, 404-347-3555, ext. 6747

The office maintains and updates, as needed, a computerized mailing list database of approximately 14,000 schools and environmental organizations in the region, which can be sorted by state and type of school for targeted environmental education mailings.

Exhibits and Shows

Contact: Wesley Lambert, 404-347-3555, ext. 6758

EPA Region 4 took part in the following events during 1994:

- Georgia Conservancy Youth Conference, Calloway Gardens, GA, Feb. 25-27
- Atlanta Braves Env Awareness Day, Atlanta, GA, April 20

- Dogwood Festival, Atlanta, GA, April 21-23
- Public Service Recognition Day, Atlanta, GA, May 4
- Cultural Diversity Day Celebration, Atlanta, GA, September 30
- Zoo Conservation Day, Atlanta, GA, Sept. 30
- Florida Environmental Expo, Tampa, FL, Oct. 10-13
- Sunbelt Agricultural Expo, Moultrie, GA, Oct. 18-20
- Environmental Technology Expo, Atlanta, GA, Dec. 7-9

EPA environmental education literature, posters, bookmarks, and other educational handouts are distributed during these events.

Public Notices, Meetings, Hearings

Contact: Lena Scott, 404-347-3555, ext. 6754

Three hundred eighteen (318) public notices were issued; 12 public service announcements were placed with radio stations in areas where major public meetings were scheduled; and one public hearing was coordinated during 1994.

Volunteer Outreach Program

Contact: Wesley Lambert, 404-347-3555, ext. 6758

EPA employees volunteer for a wide variety of programs in the local community to promote environmental awareness such as tutoring subjects in adopt-a-school programs, judging science fair projects in the Atlanta Public Schools and Apple Corps, and a mentoring program with Clark Atlanta University. Since 1993, the region has planned and implemented various aspects of the President's National Service Initiative which allows college-age participants to pay back a portion

of their college tuition by performing acts of volunteer service in their communities. Presently, a corps of 10 National Service participants has been established to perform community service work, including an urban stream restoration project and a lead and radon outreach effort in low-income areas of Atlanta, GA.

Regional/State/Local Networks

The office established working relationships and partnerships with a number of federal, state, local, and private sector organizations during 1994 and maintained relationships set up in previous years with other organizations. These included:

Atlanta Braves Environmental Awareness Day was co-ordinated in partnership with the U.S. Fish & Wildlife Service, Georgia Conservancy, Georgia Department of Natural Resources, Georgia Wildlife Federation, National Park Service, U.S. Forest Service, U.S. Geological Survey, Nature Conservancy, Corps of Engineers, Atlanta Botanical Gardens, Save the Manatee Club, Zoo Atlanta, Turner Broadcasting System, and National Foundation to Protect America's Eagles. This event was held at the Atlanta-Fulton County Stadium during the opening week of the Atlanta Braves 1994 baseball season, with an estimated 50,000 in attendance.

Contact: Wesley Lambert, 404-347-3555, ext. 6758

Earth Day was observed at the Dogwood Festival, Atlanta, GA. Environmental information, wildflower seeds, and nearly 7000 dogwood seedlings (donated by the Pennington Seed Company, Madison, Georgia) were given visitors.

Contact: Alice Chastain, 404-347-3555, ext. 6747

International Programs

Contact: Norman Black, 404-347-3555, ext. 6746

The office was host to 54 foreign visitors, from 10 countries, on 14 occasions, during 1994. The agendas for these visits normally included technical presentations by EPA Region 4's staff, as well as an opportunity for the visitors to get and give information about environmental problems, laws, and enforcement. The visitors hosted in 1994 were from:

- China (3)
- Colombia (1)
- El Salvador (2)
- Ethiopia (1)
- Ireland (1)
- Mexico (1)
- Philippines (10)
- Russia (21)
- Slovak Republic (6)
- United Kingdom (8)

The visitors' agendas included presentations, at two Superfund sites, in Florida, for 20 of the Russian visitors; visits by the Chinese visitors to municipal waste pickup and recycling sites in Georgia; a visit, by the Mexican visitor, to a municipal drinking waterworks, in Georgia; and visits by the El Salvadorians and three British visitors to EPA laboratories, in Athens, Georgia.

Other Education & Outreach Activities

- **Earth Day/Month** - During April, speakers made presentations, at lunch and learn sessions, at Region 4's offices, on environmental topics.

Contact: Alice Chastain, 404-347-3555, ext. 6747

- **Sunbelt Agricultural Exposition, Moultrie, GA** - this agribusiness expo hosted about



Photo by Norman Black

Patrick M. Tobin (fourth from the left), Region 4's Deputy Regional Administrator, talks with Philippine visitors after his presentation to them about the EPA and Region 4's activities. The 10-member Philippine group visited Region 4 during 1994.



Photo by Norman Black

Staff members of the Washington, D.C., bureau of China Central Television (CCT) record action, during 1994, at a newspaper recycling collection building, in Marietta, Georgia. An editor and two members of CCT's Washington editorial staff recorded recycling efforts in Marietta and Roswell, Georgia, for a nation-wide report in their homeland. The group was escorted by Sinclair Ke, Project Officer of the U.S.I.A.'s Television and Film Service, and Norman Black, International Visitors Coordinator of the U.S. EPA's Region 4, who also arranged the visitors schedule.

206,000 persons and featured 1042 exhibitors in 1994. The office coordinated six exhibits and 18 exhibitors from various media including representatives from the Air, Waste, and Water Management Divisions and the

Environmental Services Division in Athens, Georgia. This is the most intensive education and outreach effort to the agricultural community during the year.

Contact: Wesley Lambert, 404-347-3555, ext. 6758

• **Environmental education packages** - the office receives approximately 5-10 requests weekly from teachers, students and the public for environmental education materials. Nearly 400 packages were assembled and sent out in 1994 upon either phone or written request for use as lesson plans, teaching aids, school reports, etc.

Contact: Alice Chartain, 404-347-3555, ext. 6747

Photography

Contact: Norman Elack, 404/347-3555, ext. 6746

Still photography was taken, throughout 1994, of news events and events of interest to the region's employees. The resulting prints were used with news releases sent to the general readership and specialty press, as well as in the region's employee newsletter.

AIR, PESTICIDES AND TOXICS MANAGEMENT DIVISION

Contact: Greg Glahn, 404-347-3043

Lead Based Paint Program

The Division printed 1994 Lead Awareness Calendars, which inform the public about lead exposure hazards, and mailed nearly 16,000 of them to the National Headstart Association and National Association of County Health Officials. The distribution was done jointly by EPA Region 4 and the National Safety Council. Lead-based paint program personnel met with states and legislators to provide education and outreach about the program and spoke at several conferences within the region and nationally about lead-based paint issues.

Air Information Resources for Education (A.I.R.E.)

A.I.R.E. is a stand-alone curriculum developed jointly by the EPA's Office of Air and Radiation and the American Lung Association. The curriculum is directed to specific age groups, from kindergartners to high school seniors. The Division distributed and promoted this curriculum's use by the region's employee volunteers, state and local agencies, school systems, and parent-teacher organizations.

Indoor Air Outreach

The Division, in cooperation with the Georgia Consumer Center, conducted an "Indoor Air House of Horrors", on the Friday before Halloween. School children and news media personnel were educated by ghoulish figures on household hazards such as radon, lead, asbestos, pesticides, carbon monoxide, and secondhand smoke. The event was in the local news and also on the Cable News Network.

Pesticides - Outreach

The Division implemented an aggressive program to educate various groups about pesticides programs. The outreach was accomplished through speeches and displays designed to illustrate various programs, including worker protection, containers, and labels; the conduct of training sessions; and the distribution of educational materials. Major presentations included the Turfgrass Councils, Agricultural Aviation Association, and Aquatic Management Societies. Presentations on the Endangered Species Program were given at meetings of the Environmental Law for Foresters and Forestry Herbicides. Presentations on the

Worker Protection Standard (WPS) were given at the Florida Agricultural Seminars' Labor Relations Seminars, at which regulations for the protection of agricultural workers were discussed, with contractors and agricultural employers. All Region 4 states' pesticide inspectors (about 150 state employees) took part in these WPS courses, and some WPS educational material was distributed to state agencies and in response to public requests.

Stratospheric Ozone Depletion

The Division implemented an extensive program to educate the public and the regulated community about the regulatory requirements under Title VI of the Clean Air Act. Various presentations were hosted by the regulated community or government agencies, including meetings of the Birmingham Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.; the Heating, Ventilation and Air Conditioning Wholesalers Association; and the Southern States Chapter of the Air and Waste Management Association.

