CHESAPEAKE BAY RESTORATION FUND



PROJECTS
CATALOGUE
2000

CHESAPEAKE BAY RESTORATION FUND

SUPPORTING ENVIRONMENTAL EDUCATION AND RESTORATION PROJECTS FOR THE CHESAPEAKE BAY.

PROJECTS CATALOGUE 2000



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Issue I

The Division of Legislative Services of the Virginia General Assembly publishes this catalogue. The information contained in these pages is current as of October 15, 1999.

Thank you to all of our partners and to all grantees of the Foundation who have provided text and materials for this catalogue.

This catalogue was developed for all agencies, organizations, and individuals interested in environmental education and restoration projects on the bay and its rivers.

General Assembly
Division of Legislative Services

Produced by Jennifer Hunt, Research Associate

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I. History

In 1992, the Virginia General Assembly enacted legislation, which was co-patroned by Senator Frederick Quayle and Delegate Harvey Morgan, that established the Chesapeake Bay preservation license plate. The design included drawings of bay grass, oysters and crabs, and read "Friends of the Chesapeake." The Department of Motor Vehicles (DMV) began issuing the specialty plates in December 1992.

The legislation also established the Chesapeake Bay Restoration Fund. The Council of the Environment established the Fund within the Department of Accounts, for use or its successor agency, for environmental education and restoration projects related to the Chesapeake Bay and its tributaries. For each plate sold or renewed at a cost of \$25, the Fund receives \$15 and the DMV gets \$10. In an effort to ensure that allocations for Chesapeake Bay projects would be funded in an efficient manner Senator Quayle sponsored a bill, in 1995, that created the Chesapeake Bay Fund Advisory Committee to administer the Fund.

The seven-member advisory committee is comprised of three legislative members and four private citizens. It chose to distribute the Fund money in the form of financial support grants to aid the Bay program. Recipients include state agencies, local governments, schools, or nonprofit groups. The Chesapeake Bay Fund Advisory Committee reviews grant applications and submits a list of recommended projects to the General Assembly for approval.

Recommended projects fall into two categories: environmental education and restoration projects. Education projects include volunteer and teacher training, special school projects, and the development of education curricula and materials, and public information. Restoration projects include actions taken to preserve the Bay and its tributaries.

The Restoration Fund has received in excess of \$300,00 per year since its inception.

II. THE ADVISORY COMMITTEE

The Chesapeake Bay Preservation Act established the Advisory Committee within the legislative branch. [Va. Code § 10.1-2116 (Michie 1998)]. The purpose of the Committee is to advise the General Assembly on the expenditure of moneys received in the Chesapeake Bay Restoration Fund.

The Committee consists of seven persons as follows:

- * Legislators: two members of the House of Delegates and one member of the Senate
- * Citizens: two persons appointed by the Speaker of the House of Delegates, one of whom shall be a representative of the Chesapeake Bay Foundation and two persons appointed by the Senate Committee on Privileges and Elections, one of whom shall be a representative of the Virginia Association of Soil and Water Conservation Districts

Other requirements of the committee members include:

* All persons appointed shall be representative of all interests associated with restoration and conservation of the Chesapeake Bay

* At least one citizen member shall be a current holder of the "Friend of the Chesapeake" license plate

Committee members serve for terms of four years. Legislators' terms shall be concurrent with their elected terms of office. Members are not eligible to serve for more than two consecutive terms. The Committee elects a chairman and vice-chairman from among is legislative membership.

The Committee shall develop goals and guidelines for use of the Fund, which may include but not be limited to cooperative programs with, or project grants to, state agencies, the federal government, or any not-for-profit agency, institution, organization, or entity, public or private, whose purpose is to provide environmental education and projects relating to the restoration and conservation of the Chesapeake Bay. The Committee is required to meet at least once a year. During this meeting, the Committee will review applications to form a list of recommended programs to receive grants, which is then presented to the Governor and General Assembly.

