# ENVIRONMENTAL EDUCATION GRANT PROFILES FISCAL YEAR 1994

U.S. Environmental Protection Agency
June 21, 1994



#### ENVIRONMENTAL EDUCATION GRANT PROGRAM PROFILES FOR FISCAL YEAR 1994

Enclosed are profiles of the 255 Fiscal Year 1994 environmental education grant awards funded by EPA Headquarters and each of the 10 EPA Regional Offices. EPA Headquarters awarded 14 grants and the EPA Regional Offices awarded 241.

This grant program is authorized under section 6 of the National Environmental Education Act of 1990 (P.L. 101-619). The statutory ceiling under the Act for any one grant is \$250,000 of federal funds. EPA's Regional Offices award grants of up to \$25,000 in federal funds. EPA Headquarters awards grants with a federal share between \$25,001 and \$250,000. Under the Act, at least 25% of the total amount of environmental education grant funds must be awarded for grants of \$5,000 or less.

In Fiscal Year 1994, the total amount of environmental education grant funds was \$2,964,000. Each EPA Regional Office awarded up to \$180,000 for environmental education grants for a total of \$1.8 million, and EPA Headquarters awarded up to \$1,164,000.

The table below identifies the number of applications received by EPA and the number of grants awarded. These statistics show that the smaller grants awarded by the Regions (e.g., especially those for \$5,000 or less) have the greatest chance of being funded because fewer applications are received. The table shows that:

- -- For grant requests to the Regions for \$5,000 or less, approximately 1 out of 3 applicants were successful in receiving awards.
- -- For grant requests to the Regions between \$5,001 and \$25,000, approximately 1 out of 10 applicants were successful in receiving awards.
- -- For grant requests to Headquarters for more than \$25,000 and up to \$250,000 approximately 1 out of 25 applicants were successful in receiving awards.

The solicitation, evaluation, and award processes which indicate how EPA arrives at our final decisions on grant awards are described each year in EPA's annual environmental education grants solicitation notice. You may obtain a copy of the Fiscal Year 1995 solicitation notice by reviewing the Federal Register (located in most local public libraries). We expect it to be published in the Federal Register in early June 1994. Alternatively, you may obtain a copy of the solicitation notice by contacting EPA Headquarters or an EPA Regional Office. A list of EPA contacts is provided at the end of this document.

# Fiscal Year 1994 Environmental Education Grant Applications and Awards

	Amount of Award	Applications Received	Awards Made	Percentages of Awards Made Compared to Applications Received
EPA H	eadquarters			
	>\$25,000 and up to \$250,000	325	14	4%
EPA R	egional Off:	ices		•
ī.	<\$5,000	55	18	33%
	>\$5,000*	65	6	9%
II.	<\$5,000	43	21	49 <b>%</b>
	>\$5,000*	84	4	5%
III.	<\$5,000	28	19	68%
	>\$5,000*	41	5	12%
IV.	<\$5,000	74	18	24%
	>\$5,000*	62	4	6%
v.	<\$5,000	89	21	24%
	>\$5,000*	78	4	5%
VI.	<\$5,000	50	19	38%
	>\$5,000*	63	5	8%
VII.	<\$5,000	29	19	66%
	>\$5,000*	30	5	16%
VIII.	<\$5,000	31	15	48%
	>\$5,000*	26	6	23%
IV.	<\$5,000	71	23	23%
	>\$5,000*	47	5	11%
х.	<\$5,000	48	18	38%
	>\$5,000*	49	6	12%
Regio:		519	191	37%
Total		545	50	9%

<sup>\*</sup> As stated above, the EPA Regions award grants of up to \$25,000 and must award 25% of the total grant funds for projects of \$5,000 or less. Thus, the ">\$5,000" used in this table refers to grants greater than \$5,000 and up to \$25,000.

# EPA HEADQUARTERS GRANTS BETWEEN \$25,001 AND \$250,000

#### CALIFORNIA

Regents of the University of California (\$108,000)
Neil Maxwell, Lawrence Hall of Science, Regents of the University of
California, c/o Sponsored Projects Office, Sproul Hall, room 336, University
of California, Berkeley, CA 94720
The "Environmental Education School Action Projects" will develop a model
school action and public education program in the Greater San Francisco Bay
Area. It will provide teachers, students, and community volunteers with an
opportunity to work together to develop projects designed to solve local
environmental problems. The project will include an environmental education
teacher institute for primary and secondary school teachers and community
volunteers and will draw hands-on curricula from already existing programs
that teach responsible decisionmaking and action.

#### COLORADO

Food, Land, and People (\$35,000)
Roxanne Brickell, National Steering Committee, Project Food, Land, and People, 643 Jackson Street, Denver, CO 80206
This project will teach K-12 students about the interdependencies between the environment and agriculture. It will emphasize a holistic learning of environmental and agricultural issues (e.g., relating to water quality, solid waste management, natural resource management, soil conservation, pest management, food production, sustainability, biotechnology, and land use). The project will use existing materials, complete the development of new materials, and translate key lessons into Spanish.

#### IOWA

Hoover Elementary School (\$30,000)
Roberta Dardyshire, Hoover School, 1002 Spring Street, Davenport, IA 52803
The project will add several weeks of instruction to the school year to teach preschool through 3rd graders about the importance of preserving the environment and providing them with stewardship skills. The majority of school's students are considered to be "at-risk" (e.g., from low income and/or minority families or testing at or below grade level in reading and mathematics). Teachers will use existing curricula that use an interdisciplinary approach to learning and that emphasize student interaction with the natural and social environment (e.g., Project Learning Tree, Project Wild, and Project Aquatics).

# **MASSACHUSETTS**

Manomet Observatory (\$58,880)
Janis Burton, Manomet Observatory, 81 Stage Point Rd., Plymouth MA, 02345
"Save Our Migratory Birds" will emphasize the global nature of environmental and natural resource issues by teaching middle school students in the U.S., Mexico, Canada, and Argentina how to protect local habitats used by migratory birds. This "think globally, act locally" project includes a partnership between non-profit conservation and education organizations in all four countries.

Boston Private Industry Council, Inc. (\$119,956)
George Moriarty, Boston Private Industry Council, Inc., 2 Oliver St., 9th
Floor, Boston, MA 02109
"Green Tech" is an environmental career work-to-school transition program for
South Boston High School students (73% of which are minorities) and is
designed to teach students that what they learn in the classroom as well as
through work experience are fundamental to future employment opportunities.

The program will increase student awareness about environmental career opportunities through classroom instruction and on-site experiences such as internships and summer jobs in environmental agencies, businesses, and nonprofit organizations.

Environmental Careers Organization (ECO) (\$80,000) Lori Colombo, Environmental Careers Organization, Inc., 286 Congress Street, Third Floor, Boston, MA 02210-1009

"Environmental Studies: 2000 Project" is a national program to assist university environmental studies programs in preparing for environmental workforce needs and to assist students in preparing for environmental careers. The program will disseminate the results of an ECO study which assesses the needs of environmental employers vis-a-vis the interests of environmental studies departments and students through workshops at national conferences and minority academic institutions. Activities will include developing environmental career strategies and creating lasting partnerships between educators and employers.

#### MINNESOTA

Prairie Island Tribal Council (\$26,260)
Lin Nelson, 118 Island Blvd., Prairie Island Tribal Council, Welch, MN 55089
This project will enhance environmental awareness and motivate area school children, tribal members, and visitors to the reservation community to be more environmentally conscious in making decisions that affect the environment. The project will develop culturally sensitive curriculum that addresses a wide-range of environmental problems on the reservation, including problems associated with air and water pollution, woodland ecology, and solid waste disposal.

# NEW JERSEY

New Jersey Department of Education (\$224,583) Sylvia Kaplan, NJ Department of Education, 225 E State St., CN 500, Trenton, NJ 08625

"Project CLEEN" will prepare New Jersey vocational technical students for environmental careers. It will identify ten occupational areas throughout the state which have the greatest pollution problems, develop environmental management curriculum resources to address problems at these sites, host educator workshops, and disseminate curriculum and professional development materials nationwide. The focus of the project will be to prepare individuals to prevent pollution in the workplace.

# NEW YORK

Educational Broadcasting Corporation (\$100,000)
Rose Tatlow, Foundation and Government Underwriting, Education Broadcasting Corp., 356 West 58th Street, New York, NY 10019
"Nature Trail" is a 13-week half-hour television series that will educate children about their everyday natural world. It will demonstrate to young people that they don't need go outside of their immediate environment to experience nature; they can learn about the importance of protecting the environment from suburban backyards, city streets, neighborhood streams, and urban parks. Educational materials will be developed along with the series to be disseminated to schools and environmental education organizations.

# NORTH CAROLINA

East Carolina University (\$36,551)
Roger Rulifson, Biology Dept., Howell Science Complex, East Carolina
University, Greenville, NC 27858
"Project TEACH" will provide elementary and junior high school science

teachers with knowledge and instructional skills to teach students about coastal environmental problems in Eastern North Carolina. It will educate students about basic ecological principles and man's role in the balance of nature as well as develop student skills in analyzing data and solving local environmental problems. Teachers will be acquainted with local environmental problems, provided with a variety of classroom field activities suitable for their grade levels, and aided in integrating these activities into their science curriculum.

#### **TEXAS**

University of Texas Health Science Center (\$69,594)

Irena Cech, School of Public Health, University of Texas Health Science
Center, Rouston, TX 77225

"Outreach for Community Health Workers" will expand existing environmental education and field demonstration outreach efforts to help meet the environmental health education needs on the U.S./Texas-Mexican border. It will provide environmental health training for community nurse-practitioners, doctors, and other health care providers to enable them to recognize and address environmental causes of ill health in the communities they serve. Environmental health problems to be addressed include those relating to inadequate treatment and management of sewage, industrial effluents, and agricultural and mining wastewater.

#### VIRGINIA

Virginia Institute of Marine Sciences (\$33,175) Ginger Smith, Virginia Institute of Marine Science, Gloucester Point, VA 23062 The project will train Virginia middle and high school science educators to incorporate real environmental monitoring data on estuarine debris problems into their instructional materials. It will disseminate educational materials through a computer network as well as through various existing marine science programs.

# WISCONSIN

University of Wisconsin, Stevens Point (\$100,411)
Abby Ruskey, College of Natural Resources, University of Wisconsin, 1900
Franklin, CNR Bldg., Stevens Point, WI 54481
The "Environmental Education Demonstrations State Project" will build state governmental capacity to develop and deliver environmental education programs in five states -- Iowa, Kentucky, Louisiana, New Jersey, and Illinois. It will assist these states in developing and implementing comprehensive state-wide environmental education action plans which may include the development of state coordinating councils and/or pre-service and in-service teacher training.

# WASHINGTON

Adopt-A-Stream Foundation (\$100,000)

Tom Murdoch, Adopt-A-Stream Foundation, Shoshomish County Admin. Bldg. 4th
Floor, 3000 Rockerfeller, Everett, WA 98201

The "Northwest Region Streamkeeper Network" will train volunteers in
Washington, Oregon, Idaho, and British Columbia to become watershed stewards
by monitoring the physical, chemical, and biological characteristics of
streams and developing action plans for protecting them. The project places
emphasis on establishing and maintaining partnerships between citizen
volunteers, community leaders, and the Foundation.

#### EPA REGIONAL GRANTS UP TO \$25,000

#### **ALABAMA**

Poarch Band of Creek Indians (\$3,500)

James T. Martin, HCR 69A Box 85B, Atmore, AL 36502

A classroom presentation to high school students of a scientific field demonstration project in water quality assessment including identification and understanding of pollution sources and methods of abatement.

#### **ALASKA**

Alaska Pacific University (\$3,?11)
Dr. Richard Myers, 4101 University Dr., Anchorage, AK 99508-4672
The University will construct environmental science kits, primarily for water testing in rural Alaska villages. Workshops will be held to train teachers on the use of the kits. The kits will be distributed statewide, including to isolated village schools and will enable educators to increase residents' awareness of their environment.

Kenai Peninsula School District (\$5,000)
Diane Borgman, 150 Park Ave., Soldotna, AK 99669
The Kenai Peninsula School District will introduce environmental education to the students by infusing it into existing curricula using thematic units at each grade level. To accompany the thematic units, a series of seven tubs (materials) will be developed for kindergarten through sixth grade. Tubs will contain "hands-on" materials. Facilitators will be hired to train the teachers at a pilot school in the use of the materials.

Prince William Sound (\$4,710)
Nancy Bird, P.O. Box 705, Cordova, AK 99574-0705
A team of educators will visit Prince William Sound communities and present a series of interactive environmental education activities in each of the elementary schools. The activities will be tailored to meet the needs and concerns of each community. The educators will bring "self-contained" education kits and provide environmental education resources and extension activities to the community school.

# <u>ARIZONA</u>

Hualapai Tribe (\$5,000)
Thomas Gordon, P.O. Box 179, Peach Springs, AZ 86434
The "Hualapai Environmental Education Program" program, aimed at all community members, will also have particular emphasis for high school youth. Community activities will include recycling workshops, clean-up days, poster contests, and Earth Day Fair. An environmental education summer camp and habitat study will be conducted for the tribal youth.

Rough Rock School Board, Inc. (\$5,000)

A. Keith Warner, P.O. Box 217 RRDS, Chinle, AZ 86503

"Reservation Environmental Science Education Training"

Staff development training in the environmental science curriculum will allow Native American students to get involved in hands-on projects that address daily environmental problems of waste management and water pollution on the Navajo Reservation.

Southwest Center for Education & Natural Environment (\$5,000)

Kathryn Kyle, Arizona State Univ., Tempe, AZ 85287-2512

"Integrating Environmental Education into the Existing Curriculum Through Teacher Training Workshops"

The effects of urban development on the Sonoran Desert ecosystem is the theme of a teacher workshop designed to transform scientific content into classroom

environmental education activities. The grant will also identify gaps in the database of existing environmental education materials and offers teachers training in accessing this database.