Asbestos Education Program

The Asbestos Hazard Emergency Response Act requires the mandatory training and accreditation of persons who do asbestos-related work in the schools. The 1990 Asbestos School Hazard Abatement Reauthorization Act extended training and accreditation requirements to persons that perform work in public and commercial buildings. The Division made numerous presentations to school officials and educators, industry, and state representatives to address the asbestos regulatory requirements

and communicate the health effects of asbestos exposure. These groups included the South Carolina/North Carolina Environmental Information Association, Federal Facilities Annual Meeting, Southeastern States Asbestos Conference, Amoco Asbestos Renewal Meeting, Oak Ridge Environmental Quality Board - Asbestos in the Home seminar, and the Georgia Military College environmental studies class.

ENVIRONMENTAL SERVICES DIVISION

Contact: Cindy Kesler, 706-546-3133

Ambient Air Monitoring - Tim Slagle, Air Compliance Unit, made a presentation to Prof. Barnhart's environmental science class, at the University of Georgia, Athens (UGA), on air monitoring methods and emerging monitoring technologies. On another date, Danny France, Air Compliance Unit, lectured the class about the air module of the Basic Inspector Training course. His talk addressed the Clean Air Act Amendments, ambient air pollutants, and air monitoring techniques.

Waste Water Orientation - On January 18-20, the Water Compliance Unit's staff held a waste water orientation course, in Athens, Georgia, for the Region 4's Waste Management Division and Georgia's Environmental Protection Division (EPD). The course was designed to familiarize the participants with the basic concepts of waste water characteristics, treatment, monitoring methods, and regulatory requirements. It included demonstrations of flow measurement and sampling equipment and a tour of two waste

water treatment plants. About 25 EPA and EPD employees took part in the course.

Activated Sludge Process Control Workshop - On May 10, 12, and 24, Antonio Quinones and Mike Bowden held an Activated Sludge Process Control Workshop for UGA's Environmental Health Science Program. The course dealt with the basic operational principles of the activated sludge process and how to conduct activated sludge process control tests.

UGA - Tim Slagle lectured to the Environmental Health Science's class, at UGA, about air monitoring methods and emerging monitoring technologies.

National Association of Institutional Linen Management - On January 20, Mike Carter talked to the Georgia Association of the National Association of Institutional Linen Management about NPDES monitoring regulations and the Clean Air Act. About 50 people attended.

Sunbelt Agricultural Exposition - On October 18-20, members of the Ecological Support Branch participated in the Sunbelt Agricultural Exposition held at Moultrie, Georgia. The Exposition is the largest farm show in the nation that features field demonstrations. The show has grown steadily year to year, from 437 exhibitors in 1987 to 1,042 in 1994. More than 205,000 persons passed through the gates at the 1994 show, including visitors from 30 foreign countries.

There were 52 educational exhibitors, including several from the EPA in Atlanta and Athens. The Ecological Support Branch of the Environmental Services

Division had a booth with the Georgia EPD, at which was shown an artificial, flowing stream and its aquatic insect larval inhabitants. Handouts and a backboard showed non-point pollution's effects on fresh water environments. The stream was very popular with the visitors, especially the young ones.

WASTE MANAGEMENT DIVISION

RCRA Branch

Teachers Workshop

The RCRA Branch provided presenters for the Environmental Workshop held by the EPA and Clark Atlanta University's Teachers Institute. They held a mock trial; explained RCRA regulations; and gave relevant reading material and chemistry demonstrations.

Combustion Roundtable

The RCRA Compliance Section (RCS) helped plan a Combustion Roundtable, which hosted industry, citizens, environmental groups, environmental equity groups, and other interested parties.

Used Oil Regulations

RCS's presentation to industry included a summary of management standards about used oil, a question and answer session, and the distribution of Federal Register copies.

Contact: J. Sophianopoulos, 404-347-7603

Audio/Video Outreach Tools

Staff members wrote and recorded public service announcements to educate the public about the Superfund program. The tapes were geared to southern Florida.

Superfund Outreach

Rose Jackson was interviewed on the "Focus on South Florida" program, of radio stations WFLC-WIOD, in Miami, Florida. She discussed the Superfund program and National Priorities List sites (NPL) in Dade County and southern Florida.

Contact: Rose Jackson, 404-347-2643

Superfund Coloring Book

The South Superfund Remedial Branch distributed copies of the Superfund coloring book to elementary schools in areas in which there is an NPL site. Teachers have said the books are valuable in helping pupils and their parents understand what goes on in their neighborhoods when the EPA does a Superfund cleanup.

Contact: Betty Winter, 404-347-2643

Outreach

In January 1994, Betty Winter spoke to pupils at the Duluth Middle School, Duluth, Georgia, on careers in environmental communication and the Superfund community relations program.

Contact: Betty Winter, 404-347-2643

Remediation

EPA Region 4's Federal Facilities Branch and the South Carolina Dept. of Health and Environmental Control developed a statewide seminar for federal facilities. Staff members held a Remediation Workshop, on September 20-22, 1994, at Charleston Air Force Base, for the Department of Defense and other federal facilities.

- The South Superfund Remedial Branch developed a brochure entitled "EPA at Work...Protecting South Florida" as part of the South Florida Geographic Initiative

(SFGI). It was produced in co-operation with the Florida Department of Environmental Protection. Its purpose is to increase public understanding of the EPA's role in assisting the state to manage hazardous and solid waste in order to reduce harmful effects in southern Florida. Copies have been distributed to the Board of Public Education in Dade County and to the environmental specialist of the SFGI who plans to send copies to science directors at each high school in the area.

- The "Superfund Team and Mother Mouse" coloring book, created and produced by the Branch in 1992, was reprinted in 1994 by the EPA's headquarters. Region 4 received 9,000 copies, which it plans to distribute to schools in Georgia and southern Florida.

Sangamo-Weston/Twelve-Mile Creek Superfund Site

Contact: Mike Norman, 404-347-3931, ext. 6123

- In July 1993, Cynthia Peurifoy, a community relations coordinator for the Region, participated in a Career Workshop at Clemson University. The workshop is conducted each summer for minority and low income students that attend summer college preparatory classes. Ms. Peurifoy talked one-on-one with high school juniors and seniors about careers within the EPA, particularly about community relations. She also explained the EPA's organization, mission and various programs.

During the same period, a Clemson communications class did a project using the EPA's community relations program. Class members prepared questions to be asked as part of the

community relations interview process, as if they were the community relations coordinator. Ms. Peurifoy worked with the professor to explain the process and with some of the students as well.

- The Emergency Response & Removal Branch conducted seven outreach seminars for the Spill Prevention control and countermeasures regulations in FY 1993. There were a total of 325 attendees from state government, the regulated community, and industry associations. The meetings were held in Atlanta, Georgia; Bowling Green, Kentucky; and Columbia, South Carolina.

WATER MANAGEMENT DIVISION

National Pollutant Discharge Elimination System Newsletter

Contact: Susan Pope, 404-347-4793, ext. 4277

The NPDES Newsletter has been included in the quarterly mailing of pre-printed Discharge Monitoring Reports. The tenth newsletter is currently being prepared. It makes permittees current with new developments, prompts compliance with any new regulatory requirements, and provides advice about complying with requirements, with which difficulties have been observed.

Electronic Bulletin Board

The NPDES Electronic Bulletin board was established in September 1992 and is accessible to anyone with a modem. The board includes articles and information about NPDES compliance.

Water Sourcebook

Contact: Kristi Watkins, 404-347-2913, ext. 6499

The Water Sourcebook is planned as a comprehensive environmental education program on water issues for grades K-12. The first volume, currently being distributed nationally and internationally by the Water Environment Federation, is for grades 3-5. The Georgia Water Wise Council conducts teacher workshops, in Georgia, about the book, and Legacy, Inc., distributes it in Alabama.

The Sourcebook for grades 9-12 is being developed and should be ready for distribution in the fall, 1995.

The volumes for grades K-2 and 6-8 will be developed as funding becomes available. The Sourcebook is an effort by persons committed to ensuring that future generations get good quality environmental education.

Wellhead Protection

Contact: Ronald Mikulak, 404-347-3866, ext. 6646

A multi-program educational project was done by the programs of the Division's Groundwater Protection Branch. It trained local officials to deal with compliance issues in the wellhead protection areas of Elizabethton, Tennessee, and Worthington, Kentucky.

4M UST Training Center

Contact: John Mason, 404-347-3866, ext. 6672

During FY 1994, the 4M UST Training Center, Chattanooga, Tennessee, used a \$150,000 grant from Region 4 to hire a director and offer seven courses in underground storage tank

remediation. About 210 engineers, geologists, and other technical specialists took the courses. These students were employed by federal, state, and local governments, as well as contractors.

OFFICE OF POLICY & MANAGEMENT

Contact: Cory Berish, 404-347-7109

Partners for a Clean Environment (PACE)

PACE combines the EPA's Greenlights, Waste Wi\$e, WAVE, and EnergyStar programs with state and local initiatives to form a comprehensive approach to pollution prevention. PACE provides a method for businesses to examine their energy efficiency, solid waste reduction, water efficiency, and transportation alternatives. Businesses are encouraged to join this voluntary EPA program and also implement other measures that provide reasonable returns on investments, while reducing waste and pollution in each of these areas. This program is being tested in the Atlanta area.