The members of the Chesapeake Bay Advisory Committee as of October 1999 are:

Senator Frederick Quayle (R-Chesapeake), Chairman Delegate Harvey Morgan, Vice-Chairman Delegate I Vincent Behm, Jr.

Joanne Berkley, Norfolk Stella Koch, Fairfax County, Audubon Naturalist, Society of Central Atlantic States Stephen Mallette, Accomack County Jacqueline Stieffen, Hampton

Staff:

Marty Farber, *Senior Research Associate*Nikki Rovner, *Staff Attorney*Gwen Foley, *Senior Operations Staff Assistant*Division of Legislative Services

III. SUMMARY OF ACTIVITIES

The Chesapeake Bay Restoration Fund experienced continued growth by increased sales of the specialty license plate. The Restoration Fund has received about \$300,00 per year since its inception in 1992. In the spring of 1999, the Committee distributed \$377,751, the highest annual amount to date.

During its fourth year in operation, the Committee reviewed a total of 60 grant applications from civic and community groups, environmental organizations, schools and public agencies. The Committee awarded forty-eight grants, having a total value of \$379,795. Seventy percent were for amounts of less then \$5,000. Grant activity in 1999 increased the total of Committee commitments to \$3 million since 1995. Most importantly, more than 300 community groups have shared in these awards for volunteer restoration and Bay education efforts.

Thanks to the generosity of Virginia citizens, revenues from the purchase of the popular Chesapeake Bay commemorative license plate totaled \$300,000 each year. Sales have climbed to \$1 million. The Fund is grateful for the generosity of the concerned citizens who have supported these initiatives.

Number of Chesapeake Bay Plates sold over Fiscal Years

FY1996	FY1997	FY1998	FY1999
19.607	20.442	22.434	22.913

Amount Received by the Chesapeake Bay Restoration Fund by Fiscal Year

FY1996	FY1997	FY1998	FY1999
\$318,435	\$330,975	\$374,205	\$369,930

IV. APPLYING FOR A GRANT

- * Eligible groups: state agencies, local government, public or private not-for-profit agencies, institutions, or organizations
- * Types of projects: environmental education and action-oriented conservation and restoration projects within Virginia's Chesapeake Bay watershed.

Individuals are not eligible for grants.

Activities that are NOT eligible for funding include:

- * Capital construction
- * Endowments
- * Annual giving or fund raising
- * Salaries or benefits (unless directly performing specific project activities)
- * Indirect costs
- * Food items
- * Lawsuits/litigation
- * Political action programs/lobbying

Grants are awarded for one year, except in special circumstances. Recipients are accountable for documenting how grant funds are used through the submission of a final financial and narrative report due upon the completion of the project's activities.

A. CRITERIA

- * Will have a positive, tangible benefit to the Bay and Bay program
- * Presents clear objectives, including a plan for achieving these objectives (presents a specific, feasible plan of action to accomplish well-defined results)
- * Demonstrates qualifications necessary to carry out the project, including technical and financial feasibility

- * Provides an opportunity for cooperation among diverse organizations
- * Utilizes existing resources and expertise from local businesses, industries, public agencies, academic institutions, and conservation and environmental organizations
- * Emphasizes the service of volunteers to minimize administrative overhead
- * Demonstrates a realistic prospect for successfully completing the project.

B. APPLICATION PROCEDURES

Applicants should complete the grant application form available from the Chesapeake Bay Restoration Advisory Committee. No application will be accepted after the 5:00 p.m., October 1, deadline. Proposals should be typewritten. Applicants are encouraged to submit proposals in the areas of environmental education and restoration and conservation projects of the Chesapeake Bay.