Tempe Unified High School District (\$4,965)
Mike Trimble, 500 W. Guadalupe Rd., Tempe, AZ 85283
"Environmental Biology Field Courses"

This project will provide training for 24 high school students who will investigate and explore the fragile and varied desert environment. Their observation of key wildlife species, riparian ecosystems, and the relationship of human influence on these species and three habitats will form the basis of a report to be disseminated at Arizona teacher conferences.

Growing Connections, Inc. (\$5,000)
Linda Herzog, 2123 E. Grant Rd., Tucson, AZ 85719
"Teacher Training Workshops in Environmental Education"
Organic gardening and nutrition are the themes of the two day workshop which will be presented twice for 32 elementary school teachers. Teachers will then guide their students in planting environmental gardens. Parents will be surveyed to determine if students' eating habits or other behavior has been effected.

#### AMERICAN SAMOA

American Samoa Community College (\$5,000) Don Vargo, P.O. Box 2609, Pago Pago, AS 96799 "Tree Production Project"

The community college will team with Manumalo Baptist School in a forest conservation project. Students will learn about the role trees play in Samoan culture and the fundamentals of forestry as they nurse seedlings along until they are ready for transplanting.

#### **ARKANSAS**

Arkansas Department of Pollution Control and Ecology (\$18,000) Gregg Patterson, 8001 National Dr., Little Rock, AR 72209 Purchase equipment to support the "Arkansas Water Education Team" program in which students will monitor a water resource near their community and study the results to better understand the impact of surrounding land use practices on water quality.

Arkansas Recycling Coalition (\$4,000)

Maureen Rose, P.O. Box 190825, Little Rock, AR 72219

Conduct workshops for elementary and junior high school teachers from central and southeastern Arkansas. Focus will be on solid waste management, recycling and source reduction.

# CALIFORNIA

Armory Center for the Arts (\$5,000)
David Spiro, 145 N. Raymond Ave., Pasadena, CA 91103
"Children Investigate the Environment"
This project brings together teaching staff from the arts as well as the sciences to promote interactive science education through observation, experimentation, data gathering, classification, and problem solving.

Atascadero Unified School District (\$3,842) Gene Elsdon, 5601 West Mall, Atascadero, CA 93422 "Atascadero Creek Schools"

Using Atascadero Creek and the Salinas River as environmental education laboratories, high school students will join with faculty to present "Creek School" workshops to elementary students and teachers.

Calaveras Unified School District (\$5,000) Betty White, P.O. Box 788, San Andreas, CA 95249 "A Child's Place in the Environment"

This project presents an interdisciplinary, thematic, environmental education program to K-6 students with the goal of encouraging environmental literacy leading to responsible lifestyles.

Daedalus Education Foundation (\$4,840)
Merle O'Neil, 12702 Via Cortina #201B, Del Mar, CA 92014
"Environmental Education Teacher Training Institute"
This project provides for environmental education training for 120 teachers in Tijuana, Mexico. The content will focus on the environmental issues linked to water, health, solid waste, land and resource management, and human interaction with the surrounding environment.

Desert Tortoise Preserve Committee (\$4,850)

Jun Lee, 255 S. Grand Ave. #2203, Los Angeles, CA 90012

"Interdisciplinary Approaches to Environmental Education"

A one day conference will bring together high school teachers with representatives of government agencies and private conservation organizations. The task of the workshop participants is to develop a sample teaching plan which employs endangered species themes for an interdisciplinary curriculum for four pilot high schools.

Friends of the San Francisco Estuary (\$5,000)
Marcia Brockbank, P.O. Box 2050, Oakland, CA 94604-2050
"Estuary Environmental Education Program"
The project will target two inner city classes and their teachers in a ten week action project. In these activities the students, working with local resource agents, will clean up and enhance estuary habitats near their schools.

Konocti Unified School District (\$5,000)
Olga Clymire, P.O. Box 6630, Clearlake, CA 95422
"A Child's Place in the Environment"
Demonstrations on how an environmental education program can be organized through integration of the traditional elementary school subjects will be offered in teacher workshops in four geographical regions of California.
Teachers will participate in hands-on activities of the curriculum model and develop in cooperative groups a plan to assist their students in selecting and implementing environmental enhancing projects.

Napa Valley Unified School District (\$5,000)
Dr. Barbara Pahre, 2425 Jefferson Street, Napa, CA 94558
"The New 3 R's: Reduce, Re-use, Recycle"
Pollution prevention becomes an issue that students can impact on a daily basis through their hands-on involvement in gardening and composting components of this waste reduction curriculum.

Outward Bound Adventure, Inc. (\$4,948)
Helen Mary Williams, P.O. Box 202, Pasadena, CA 91102
"Meaningful Water Conservation for Inner-City Students"
Funds will be used to prepare a curriculum of water learning concepts and conservation and to provide six 1-day field trips for 24 middle school students to sites that are linked to the delivery and usage of water to the Los Angeles metropolitan area. Selected students (12 from Markham Jr. High in Watts and 12 from Washington Middle School in Pasadena) will also prepare for a seven day High Sierra environmental study trip that will be funded from other sources. Thereby students can trace a drop of melted snow through the delivery system to their own neighborhood.

Rising Sun Energy Center (\$5,000)
Michael Arenson, P.O. Box 2874, Santa Cruz, CA 95063

"Solar Energy Education"

Student interns from the Department of Environmental Studies at UC, Santa Cruz will be trained in solar energy and conservation to develop lessons and activities that are compatible with Santa Cruz school district's science education goals. The interns will make in-class presentations at four public elementary schools.

Sacramento Science Center (\$5,000) Patricia McVicar, 3615 Auburn Blvd., Sacramento, CA 95821 "Water Education Project"

Three workshops for separate groups of 20 elementary school teachers will emphasize stewardship of water resources. Each participant will create a "make it-take it" kit for subsequent use in their classrooms.

San Bernardino County (\$5,000)

Phyllis Hebbard, 385 W. Arrowhead Ave., San Bernardino, CA 92415-0160

"Hazardous Waste Education Outreach"

Health Services will offer a video/lecture presentation to public and private

Health Services will offer a video/lecture presentation to public and private schools in the county to increase awareness of hazardous household products, less toxic alternative products, the dangers of improper hazardous waste disposal, and the location of hazardous waste collection centers.

San Francisco Bay Delta Aquatic Habitat Institute (\$11,259)
Kathryn Kramer, 1301 S. 46th St. \$180, Richmond, CA 94804
"Kids in Creeks: A Creek Exploration and Restoration Program"
This proposal will provide educators in Contra Costa County with two and a half days of training in creek ecology, access to a lending library, and support for conducting community-based action projects with their classes.

San Joaquin Office of Education (\$5,000)
Judi Wilson, P.O. Box 213030, Stockton, CA 95213-9030
"Kids Make a Difference: Environmental Projects for Elementary Students"
Fifty teachers will be trained to use action projects related to an
environmental issue that children at differing developmental levels can work
on together, share perspectives, and arrive at a common objective to solve the
problem.

San Lorenzo Valley Unified School District (\$4,998) Jane Orbuch, 6134 Highway 9, Felton, CA 96018 "The River Project"

The San Lorenzo River and its watershed provide the unifying theme for this project which will involve students K-12 in hands-on monitoring, measuring, and classifying water quality, riparian vegetation and wildlife, status of aquatic organisms, sedimentation and erosion, and human uses and impacts.

Southern Sonoma County Resource Conservation District (\$14,438) Sheila Adams, 1301 Redwood Way Suite 170, Petaluma, CA 94554 "Adopt-a-Watershed Curriculum"

The proposal will provide in-service training for participating teachers in Sonoma Valley and Petaluma schools. This training will assist teachers in providing their students with increased environmental sensitivity through outdoor field observation and experimentation.

TreePeople (\$10,000)

Diane Hunt, 12601 Mulholland Dr., Beverly Hills, CA 90201

"The Magical City Forest"

Three teacher workshops for 150 teachers of grades K-6 will emphasize hands-on training in the curriculum which links information about the cycles of the earth, air, trees, wildlife, fresh water, and oceans with children's everyday lives in Los Angeles. To give students a sense of where they fit in the

ecosystem, the curriculum addresses the realities of urban living. .

#### COLORADO

Bauder Elementary School (\$4,970)
Mary Joyce Fink, 2345 W. Prospect Rd., Fort Collins, CO 80526
Bauder proposes to develop and implement an Environmental Literacy for
Families (ELF) program. The overall purpose of this project is to target
environmental education at the family level, focusing on (1) air pollution,
(2) land management, (3) water pollution, (4) energy conservation, (5) solid
waste management, and (6) co-existence with other animal species.

Bookcliff Middle School (\$2,698)
Teri Lindauer, 2935 Orchard Ave., Grand Junction, CO 81504
This project is designed to motivate students to be more environmentally conscious and to make informed decisions through hands-on involvement in environmental situations. The school will conduct ecology based community service projects by converting the campus into an environmentally sensitive recreation area and developing it as a learning environment.

Clean Air Campaign of the Pikes Peak Region (\$3,450)
Linda Lewis, 219 W. Colorado Ave. Suite 210, Colorado Springs, CO 80903
This project proposes to improve environmental education teaching skills by conducting educator workshops, and distributing the curriculum and accompanying kits to each participant for classroom use. The overall purpose is to educate the community to solve air pollution problems through pollution prevention activities.

Colorado Alliance for Environmental Education, Inc. (\$5,000) Walt Blackford, P.O. Box 101744, Denver, CO 80250
The overall purpose of the project is to significantly improve a statewide database and clearinghouse service of environmental education training, curricula, materials, and other resources. This is a project which develops capacity for the dissemination of environmental curricula and resources to a statewide network of environmental education organizations and individuals.

Colorado Division of Wildlife (\$5,000)

Karen Hardesty, 6060 Broadway, Denver, CO 80216

The project will improve environmental education teaching skills through a series of advanced workshops for teachers that use inner city places and people to enhance environmental awareness. It will target adult teachers of and urban student populations to develop an increased self-confidence in their abilities to teach environmental education in any neighborhood setting.

Colorado Hospitals for a Healthy Environment (CHHE) (\$5,000)
Patricia McClearn, 2140 S. Holly St., Denver, CO 80222-5607
CHHE will hold three workshops in Denver, Pueblo and Grand Junction to educate participants about recycled paper and soy ink to promote their increased use for hospital print materials. This project has good potential as a model for other industries in helping them to participate in source reduction to solve the solid waste problem.

Colorado State Forest Service (\$4,800)
Mike Way, Project Learning Tree, Fort Collins, CO 80523
The overall purpose of this project is to enhance the demonstration and dissemination of Project Learning Tree and Project Wild (PLT/PW) environmental education curricula materials. This project will recruit and train a cadre of PLT/PW workshop trainer/facilitators from the ethnic minority community in the Denver metro area, with special attention on cultural diversity and at-risk students.

Hallett Elementary School (\$5,000) Cynthia Kahns, 2950 Jasmine St., Denver, CO 80207 The Eco-Urban Sensory Garden will be an outdoor science lab for teachers and students in an urban neighborhood. This project is part of the school renewal program, and is designed to improve the teaching of elementary science to students and their families through a hands-on approach in ecology, plant growth, and habitat development in the urban environment.

Woodland Park School District RE-2 (\$2,191)
Fred Wall, P.O. Box 1808, Woodland Park, CO 80866
The purpose of this project is to provide a wetlands learning environment for students and to innovatively control the flow velocity of the water downstream from the school property. This will provide a hands-on study experience for science students who will help create a wetlands environment.

Biological Sciences Curriculum Study (\$25,000)

James Ellis, 830 N. Tejon Suite 405, Colorado Springs, CO 80903

This program is part of a five year project that will improve the background in science content and teaching skills of teacher in grades four through six and to support the implementation of effective instruction in science, with an emphasis in environmental education.

Colorado Bird Observatory (\$24,910)
Michael Carter, 13401 Piccadilly Rd., Brighton, CO 80601
This program will develop Birds Beyond Borders, an international education program designed to link teachers and students from different countries and cultures through shared environmental issues and natural resources, using migratory birds as the bond. Workshops will be offered in Colorado and in Jalisco, Mexico, that will equip teachers with information they need to encourage government support of environmental education.

The Keystone Center (\$18,031)
Dr. Jon Thompson, P.O. Box 8606, Keystone, CO
The Institute will provide a six-day, intensive training program to educators from rural communities covering terms involved in environmental issues, providing a scientific framework for use in diverse issues investigations, offering specific hands-on activities, teaching educators how to develop and implement their own classroom plans, and conducting a mediation role-play to demonstrate the pubic policy process.

Thorne Ecological Institute (\$18,750)
Susan Foster, 5398 Manhattan Circle Suite 120, Boulder, CO 80303
This program will improve efficiency in educational outreach and increase participation by educators and children through trained volunteers. A guidebook will be developed to provide background on Chatfield State Park's ecological setting, human history and critical environmental issues for use in participating in hands-on workshops that can serve as a model for replication elsewhere.

# CONNECTICUT

Farmington River Watershed Association (\$4,975)
Maryon Attwood, 749 Hopmeadow Street, Timsbury, CT 06070
The "Phase I Adopt-A Stream" portion of the Farmington River Green Way Project will identify and create a plan to focus on the unprotected lower portion of the Farmington River. The project will facilitate the partnership of diverse groups through environmental education and community stewardship activities. The groups to be targeted include community civic groups, town officials, and businesses in seven area communities. Eventually an area of over 600,000 people may be impacted. The collection of natural resource data and the subsequent adoption of sections of the river by these different groups will lead to a multi-town river corridor conservation plan.

The Nature Conservancy (\$4,586) Stephen R. Patton, Box 1162, Weston, CT 06883 The "Interactive Interpretive Trail Guide" will provide visitors to the Lucius Pond Ordway - Devil's Den Preserve - education in watershed protection, ecosystem function, and conservation of biological diversity. Through these interactive, outdoor education and walking tours, visitors of varying backgrounds, will learn about watersheds, habitats, and wildlife migratory routes on their own while walking a 2-mile loop within the 1,660-acre preserve.