Construction and Debris Material Recycling

The EPA has funded the Institute for Local Self Reliance (ILSR) of Philadelphia, Pennsylvania, and Augustine Environmental of Atlanta, Georgia, to do a five-month-long research, analysis, and facilitation project among government, community, and private sector agencies, with the goal of establishing a community-based construction and demolition debris recovery enterprise in Atlanta.

More than 95% of the asphalt, brick, and concrete rubble

generated in Atlanta is now processed by Aggrecon, Inc., which ILSR helped in its effort to move to a new site in Atlanta. ILSR continues to offer Aggrecon help in hiring and training under-skilled workers for low-income areas in Atlanta.

Energy Efficient Affordable Housing

The EPA funded the Southface Energy Institute of Atlanta, Georgia, to work with nonprofit agencies that build "affordable housing", in an endeavor to increase the use of proven, new technologies, which increase new homes' energy efficiency. Southface worked mainly with Charis Housing and Habitat for Humanity, in Atlanta and neighboring Cobb County, Georgia.

Energy & Water Conservation

The Planet Protection Center program educates home improvement retailers about the need for energy and water conservation and encourages them to stock and promote products that would help American homeowners and businesses conserve energy and water. Through this program, Region 4 expects to deliver the energy and water conservation message to 7.5 million U.S. households.

Contact: Carol Monell, 404-347-3555, ext. 6779

Project Harambee

Region 4 has sponsored a local effort for pollution prevention, called Project Harambee (Swahili for "let's pull together"). This community-based conservation program is intended to show local and regional decision makers and community stakeholders how a

community-based conservation program can pay back the community, while creating a financial and environmental win-win situation.

Media Divisions

The Region 4 media divisions have been working with their state program counterparts to put pollution prevention activities into their state grant programs. The Air, Pesticides, and Toxics Division has, for example, set aside a percentage of the air grants for states to use for pollution prevention strategies. The Region

provided training for state air programs personnel and works with each state to help it develop a plan suited to its needs.

OFFICE OF REGIONAL COUNSEL

Contact: Bill Anderson, 404-347-3555, ext. 2182

Bill Anderson, Assistant Regional Counsel, completed the second year of a two-year-long assignment, under the Intergovernmental Personnel Act, at the School of Public Policy of the Georgia Institute of

Technology, Atlanta, Georgia. He developed and taught two new courses for the Master of Science degree in public policy, which offers a specialization in environmental policy. The courses were Environmental Law, which covered cross cutting statutes, such as the National Environmental Policy Act and the Endangered Species Act, as well as statutes governing the use of federal lands, such as national forests. These courses attracted 135 undergraduate and graduate students of management, city planning, engineering and science, and public policy.

EPA REGION 4 OFFICE OF RESEARCH & DEVELOPMENT LABORATORIES

ENVIRONMENTAL RESEARCH LABORATORY, ATHENS, GEORGIA

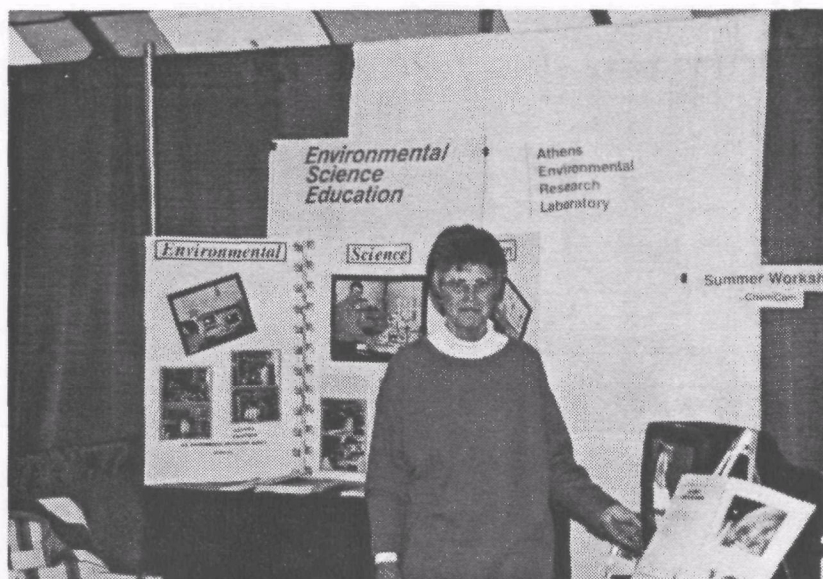
Contact: Kate McDaniel, 706-546-3524

Distant Learning

Research done by Lee Wolfe, Ph.D., and staff, at the Environmental Research Laboratory (ERL) found some aquatic plants break the trinitro toluene (TNT) molecule into other molecules.

To enable students at five high schools in Georgia to do similar experiments, ERL mailed their schools the chemicals and supplies needed to do the experiment, along with written test requirements and instructions for their use. Instead of TNT contaminated soil, the students had a new lab test for measuring the presence of a specific enzyme in the plant. The schools taking part were Columbus and Carver, in Columbus; E.T. Booth School, in Woodstock; Rome, in Rome; and Dodge County, in Eastman.

The students later saw a video of the ERL research, in which they could see in great detail how to properly collect and prepare samples, as well as the equipment used, and how the lab test was done. During this live electronic connection with their schools, ERL staff members and students saw, heard, and talked with each other.



Kate McDaniel of the Environmental Research Laboratory (ERL), Athens, Georgia, uses a video and handouts to promote ERL's Environmental Science Education Program. She is shown in ERL's 1994 booth, at the Sunbelt Expo, in Moultrie, Georgia.



The experiment shown above was set up, in Childersburg, Alabama, by personnel of the Environmental Research Laboratory, Athens, Georgia, in order to test the effectiveness of an aquatic plant named parrot feather to break down trinitro toluene molecules.

During their study, the students did sophisticated lab tests and found new, useful plants in their communities. These were sent to ERL for further tests.

Sunbelt Expo

ERL had a booth at the yearly Sunbelt Expo agricultural fair, in Moultrie, Georgia. The booth was visited by 105 teachers and educators, and 25 requests were made for other material. Nearly 1,730 copies of 16 curriculum were given to visitors.

Governor's Council

ERL took part in the Council for Environmental Education, set up by Georgia's Governor Zell Miller. The 12-member council investigated the status of environmental education in Georgia and the need to teach the subject. It gave its report to the governor at the January 1994 legislative session.

Unerground Storage Tanks

ERL had a booth at a meeting of the Oconee County Clean and Beautiful Commission. Commission members were asked to find an abandoned, leaking gas tank, which contaminated a small community's drinking water.

Science Teachers' Workshop

ERL sponsored a ChemCom workshop (i.e., Chemistry in the Community), on June 19-24, 1994, at ERL, for 25 Georgia high school teachers. The six-day-long course was co-sponsored by the American Chemical Society.

Nature Trail/SAVE A SPECIES

ERL scientists worked with teachers at the 4th Street Elementary School, in Athens, Georgia, to research the native plants and make markers for some. The markers, and a brochure for teachers, are for use in connection with the school's nature trail.

The Athens chapter of Sigma Xi, a national research society, whose president is David Lewis, Ph.D., an ERL scientist, is coordinating a new, continuing program, called Save A Species, with the school. It will enable pupils to see the nature trail as a habitat and study the animals in the surrounding wood, as well as write essays for a contest about endangered species.

Several ERL scientists took part in the school's Mentor Program during the year.

Clark Atlanta University

Clark Atlanta University students toured ERL's labs. In addition, faculty research participation, joint research projects, student internships, mini-courses, workshops, and faculty and scientist exchange appointments were ongoing.

Conservation Workshop

ERL scientists taught four, two-hour-long classes daily, about water quality, during the five-day-long summer conservation workshop at Abraham Baldwin Agricultural College, Tifton, Georgia. The event was attended by 300 students from 150 Georgia high schools.

OFFICE OF RESEARCH AND DEVELOPMENT, RESEARCH TRIANGLE PARK, NORTH

CAROLINA

Contact: John O'Neil, Ph.D., 919-541-0179

The Office of Research and Development, at Research Triangle Park (RTP) supported the following environmental education activities in 1994:

K-12

Thirtyfive students from grades K-12 were enrolled in the Research Apprenticeship Program, under a cooperative agreement RTP has with Shaw University. The youth are enrolled after the 8th grade and attend special classes at Shaw on Saturdays, during the school year and for six weeks, during the summer. During the summers after their 11th and 12th grades the students work, with EPA mentors, in RTP laboratories as apprentices. The program's purpose is to encourage bright students to pursue careers in science and engineering.

About 20% of ORD's scientists volunteer as either scientists in the classrooms, or as scientists in residence at local schools.