1. Environmental Education Priorities

The goal of environmental education is to increase public awareness and knowledge about the Bay resulting in behavioral change. Proposals should:

- * supplement and enhance environmental training for educators
- * expand environmental educational opportunities and the use of existing educational resources (curricula, publications, and field studies) in schools and community programs for students, teachers, and adults
- * increase the involvement of students and the public in Bay restoration activities
- * increase public support for Chesapeake Bay restoration by purchase of Chesapeake Bay license plates

2. Restoration and Conservation Priorities

- * activities which contribute to meeting tributary strategy nutrient reduction goals
- * practices which protect water quality from non-point sources of water pollution resulting from the use of land
- * projects which enhance and protect tidal fishery habitats
- * projects which seek to seek to restore tidal fisheries (finfish, crabs, clams and oysters)
- * projects which focus on the prevention of toxic substances entering the Bay and its tributaries
- * activities which restore important Bay wetlands and habitat

Projects selected for funding will be included in the amended budget bill. Applicants will receive notification of their awards by the Advisory Committee upon approval of the state budget in the following May.

GRANT PROJECTS LIST

1996 GRANT PROJECTS

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Audubon Naturalist Society (ANS) &		
The Woodbridge Foundation	96-013	28
Chesapeake Bay Foundation		
Elizabeth River Project	96-032	52
Fairfax County Park Authority	96-037	53
Fairfax ReLeaf, Inc.		
Fauquier Outdoor Education Association		
Flint Hill Elementary School	96-055	17
Herndon Middle School & Tree-Action	96-047	53
Hoffler Creek Wildlife Foundation, Inc.		
James River Association		
John B Cary Elementary School	96-043	18
Keep Fauquier Clean, Inc.		
Mathematics & Science Center Foundation	96-046	25
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Rappahannock River Resources Council	96-031	35
Reston Environmental Education Foundation	96-053	35
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Monacan		
Mountain	96-093	38
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Development Area	96-009	57
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Laboratory	97-021	29
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Department of Forestry		
Eastern Shore of VA Earth Day		
Committee, Inc.	97-082	30
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Friends of Dragon Run, Inc.		
Friends of the Rappahannock	97-005	31
Friends of the Rivers of Virginia (FORVA)	97-003	32
Friends of the Shenandoah River	97-078	25
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Lewis Ginter Botanical Garden		
Mattaponi Heritage Foundation		
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Conservation II Class	97-068	58
Valley Conservation Council (VCC)		
Virginia Cooperative Extension		
Dinwiddie & Isle of Wright County	97-039	44
Eastern Shore Agricultural Research		
Center	97-027	45
Isle of Wright County		
Spotsylvania County 4-H		
Virginia Division of Izaak Walton League		
VA Marine Resources Commission		
Conservation & Replenishment Division	97-004	59

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 $^{^{**}\,}$ RESULTS FOR 1999 PROJECTS ARE NOT PROVIDED BECAUSE SUMMARY OF RESULTS ARE NOT DUE UNTIL GRANT ENDS IN SUMMER OF 2000.

ENVIRONMENTAL EDUCATION PROJECTS

IN THE SCHOOLS AND BY ORGANIZATIONS EDUCATING THE YOUTH AND THE COMMUNITY

* Projects listed under both education and restoration/conservation sections.

Education in the Schools

Aylett Country Day School

www.access.digex.net/~aylett/core.html

Project #: 97-083

Plan: Continuation of the water quality monitoring program, project CLEARR, an interdisciplinary study of estuarine ecology. This project has been ongoing for 3 years and Aylett Country Day School is seeking funding to continue its educational efforts and water quality monitoring and make a presentation in may, followed by an article to be published in local newspapers on the project and its findings.

Results: 7th graders continued a water quality monitoring project that began in 1994. Lab work was done at the school. A canoe trip took place on the Mattaponi River and a work boat trip on the Rappahannock River.