Science Center of CT/Roaring Brook Nature Center, Inc. (\$7,790)
Beth Dal Negro, 70 Gracey Rd., Canton, CT 06019
The Roaring Brook Nature Center project will establish a partnership with 17 developmental pre-schools, composed of 680 four-year-old children, over 70% of them African American or Hispanic, in the Hartford Public School system.
These "developmentally at-risk" pre-school children will be exposed to, and build an understanding of, the interconnectedness of the natural world of people, plants, and animals. The project consisting of an initial teacher workshop, in-class program, and field trip to the Nature Center, will lead to an increase in the children's familiarity with the natural world and greater environmental consciousness by children and teachers alike.

University of Connecticut (\$24,494)
Dr. Richard Cooper, 1084 Shennecossett Rd., Groton, CT 06340
The National Undersea Research Center at the University of Connecticut through its "Aquanaut Program" will facilitate environmental/research partnerships between high schools and research scientists. All high schools in Rhode Island will be provided with a brochure promoting the program highlights, including the use of scientific method and its application utilizing modern, in situ technology. Teachers and students will gain experience in hands-on research through the Narragansett Bay summer research cruise which will provide access to and promote regional geographic relevancy of environmental issues.

## DISTRICT OF COLUMBIA

Metropolitan Washington Council of Governments (\$25,000)
Stuart Freudberg, 777 North Capitol St., NE, Washington, DC 20002
Metropolitan Washington Council of Governments will establish a public education campaign to teach minority communities about reducing non-point source pollution generated from vehicles. The result is to increase used oil recycling and antifreeze, battery, and tire returns in minority communities by 10 percent. The environmental objective is to increase awareness of non-point source pollution in such communities.

# **FLORIDA**

Broward County School Board (\$5,000) Frank Mandley, 600 Southeast 3rd Avenue, Fort Lauderdale, FL 33301 The Plantation High School ECO-LAB will provide high school students an onsite opportunity to investigate, observe, and experiment with a small scale southern Florida ecosystem.

Broward County Audubon Society, Inc. (\$5,000)
Karen Mauck, 616 NW 22 Court, Wilton Manors, FL 33311
The Broward Outdoor Natural Urban Studies project will train 150 teen and adult volunteers to conduct hands-on, outdoor, nature/science activities for 1200 fourth grade students in a series of investigations of the living things found in the elementary schoolyard.

Charlotte Harbor Environmental Center, Inc. (\$4,675)
Joy Duperault, 10941 Burnt Store Road, Punta Gorda, FL 33955
Will adapt an existing estuarine curriculum to the Charlotte Harbor watershed region and conduct middle school teacher workshops in the use of the curriculum.

Northwest Florida Water Management District (\$5,000)
Carol Pugh, Route 1, Box 3100, Havana, FL 32333
Field trips and hands-on environmental science activities for middle school students and teachers that focus on environmental actions to reduce storm water run-off pollutants and surface water degradation. Approximately 30,000 K-12 grade teachers and students will be involved in the project.

Tampa Palms Elementary School (\$5,000) Charmaine Jones, 6100 Tampa Palms Blvd., Tampa, FL 33647 Will provide all elementary teachers hands-on curriculum materials and workshops to heighten their awareness of the Hillsborough River as an important resource needing environmental protection.

#### GEORGIA

Bleckley County School System (\$4,990)
Donald M. Turknett, P.O. Box 516, Cochran, GA 31014
Will develop a K - 12th grade environmental education center, which includes an outdoor classroom and natural resource study stations to emphasize hands-on learning activities.

City of Atlanta (\$4,735)
Commissioner Remedios K. del Rosairo, Department of Water, 68 Mitchell St.,
Suite 5700, Atlanta, GA 30335

A partnership with the Atlanta Water Department, Georgia-Pacific Corporation, Georgia Water Wise Council, and the Atlanta Public Schools will introduce the Water Sourcebook to 36,000 students in grades 3-5 and 1400 teachers.

Friends of Geosphere (\$5,000)
Deron Davis, 8615 Barnwell Road, Alpharetta, GA 30202
Working in the Magic Garden will provide a training program for 30 K-5 grade teachers to establish Wildlife Sanctuary Outdoor Learning Centers at 5 economically depressed, urban elementary schools.

Georgia State University (\$24,906)
Jack Hassard, University Plaza, Atlanta, GA 30303
Will conduct a summer teacher preparation institute based on the Global
Thinking Project, a computer-mediated distance learning curriculum, and
convene a Global Summit consisting of 2 days of workshops and seminars on
global thinking and environmental science for 8 elementary school teachers, 2
high school teachers, and 800 ethnic minority and low-income students in
grades 5-7.

Golden Triangle Resource Conservation and Development Area (\$4,450)
Jerome Brown, 1016 Lowe Road, Albany, GA 31701
"Operation Clean" will develop a solid waste collection and composting demonstration site and conduct a high school teacher work hop to increase county residents awareness of environmental issues and encourage them to take an active role in addressing environmental problems.

Griffin-Spalding County School System (\$5,000)
Ann Nunan, P.O. Drawer N, Griffin, GA 30224
The "Outdoor Environmental Laboratory Urban Model" will emphasize ecology and biodiversity to demonstrate how elementary environmental education can be implemented in a limited natural resource environment.

Medlock Bridge Elementary School (\$4,995)
Virginia C. Smiley, 10215 Medlock Bridge Parkway, Alpharetta, GA 30202
The "Living Classroom II" will develop an outdoor classroom area and utilize the site as a teaching laboratory to train K-5th grade teachers in Project Learning Tree and Project Wild workshops.

Scitrek, Science and Technology Museum (\$24,000)
Bernadette M. Peiffer, 395 Piedmont Ave. NE, Atlanta, GA 30308
Will disseminate to grades 3-5 the "Water Sourcebook," using a teacher training model and community partners. The project will create 200 teacher trainers across Georgia and establish 12 partner site learning communities.

#### HAWAII

American Lung Association of Hawaii (\$4,860)
Shirley Robinson, 245 N. Kukui Street, Honolulu, HI 96817
"Partnership in Health Education"
The American Lung Association is joining with Girl Scouts of Hawaii, Hawaii Children's Museum, and the State Department of Education in an outreach project expected to extend to 10,000 students, promoting awareness of potential health hazards associated with indoor air pollution. At the end of the education unit, students and their parents will be able to recognize indoor air pollution hazards and know how to minimize and control them in

County of Maui (\$5,000) Steve Parabicoli, 200 S. High St., Wailuku, HI 96793 "Wastewater Education"

their home and school environments.

An educational partnership between the Wastewater Reclamation District and the county's schools will be established by combining classroom presentations with tours of the wastewater reclamation facilities.

Hawaii Nature Center (\$20,000)
Tamar Chotzen, 2131 Makiki Heights Dr., Honolulu, HI 96822
"Wetlands Endangered Species Environmental Education Field Program for Elementary School Students and Teachers"
This project will provide teacher training and produce resource guides for field study of wetland endangered species. This training effecting up to 11,000 elementary school students focuses on preservation of wetland endangered species and conservation of their habitat.

#### IDAHO

Better Living (\$5,000)
Loreca Stauber, Route 1 Box 54, Genessee, ID 83832
Workshops for youth leaders, teachers and high school students will be designed to enhance their skills in "hands-on"environmental education and to give them a good understanding of ecological concepts and factual background. The workshops will take place at an environmental park site in Moscow, with an emphasis on ecological implications of Moscow's land use practices.

Boise State University (\$5,000)
Dr. Richard McCloskey, 1910 University Dr., Boise, ID 83725
The University will hold an elementary and secondary teacher workshop on how parks, zoos, botanical gardens and natural areas can be used to teach science, and the use of journaling and children's literature to teach environmental education. The workshop will include investigations of river ecology and will demonstrate riparian "hands-on" activities.

#### ILLINOIS

Native American Educational Services College (NAES) (\$24,995)
Faith Smith, 2838 West Peterson, Chicago, IL 60659
To develop a comprehensive environmental education program at the NAES campus located on the Menominee Reservation in northeastern Wisconsin. With the grant, NAES College will develop a bachelor's degree program in natural resources; formalize a community service training program with the Tribe; integrate environmental instruction into K-12 Native American study; and, create a local library resource for Menominee community members related to the environment. The project will reach more than 2,000 Menominees.

Boys & Girls Clubs of Chicago (\$5,000)
Ellen Glantz, 625 W. Jackson, Suite 300, Chicago, IL 60661
To develop a community network for solid waste management education. With the funds, the organization will offer bilingual workshops that will result in improved recycling practices and reduction of waste in the Lathrop Homes Community. Lathrop Homes' is comprised of 1,000 families, predominately African American and Hispanic. The workshops, which will be presented in partnership with other Chicago non-profit organizations and local government offices, will be targeted toward parents and emphasize family recycling.

DeWitt County Soil and Water Conservation District (\$5,000) Carol Thompson, 804 W. VanBuren, PO Box 617, Clinton, IL 61727 To collaborate on an environmental education program with Weldon Springs Foundation and State Recreational Area that will offer some 2,087 K-12 Clinton, Illinois students the opportunity to learn about habitat enhancement and the local ecosystem. Funds will be used to develop a teacher workshop and lesson plans that present the park as a living classroom.

Environmental Education Association of Illinois (\$5,000)
Dr. John Beaver, 47 Horrabin Hall, WIU, Macomb, IL 61455
To assist the Environmental Education Association of Illinois in its sponsorship of the 1994 Midwest Environmental Education Conference. Funds will support educational programming at the conference which will be held October 27-29, 1994, at the Eagle Ridge Resort and Conference Center in Galena, Illinois. Sponsorship of the Midwest conference rotates between Illinois, Iowa, Minnesota, and Wisconsin. The theme of this year's conference in Illinois is "Environmental Education: Making the Right Connection." The conference, which will offer workshops, interact sessions, presentations, and networking opportunities, is open to all Midwest environmental educators.

Mark Sheridan Magnet (\$5,000)
Susan O'Neill, 533 W. 27th Street, Chicago, IL 60616
To add a strong environmental education component to the school's math, science and art curriculum. Funds will be used to teach ten classroom teachers and five artists to integrate environmental issues into their classroom curricula and focus on the ecosystems of Southeast Chicago and Northwest Indiana. Workshops will foster higher order thinking and learning by teaching environmental education through the arts. The project at Mark Sheridan will serve as a model for teacher training at 43 other schools throughout Chicago's sixth school district.

Madison County Soil and Water Conservation District (\$4,913)
Larry Firkus, P.O. Box 482, Edwardsville, IL 62025
To facilitate in the delivery of environmental education programs to the community. Funds will be used to hire an environmental education coordinator to work in cooperation with several local organizations. The Madison County SWCD environmental education coordinator will work to integrate environmental education in 14 school districts throughout the county; make presentations to city officials on erosion control and storm water management; and, assist rural landowners with sustainable agriculture research.

#### <u>INDIANA</u>

Indiana Recycling Coalition (\$16,000)

Jane St. John, 1040 W. 17th St., Bloomington, IN 47404

To establish the "Environmental Education Master Teacher Network" and sponsor environmental education workshops for master teachers in sixteen counties of southern Indiana. Master teachers will in turn educate other teachers so that the program could potentially reach 24,000 K-12 students. The workshops will revolve around an interdisciplinary environmental curriculum developed by the Heritage Education Foundation of Indianapolis called, "Partners with the

Clarksville Riverfront Foundation (\$5,000)
Kenny Karem, 430 Marriott Dr., Clarksville, IN 47130
To develop a hands-on ecosystem education program for the nearby Falls
Interpretive Center. The center will serve more than 800,000 people in
southern Indiana and northern Kentucky. The project will enable the Falls
Interpretive Center, which will be established in 1994, to offer teacher
education workshops and student programs that focus on the diverse habitat
found on its 1,400-acre wilderness area.

#### IOWA

Grant Wood Area Education Agency (\$24,974)
Dean Hartman, 4401 6th St. SW, Cedar Rapids, IA 52404-4499
The "Save Our Water Project" is designed to improve the quality and quantity of environmental education teaching skills in the upper elementary grade levels. Teacher workshops will use new, interactive hands-on tools and techniques. A locally relevant water quality resource guide will be developed. An increased partnership between educators, students and parents and their community soil and water conservation personnel is expected to evolve.

University of Iowa (\$24,862)
Susan M. Blunck, Van Allen Hall, University of IA, Iowa City, IA 52242
"The Iowa Floods Follow-up Project" will be a means of improving environmental teaching skills. The project will build on a nationally recognized teacher in-service program known as the Iowa Chautauqua Program, which is a model science in-service program. The focus will be the effects in Iowa of the floods of the summer of 1993. Teachers will use information from their investigations during visits throughout the state to create modules that can be used in the classroom. The university will coordinate teacher planning and design of resource modules for summer workshops.

Betterdorf High School (\$5,000)
Barb Jacobsen, 33333 18th St., Bettendorf, IA 52722
The project is a four stage environmental source reduction education project using a new methodology called Search, Solve, Create and Share developed by teaching researchers at the University of Iowa. The goal is to involve others in environmental education in an active role. Along with workshops for teachers and students, an activity booklet related to solid waste issues will be developed.

Iowa Department of Education (\$5,000)
Duane Toomsen, Grimes State Office Bldg., Des Moines, IA 50319
The goals of the "Volunteer Wilderness" project are to enhance teaching skills through a wilderness awareness and ecological restoration workshop for educators, to enable the educator to communicate this experience with a participant presentation, and to expand the knowledge base within the community to enable community members to make more positive environmental choices. The program will affect more than 1,500 people. It is done in cooperation with the Iowa Department of Education, the U.S. Environmental Protection Agency, the U.S. Forest Service, Idaho Fish and Game, The

University of Northern Iowa, Iowa State University Extension Youth and the 4H Program.

Iowa 4-H Foundation (\$4,989)

Beverly Berna, Iowa State Univ., Ames, IA 50011

The project will improve environmental education teaching skills by providing curriculum integration and modeling of classroom in-service to educators. Classroom educators or learning center teachers will be empowered to teach their students with an age specific, integrated, sequential curriculum. Students will have the opportunity to participate in community projects such as paint recycling and household hazardous waste reduction.