ORD obtained funding and sponsored a four-week-long summer teachers-workshop entitled "Development of an Environmental Report Card". It was attended by 25 middle and high school science teachers.

Research Fellows

ORD funds a pre- and post-graduate Summer Research Fellowship Program for minorities. This is done through the Clark Atlanta University Consortium. The students participate in research in the ORD laboratories, during the summer and continue their

work during the school year. They receive summer expenses, a school year stipend, and the equivalent of in-state tuition.

Training

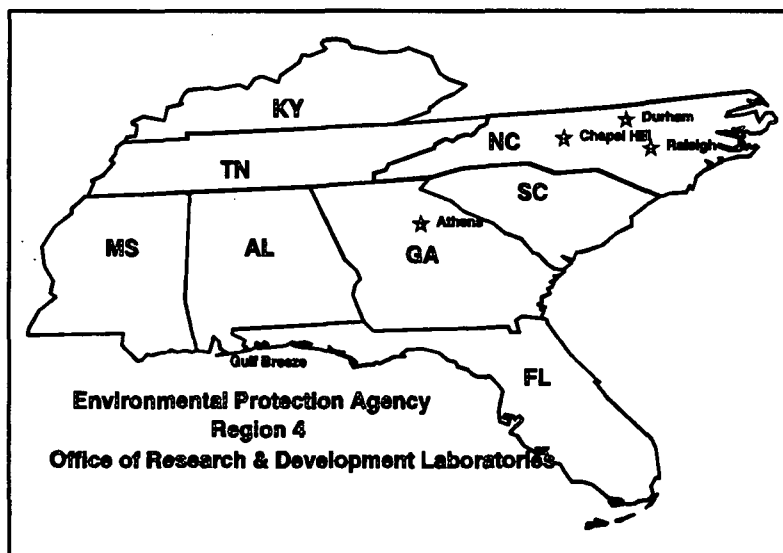
The Southeast Partnership for Environmental Technology Education (SEPETE) is supported

by ORD and other federal agencies in the southeast to train students for technical careers in environmental technical roles.

Academic Relations

ORD takes part, with local universities, in implementing Memorandums of Understanding.

The schools include Duke University, North Carolina Agricultural and Technical University, North Carolina Central University, North Carolina State University, at Raleigh, the University of North Carolina, at Chapel Hill and, at Wilmington, Shaw University, and Western Carolina University.



EPA REGION 4 STATES

ALABAMA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Contact: Catherine G. Lamar, 205-271-7709

Environmental Tags

Contact: Tim Forester, 205-271-7958

At the end of FY '94 the proceeds from the sale of environmental license plates, which went on sale in April 1993, totaled \$542,000. (Legislation creating the tags was passed in 1992.) This money is for use in funding environmental education projects. Some of these have included:

- Produced and distributed 10,000 water resource posters to schools throughout the state in cooperation with the EPA, the Geological Survey of Alabama, and Legacy, Inc.;
- funded the development of a K-12 curriculum guide by Troy State University's Center for Environmental Research and Service. A resource guide, which will serve as an informational source and supplement the curriculum material, is currently being developed;
- provided \$25,000 in grants to public schools throughout the state to initiate and implement environmental education projects;
- initiated, in 1994, the first Envirobowl, modeled after the College Bowl and other similar game shows. It features questions about environmental issues. Nearly 140 students from 28 high



School teachers listen to information about water quality, during a teacher workshop, at Lay Lake, Alabama. The workshop, held in 1994, was sponsored by the Alabama Department of Environmental Management.

schools in the state took part;

- produced and distributed, with the cooperation of the Alabama Cattlemen's Association, 150,000 free place mats to restaurants across the state. The mats featured environmental information in celebration of Earth Day;
- funded, in cooperation with the Alabama Forestry Association, a one-week environmental education workshop for elementary students in the Decatur area. The focus was on forestry, land, water and wildlife issues;
- funded the creation of a recycling center and outdoor environmental laboratory for elementary students at Birmingham Southern College, in Birmingham.

Outdoor Environmental Education Labs

Contact: Patti Hurley, 205-271-7938

Using EPA nonpoint source funds, 26 environmental education laboratories were established at public school sites throughout the state through the cooperation of the Resource Conservation and Development districts.

Citizen Monitoring Network

Contact: Patti Hurley, 205-271-7938

Nonpoint source funds from EPA grants supported training citizens pursuant to setting up a citizen monitoring network. About 25 workshops were held throughout the state to train nearly 1,000 citizens in the proper water quality monitoring techniques. To date, 32 citizen monitoring groups have

been established statewide.

Water Quality Teacher Workshops

Contact: Patti Hurley, 205-271-7938

Two workshops were sponsored in the coastal area with the cooperation of the Alabama Cooperative Extension Service, Troy State Environmental Studies Center, Mobile County Environmental Studies Center, and Weeks Bay Reserve. The workshops, attended by approximately 25 teachers, focused on nonpoint source pollution problems.

Staff Outreach

Contact: Catherine G. Lamar, 205-271-7709

In October 1993, ADEM began compiling a list of outreach

activities by its staff. The records for that one-year period indicate that personnel participated in almost 300 programs involving more than 18,000 attendees. These ranged from workshops on technical issues and regulations sponsored by ADEM for the regulated community, to presentations at public schools, churches, and scout troops.

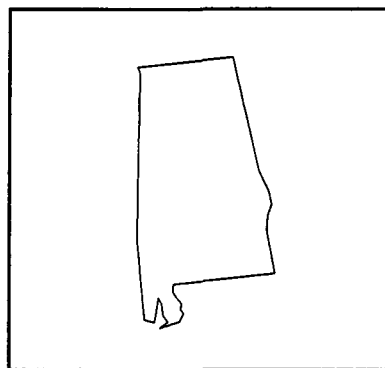
Ombudsman Office

Contact: Blake Roper, 1-800-533-2336

This outreach was set up in May 1993 to comply with mandates of the Clean Air Act. ADEM chose to expand it to deal with multimedia environmental issues (as opposed to air issues only). ADEM is the second state in EPA Region 4 to adopt this broadened outreach approach.

The office's main objective is to

help small businesses by disseminating information on proposed and new regulations, evaluating the regulations' impacts and making referrals for technical assistance to facilitate compliance. Since 1993, the office has been involved in more than 50 public outreach efforts. To facilitate communications, ADEM set up a toll-free phone line. There have been an average of 30 calls daily to complain or ask technical interpretations of regulations.



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Contacts: Jim Lewin, Director, Office of Environmental Education (OEE), Janine Rogers, Dodie Zeiler: 904-488-9334.

The Department of Environmental Protection (DEP) has begun ecosystem management. In support of this, the OEE has taken an ecosystem approach to environmental education. This move has been guided by a committee composed of agency and outside representatives.

School Outreach and Public Information: The OEE provides information for the public, other agencies, environmental and civic clubs, and schools. It answers inquiries and provides pamphlets, booklets, fact sheets, videos, and posters. Guided by the OEE, the DEP participates in a unique partnership entitled Partners for Excellence, with schools statewide. School needs are matched to DEP's resources and DEP employees serve as consultants and judges for science fair projects. They also take part in school career days.

The Florida Envirothon: The DEP's staff participates in local and state Envirothons. The Florida Envirothon is a one-day event for high school students, which gives them experience with environmentally oriented activities and helps them become environmentally aware, action oriented adults. Winning teams from local events take part in the annual Florida Envirothon.

Teams of five students each take hands-on and written tests in aquatics, environmental issues, forestry, soils, and wildlife.

Computer Bulletin Boards (BBS): The OEE operates a 24-hour computer BBS. The Ecosystem Management and Environmental Education Computer BBS 904-922-7108, contains text files on a variety of environmental topics, DEP Ecosystem Management reports, a few environmental education programs, and Florida's state air, water, and waste rules. In addition, the BBS will help Florida students get information about environmental subjects.

Parknership: The DEP's Florida Park Service gives Florida schools the opportunity to enter into "Parknerships", by serving in one of the state parks. Students experiences range from creating a butterfly habitat to restoring sand dunes and planting seedlings. The program has doubled in two years.

Angler's Guide: The publication entitled "Fishing Lines: An Angler's Guide to Florida Marine Resources" provides educational information about marine resources for salt-water anglers in Florida. About 1.5 million copies have been printed to give information about fishing ethics, habitats, life histories, and detailed paintings of the most important species.

Laboratory: Tours of the department's state-of-the-art laboratory complex are offered high school students and various organizations. A speaker explains the purposes of an environmental

lab and the kinds of analyses that are conducted in it.

Speakers Bureau: The DEP provides speakers for schools and other organizations throughout the state. The topics addressed include habitat destruction; air and water pollution; endangered species; oil spills; and marine fisheries.

4R's: The DEP provides supplementary information to this state solid waste curriculum, which is used in K-12 math, social studies, language arts, and science classes.