Amount granted: \$520

P.O. Box 70 Millers Tavern, VA 23115 (804) 443-3214

Chesapeake Bay Governor's School

Project #: 98-006

Plan: The Chesapeake Bay Governor's School seeks funds for a 1-week teacher workshop to assist in developing curriculum that will enhance its marine and environmental science focus. The goal of this project is for teachers to choose a Chesapeake Bay-related issue and to create curriculum units that supplement the existing study of marine and environmental issues.

Results: NA

Amount granted: \$7,075

P.O. Box 756 Tappahannock, VA 22560 (804) 443-4366

Flint Hill Elementary School

www.fcps.k12.va.us/FlintHillES

Project #: 96-055

Plan: Continue progress and/or expansion of environmental projects currently underway such as Bay clean-up projects, tree planting, an environmental science garden, and stream monitoring. Expansion would include increasing teaching resources, such as books, videos, and computer software. The school also hopes to send representatives of the faculty and students to the VAEE Conference.

Results: The students of Flint Hill have continued participation in the environmental projects in progress. Equipment and resources were purchased. The materials have been important in educating the students about the Chesapeake Bay. A garden has been built to educate about the bird and plant environment. The school also compiled The Chesapeake Bay Report, a collection of writings by the students about their experiences with the environment.

Amount granted: \$4,610

2444 Flint Hill Road Vienna, VA 22181 (703) 242-6100

Granby High School

Project #: 98-070

Plan: The purpose of this project is to educate the students at Granby High School regarding water quality in the Lafayette River by purchasing laboratory systems and probes.

Results: 6000 oyster seeds were purchased from a hatchery. The oysters were monitored and 2 oyster floats were constructed. Equipment to conduct tests on the Lafayette River was purchased. Students completed the testing of water.

Amount granted: \$2,155

7101 Granby Street Norfolk, VA 23505 (757) 441-1265

John B Cary Elementary School

Project #: 96-043

Plan: Enhance and strengthen the school's basic science curriculum for pre-K through 5th grades through the development of a natural science laboratory and the design of an outdoor classroom as natural habitat which will attract local wildlife.

Results: Students, parents, and teachers built a garden incorporating plants, animals, garden structures, water features and natural elements. The garden serves as an outdoor classroom and each class has the responsibility of a designated plot of the garden. The school has began construction of a web page outlining the grant and providing information on similar programs.

Amount granted: \$4,976

3021 Maplewood Ave Richmond, VA 23221 (804) 780-6252

John Wayland Elementary School

www.rockingham.k12.va.us/JWES/JWEhome.html

Project #: 99-011

Plan: The school proposes to teach students how to preserve and conserve natural resources through the establishment and use of a natural outdoor lab at Wildwood Park in Bridgewater and a science and art learning center classroom at the school.

Amount granted: \$1,600

801 N Main Street Bridgewater, VA 22812 (540) 828-6081



King George Middle School

Project #: 99-021

Plan: A watershed awareness project will be conducted for 7th graders to promote awareness of water sources of the Bay.

Amount granted: \$2,600

8562 Dahlgren Road King George, VA 22485 (540) 775-2331

Lynchburg City Schools

www.ace-lynchburg.com/business/ education/education.htm

Project #: 98-073

Plan: The Lynchburg school system proposes to train teachers and develop a curriculum that will address environmental sciences as part of the standards of learning. The course will focus on the importance of protecting the Bay from environmental contamination.

Results: Teachers and students went through extensive educational training and programs. The students went out into the field to conduct air, soil, and water quality tests.

Amount granted: \$8,400

Tenth and Court Streets Lynchburg, VA 24505 (804) 522-3700



New Kent Middle School

Project #: 97-069

Plan: This is an effort to enable special education students to: (i) evaluate community wetland needs, (ii) work with other students from different regions, (iii) learn problem-solving skills, and (iv) learn how to work with public and private enterprises to protect wetlands. Students will work with other students in New Orleans via the internet.

Results: Collaboration with the New Orleans school via the Internet was not available. However, the students began the wetland protection project by obtaining software and a book to guide them in developing a curriculum and wetlands/nature project. A project has been designated to began on a 23-acre farm site that was donated to the school.