Kirl.wood Community College (\$5,000)

Douglas Feil, P.O. Box 2068, Cedar Rapids, IA 52406

The project is to develop a curriculum package that will motivate marginally literate adults and their families to be environmentally conscious, informed, and responsible. It does so by coupling environmental issues with the Adult Basic Education curricular emphasis on family literacy and life skills. This curriculum will teach basic environmental responsibility to marginally literate adults via "hands-on" activities adapted from the pre-reader program funded last year and successfully administered.

Eastern Iowa Community College District (\$4,250)
Ed Stoessel, 306 W. River Dr., Davenport, IA 52801-1221
Eastern Iowa Community College will provide high school teachers with the opportunity to discover environmental resources and experience environmental education through a five-day workshop. Participants will receive an environmental science resource instructor guide and a sampler of an environmentally centered English composition anthology comprising classical, journalistic, and technical selections.

#### **KANSAS**

Johnson County Parks & Recreation District (\$3,705) Bill McGowan, 909 N. Highway 7, Olathe, KS 66061

The purpose of the project is to improve the aquatic education program Ecology Encounters, which is a fourth through sixth grade field trip with hands-on activities. This project will reach five school districts in Johnson County, Kansas; schools in Kansas City, Kansas, and Kansas City, Missouri; and numerous private schools. Based on figures from past years, the expected goal is to reach 700 to 800 students with the Ecology Encounters program.

Emporia State University (\$3,735)
William P. Lanier, Emporia State Univ., Emporia, KS 66801
The purpose of the project is to publish one issue of the Kansas School
Naturalist dealing with the 1993 flood of the upper Mississippi region, which
continues to affect the populations of Iowa, Kansas, Missouri and Nebraska.
The proposed issue of the Kansas School Naturalist will address certain
aspects of flood science and will provide problem-solving activities along
with basic science behind common flood phenomena. The issue will be
maintained and referenced over the years by a loyal audience among school
libraries.

Geary County Fish & Game Association (\$5,000)
Kathy Brown George, P.O. Box 631, Junction City, KS 66441
The project is for a teacher workshop that will blend discussion sessions with hands-on activities designed to supply information through the full range of education from elementary to secondary and special education classes. The workshop will reach beyond the science curricula instructors to the classroom teachers in emphasizing the blending of science, mathematics, social studies and language arts into a connected pattern of learning that includes environmental education.

Olathe East High School (\$5,000) Brad Williamson, 14545 W. 127th, Olathe, KS 66062

The project is to expand the monarch butterfly tagging effort and to implement new student-based research projects related to the migration phenomenon. workshop will give teachers necessary skills and materials to culture the monarchs under different light regimens. Protocols for investigation will be developed in a collaborative manner and piloted by the core schools. The tagging aspect of the monarch project will involve teachers and students from the Midwest. It provides the opportunity for students to learn science by doing science in collaboration with a professional researcher.

Emporia State University (\$3,735).

Dr. Thomas Eddy, Box 4050, Emporia State, Emporia, KS 66801 The purpose of the project is to publish one issue of the Kansas School Naturalist that deals with the newly understood role of animals in succession. The <u>Kansas School Naturalist</u> integrates birds, insects, and other animals as co-determiners of succession through seed dispersal and soil development. The transfer of the succession is the seed dispersal and soil development. issue will be maintained and referenced over the years by a loyal library audience in Iowa, Kansas, Missouri and Nebraska.

Kansas State University (\$6,676)

Carol Shanklin, KSU, 2 Fairchild Hall, Manhattan, KS 66506-1103 Train-the-trainer workshops for food service managers and personnel will deal with environmental problems and alternative approaches for managing solid waste and preventing air and water pollution by food service operations. Participants will use the knowledge learned to present training sessions to their employees or other food service managers.

#### KENTUCKY

Jessamine County Middle School (\$750)

Grant Pelice, 851 Wilmore Road, Nicholasville, KY 40356

"Water Analysis in Jessamine County" will integrate life, earth, and physical science into the 6-8 grade curriculum, using water quality testing as an environmental education medium.

Kentucky School For The Deaf (\$5,000)

Angela K. Wilson, P.O. Box 27, South Second St., Danville, KY 40422 A series of workshops will provide teachers with the tools to give pre-school through high school hearing-impaired students a wide range of non-sheltered environmental education experiences, such as trips to nature centers and telecommunication projects with Kentucky Educational Television.

#### LOUISIANA -

Imperial Calcasieu Resource Conservation and Development (\$5,000) Council, Jim Neveu, 2422 Port Dr., Jennings, LA 70546

The "Forestry Awareness Project" will target sixth grade students in Allen and Northers Evangeline Parishes. Will use hands-on activities to address issues of multiple use of the forest and the many varying concepts of multiple use.

Sam Houston High School (\$5,000)

Linda Wygoda, 880 Sam Houston Jones Pkwy., Lake Charles, LA 70611 A week-long workshop will train teachers to use hands-on water monitoring activities for the intensive study of the Calcasieu River.

Southern University and AEM College (\$18,000) Dr. Chukwu Onu, Southern Branch Post Office, Baton Rouge, LA 70813 The "Environmental Awareness and Career Training" program will use a variety of environmental education activities and hands-on experiences to improve decision-making skills of non-technical minority college students and community leaders.

#### MAINE

Cumberland County Soil & Water Conservation District (\$4,900)
Forrest Bell, 381 Main Street, Suite 3, Gorham, Maine 04038
"The Campers' Lake Ecology Book" will provide campers and camp staff within the Sebago Lake Watershed with information on soil and water resources.
Specifically, it will explain to younger "lake users" (ages 6-10) how lakes function, how they are threatened, and how they can be protected via a variety of activities including puzzles and illustrations. The goal of the "Camper's Book" is to teach about lake ecology and stressing the importance of the water quality of their lakes to young campers.

Department of Environmental Protection (\$3,600)
Nick Archer, 1235 Central Drive, Presque Isle, Maine 04769-2053
The St. John River "Mr. and Mrs. Fish" water quality education program will market its project focusing on enhancing the understanding of water ecosystems among students living on the American, as well as Canadian side of the river. The program, directed at third grade students and their teachers, consists of a teacher workshop, performance for students, and a training package. This will provide teachers with the resources to introduce water quality lessons in the classroom curriculum. Furthermore, the project will enhance partnerships between local school systems, municipalities, and regional natural resource agencies, all on behalf of the water quality of the area's St. John River.

Maine Audubon Society (\$4,998)
Maureen K. Oates, 118 U.S. Route One, P.O. Box 6009, Falsouth, ME 04105
"The Casco Bay Water Quality/Watershed Education Project" will provide middle and high school teachers with hands-on experience in water quality and watershed issues. Teachers will participate in interactive workshops, and use watershed models and topographic and watershed maps for wetland education in classroom practice. The Casco Bay Watershed program is the vehicle which will establish a student/community water quality monitoring project on Casco Bay and foster ongoing "mentoring" relationships between citizens and the classrooms.

# MARYLAND

Alliance for Community Education (\$5,000)
Anne Pearson, 5103 North Crain Hwy., Bowie, MD 20715
The Alliance for Community Education will start an adult education program, primarily for minority students, about non-toxic lawn and garden care. The goal is to provide jobs and to launch "green gardens," which will treat lawns and gardens "as an ecosystem." The environmental objective is to reduce non-point source pollution into the Chesapeake Bay.

Baltimore Metropolitan Council (\$24,954)
Jack Anderson, 601 N. Howard St., Baltimore, MD 21201
The Baltimore Metropolitan Council will launch a Reservoir Watershed
Protection project that will result in staff training and curriculum
development.

Baltimore School District (Sussex Elementary) (\$4,955)
Kathy Brauer, 515 S. Woodward Dr., Baltimore, MD 21221
Baltimore County Public School (Sussex Elementary) will fund a water quality project using the ChesNet forum on the Metnet bulletin board system. This project will create a network of teachers and students who have been trained in both environmental and telecommunications technologies. The environmental objective is to encourage environmental education.

The Loading Dock, Inc. (\$15,900)
Hope Cucina, 2523 Gwynns Falls Pkwy., Baltimore, MD 21216
The Loading Dock, Inc., a non-profit building materials recycler, will publish A Guide to Successful Building Recycling and provide technical assistance, one-on-one, to improve methods of materials reuse, as well as alternative means to supporting the creation of low-income housing.

Clean Islands International, Inc. (\$5,000) 8219 Elvaton Drive, Pasadena, MD 21122

"Environmental Lessons on Video" is a U.S. Virgin Islands Education Project consisting of teacher workshops for Virgin Islands educators and a video for those unable to participate in the workshops. Goals of the project include development of methods to promote environmental awareness, conservation practices relevant to the resources and restrictions of island communities and effective decision making for solid waste disposal alternatives.

# **MASSACHUSETTS**

Lloyd Center for Environmental Studies (\$5,000)
Alan Harris, 430 Potomska Road, P.O. Box 87037, South Dartmouth, MA 02748
The "Docent Program" will train volunteers to lead school children in explorations of their local environments. There will be ten workshop sessions, including coastal field studies, wildlife in the school yard, and marine organisms. The workshops will provide volunteers with the ability and access to materials necessary to lead students in hands-on investigation. The program will reach a diverse audience, both adult volunteers and children from across New Bedford, promoting and enhancing environmental education in the area.

Massachusetts Audubon Society/Arcadia Wildlife Sanctuary (\$5,000)
Anthony Symasko, III, 127 Combs Rd., Easthampton, MA 01027
The Arcadia Nature Center and Wildlife Sanctuary, a local arm of the Audubon Society, will expand its six-week summer environmental field trip program to eight weeks and continue serving 350 Holyoke Hispanic children, ages five to eleven in their increasing awareness of their natural environments through hands-on discovery. The expansion will emphasize adult workshops, hire an additional part-time professional educator, prepare assistants in the use of observation and sampling equipment, and provide additional contacts hours for children at the sites and at community meeting halls after the field trips.

MA Audubon Society/Wellfleet Bay Wildlife Sanctuary (\$5,000) Christine Brothers, P.O. Box 236, South Wellfleet, MA 02663 Through classroom sessions, field trips, and summer interpretation, "Project Pond" will educate 240 tenth grade biology students in the natural history and management of the Outer Cape's kettle ponds. The program will expose the students to scientific research, natural resource management and work experience in environmental management and education. They in turn will use these skills and knowledge to educate town residents and visitors who use the ponds.

Patriots' Trail Girl Scout Council (\$7,965)
Brenda Rich, 95 Berkeley St., Boston, MA 02116
"Trails to Action," a weekend workshop, will provide approximately 150 Girl Scout troop leaders with environmental materials and curricula which will enable them to bring environmental education to the girls, volunteer staff, board members, and committee members. It is expected that the leaders as well as the girls will display environmental awareness in all aspects of their lives and take appropriate action.

Reading Public School (\$4,990)

Leo P. Kenney, 62 Oakland Rd., Reading, MA 01867 Through its "Vernal Pool Education Project," the Reading Public Schools seek to improve environmental education in Massachusetts by involving high school students and their teachers in the identification, study, and certification of vernal pools in their communities. Via a series of workshops, students and teachers from approximately 60 high schools in Middlesex county will get involved in data gathering, study and certification of vernal pools. The workshops will use an investigative hands on approach using color infrared aerial photographs to identify and plot vernal pools on USGS maps, eventually leading to applications for vernal pool certification. The project will also promote partnerships with agencies such as the Department of Environmental Protection Wetland Conservancy Program and the Essex County Greenbelt Association.

Silvio O. Conte Institute for Environmental Health (\$24,976) Charles Weinstein, Berkshire Common, Suite 370, 2 South Street, Pittsfield, MA 01201

The establishment of the "Summer Institute in Environmental Health" will provide a week-long, residential, credit-bearing program for middle high school teachers. The Institute will train teachers to incorporate environmental health into the science curriculum of public schools in Massachusetts, with particular emphasis being placed in the recruitment of schools serving minority populations. Through workshops and lecture/ discussions by key scientists, participants will attain the analytical and evaluative skills essential to teaching environmental health. The program ultimately seeks to encourage students to become active citizens aware of the health effects of the varied sources of pollution.

Westport River Watershed Alliance (\$5,000)
Gay Gillespie, 1151 Main Rd., P.O. Box 3427, Westport, MA 02790 The Westport River Watershed Alliance's "Watershed Education Project (WEP)," will expand its environmental program by using hands-on, grade-specific curriculum kits, expanding teacher workshops, and developing Family Nights wherein students will share with parents and friends the activities resulting from the WEP kits. This program will now incorporate communities within the Westport River's watershed, like Fall River and Freetown, MA and Tiverton and Little Compton, RI, which were previously not covered. The expansion of "WEP" will increase the students' and public's awareness of the environmental health of the watershed.

# **MICHIGAN**

Washtenaw County (\$23,241)
Dr. Rebecca Head, 220 N. Main St., P.O. Box 8645, Ann Arbor, MI 48107-8645
To develop a new program entitled "Environmental Equity Community Outreach," which aims to form partnerships between Washtenaw county government agencies and low income, diverse communities in the county. The goal of the program is to increase citizen awareness of the county's environmental programs and services and to gain input from citizens to ensure that county programs meet the expressed needs of underrepresented communities of color. Citizens will participate in community workshops, presentations, and environmental projects. The project builds on a 1992 EPA envi onmental education grant awarded to Washtenaw County to run an Environmental Career Internship Program for students of color. The former interns will assist in cultivating community contacts for this program.

Muskegon Area Intermediate School District (\$23,239) Tom Green, 630 Harvey St., Muskegon, NI 49442 To expand the school district's river/groundwater project, which involves students in cooperative study of the history, geography, hydrology, biology, chemistry and politics of the Muskegon River and White River watersheds. EPA funds will enable the Muskegon Area Intermediate School District to reach 1,000 additional middle and high school students in four additional districts. Muskegon School District ultimately aims to establish the program in 10-20 regional sites in Michigan. Students will share data they gain from the watersheds through the Global Rivers Environmental Education computer network.