Boating Safety: The Florida Marine Patrol's "Bobber", a cartoon character, educates children about the importance of water and boating safety.

Other: DEP units also promote education on subjects such as used oil, coral reefs and other marine inhabitants, manatee, and other marine mammal protection through in-school programs and on-site field trips.



GEORGIA DEPARTMENT OF NATURAL RESOURCES

Fall and Spring into Recycling

Contact: Pamela Tinley, 404-656-4713

The Environmental Protection Division (EPD) of Georgia's Department of Natural Resources participated in the fourth annual Spring into Recycling, in May, and Fall into Recycling, in October. This event was co-sponsored by the Department of Community Affairs, WXIA Channel 11, and various private industries. The one-day events were held at seven locations throughout metro Atlanta and are designed to allow the public to bring in many types of recyclables, such as glass, aluminum, paper, and hard-to-recycle items, such as latex paint, motor oil, and antifreeze. Almost 600 volunteers helped collect more than 425 tons of recyclables at these events. The public was given educational handouts, which focused on what can be recycled and how it should be collected. The local television station also assisted in informing the public about how to recycle. Some

recycled latex paint was donated to the flood victims in southern Georgia.

Georgia River Clean Up

Contact: Laurie Hawks, 404-656-4905

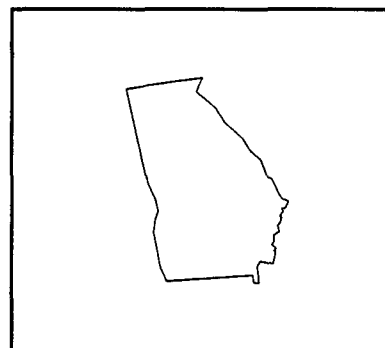
The Third Annual River Clean Up took place on July 14-21, 1994. Nearly 2,100 individuals volunteered more than 6,000 hours and collected more than 2,580 bags of trash. The River Clean Up was planned and coordinated by 33 local organizers and covered a total of 15 rivers, four lakes, and eight creeks, in 30 counties. The groups that provided volunteer support included various Georgia Clean and Beautiful Programs, environmental organizations, schools, civic groups, church groups, and private industry. The items picked up included bicycles, furniture, car parts, aluminum, glass, and plastic.

Georgia Adopt-A-Stream Program

Contact: Laurie Hawks, 404-656-4905

The EPD's Adopt-A-Stream Program has developed a new

trend in water quality protection. In cooperation with schools, private industry, and state and local governments, citizens have begun to take water quality seriously, and thousands of volunteers have helped to clean, monitor, and protect their local streams, rivers, and lakes. Adopt-A-Stream groups throughout the Atlanta area have cleaned up numerous streams and rivers and stenciled storm drains to inform the public that storm drains carry rainwater directly to streams. Eroding stream banks have been stabilized by planting trees and sandbagging and regular water quality monitoring has been done to inform local authorities of potential problems.



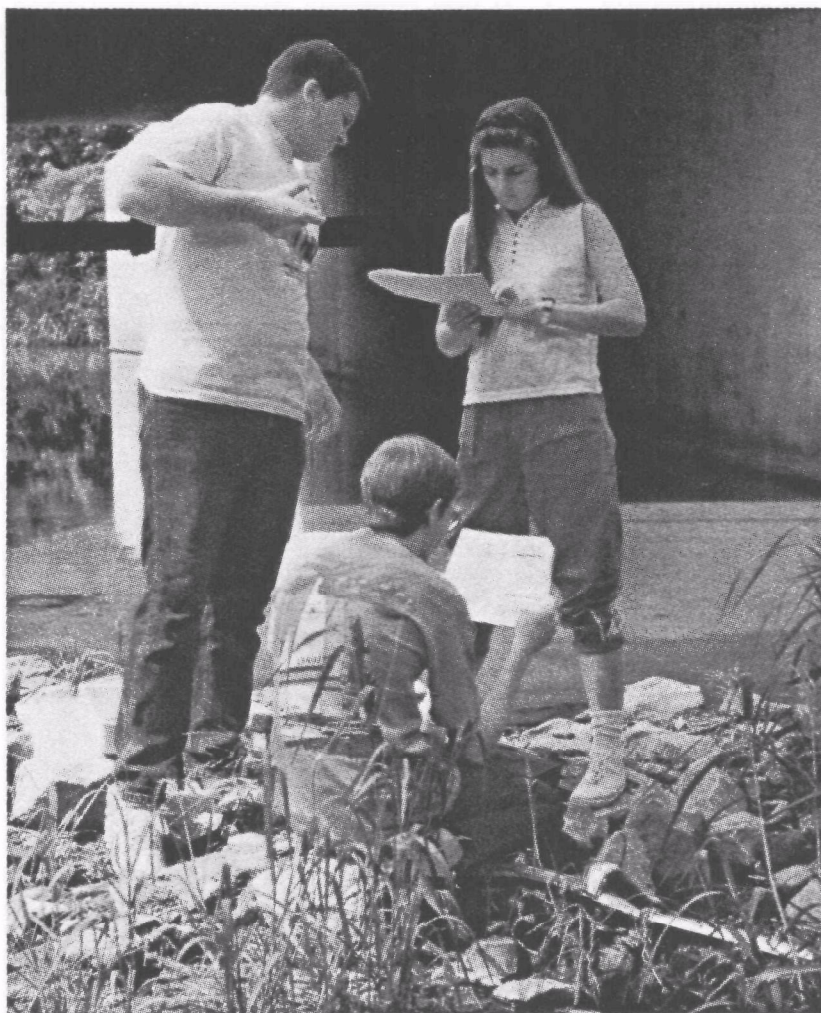
KENTUCKY NATURAL RESOURCES & ENVIRONMENTAL PROTECTION CABINET

Contact: Maleva Chamberlain, 502-564-3410

Comparative Risk Project: This project, a part of Kentucky Outlook 2000, was the state's major environmental education effort during 1994. By involving the public in combining comparative risk assessment with projections and an analysis of Kentucky's future, the state is making an effort to achieve a sustainable future. Environmental education personnel from every agency in the Natural Resources and Environmental Protection Cabinet were involved in planning public involvement for the project and in providing staff support to public committees appointed by Gov. Brereton C. Jones. Project Manager Nancy Fouser participated in the Second International Comparative Risk Analysis Symposium in Taipei, Taiwan, in November, at which she discussed the role of comparative risk in environmental and economic policy planning.

Environmental Education Forum: A special Environmental Education Forum for teachers was included in the annual Governor's Conference on the Environment. One workshop included a tour of an outdoor classroom followed by presentations by teachers who operate outdoor classroom facilities. The forum also gave teachers a chance to state their opinions about the role of Kentucky's Environmental Education Council.

Kentucky Science Teachers'



Water Watch volunteers record information about water samples they have taken from the river behind them.

Association Conference: Department environmental education personnel staffed an exhibit at this conference and distributed materials to more than 1,000 teachers.

Students Exploring the Environment in Kentucky: This program, known as SEEK, is a club, which enables students and teachers to offer a regular newsletter, with games, puzzles, and suggestions for projects and hands-on activities about Kentucky's environment, as well

as a calendar of environmental events and workshops.

Environmental Education Workshops: Two environmental education workshops were held for local officials from several counties to provide them with information about cabinet programs and regulations.

Agriculture and the Environment in the Classroom Workshops: Four of these workshops were held to give educational personnel a chance to present information

about available programs and materials.

DIVISION FOR AIR QUALITY

Contact: Lillie Cox, 502-564-3382

Clean Air for Kentucky: This program's educational events continue across the Commonwealth at schools, in environmental days, at fairs, outdoor classrooms, and other special events, along with the distribution of teacher and education packets. The division sponsored educational workshops on permitting requirements in the spring and, in the late summer, and fall held special workshops across the state about open burning.

D I V I S I O N O F ENVIRONMENTAL SERVICES

Contact: Nancy Fouser, 502-564-2150

River Assessment Monitoring Project: This annual event, sponsored by the Division of Environmental Services (DES) and the Division of Water, took place this year along the Upper Cumberland River. Science students took water samples at 26 sampling locations. After analysis by DES chemists, the results were provided to the schools. Students then analyzed the lab results, drew conclusions, and provided recommendations about water quality in the river basin.

DIVISION OF WASTE MANAGEMENT

Contact: Debra Hockensmith, 502-564-6716

Waste Resources Workshop: Debra Hockensmith conducted in-service workshops entitled Waste: A Hidden Resource in Kentucky, which is an educational curriculum for grades 7-12. She also distributed more than 1,200 copies

of the U.S. EPA's waste curriculum Let's Reduce and Recycle: Curriculum for Solid Waste Awareness. In addition, she staffed exhibit booths at conferences and school and community environmental days and made presentations to school assemblies, civic organizations, and local solid waste advisory committees, on waste reduction, recycling, and other waste management issues. She also worked with the Ohio River Valley Water Sanitation Commission to conduct the sixth annual Ohio River Sweep, a six-state riverbank cleanup along the river's entire length.