Amount granted: \$400

P.O. Box 190 New Kent, VA 23124 (804) 966-9656

Norfolk Public Schools: Ocean View Elementary School Maritime Pathway Project

Project #: 98-010

Plan: This school is seeking funding for its maritime pathway project, which focuses on maritime studies, providing experiences related to Hampton Road's maritime heritage for students at the elementary, middle, and high school levels. Specifically, they want funds for staff development, field studies, and a part-time on-site facilitator to the project.

Results: Students from K to 5th grade participated in maritime field studies. The trips provide the students with experiences and interactions with the various maritime resources in the Norfolk area.

Amount granted: \$11,580

9501 Mason Creek Road Norfolk, VA 23503 (757) 441-1835

Northampton High School Legacy Program

Project #: 98-049

Plan: The school's program needs material to build 20 plywood canoes so the students may participate in environmental/educational activities on the waters of the Bay.

Results: Twenty at-risk high school students built twenty plywood canoes. An article about the program was published in the March 1998 edition of Educational Leadership.

Amount granted: \$1,679

16041 Courthouse Road Eastville, VA 23347 (757) 678-5144

Northside Middle School

Project #: 98-036

Plan: NMS hopes to become an environmental education resource to the community and is seeking funding to (i) hold oyster gardening workshops; (ii) plan and maintain an environmental garden; and (iii) establish a student web page that will be used to share ideas regarding conservation.

Results: NA

Amount granted: \$4,277.25

8720 Granby Street Norfolk, VA 23503 (757) 441-1825

Pembroke Elementary School

www.pembrokees.vbcps.k12.va.us

Project #: 96-002

Plan: Development of an educational program and the Coastal Ecology Camp, for 3rd graders. Provides handson field experience and classroom activities to increase appreciation for the marine environment.

Results: Prior to the museum visit, the students learned facts and vocabulary relating to the Chesapeake Bay. The students visited the science museum and went to Sunset Beach to collect specimens for aquariums to be set up in the classrooms. Student reports indicated that the students enjoyed the experience and learned about the animals found in the Bay.

Amount granted: \$1502.72

4622 Jericho Road Virginia Beach, VA 23462 (757) 473-5025

Randolph-Macon College

www.rmc.edu



Project #: 98-038

Plan: RMC will conduct a study on the relationship between land use and water quality. Focusing on: (i) long term stream monitoring program and (ii) development of GIS maps of the 4 watersheds located within Hanover county. The data will help determine how land use practices influence water chemistry, stream organisms and aquatic habitats.

Results: Research conducted to identify relationships between urbanization intensity and stream health in Hanover County. 15 stream monitoring sites were analyzed. Results suggest that urbanization may have to reach a limit before its effects are noticeable and that land use impacts may occur on a site-specific basis rather than on a watershed specific basis.

Amount granted: \$3,652

Dept of Biology, P.O. Box 5005 Ashland, VA 23005-5505 (804) 752-7293

Richmond Community High School

mother.richmond.k12.va.us/schools/rchs

Project #: 96-054

Plan: A 5-day field experience for 60 students to learn about marine and animal life, the Chesapeake Bay's ecosystem and how to apply scientific methodology. The Freshmen Minimester is a camping trip to the Barrier Island of Virginia's Eastern Shore. Lecturers and volunteer naturalists will aid the students in experiments, such as water and plant sample collections for testing and observation.

Results: Students of Richmond Community High School attended a pre-trip to Echo Hill Environment Camp, a pre-trip canoeing activity, and the Chesapeake Bay field camping experience. After the trips, students completed research papers and oral presentations delivered to students, parents, and community advocates concerning the environmental topics selected by the student.