Grand Traverse Band of Ottawa and Chippewa Indians (\$5,000)
Robert Kewaygoshkum, 2605 NW Bay Shore Dr., Suttons Bay, MI 49682
To build tribal capacity to develop and deliver an environmental education program to the Ottawa and Chippewa Indian communities. EPA funds will enable the Grand Traverse Band to develop a first-ever tribal plan for environmental education by convening a task force and identifying existing resources and gaps. In addition to earmarking goals and objectives for a holistic environmental education program, the Tribal Plan will develop demonstration projects that combine Native American cultural practices with local natural resources.

Michigan State University (\$5,000)
Clarence Suelter, 302 Admin. Bldg., East Lansing, MI 48824
To offer a three-week interdisciplinary workshop in physical environmental science for 30 high school chemistry, physics, and earth science teachers. The workshop will incorporate the use of science, technology and society to demonstrate the complexity of environmental issues involved with water usage and reclamation. The workshop will stress the need for multi-disciplinary approaches to solving problems by challenging teachers to work through different environmental scenarios. Teachers who participate in the workshop will be required to either share their experience with their peers, or give a presentation on the program at the Michigan Science Teachers Association conference.

Urban Options, Inc. (\$5,000)
Marisa McGlue, 405 Grove St., East Lansing, MI 48823
To deliver a series of workshops to elementary teachers on energy efficiency and conservation. EPA funds will be used to support the first year of a four year plan to in-service 200 teachers. Urban Options will survey existing energy curricula in order to use hands-on energy activities with the teachers that complement Michigan's educational science objectives.

West Michigan Environmental Action Council (\$4,996)
Elaine Pelc, 1432 Wealthy SE, Grand Rapids, MI 49506
To support a statewide conference on citizen volunteer water quality monitoring. The conference, which is tentatively scheduled for August 1994, aims to strengthen existing partnerships between state and local regulatory agencies, educational institutions, non-profit organizations and private citizens who monitor local water quality throughout Michigan. One goal of the conference is to validate the important role citizen volunteers play in providing necessary, valid, and cost-effective information to governmental agencies about the health and vitality of surface water in Michigan: The conference also aims to further educate volunteers on the biological, chemical and physical characteristics of monitoring.

Ingham Soil Conservation District (\$4,747)

Ann Nebe, 521 N. Okemos Rd., PO Box 236, Mason, MI 48854

To educate students and adults, residents and businesses in the Sycamore Creek Watershed about their local watershed and about the environmental importance of small streams. Further education will focus on how individual actions can eventually impact the Great Lakes. Funds will be used to support forums to reach residents and businesses and to involve students in actual water quality sampling.

#### MINNESOTA

Bell Museum of Natural History (\$5,000)

Don Luce, 1100 Washington Ave. South, Suite 201, Minneapolis, MN 55415

To develop and conduct a series of focus groups to assess public understanding of issues surrounding endangered species in the north central region of the United States. Bell Museum will use data collected from these focus groups to shape a series of exhibitions the museum is now developing in collaboration with the U.S. Fish and Wildlife Service. The exhibit's goal will be to challenge visitors to think about the extended consequences of their actions on the natural world and to further develop their conservation ethic. Some of the exhibitions will be able to travel to classrooms and will actively engage viewers by including dioramas, graphics, interactive objects and videos, learning kits, and games.

Red Lake County Soil and Water Conservation District (SWCD) (\$5,000) Irene Hill, Route 1, Box 31B, Red Lake Falls, MN 56750 To offer outdoor education on the value and benefits of wetlands to local educators. Funds will enable Red Lake County SWCD to reach at least 20 educators who will in turn teach more than 400 local students about wetland biology, plant identification, water quality, adjacent land use, and other related subjects.

#### MISSISSIPPI

University of Mississippi (\$5,000) Bonnie J. Krause, Graduate School/Office of Research, University, MS 38677 Will develop a "Traveling Trunk Environmental Education Program" on soil conservation and conduct 3 workshops to train teachers and volunteers in a 20county area in northern Mississippi in the use of the materials. The program is designed to serve about 1750 elementary students and 20 teachers.

#### MISSOURI

Metropolitan Energy Center (\$24,910)
Peter Dreyfuss, 3808 Paseo, Kansas City, MO 64109
The purpose of the project is to educate school staff and students about the management and control of lighting and the environmental impact of improving lighting efficiency. It involves students in conducting a lighting audit as an educational tool and provides workshops for educators to learn basic principles of energy efficient lighting.

Francis Howell School District (\$10,000)

Gerry Boehs, 7001 Hwy 94 South, St. Charles, MO 63304

The Francis Howell School District implemented the River Project and will introduce other local high schools to the project. The River Project has focused on teachers training teachers and will improve on that model by having teachers instruct students, who in turn will train students from other high schools. The project will create an environmental education partnership and deliver environmental education training to St. Charles County high schools.

Meramec Regional Planning Commission (\$4,728)
Bonnie Prigge, 101 W. 10th St., Rolla, MO 65401
The goal of this project is to educate the public on backyard composting and generate interest and participation in waste reduction and reuse through composting. The project will consist of six hours of classroom instruction and three hours of hands-on field work. Participants will be selected from each community in the district and will serve on the environmental speakers bureau, reaching a broad spectrum of the Ozark Rivers Solid Waste Management District.

Meadow Heights R-II School (\$5,000) Cheri Fuermeler, Hwy 72E, Box 210D, Patton, MO 63662 The Meadow Heights teachers in grades K-4 and science specialists in grades 5-12 will create an outdoor classroom to provide real-life contact with nature. Summer workshops will enable teachers to improve instructional skills, incorporate environmental studies into existing curriculum and incorporate the outdoor classroom as a laboratory for regular science instruction.

River Bluffs Audubon Society (\$4,972)
Celeste Koon, 1017 Holly, Jefferson City, MO 65109
This project would facilitate an environmental education partnership among local government, the local school district and the River Bluffs Audubon Society. Money will be used to prepare a traveling display, fliers, and public service announcements to promote recycling and an overall awareness of how individual actions create or reduce pollution.

Meramec Regional Planning Commission (\$4,038)
Bonnie Prigge, 101 W. 10th St., Rolla, MO 65401
The project is designed to provide education about household hazardous waste and includes a workshop for representatives from a six-county area. The training will include issues relating to proper disposal methods and use of alternative products. This project will provide education for many elected officials, educators and students, who will be able to share their experiences and knowledge in their own communities, schools and local governments.

Niangua R-V School (\$4,000)
Dr. Roy W. Manion, P.O. Box 77, Niangua, MO 65713
The grant will provide additional environmental education for teachers K-12 to incorporate into their general curriculum. The training will include an emphasis on water sampling for students. Information will be shared with the community in hopes that the community will become more aware of problems, possible solutions and the need for clean rivers, creeks and water.

Waynesville R-VI Schools (\$3,750)
Herbert Turner, 403 School St., Waynesville, MO 65583
The project is a continuation and expansion of hands-on laboratory activities and a stewardship program involving the Roubidoux Creek. The project encompasses a yearlong study of creek conditions. Eighth-grade students act as mentors for the elementary grades. The project leads to a simple environmental curriculum that can be used or modified by other educators. The water quality monitoring program has identified, and will continue to monitor for, minor problems early so that the community can react and make corrections as needed.

# MONTANA

Butte-Silver Bow Health Department (\$5,000)
Barbara Popovich, 25 West Front St., Butte, MT 59701
The purpose is to encourage students grades 4-8 and educators to take an investigative/scientific approach into understanding the influence of lead as an environmental substance by having staff go into the classroom to explain about lead in our environment, suggest projects and offer assistance to develop these projects. The grant funds will be used for awards given through a regional science fair.

Montana Environmental Education Association (\$4,500)
Carol Soth, P.O. Box 928, Dillon, MT 59725
The purpose of this project is to extend a pilot outreach program to rural school districts to further the integration of environmental education into the K-12th grade curriculum by expanding the Resource Lending Library, installing an 800 telephone line, conduct 5-8 additional residencies in rural schools and conduct 5-8 additional inservices for teachers around the state.

#### **NEBRASKA**

Nebraska Groundwater Foundation (\$9,480)

Susan Seacrest, P.O. Box 22558, Lincoln, NE 68542-2558

The foundation will match secondary students, with an interest in groundwater, with a diverse group of groundwater-related professionals as mentors. Student and mentor recruitment, training and recognition will be built on established Groundwater Festival partnerships with state agencies, higher education and natural resource districts. Specific objectives will be to create a groundwater project that includes a visual product suitable for public demonstration while promoting communication and cooperation between students and groundwater professionals.

University of Nebraska (\$5,000)

Shirley Niemeyer, University of Nebraska, Lincoln, NE 68588
The project goal is to transfer existing pollution prevention technology to consumers and householders through the use of a touch-screen interactive multimedia computer program. The intermedia program has the potential to improve environmental education teaching through use in educators' workshops, conventions or displays. It builds on state and local government capacity to develop and deliver environmental pollution prevention educational programs.

University of Nebraska (\$4,000)

Joel Cahoon, South Central Research & Extension Center, P.O. Box 66, Clay Center, NE 68933

The primary goals of this project are to demonstrate and evaluate techniques that reduce deep percolation of irrigation water below the active root zone in furrow-irrigated fields and to narrow the gap between irrigation application amounts and the actual amounts of water extracted by the crop. The results of the project will be presented at an irrigation workshop in Clay County and at the Central Plains Irrigation Short Course and Equipment Expo, which annually attracts more than 300 irrigators from three states.

#### NEVADA

University of Nevada-Las Vegas (\$11,000) Roberta Williams, 4505 Maryland Pkwy, Las Vegas, NV 89154-4004

"Science and Society"

This environmental education course, targeting teachers from rural Nevada as well as residents of Clark County, will provide insights into national and local environmental issues. Participating teachers will be encouraged to conduct workshops at their home schools to extend to their peers the hands-on experiments, instructional materials, and critical thinking about environmental issues.

Washoe Tribe of California and Nevada (\$5,000) Sherry Smokey, 919 Hwy 395 South, Gardnerville, NV 89410

"Willow Project Expansion"

This proposal will provide teacher training and curriculum activity kits for fourth grade teachers in Alpine County of California and Carson City, Nevada. The model, currently in use in the schools of Douglas County, Nevada, offers a cross-cultural environmental curriculum and presents Native American traditions in a science context.

# NEW HAMPSHIRE

Connecticut River Joint Commissions (\$12,350)
Sharon Francis, P.O. Box 1182, Charlestown, NH 03603
The Joint Commissions, CT River Watershed Council, and the VT Department of Environmental Conservation will promote environmental literacy by developing, publishing, and distributing an illustrated guide which will serve as an educational tool for teachers, students, and citizens of the Connecticut River

watershed. The guide will focus on combatting non-point source pollution, by suggesting actions that can be taken to prevent and control pollution, and serving as a reference guide on where to obtain information on best management practices. Besides the guide, workshops like "The River that Connects Us", and publications like "Environmental Management" will provide the teaching tools necessary for numerous interest groups, especially teachers and students in four states (CT, MA, NH, and VT).

Harris Center for Conservation Education (\$5,000)
Marian K. Baker, 341 Kings Highway, Rte. 1, Hancock, NH 03449
AIRNET, and air quality monitoring project will create partnerships between the Harris Center, town and state officials, and ten local, private and public high schools in New Hampshire. This grant will be used to expand the existing AIRNET monitoring project which promotes environmental education through interdisciplinary learning including workshops, team teaching, computer networking, multidisciplinary research and analysis of data. Teachers, students (and indirectly other citizens) will increase their interest and knowledge of air quality issues through this unique program.

Raymond Parks and Recreation Department (\$5,000) Richard C. Bates, Raymond NH 03077

The Raymond Parks and Recreation Department in conjunction with the Raymond School District will manage environmental education programs which enlighten and empower the citizens of Raymond to actively monitor Raymond's environmental health. Specific projects include evaluating wetlands, monitoring water quality, and finding alternatives to landfills. Raymond high school students will be trained as Environmental Docents -- providing environmental lectures, demonstrations, tours to elementary and middles school classrooms and community organizations. Also, in the summer, environmental education will be incorporated into the summer youth program wherein the docents or other students will work as Junior Conservation Counselors. A part-time Environmental Education Coordinator will be hired to schedule workshops and other relevant community events to complement the students' efforts.

University of New Hampshire (\$4,999)

Ihab Faraq/Linda Kahan Meier, Office of Sponsored Research, 107 Service Bldg.,
UNH, Durham, NH 03824-3585

In conjunction with the Pollution Prevention Consortium of New England Universities, the University of New Hampshire plans to sponsor a regional conference facilitating the transfer of pollution prevention technology to undergraduate and graduate students and faculty. The "P2 Consortium," the first of its type, will encourage demonstrations, discussions, and dissemination of pollution prevention activities and information. Students will get an opportunity to present pollution prevention projects and foster greater awareness and understanding of pollution prevention.

# NEW JERSEY

American Littoral Society (\$18,500) D.W. Bennett, Highlands, NJ 07732

The American Littoral Scriety will sponsor teacher workshops in the New York Harbor area using an existing curriculum, ESTUARIES. This program is designed to motivate teachers to introduce estuarine-related studies to students, introduce interdisciplinary curricula related to estuaries, complement efforts in the public and private sectors in environmental education related to harbor and estuary programs and demonstrate how individuals can protect estuaries.

Genesis Farm, Inc. (\$5,000) Sister Patricia Daly OP, 41a Silver Lake Road, Blairstown, NJ 07825 Genesis farm embodies the ideal of "living lightly on the earth." This program will consist of teacher workshops for elementary school educators providing them with materials for classroom implementation and current scientific understanding of ecosystems. The workshops will enable teachers to collaborate on the development of environmental education programs and learn about effective models from each other.

Greater Newark Conservancy (\$5,000)
Deborah Hadley, 303-9 Washington Street, 5th Floor Room 2, Newark, NJ 07102
The Weatherwatch Pilot Program will continue and expand a pilot project to measure the impact of meteorological phenomena and pollution on the environment by creating partnerships between Newark schools and non-profit environmental organizations. The expansion of a 1993 program, this phase will reach ten schools enabling educators to use the hands-on weather curriculum with an estimated 400 students.