Certification: The division also held certification schools for land farming, composting, and landfills; held four training workshops for solid waste coordinators; and made a presentation about solid waste to extension service homemakers.

DIVISION OF WATER

Contact: Maleva Chamberlain, 502-564-3410

Water Watch Program: Monitoring projects were established in more than 35 communities, bringing to more than 250 the number of volunteer groups with water-testing equipment, which report to the division in this program. A statewide computer network for schools and groups with access to computers with modems has been developed. Bulletin board systems provide electronic mail, file libraries, and discussion centers for water-related topics. Agency personnel are available via internet mail and have established links with groups in Canada, Russia, Germany, India and other parts of the U.S. Other Water Watch

activities include teacher-training workshops, river basin and stream-side cleanups, and visits with Kentucky's clean water mascot Ollie Otter.

Sister Rivers: A Sister Rivers International Exchange Program has been instituted. Video tapes in Russian and Japanese and brochures in Japanese and Spanish have been developed for the project to discuss water quality and watershed protection efforts. In addition, Water Watch and other division personnel have helped American delegations to Japan and ones from Russia to the U.S.

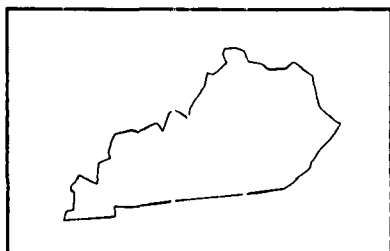
Rivers Month: Brochures, which listed statewide activities, during June 1994, were prepared and disseminated for Rivers Month.

Facilities Construction: Two facilities construction seminars were held in conjunction with the Kentucky Infrastructure Authority. One was to help potential applicants understand planned requirements. The second was to provide information to help attendees determine whether or not the Federally Assisted Wastewater Revolving Fund program was the proper choice for their projects.

Retired Seniors and Wellhead Protection: The Retired Senior Volunteer Program has become a partner in order to help with the Wellhead Protection Program. Senior volunteers are being trained to inventory potential contaminant sources in wellhead areas. In addition, workshops on wellhead protection were presented for planners, local officials, cooperative extension agents, and personnel from the Soil Conservation Service and local

health departments.

Biomonitoring Newsletter: A new Biomonitoring Newsletter was begun to provide information and help facilities with discharge permits that require biomonitoring.



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

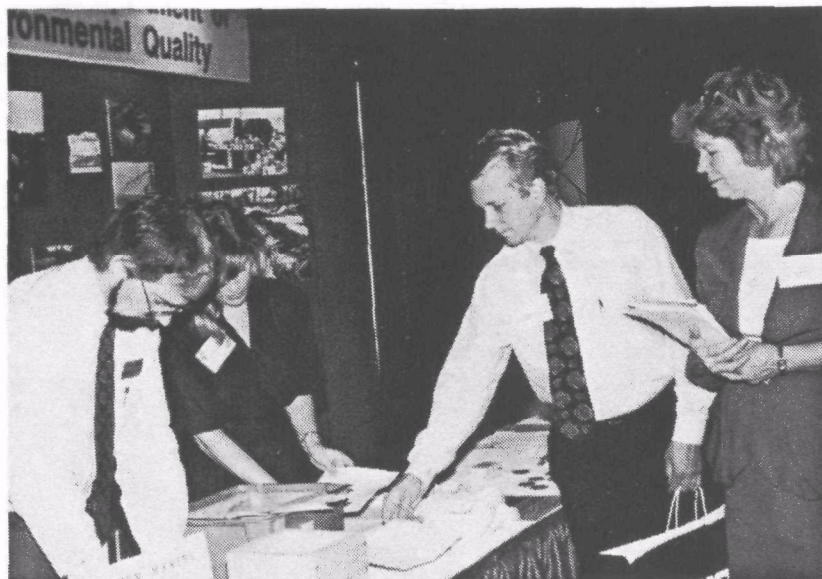
Contact: Eleana Turner, 601-961-5015

The Department of Environmental Quality (DEQ) continues to devote more time each year to educating the regulated community, as well as to providing educational materials and staff to the general public. General information was distributed by the staff at the Mississippi State Fair; every Household Hazardous Waste Day in the state; Waterfest for teachers; and the annual meeting of the Mississippi Association of Supervisors. The DEQ's staff provided speakers for civic clubs, environmental and professional organizations, schools, colleges, and universities. Departmental professionals were also available to judge science fairs, participate in career days, and serve on committees for environmental education projects.

Surface Water Division

Contact: Barry Royals, 601-961-5102

The division exhibited and distributed information at the annual meeting of the Mississippi Municipal Association and at the Mississippi Water Pollution Control Operators Association. A manual entitled Planning and Design Manual for the Control of Sediment and Stormwater was completed this year and is now being sold by the DEQ. The division, in cooperation with the Mississippi Wildlife Federation, held its first four Adopt-A-Stream Workshops. The workshops emphasize watershed mapping, land use, water chemistry, and macroinvertebrate sampling. The



Larry Estes (left) and Aimee Faulker (second from left) demonstrate paper making for participants, during the Southeastern States Environmental Conference, in Biloxi, Mississippi. The demonstration, which gives a better understanding of recycled paper, is also available to schools and other educational organizations. Mr. Estes is with the pollution prevention program and Ms. Faulkner with the public information division of Mississippi's Department of Environmental Quality.

participants included citizens, teachers, resource agency personnel, and industrial personnel. Three environmental resource workshops were held for teachers and students. These included exhibits, literature, and demonstrations of the nonpoint source pollution model, and the ground water aquifer model.

Groundwater Division

Contact: Bill Barnett, 601-961-5119

The underground storage tank branch held four public information seminars for tank owners, operators, installers, repairers, and removers. The branch also mailed its publication entitled "Timeout for Tanks" to installers, removers, and repairers, and its publication entitled "Tanknically Speaking" to companies that provide remediation services at leaking sites.

Hazardous Waste Division

Contact: Jerry Banks, 601-961-5221

A manual for Liquified Petroleum Gas Emergency Response and a three-hour-long seminar were developed by the division. More than 200 emergency response personnel have participated in the seminars. In addition, the emergency response section addressed every Highway Safety Patrol division in the state, at their district meetings.

Air Division

Contact: Dwight Wylie, 601-961-5104

The air division participated in a two-day seminar to introduce the Title V program, by explaining the new regulations and their impact on the regulated community. The division regularly provides outreach efforts to the regulated

community by participating in quarterly meetings of the Mississippi Manufacturers Association.

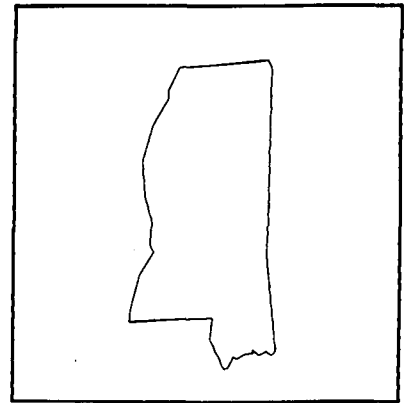
Pollution Prevention Program

Contact: Tom Whitten, 601-961-5241

This program developed a publication request form that lists 28 free publications on source reduction, reuse, recycling, composting, and recycled buying, as well as a video list of more than

30 waste reduction videos. A second publications request form, which lists 44 hazardous waste reduction publications, was also developed.

Approximately 1,000 people attended the Southern States Environmental Conference hosted by the DEQ and coordinated by the Pollution Prevention Program. The program also worked closely with state and federal agencies, universities, and community colleges to establish recycling programs.



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH AND NATURAL RESOURCES

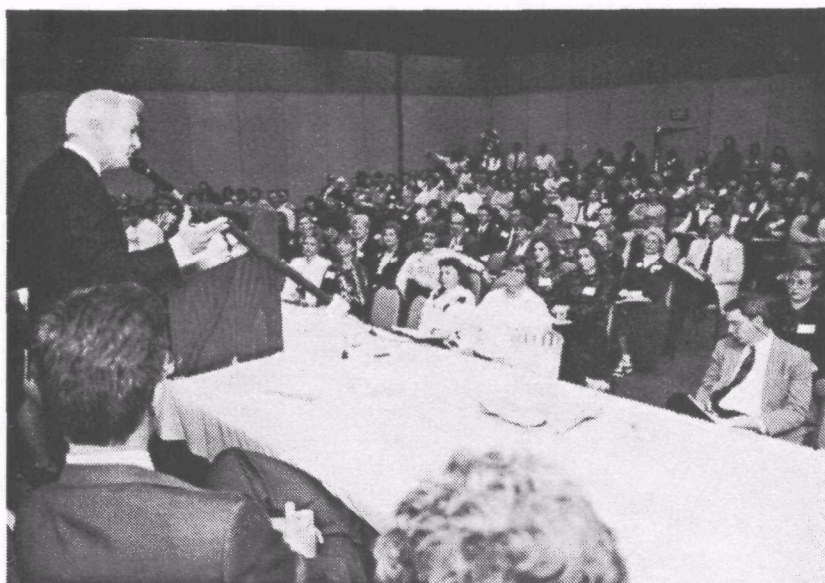
Contact: Anne Taylor, 919-733-0711

Environmental Education Advisory Council

The Office of Environmental Education formed an intra-agency Environmental Education Advisory Council (EEAC) made up of environmental education representatives from the Wildlife Resources Commission, the Zoo, Aquariums, Forestry, Soil & Water, Marine Fisheries, Parks and Recreation, Water Resources, Land Resources, Coastal Management, and other divisions within the agency. This council met monthly and developed principles and concepts of environmental education and identified environmental education needs and objectives.

1994 Environmental Education Conference: Making the Commitment

- North Carolina's first directory of environmental education centers in the state was published for presentation to those participating in the concurrent session on environmental education centers. It listed more than 100 such centers. The meeting was the first in which centers' staffs and supporters met together in an organized forum. Recommendations, which resulted from the session, included that an association of environmental education centers be formed, and that staff development opportunities be arranged, including standards and accreditation, cross training, and staff exchange programs.



North Carolina's Governor James B. Hunt addresses the 700 people in attendance at the 1994 North Carolina Environmental Education Conference, in Research Triangle Park, North Carolina.

- The conference also showed the participants examples of environmental education programs and teacher training programs available to them. The programs presented included Projects WILD, Aquatic WILD, Estuary, and Learning Tree; EELEs, the Museum of Natural Sciences, Zoo, Aquariums, Soil & Water, Ag in the Classroom, Educational State Forests, Air Quality, Electronic access with NandoLand, Learning Link, and PSInet.

- One concurrent session dealt with the process for applying for the \$1,000 grants to be made to nearly 25 schools for use in creating model environmental education library collections. The session was presented by the DPI and ENHR Office of Environmental Education.

- Another concurrent session dealt with the development of activities and curriculum through the use of North Carolina-specific GIS data. It drew many science, social studies, math, and computer skills teachers.

- The EEAC's work was published in "A Framework for Discussion" and presented to the 700 participants, in December 1994, in Research Triangle Park, at the Environmental Education Conference, which was co-sponsored by the North Carolina Department of Public Instruction (DPI) and the Department of Environment, Health, and Natural Resources. Gov. Jim Hunt opened the conference with a call for the establishment of a conservation ethic in North Carolina and a sense of stewardship through environmental education. Prof. Rick Wilke of the University of Wisconsin, chairman of the United States Education Advisory Council, delivered the keynote address. Concurrent sessions were conducted to discuss the draft objectives of the North Carolina Environmental Education Plan, which are in the "Framework for Discussion". Reports and recommendations from each session were presented to the full conference for incorporation in the next draft, which will be taken to seven regional meetings across the

state for further public discussion. The final plan will be presented to the governor and North Carolina General Assembly on Earth Day 1995.

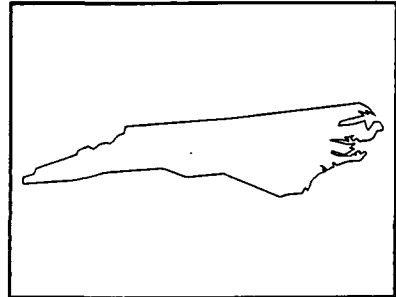
Environmental Education Objectives:

- Other environmental education objectives for which concurrent sessions were conducted, and from which reports and recommendations were presented, included the role of business and the press in environmental education, pre-service environmental education training for teacher candidates, in-service environmental education

recognition and award certificate, funding environmental education programs and measures of environmental literacy in North Carolina.

- An electronic correlation was developed for environmental education activities and DPI's Standard Course of Study for science, social studies, math and other subject courses. This was done, during an eight-month-long period, by a team up of representatives from Project Learning Tree, Project Estuary, Project WILD, Project Aquatic WILD, and the North Carolina State Parks EELEs (that is, curriculum referred to as

"environmental education learning experiences", which are specific to each of the state's 32 state parks). This conference was the first forum for the presentation of the science and social studies correlation and copies were made available to the conference's participants.



SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Environmental Education Partnership

Contact: Marie Horton, 803-734-3941

The mission of the South Carolina Department of Health and Environmental Control (DHEC) is to protect public health and the environment. The goal of DHEC's Environmental Education Partnership (EEP) is to support the agency's mission by co-ordinating and promoting its environmental education efforts.

During 1994, the EEP's activities included presentations at the South Carolina Science Council's annual workshop, at the state's National Science Foundation retreat, and to the Environmental Education Association.

The EEP was formed in 1994 to be an educational information clearing-house for DHEC's environmental areas. It provides curriculums, material, videos, displays, and speakers to schools, local governments, industry, and the public. EEP includes representatives of the bureaus of Air Quality, Water Pollution Control, Drinking Water Protection, and Solid & Hazardous Waste Management and the Ocean and Coastal Resource Management, and Educational Resources Center.

OFFICE OF SOLID WASTE REDUCTION & RECYCLING

Public-Private Partnerships

Contact: Richard Chesley, 803-896-4209



Representatives of the partners and January winners are shown while on the set of WIS-TV, Columbia, South Carolina, during the kick-off of the Champions of the Environment scholarship program. Shown (left to right) are Dwight Hanks, representing DuPont; Bob King, representing South Carolina's Department of Health and Environmental Control; Jill Bergeron of the Hilton Head Preparation School, a winner; Susan Vaughan McPherson, representing Union Camp; Micaela Grant of the L. W. Conder Elementary School, Columbia, a winner; Dawn Mercer, representing WIS-TV, Columbia; John Harrison of the Lexington High School, a winner; and Ron Loewen, also of WIS-TV.

Curriculum

The Office of Solid Waste Reduction and Recycling (OSWRR), in conjunction with the South Carolina Department of Education, a statewide team of classroom teachers, and private consultants, developed Action for a cleaner tomorrow: A South Carolina Environmental Curriculum. The kindergarten through eighth grade segment was introduced in January 1994 and more than 2,100 teachers were trained to use it.

Used Oil Partnership

In 1994, the South Carolina Used Oil Partnership, created by OSWRR in 1992, updated its used oil recycling curriculum, produced a video, provided posters, decals, a display, and other promotional

materials, and made numerous presentations to schools, civic groups, and national workshops. The partnership includes the South Carolina Petroleum Council, the South Carolina Department of Transportation, and Santee Cooper.

Public-Private Partnership

OSWRR has developed and maintained public-private partnerships to promote the public's awareness of specific solid waste issues. The partnerships include Pepsi, for statewide aluminum can recycling; Hardee's, for trayliners with recycling information; the Special Olympics, for statewide junk-car recycling; the South Carolina Association of Realtors, for statewide household hazardous waste information; and the Coalition for Natural Resources

Education, for co-ordinating environmental education efforts throughout the state.

Resource Center

OSWRR's Resource Center received, during 1994, more than 4,000 calls on its toll-free recycling hot line and mailed more than 600 packages of information.

NONPOINT SOURCE WATER POLLUTION

Contact: Phil Hayes, 803-734-5078

Champions of the Environment

The Champions of the Environment is a statewide public-service partnership aimed at promoting environmental awareness at the elementary, middle and high school levels. In December 1994 (its third year), the partnership received national recognition, when the Pine Street Elementary School of Spartanburg, one of the champions, was asked to perform its original, Earth Day musical for the White House Conference on Environmental Technology. The program and school were recognized by Vice President Al Gore, Secretary of

Education Dick Riley, and U.S. Environmental Protection Agency Administrator Carol Browner.

"Champions" features two programs. In one, the South Carolina Environmental Awareness Student Awards Competition, 450 students competed in four categories: environmental awareness poster; environmental awareness essays; environmental awareness spokesperson; and environmental awareness bowl.

The other program featured recognition of students and classes at work on environmental projects. During the school year, 18 students and classes were selected and videotaped for one-minute television spots. Each spot was broadcast 25 times for a total of 450 minutes and reached an estimated 670,000 viewers each month and more than six million during the year.

BUREAU OF AIR QUALITY

Contact: Mohamed Abdelsalam, 803-734-4750

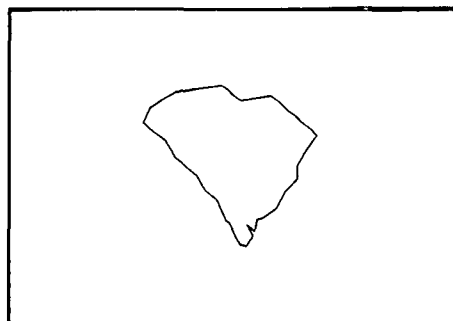
The Bureau of Air Quality (BAQ) made numerous presentations to community groups and schools,

including work with a high school student on a senior thesis project. The BAQ also provided resources for the Oconee County Science Fair, and participated in the Science Council's Earth Day Share Fair, the Environmental Law and Technology Conference, and the Automated Manufacturers Conference.