New Jersey Audubon Society (\$24,000)
Peter Bacinski, 790 Ewing Avenue, P.O. Box 125, Franklin Lakes, NJ 07417
The New Jersey Audubon Society's "Bridges to the Natural World", the first natural history guide providing educators with New Jersey-specific information, will be the basis for teacher and facilitator workshops. These workshops will reach educators throughout New Jersey empowering them to make environmental education relevant, exciting and accessible in urban, suburban and rural settings.

Warren County 4-H Leaders Association (\$5,000)
Carol Knowlton Ward, 165 County Road, Route 519 South, Belvidere, NJ 07823
The New Jersey 4-H Conservation School will be a hands-on program for teens introducing them to environmental issues including waste management and water quality. State, county and private sector partners also fund this program that will draw youth from throughout New Jersey. Participants learn about the environment and how to relate their concern about environmental issues to policy makers.

Washington Township Board of Education (\$4,000)
Helen E. DiPascale, 234 Sharon Road, Robbinsville, NJ 08691
This grant will fund "Family Learning for Environmental Education." The project will involve students in grades four through six and their parents. It provides them with the opportunity to learn about the environment and prepares them to make informed decisions. The family learning sessions will be conducted in evening and Saturday morning sessions.

#### NEW MEXICO

Carlsbad Caverns-Guadalupe Mountains Association (\$5,000)
Teresa M. Jaskiewicz, P.O. Box 1417, Carlsbad, NM 88221
"Partnerships with Carlsbad Caverns Teacher Workshops" will train teachers to prepare students for visits to the national park and to lead tours through the park.

Gadsden Independent School District (\$5,000)
Pamela Donaldson, 2500 W. Washington Ave., Anthony, NM 88021
Materials and curricula will be developed and equipment purchased. Teachers will be trained to use high school students to teach 5th graders about water quality issues in the Gadsden area.

Santa Fe Community College (\$5,000)
Mary Ann Walz, P.O. Box 4187, Santa Fe, NM 87502
The "Teacher and Counselor Environmental Workshop" will focus on how to incorporate 50 minute environmental lessons into existing curricula. Workshop content also includes environmental career counseling and promoting awareness of environmental concerns in the Santa Fe, New Mexico area.

Youth Development, Inc. (\$18,000) Augustine C. Baca, 6301 Central NW, Albuquerque, NM 87105 Children will develop multi-cultural, bilingual educational tools, including a coloring book, to raise awareness of groundwater contamination and other environmental issues.

#### NEW YORK

American Lung Association of Nassau-Suffolk (\$13,200) Madelon Goldberg Givant, Program Department, 214 Marcus Blvd., Hauppauge, NY 11788

The project will provide educator workshops for school personnel working with students in occupational education classes in public and private educational institutions in Nassau and Suffolk Counties. The Future Workers' Education Project provides young people and adults entering the work place with the knowledge, skill and understanding enabling them to prevent and minimize exposure to lung hazards.

The Bronx High School of Science Foundation, Inc. (\$20,500) 75 West 205th Street, Bronx, NY 10468

The summer Ecology Training Institute will use the Inwood Hill Park spartina marsh and Van Cortlandt Park freshwater wetlands as urban habitat themes. New York City teachers will receive training on how to design and disseminate NYCbased aquatic ecology lessons and use the parks as outdoor laboratories. This project will establish an Ecology Resource Center for middle school teachers at the Bronx High School of Science.

Brooklyn Botanic Garden (\$5,000) Ann T. Schwartz, 1000 Washington Avenue, Brooklyn, NY 1122 Funding will support the pilot phase of a community environmental education program, "Brooklyn GreenBridge." Using gardens as an educational vehicle to create stronger communities also enhances the quality of the local environment. Brooklyn GreenBridge targets school groups in underserved urban neighborhoods bringing them together with Garden and community educators to create teaching gardens in vacant lots.

City of New York Department of Parks and Recreation (\$5,000) Alexander R. Brash, Urban Park Rangers, 1234 Fifth Avenue, New York, NY 10029 A teacher's guide for the Urban Forest Ecology Center and surrounding Van Cortlandt Park will be developed enabling educators to use the park to teach urban forestry and restoration ecology. The guide will support teacher efforts to continue their involvement with restoration of urban natural areas. This model program seeks to draw a more diverse population to conservationrelated careers.

Cornell Cooperative Extension (\$5,000) Ann Herriott, Environmental Issue Team, East Kirkbride Road, PO Box 1000, Thiells, NY 10984

This project will educate the community about the environment and encourage citizens, through hands-on learning, to take responsibility for processing most of their yard and food waste through home composting. The project promises to be a model for Rockland County and seeks to demonstrate the economic and horticultural benefits of home composting in a community venture. Cornell University, Institute on Science and Environment for Teachers (\$4,873) Arlene Hansen, Office of Sponsored Programs, 120 Day Hall, Cornell University, Ithaca, NY 14853

This funding will extend the resources of ISET by focusing on experimental aquatic research projects and offering regional training workshops, equipment loans and ongoing support on a computer network. The project supports the teaching of aquatic environmental science via open-ended, student-generated, original empirical research and will train inservice and preservice teachers.

Friends of the Anderson Program, Inc. (\$4,974) Helen Krasnow, The Anderson Program at P.S. 9, 100 West 84th Street, New York, NY 10024

The Anderson Program serves inner city, culturally diverse, gifted students. The funded project focuses on wetlands and wetland preservation in and around the Metropolitan New York area. Students do field work including research, observation and comparison at various estuarine sites. A major aspect of this project involves fourth graders working with Kindergarten students cooperatively and as mentors.

Hudson River Sloop Clearwater, Inc. (\$5,000)

Kate Mitchell, 112 Market Street, Poughkeepsie, NY 12601

The overall purpose of Clearwater's Teacher Training Workshops project is to promote a sense of stewardship of the Hudson River and other waterways. Using A Hudson River Primer, created for workshop use, in partnership with Scenic Hudson, the project will reach educators in the Hudson Valley improving their understanding of and access to riverfront ecology.

Niagara Falls City School District (\$5,000)
Cynthia A. Bianco, 607 Walnut Avenue, Niagara Falls, NY 14301
"Paddle to the Sea: A Great Lakes Journey" is designed to stimulate interdisciplinary environmental education regarding pollution in the Great Lakes using technology and the Internet system. Specific objectives include development of interdisciplinary units for grades 6-8, developing projects for each grade involving assessment, training educators in telecommunications and improving student problem solving strategies and thinking skills.

NYC Board of Education, Community School District 19 (\$4,892)
Anthony DeLucia, 557 Pennsylvania Avenue, Brooklyn, NY 11207
"Project ECOLE Plus" expands an environmental education apprenticeship for teams of regular and special education classroom teachers. This aspect of the program will develop skills and knowledge teachers need to apply process skills developed from ECOLE field experiences. Workshops will combine classroom instruction with field experiences for teachers in the East New York section of Brooklyn.

NYC Board of Education, Community School District 75 (\$5,000) Dr. Susan Erber, P.S. 233, Blue Mini Building, 204 Street and 109 Avenue, Hollis, NY 11412

"Environmental Recycling for Multiple Handicapped Students" is an educational program promoting reutilization of waste materials from school meals at this school serving 260 severely handicapped students ages 5 to 21 years. Objectives include development of students' environmental and recycling awareness and skills including packaging materials that are taken to recyclers and composting organic waste in the school garden.

Okeanos Ocean Research Foundation, Inc. (\$4,800)
Samuel S. Sadove, 278 East Montauk Highway, Hampton Bays, NY 11946
This project will provide multi-media, multi-subject programming using current teaching techniques. Concentrating on marine mammal and turtle populations and their ecology in the New York region, materials and activities will be combined with visuals to educate students in grades 4-12. The project will investigate how human activities have impacted the marine ecosystem.

Orleans-Niagara Board of Cooperative Educational Services (\$5,000)

Jean K. O'Connell, 4232 Shelby Basin Road, Medina, NY 14103

Four school districts, Lewiston Porter Central, Niagara Falls City, Niagara Wheatfield Central and Wilson Central, will participate in "The Many Fa(u)cets of Water." This program will educate students about the area's water resources including nearby Lake Ontario and the Niagara River. In-service workshops and field trips will enable teams of teachers to develop a course of study for use in area classrooms.

Public Policy and Education Fund of NY (\$5,000)
John Stouffer, 94 Central Avenue, Albany, NY 12206
This project will result in development and publishing of a waste prevention and recycling curriculum for public housing projects. Employing participatory educational techniques, the project will identify attitudes towards solid waste issues, test existing materials for suitability and develop workshops to enable peer educators to work with residents of public housing units.

Rome Teacher Resource Center (\$4,950)
Louis V. Campola, Marine Midland Bank Building, 199 Liberty Plaza, Rome, NY
13440

"Open Space, Defining-Assessing-Deciding" stresses the profound impact current decisions on open space have on the future. The project involves designing a course to teach open space use principles, presenting the course to key representatives of the community and disseminating programs and activities to interested groups. Community representatives will include those from education, business, industry, local government and special interest groups.

Wave Hill, Inc. (\$5,000)
Marilyn Oser, 675 West 252 Street, Bronx, NY 10471
Wave Hill will develop a kit for use by visiting elementary school teachers.
Wave Hill educators will work with teachers from NYC School District 11, the Bronx, to develop kits containing materials and instructions. By enabling teachers to bring their own classes through this outdoor learning facility, and not requiring a Wave Hill leader, this outdoor facility becomes more accessible to more students who can benefit from the outdoor educational experiences.

Earth Day New York (\$5,000)

Pamela Lippe, 10 East 39th St., Suite 601, New York, NY 10016

"The Earth Day Education Program" proposes to build a distribution network to disseminate already-existing curricula and teaching guides and make them available directly to schools at every grade level, in every school, in every state, impacting students across all social and ethnic lines. The program will establish partnerships between schools through a network of Earth Day coordinators, non-profit organizations and the private sector. By motivating, informing and instilling an environmental ethic in children, the general public will reap the rewards of their enlightened environmental consciousness in the years ahead.

# NORTH CAROLINA

Wake County Public School System (\$5,000)
Geraldine Ritter, 3600 Wake Forest Road, Raleigh, NC 27611
Will provide training and educational materials for K-5th grade teachers of the Underwood Elementary School to fully utilize the school's planned on-site pond habitat and butterfly garden.

#### NORTH DAKOTA

The International Coalition for Land/Water Stewardship in the Red River Valley (\$4,120)

Karla Parkinson, P.O. Box 127, Moorehead, MN 56561-0127
The "Smart Shopper's" program is currently disseminating environmental education materials through grocery stores, and this project will expand this program to include new waste reducing tips and also add "WaterWise" tips promoting more efficient use of water. The goal is to education, to inform, and to help the grass roots population address these important issues. (Note: The mailing address for this project is in Minnesota, although the project is taking place in North Dakota with funding from EPA Region VIII).

#### OHIO

Rural Action (\$5,000)

Heather Cantino, 36 S. Congress St., Athens, OH 45701
To carry out an educators' training project in integrated pest management entitled "Pest or Guest?" Funds will enable at least 75 K-12 teachers to participate in workshops that prepare them to teach integrated pest management curricula to students in five local school districts. Workshops will teach teachers to engage students in interdisciplinary, community-based problemsolving related to pollution prevention.

Environmental Health Watch (\$5,000)

Stuart Greenberg, 4115 Bridge Ave., Cleveland, OH 44113
To raise the general public's awareness of indoor air issues and help citizens make informed and responsible decisions that affect their home environment. Funds will be used to develop a decision-makers guide for families and to support presentations on household pollutants to a wide variety of civic organizations. The decision guide will walk homeowners through the risk assessment and management process in order to enable them to determine whether there is a need for action in their homes and if so, which course of action to take to minimize risk from indoor air pollutants.

Clintonville Academy (\$4,600)
Christine Sellers, 3916 Indianola Ave., Columbus, OH 43214
To afford elementary students the opportunity to participate in a comprehensive educational experience through stream and watershed assessment of the Adena Brook. The project will initially serve 40 fifth and eighth grade students and will include delineation of drainage boundaries, biological assessment, chemical sampling, and an environmental exchange program with another school.

#### OKLAHOMA

Cushing Public Schools (\$4986)
Denise Parish, 123 E. Broadway, Cushing, OK 74023
"Studying About Vitalizing Ecology" will provide children with awareness and appreciation of nature and wildlife and teach the consequences of human activity in relation to wildlife resources.

East Central University (\$16,545)
Nancy Heitland, Center of Continuing Education, Ada, OK 74820
Conduct a two-week graduate level seminar for ten teachers to develop a water conservation and/or water quality program for their classrooms.

University of Oklahoma (\$4963) Cheryl M. Patton, 1000 Asp Ave., Room 314, Norman, OK 73019 Graduate level students will develop a data and resource book concerning integrated solid waste management in small communities in Oklahoma.

#### OREGON

Central Oregon Environmental Center (\$5,000) Peter Geiser, 16 NW Kansas St., Bend, OR 97701

The "Central Oregon Household Ecoteam Program" will consist of households forming community-based "EcoTeams" to work on specific environmental projects. The purpose of this project is to educate the public about environmentally sustainable lifestyles, to help team members achieve measurable reductions and efficiencies, to promote partnerships with community and public organizations, and to empower the community to make informed and responsible environmental decisions.

Chintimini Wildlife Rehabilitation (\$5,000)

Kathleen Kanury, P.O. Box 1433, Corvallis, OR 97339

This project will use wildlife rehabilitation resources to bring environmental education to the public. Students from the Corvallis School District will apply problem-solving techniques to local environmental problems contained in wildlife rehabilitation records. The students will produce and publicly display information about living with wildlife in a shared environment.

City of Hillsboro (\$15,651)

Patrick Willis, 123 W. Main Street, Hillsboro, OR 97123

The City of Hillsboro will design and implement a wetland education program for broadcast via the Oregon Ed-Net satellite video-telecommunications system. The program will consist of a 10 week educator training with classroom student discussions, demonstrations, and "hands-on" laboratory experiences.