BUREAU OF DRINKING WATER PROTECTION

Contact: Cathy Montgomery, 803-734-5371

The Bureau of Drinking Water Protection has publications and videos for schools and supplies speakers upon request.



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Contact: Wayne Scharber, 615-532-0220

BUREAU OF RESOURCES MANAGEMENT

Contact: Rick M. Sinclair, 615-532-0734

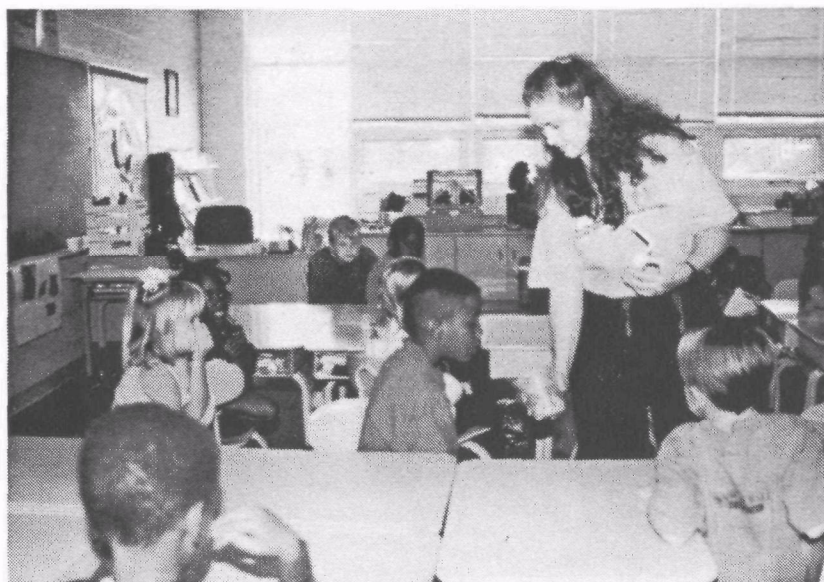
Radon and Real Estate Workshops: Six workshops were held across the state by the Radon Program of the Pollution Prevention & Environmental Awareness Division (PPEAD). The workshops were co-sponsored by the American Lung Association, EPA, and local real estate associations. The issues discussed included radon and real estate transactions, legal liability, and environmental hazards.

Essay and Poster Contest: The PPEAD, with assistance from the American Lung Association and the Regional Transportation Authority, held a poster and essay contest as part of Clean Air Month. The winners and their classroom activities were publicized in a tabloid that was circulated to 38,800 students, as part of the Newspapers in the Classroom program. The program was so well received it has been expanded to a statewide project for the current year.

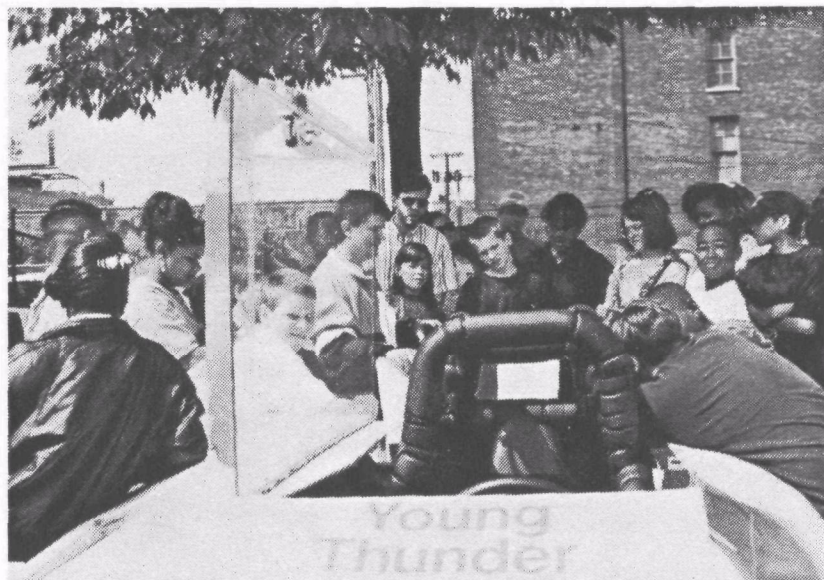
Radon Proficiency Training:

The Radon Program sponsors training each year for individuals who are interested in passing the EPA proficiency exams for radon testing and mitigation.

Indoor Air Training: An indoor air training course for state-level extension educators from various states was held in Nashville. The program was cosponsored by the



A teacher shows a pupil a sample used to illustrate a lesson, during Clean Air We Care classes, in Rutherford County, Tennessee. The classes were meant to build environmental knowledge.



Terry Young (on right, with face hidden) of Middle Tennessee University tells onlookers about a hydrogen powered car part. The car was put on display in Nashville, Tennessee, by Tennessee's Clean Air Committee.

EPA, USDA, University Extension Program, American Lung Association, and PPEAD. The program was successful and is being duplicated in three other places in America.

Rural Radon Awareness: A local radon awareness and testing

program was piloted in Giles county, a rural high risk area. More than 200 homes were tested during the six week period. The program was so successful Giles County participants assist Tennessee and the American Lung Association in conducting county training programs in four

locations, during January and February, of 1995, so other counties can help residents test their homes.

Pollution Prevention Seminar: The first regional Pollution Prevention Conference was held in Kingsport on November 11. Industries listed on the EPA's latest Toxics Release Inventory were invited to attend.

The conference was sponsored by the Tennessee Department of Environment & Conservation's (TDEC's) 2000 Initiative Industry Committee, PPEAD, and University of Tennessee Center for Industrial Services (UTCIS). The conference emphasized the need to voluntarily reduce TRI emission, related some success stories, and provided industry with people to call for free assistance.

Tennessee Environmental Priorities Project: The Policy Planning Office facilitated the initial training of the Technical Advisory Committee for the TEPP (i.e., comparative risk analysis), which will take place in 1995. The conference attendees were from across the state. They learned, from the Northeast Center for Comparative Risk and EPA, about the comparative risk process and their role in it.

Interdepartmental Awareness: The PPEAD sponsored a series of Brown Bag lunches primarily for employees within the TDEC. The topics presented varied from new EPA initiatives, such as Environmental Justice, Comparative Risk Indicators, and

Goals, to archaeological sites. Attendance was good and much information was shared between the media.

Small Business Drycleaner Teleconference: The PPEAD's Small Business Assistance Program, UTCIS, and EPA sponsored a national teleconference on the Clean Air Act MACT requirements for drycleaners. There were teleconference sites in 48 states, Canada, and Mexico.

A panel of experts presented information on the regulatory requirements, operation, and maintenance procedures, monitoring techniques, equipment options, finance opportunities, and good housekeeping practices. Participants were able to ask the panel questions by phone.

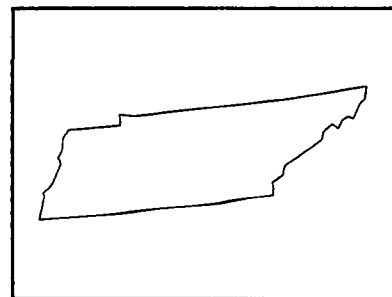
A drycleaning compliance and operations manual was also developed and given each teleconference attendee.

State of the Environment Review: Tennessee's first State of the Environment report for all Tennesseans was published in 1994. It was a collaborative effort by the bureaus of Environment and Resource Management. The report contains photography and computer generated charts and graphs and is Tennessee's initial attempt to inform its citizens of environmental progress and performance, as well as unfinished business. The report was a special edition of the department's Conservationist magazine and was sent to 20,000 individuals and companies across the state.

Mobile Solid Waste Exhibit: The Division of Solid Waste Assistance entered into a partnership with the TVA and the Tennessee Soft Drink Association in order to design and operate a mobile exhibit, which carries a small reference library and more than 50 publications for distributors. It also has two video units and about 20 video tapes or video loops for use by special community programs. The three partners have begun to design and build a second, mobile exhibit, which should be available in April 1995. It will be more interactive and address recycling and solid waste reduction.

Ecological Services: The Ecological Services Division helped organize and present the 1st Annual Tennessee Exotic Pest Plant Symposium, on March 11-12, 1994, in Nashville. The presentations ranged from environmental education to biological control from Minnesota to the Smokies.

The Division also co-sponsored and lead a control and eradication workshop for Middle Tennessee in October 1994, at Warner Parks, in Nashville. The workshop, about IPM practices, aimed at specific exotic pest plants, was mainly for resource managers.



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