Columbia Education Center (\$21,941)

Dr. Ralph Nelsen, 11325, SE Lexington, Portland, OR 97266-5927 The project, "Learning About Biodiversity," will involve students in environmental issues, investigations, evaluation, and resolution. A two-week summer training will be held for 20 teachers from public and private schools in Oregon and Idaho. These teachers will set their schools up as demonstration sites.

Jacksonville Woodlands (\$5,000)

Larry Smith, P.O. Box 252, Jacksonville, OR 97530

To prepare students and teachers before their visit to the Jacksonville Woodlands, this project will produce a woodlands educational video tape and supporting teachers' materials (including "hands-on" activities).

Monument High School (\$5,000)

Ron Gaither, North Street, Monument, OR 97864

In coordination with state and local organizations, the Student Watershed Enhancement Team from Monument High School will assist in the collection and processing of John Day watershed data. The team will establish a water quality monitoring network. This grant will allow the team to acquire the computing power to analyze the data and communicate results in a professional.

# **PENNSYLVANIA**

Heritage Conservancy (\$10,000)

Carol Quay, 85 Old Dublin Pike, Doylestown, PA 18901 The Heritage Conservancy's two year educational program will lead to informed landowner decisions regarding native plants; heighten awareness in the community at large; encourage permanent native plant protection strategies and create a better understanding of the value of native plants among school children.

Keystone Tall Tree Girl Scout Council (\$5,000)
Carol Sheets, Rd. #7 Box 368, Kittanning, PA 16201
The Keystone Tall Tree Girl Scout Council will feature water monitoring workshops to include hands-on awareness activities for scouts, and teaching methods for adults leaders. The Council will work with the Pennsylvania Bureau of State Parks and a non-profit organization, Alliance for Acid Rain Monitoring. The natural resource objective of this project is water conservation.

Laurel Mountain Environmental Education and Research Institute (\$5,000)

Lawrence Bonino, 244 Pine Court, Pittsburgh, PA 15237

The Laurel Mountain Institute will develop Environmental Issues Guidebooks.

These Issues Guidebooks will be used to conduct Teacher Training Workshops in Western Pennsylvania and at the Pennsylvania Alliance for Environmental Education Annual Conference.

North Museum of Natural History & Science (\$5,000)
Robert Gingerich, P.O. Box 3003, Lancaster, PA 17604
The North Museum of Natural History and Science will design an interactive exhibit on complex aspects of environmental issues. This bilingual exhibit will compliment the Museum's activities to reach out to the Latino community in Lancaster City, PA.

Penns Valley School District (\$4,369)
Dr. Stephen Boston, R.D. 2 Box 116, Spring Mills, PA 16875
The Penns Valley Area School District will hold Educator Workshops that will train teachers from kindergarten through high school. With this training, educators will be able to utilize the newly designed curriculum material and their Environmental Center.

School District of Philadelphia (\$2,500) Ethel Goldberg, 21st St. & the Pkwy, Philadelphia, PA 19103 The School District of Philadelphia's Fels High School is a hands-on project for Black, White, Asian, Indian, Hispanic inner city school students. With the help of local experts, Fels students will begin to understand more about habitats and habitat preservation as they create a butterfly habitat in their school yard.

South Western School District (\$5,000)
Philip Hempfing, 225 Bowman Rd., Hanover, PA 19173
The South Western School District will hold a teacher workshop that will result in greater environmental awareness for both students and teachers in York County and surrounding counties.

Wyoming County Conservation District (\$5,000)
Denise Coleman, RR#3 Box 178-B, Tunkhannock, PA 18657
The Wyoming County Conservation District will conduct a series of water quality workshops designed to train teachers from all grade levels. The District hopes to reach teachers from five school districts.

# PUERTO RICO

Mayaguezanos por la Salud y el Ambiente, Inc. (\$5,000)
Henry L. Beauchamp, Claudio Carrero #293, El Mani, Mayaguez, PR 00680
This program will specifically target western Puerto Rico and meet a need to orient environmental education to take into account the cultural and social reality of this community. Teacher resources and materials will be developed and used in workshops to enable educators to develop classroom presentations on recycling, a critical issue in western Puerto Rico.

#### RHODE ISLAND

Childhood Lead Action Project (\$5,000)

Eleanor Fredz, 421 Elmwood Ave., Providence, RI 02907

partnerships between area businesses and Save The Bay.

"The Childhood Lead Action Project" will train a myriad of outreach workers providing services to families of young children by making lead poisoning prevention a basic component of their work. Through workshops, partnerships will be established among diverse agencies like Visiting Nurses Associations, Early Start Programs, and Parents as Teachers. In this way, knowledge of lead poisoning and of the ways to prevent it will lead to a lead-safe environment throughout Rhode Island.

Save The Bay (\$5,000)

Fred Massie, 434 Smith Street, Providence, RI 02908

The "Narragansett BayWork" project is designed to increase environmental awareness and pollution prevention via a specially-designed poster and brochure program. The program will target adults in the workplace, including fifteen (15) businesses, blue and white-collar, located throughout southeastern New England. Through the posters' and brochures' graphic/narrative format, the program will increase the environmental literacy of employees from low-income minority communities, as well as create

Southern Rhode Island Conservation District (\$5,000)
Carl Sawyer, 5 Mechanic St., P.O. Box 1145, Hope Valley, RI 02832
The "Pawcatuck Watershed Education Program Curriculum Guide" will serve as the basis for teacher training workshops which will be provided to seven elementary and middle schools in the Pawcatuck Watershed area. A part-time person will promote, organize and conduct the workshops, the goal of which is to have the teacher incorporate environmental awareness and heightened appreciation for the watershed in their school year curricula. The project will also foster partnerships among the District and the educational institutions as well as, government and non-profit organizations. The "Curriculum Guide's" effectiveness will be evaluated via pre and post tests to be administered by the teachers.

# SOUTH CAROLINA

South Carolina Wildlife Federation (\$3,000)
Patricia L. Jerman, PO Box 61159, Columbia, SC 29260
Schoolyard Habitat Teacher Workshops will enhance the ability of 50 elementary and middle school teachers to develop outdoor nature study areas and school yard habitats at their schools.

# SOUTH DAKOTA

Sinte Gleska University (SGU) (\$5,000) Georgia Hackett, P.O. Box 490, Rosebud, SD 57570

SGU proposes to sponsor two (2) environmental workshops designed for the Rosebud Sioux Reservation, targeting (1) the general public, (2) tribal and agency officials, and (3) local education districts' teachers responsible for tribal educational matters. The objective is for participants to learn terms and facts regarding solid wastes, water and air quality, and radon detection, and design a work plan for recycling and reuse on the reservation.

#### TENNESSEE

Tennessee Conservation League (\$25,000)
L. Kay Linder, 300 Orlando Avenue, Nashville, TN 37209
Will develop a multi-media education component for middle and high school classrooms, which includes a video program, teaching guide, and other written materials to encourage critical thinking, problem solving, and decision-making about biodiversity issues.

Tennessee Technological University (\$4,999)
Dr. Edwin Lamberth, Box 5034, Cookeville, TN 38505
The Environmental Agriscience Workshop is an 8-day in-service workshop in environmental agriscience for 20 high school agriculture teachers. Workshop sessions will focus on teaching techniques and development of instructional/resource units on conservation.

Williamson County Schools (\$25,000)

Judy Butler, 1320 West Main Street, Franklin, TN 37064

The Harpeth River Environmental and Educational Project will use the river as an outdoor classroom providing "hands-on" experience in the theory and practice of historical, chemical, biological, and sociological research. The project will include a student field trip, two for-credit one-week summer workshops for middle and high school teachers, and partnerships to train teachers to replicate the project across Tennessee.

#### <u>TEXAS</u>

Austin Nature Center (\$2,300)

Louise Morell, 301 Nature Center Dr., Austin, TX 78746

Print 4,000 copies of "Your Back Yard Ecoguide" to hand out at the Nature

Center's exhibit, "for Birds, Bats and Butterflies and More." The guide will

explain how to reproduce native plant and animal habitats seen at the exhibit.

Bryan Independent School District (\$4,275)
Laura North, 101 North Texas Ave., Bryan, TX 77803
Teach students at Sul Ross Elementary School earth stewardship and environmental sciences through gardening. Purchase gardening tools, equipment and materials for 2 martin houses and a pond.

Clean Pearland, Inc. (\$2,900)
Delores Fenwick, P.O. Box 3041, Pearland, TX 77588
A teacher training workshop utilizing "Waste: A Hidden Resource" curriculum
This project will fill an existing gap between the environmental education
program in the elementary schools and Clean Pearland's education and
information for adults in the community.

Fort Worth Clean City, Inc. (\$3,744) Carolyn Bellah, 4100 Columbus Trail, Fort Worth, TX 76133 Project "Earth Kids" involves youth in the Summer Day Camp at Fort Worth's Handley-Meadowbrook Center. Activities will include recycling, litter reduction and beautification projects.

Galveston Bay Foundation (\$5,000) Linda R. Shead, 17324-A Highway 3, Webster, TX 77598 Train volunteers (Galveston Bay Ambassadors) to give educational programs about Gavelston Bay issues to grades K-12 students. Also to develop scientific study sheets. Houston Clean City Commission, Inc. (\$4,816)
Robin Blut, 2700 Post Oak Blvd., \$1728, Houston, TX 77056
Present workshops for secondary school teachers in the Houston area. Will include hands-on training in use of "Waste: A Hidden Resource" curriculum.

Lower Clear Fork of the Brazos Soil and Water Conservation District (\$4,949) Tommy L. Hailey, Rt. 1, Box 146 B, Albany, TI 76430 Will develop "Bobwhite Brigade" program utilizing trained volunteers to deliver programs centered around quail conservation practices to youth and adults in their communities.

Pedernales Palls State Park (\$5,000) Rod Rylander, Rt. 1, Box 450, Johnson City, TX 78636 Provide environmental education training for bi-lingual teachers from Mexico in methods for teaching youth about the regional flora and fauna and to create an understanding about the ecological relationships of Texas and southern Mexico.

Sam Houston State University (\$5,000)
Dr. Joel Bass, P.O. 2119, Huntsville, TX 77341
Conduct workshop with Gulf Coast Utilities for elementary and junior high teachers in the East Texas/Gulf Coast region. Important issues include water quality, pollution prevention, and recycling.

Texas A&M Research Foundation (\$5,000)

Lori Wilkinson, Box 3578, College Station, TX 77843

Develop geography curriculum for teaching environmental education and design model teacher workshops for K-12 Texas social studies and science teachers.

Texas Department of Transportation (\$5,000)

Karen LaFevre, 125 E. 11th Street, Austin, TX 78701-2483

Produce curriculum and outreach materials and create a volunteer program to educate Texans about the value and importance of appropriate vegetation management on approximately 800,000 acres of highway right-of-way.

Texas Marine Education Association (\$3,000)

Pamela Stryker, 3112 Ammunition Dr., Austin, TX 78748

Conduct two teacher aquatic environmental workshops to include labs, hands-on activities, and field trips. Topics will include organism and habitat protection and effects of pollution on entire ecosystem.

University of Texas at El Paso (\$18,000)
Randy Neeb, 500 W. University Dr. El Paso, TX 79968
Adapt water quality and other environmental curriculum for teachers in the U.S. and Mexico. Also, design and coordinate binational water quality monitoring program, and conduct teacher training.

#### UTAH

Greater Ogden Community Nature Center (\$5,000)
Mary Cox, 966 W. 12th itreet, Ogden, UT 84404
By publishing a Nature Education Program Guide, this program hopes to (1) significantly enhance the quality of the experience for groups who attend naturalist-led programs, (2) make nature education programs available to new groups not previously able to utilize the program, and (3) facilitate effective planning and use by making the Program Guide available to teachers for their ongoing research needs.

Utah Society for Environmental Education (\$17,500)
Vern Fridley, 230 South 500 East Suite 280, Salt Lake City, UT 84102
The proposed Environmental Education Teacher Network (EETN) will develop capacity to improve teaching skills by providing resource materials, consultation with experts, and workshops, as well as integrate environmental education into the school curriculum statewide. The EETN will serve as a model of how to develop communication between formal and non-formal educators and state and federal agency specialists.

Wasatch Fish and Gardens Project (\$11,030)
Cara Cahoon, P.O. Box 2924, Salt Lake City, UT 84110-2924
The aim of the "Urban Garden Ecology Project" is to provide city residents with hands-on training in biointensive gardening and landscaping techniques and to encourage resource conservation and source reduction of chemical pesticides and herbicides at the household and neighborhood level. It will demonstrate gardening techniques that reduce water and resource waste and consumption and decrease the use of hazardous materials.

# **VERMONT**

Montshire Museum of Science (\$13,589)
David Goudy, P.O. Box 770, Norwich, VT 05055

In conjunction with the Antioch New England Graduate School in Keene, NH, the Montshire Museum of Science expects to establish a model program to disseminate information on solid waste source reduction to eight communities in rural Vermont and New Hampshire. The training program will use curricular and logistical materials to train middle school students via training sessions and workshops at the museum. Ultimately, the intent is for these students to initiate and formalize the information transfer by creating partnerships with their own local communities, business, public works operations and personnel and other citizens.

River Watch Network (\$4,896)

Sharon Behar, 153 State St., Montpelier, VT 05602
River Watch Network will host its "Clean Water Institute," a week-long conference at the University of Massachusetts, Amherst, for a team of twenty teachers and community members from throughout the Commonwealth of Massachusetts. The training program will teach pollution prevention and encourage the use of hands-on science in the classroom setting. The Institute will build partnerships with existing environmental groups and schools, design river monitoring projects, and create teams of teachers and community representatives which will in turn affect over 900 people.

# VIRGINIA .

Center for Watershed Protection, Inc. (\$5,000)
Dr. Harvey Olem, 1020 Elden St. Suite 205, Herndon, VA 22070
The Center for Watershed Protection, Inc. will develop a Watershed Puzzle and a companion Teacher's Guide to be used for teacher training. The environmental goal of this project is non-point source pollution prevention.

Charlotte County School Board (\$4,998) George Jones, Randolph Henry HS Agriculture Dept., P.O. Box 790, Charlotte, VA 23923

The Charlotte County School Board's Randolph-Henry High School Agriculture Department will teach vocational students and area farmers about the environmental impacts of traditional irrigation systems compared to new irrigation systems. The natural resource objective of this project is water conservation.

Chesapeake Volunteers In Youth Services, Inc. (\$5,000)
Donald Marx, Jr., 301 Albermarle Dr., Chesapeake, VA 23220
The Chesapeake Volunteers In Youth Services, Inc. project will result in a visible outcome to the public. Using native plants, "at risk" youth, will develop and maintain a habitat project that will provide a sanctuary for wildlife. This sanctuary is planned as an "outdoor classroom" for local residents and visitors.

Friends of the North Fork of the Shenandoah (\$5,000)
Patricia Maier, 122 South Commerce St., Woodstock, VA 22664
The Friends of the North Fork of the Shenandoah River will train fourth grade students, in all four Shenandoah County Elementary Schools, about water quality and water monitoring. This program will reach 16 fourth grade classes and approximately 400 students.

Keep Fauquer Clean (\$4,999)
Patricia Katzen, 78 West Lee St., Suite 100, Warrenton, VA 22186
The non-profit organization, Keep Fauquier Clean, will create the project they have titled: "A Garden with a Message." The environmental garden will include a constructed wetlands demonstration site. The anticipated environmental benefits include better use of water, less expensive waste water treatment, and a reduction of non-point source pollution in the Chesapeake Bay.

Virginia Commonwealth University (\$4,997)
Elske Smith, Box 568 MCV Station, Richmond, VA 23298
The Virginia Commonwealth University will hold a workshop on renewable energy for Richmond-Petersburg area teachers, fifth through twelfth grades.

Virginia Polytechnic Institute and State University (\$4,991)
James Parkhurst, 301 Burruss Hall, Blacksburg, VA 24061-0249
Virginia Polytechnic Institute and State University's Department of Fisheries and Wildlife will train County-based Cooperative Extension Educators. At a workshop these educators will learn about wetlands and wetland-related issues.

#### VIRGIN ISLANDS

University of the Virgin Islands (\$4,994)
Marcia G. Taylor, Eastern Caribbean Center, Virgin Islands Marine Advisory
Service (VIMAS), Charlotte Amalie, St. Thomas, U.S. Virgin Islands 00802
VIMAS will develop marine field service curriculum materials for the Virgin
Islands Department of Education. These materials, which will suitable for use
in any tropical environment, will serve as a pilot program in St. Croix
Central High School's field studies center and for teacher workshops. The
project will expand the school's marine science curriculum and educate
students about local marine resources.

# WASHINGTON

Bainbridge Island School District (\$21,942)
Brent Peterson, 8489 Madison Ave. NE, Bainbridge Island, WA 98110
The purpose of this project is to develop and integrate a school district-wide education program with the Bainbridge Island watershed management planning process and to develop action plans that protect the quality of Bainbridge Island's watersheds. Teachers will be trained in watershed characterization techniques and the process of student action project implementation.

Department of Ecology (\$5,000)
Sandi Newton, P.O. Box 47600, Olympia, WA 98504-7600
Funding will be used to develop a workshop, instructional videos, and classroom materials for high school driver education, automotive shop, science, and social studies teachers to educate and train students on the proper use and maintenance of motor vehicles to ensure air quality.

Environmental Education Association of Washington (\$5,000)
Russ Hanbey, P.O. Box 4122, Bellingham, WA 98227
"Project Diversity" addresses a statewide need to bring under represented populations into the mainstream of environmental education and to bring the environmental education community closer to minority and under represented communities. Localized workshop series, held throughout the state, will include recommended approaches in structured problem solving, interactive "hands-on" exercises, and community action strategies.

North Cascades Institute (\$5,000)
Saul Weisberg, 2105 Highway 20, Sedro Woolley, WA 98284
This project, "Watershed Restoration Education," will make practical connections between classroom instruction and field applications in watershed restoration. Teacher training will be provided for middle school classroom teachers on "how to" involve children in environmental restoration and how to lead restoration projects for sixth grade classes. This is a cooperative partnership with children, school districts, natural resource agencies, the three Skagit River Indian Tribes, and the business community.

Northwest Chicano Network (\$5,000)

Amelia Ramon, 120 Sunnyside Ave., Granger, WA 98932

The project will work with government agencies, nonprofit organizations, and schools to implement an environmental education program, with a focus on pollution prevention and environmental equity (waste reduction, household hazardous waste, and pesticides). The goal is to motivate the general public to make informed and responsible decisions that impact the environment. Spanish/English printed materials will be developed. Existing brochures and focus sheets will be translated into Spanish. Radio public service announcements, call-in programs, and surveys will be used to provide environmental information.

Olympic Peninsula Foundation (\$4,985)
Betsy Carlson, 1200 W. Sims Way Suite 201, Port Townsend, WA 98368
In partnership with Olympic Peninsula Foundation and Port Townsend School District, this project will create a cross-age tutoring program on wetlands for seventh and eighth grade students and third and fourth grade students. A two-week eighth grade wetland tutoring curriculum will be created to instruct younger students. To improve their understanding of and protection for local wetlands, third and fifth grade students will participate in classroom and outdoor workshops on wetlands.

Pacific Science Center (\$5,000)
Suzanne Tripp, 200 Second Ave. North, Seattle, WA 98109
This project will support the development of the Mercer Slough School Program for elementary school groups. "Hands-on" learning experiences will be offered for classes on field trips to the slough. The classes will study the ecosystems of the freshwater peat bog and its surrounding scrub-shrub and forest wetland communities.

Pacific Lutheran University (\$7,800)
Rachel Nugent, 12180 121st St., Tacoma, WA 98447
Pacific Lutheran University will conduct a four-week summer course for K-12 teachers, providing "hands-on", inter-disciplinary approaches to watershed evaluation and planning-with the focus on the Clover Creek Watershed. The course facilitates partnerships between the university, a non-profit citizen organization, and the county by involving them in a cooperative process of gathering, interpreting, and disseminating data and analysis.

Seattle Audubon Society (\$5,000)
Kathy Malley, 8028 35th Ave. NE, Seattle, WA 98115
"Finding Urban Nature Program" uses volunteers to lead third and fourth graders in Seattle Public Schools through a series of eight separate "handson" nature oriented science explorations over the course of a school year. The goals of these explorations are to teach children about nature and science and the basics of scientific investigation and to show the children that the natural world is everywhere—even on the school grounds.

Spokane Conservation District (\$9,663)
Christine Armstrong, North 222 Havana, Spokane, WA 99202
This existing project incorporates watershed education into the social studies, science, and language arts. Around 1,000 high school and middle school students will work on the Upper Palouse Habitat Restoration Project. Students have spent time in the field learning about riparian habitat and doing actual restoration work; now they will develop an understanding of the individual and cultural choices which impact the water quality. They will study the history of areas to provide the context in which these choices have been made.

Thurston Conservation District (\$4,992)
Rochelle Rothaus, 6128 Capitol Blvd. South, Olympia, WA 98501
A teacher training will be provided for teachers in six schools on applying Project GREEN to the Budd/Deschutes Watershed. The training will include instruction on monitoring, telecommunications and global change. The training will use an action research/community problem solving approach to education. Students and teachers will be able to participate in field work with community members.

University of Washington (\$4,751)

Nan Little, Dept. of Chemistry BG-10, Seattle, WA 98195

Science Role Models program was developed to address issues of science based environmental education and to increase the numbers of women and minorities entering careers in science. This project targets Native American, women, and other minority students to research and make environmental education presentations at local high schools.

Washington State University Cooperative Extension (\$14,623)
Craig MacConnell, Courthouse Annex-1000 N. Forest St., Bellingham, WA 98225
The "Lake Whatcom Watershed School and Community Partnership Project" is
designed to promote interaction among watershed volunteers, science students,
and the public. Participants will work together on the study of Lake Whatcom,
the municipal water supply and its outlet, Whatcom Creek. They will collect
and analyze data. This data will be used by the residents of Whatcom County
to make informed decisions when developing the watershed management plan.

# WEST VIRGINIA

Monogalia County Health Department (\$4,995)
Dr. Sally Taylor, 453 Van Voorhis Rd., Morgantown, WV 26505
The Monongalia County Health Department will sponsor three workshops: one for the public; a second for plumbers and contract specialists; and another for State Health Department Environmental Specialists. The environmental objective of this project is to protect drinking water from contaminants.

The Woodlands Mountain Institute (\$5,000)

John Eckman, Main & Dogwood Streets, P.O. Box 907, Franklin, WV 26807

The Woodlands Mountain Institute will train 100 youth in West Virginia about environmental assessment. The environmental benefit of this project is that students will return to their communities following the training to begin local environmental action or environmental assessment projects.

#### WISCONSIN

River Alliance of Wisconsin (\$5,000)
Sara Johnson, 122 State St., Suite 200, Madison, WI 53703
To hold an interactive workshop at Wisconsin's 1994 statewide conference on rivers and watersheds that will convene partners in watershed management to discuss societal aspects of river use and protection. Funds will be used to provide stipends for workshop facilitators and scholarships for Native Americans, farmers and other underrepresented individuals. The workshop will use consensus building and conflict resolution techniques to first find common ground and then to develop long-term solutions for preserving Wisconsin's rivers.

Friends of Riverside Nature Center (\$4,300)
Else Ankel, 3368 N-Bartlett Ave., Milwaukee, WI 53211
To carry out a program entitled "Lead Poisoning Prevention--A Pilot Project for Community Education in Milwaukee." The program aims to increase knowledge about health risks of ingested lead-containing paint and to provide information about removing lead paint from the home. Outcomes of the project include educating more than 100 community residents about lead poisoning and prevention; conducting educator workshops on lead to middle-school teachers in eight schools; training fifteen community people to safely remove lead paint from their home; and, testing thirty homes for the presence of lead paint.

Lac du Flambeau Public School (\$3,969)
Karen Crisman, 2899 Highway 47, Lac du Flambeau, WI 54538
To incorporate environmental education in the new school's curriculum. Funds will be used to integrate environmental concepts, outdoor education, and Native American culture across the school's curriculum and to develop teacher workshops for K-8 teachers that promote the environmental curriculum focus. The school, which opened in the 1993-94 school year, is located on the Lake Superior Chippewa Indian reservation. More than 90 percent of the school's student population is Native American.

# WYOMING

Uinta County School District #1 (\$5,000)
Craig Patterson, 701 W. Cheyenne Dr., Evanston, WY 82931-6002
This project is designed to use computers and software as a new approach to teaching students about environmental impacts and environmental sciences and to upgrade the school's current ecology and environmental science curriculum. The results should provide a new teaching tool which will reduce time required to teach students to use statistical techniques when quantifying data.

# U.S. EPA REPRESENTATIVES AND MAILING ADDRESSES

#### U.S. EPA HEADQUARTERS -- For Grants Over \$25,000

Mailing Address:

U.S. EPA, Env Ed Grants
Environmental Education
Division (1707)
Office of Communications,
Education, and Public Affairs
401 M Street, S.W.
Washington, D.C. 20460

Information:

George Walker or Kathleen MacKinnon Environmental Education Specialists 202-260-8619 or 202-260-4951

# U.S. EPA REGIONAL OFFICES -- For Grants of \$25,000 or Less

EPA Region I -- CT, ME, MA, NH, RI, VT

Mailing Address: U.S. EPA, Region I Env Ed Grants Grants Information and Management Section JFK Federal Building (PGI) Boston, MA 02203 Information:
Maria Pirie
Environmental Education Coordinator
617-565-9447

EPA Region II -- NJ, NY, PR, VI Mailing Address:

U.S. EPA, Region II
Env Ed Grants
Grants Administration Branch
26 Federal Plaza (Room 1714)
New York, NY 10278

Information: Teresa Ippolito Environmental Education Coordinator 212-264-2980

EPA Region III -- DC, DE, MD, PA, VA, WV

Mailing Address: U.S. EPA, Region III Env Ed Grants Grants Management Chief (3PM71) Grants Management Section 841 Chestnut Street Philadelphia, PA 19107 Information:
Bonnie Smith or Amelia Libertz
Environmental Education Coordinators
215-597-9076 or 215-597-9817

EPA Region IV -- AL, FL, GA, KY, MS, NC, SC, TN

Mailing Address: U.S. EPA, Region IV Env Ed Grants Office of Public Affairs (E2) 345 Courtland Street, NE Atlanta, GA 30365 Information:
Rae Hallisey
Environmental Education Office
404-347-3004

EPA Region V -- IL, IN, MI, MN, OH, WI

Mailing Address: U.S. EPA, Region V Env Ed Grants Grants Management Section (MC-10J) 77 West Jackson Boulevard Chicago, IL 60604 Information:
Suzanne Saric
Environmental Education Coordinator
312-353-3209

Region VI -- AR, LA, NM, OK, TI

Mailing Address: U.S. EPA, Region VI

Env Ed Grants

Environmental Education Coordinator (6X)

1445 Ross Avenue Dallas, TX 75202

Region VII -- IA, KS, MO, NE

Mailing Address: U.S. EPA, Region VII

Env Ed Grants

Grants Administration Division

726 Minnesota Avenue

Kansas City, KS 66101

Region VIII -- CO, MT, ND, SD, UT, WY

Mailing Address:

U.S. EPA, Region VIII

Env Ed Grants

999 18th Street (80EA)

Denver, CO 80202-2466

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Northern Marianas, Republic of Palau

Mailing Address:

U.S. EPA, Region IX

Env Ed Grants

Office of Public Affairs (E2)

75 Hawthorne Street

San Francisco, CA 94105

Region X -- AK, ID, OR, WA

Mailing Address:

U.S. EPA, Region X

Env Ed Grants

Public Information Center (SO-143)

1200 Sixth Avenue

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Rowena Michaels

Information: Cece Forget

Environmental Education Coordinator

Environmental Education Coordinator

Environmental Education Coordinator

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Environmental Education Coordinator

415-744-1581 or 1582

Information:

Sally Hanft

Environmental Education Coordinator

206-553-1207