Amount granted: \$7,000

5800 Patterson Ave Richmond, VA 23226 (804) 282-0880

Richmond Community High School

Project #: 99-040

Plan: 9th grade honors ecology students will participate in a Bay field experience trip to gain first-hand knowledge of the value of the Bay and its wildlife inhabitants, conduct investigation, data collection and analysis, and submit an analytical paper about the ecological balance of the Bay.

Amount granted: \$4,900

5813 Northford Place Chesterfield, VA 23832 (804) 271-5699

Spotswood Elementary School

www.spotsylvania.k12.va.us/spes/index.htm



Project #: 98-012

Plan: Development of a website for the Bay to be maintained by students and teachers. The goal of this project is to provide a place for children to gather information about Bay-related issues.

Results: The school has created a children's website for the Chesapeake Bay. The hardware needed to produce the website was purchased. Staff members completed a 12-hour training program.

Amount granted: \$1,676.93

400 Lorraine Ave Fredericksburg, VA 22408 (540) 898-1514

Stafford County Public Schools

www.pen.k12.va.us/Div/Stafford/home.html

Project #: 97-065

Plan: In an attempt to further develop a regional environmental education model. The Ferry Farm (boyhood home of George Washington) has been made available to the community for environmental education programming. Stafford County Public Schools would like to increase the public awareness of the Rappahannock and its relationship to the Bay by planning and observing sound environmental activities at this site, and creating river's edge data collection models and projects.

Results: 19 participants from 5 school districts attended the workshop. Materials and equipment from the workshop is kept in the Kenmore/Ferry Farm trunk, which has been used for high school seminars.

Amount granted: \$10,230.33

1739 Jefferson Davis Highway Stafford, VA 22554 (540) 720-5653

Tabb High School

Project #: 97-013

Plan: Tabb High School "Adopt a River/Stream Project." This project focuses on a study of the quality of waters around York County (approximately 25-30 creeks available to study) under the direction of Dr. James Reed, professor of environmental science at Christopher Newport University. The students will perform field tests using a Calculator Based Lab (CBL) system and then bench tests in the chemistry lab will be used to evaluate the accuracy of these field tests.

Results: Adopt a River/Stream Project initiated. The CBL required purchasing calculators that were used to perform different experiments.

Amount granted: \$3,652

4431 Big Bethel Road Yorktown, VA 23693 (757) 867-7400

University of Virginia Department of Civil Engineering

www.cs.virginia.edu/~civil



Project #: 98-003

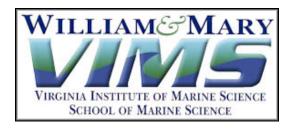
Plan: The Civil Engineering Department at UVA is seeking funding to conduct research to identify and quantify the sources of hydrocarbons in urban runoff from areas in the Bay Watershed. They also propose to test an innovative control device, which is designed for resolving oil and grease in urban runoff.

Results: NA

Amount granted: \$5,000

UVA, Thornton Hall Charlottesville, VA 22903-2442 (804) 924-6377

Virginia Institute of Marine Science



College of William & Mary

www.vims.edu

Project #: 99-056

Plan: VIMS seeks funds for a type of research project to evaluate the capacity of a particular salt marsh to aid in the degradation of TBT in contaminated soil.

Amount granted: \$12,000

P.O. Box 1346 Gloucester Point, VA 23062 (804) 684-7384

Crustacean Ecology Group

Project #: 98-055

Plan: In an effort to rehabilitate critical nursery habitat for blue crabs and other species, this group seeks funding to (i) find out how blue crabs abundance and distribution are correlated with seagrass fragmentation and (ii) experimentally determine how seagrass patches influence the survival of small blue crabs.

Results: The findings from this project indicate that seagrass fragmentation influences blue crab survival and abundance. The benefits of this study include an increased understanding of the way in which the structure of a vital refuge habitat influences a commercially important species in the Chesapeake Bay.

Amount granted: \$5,300

P.O. Box 299 Gloucester Point, VA 23062 (804) 684-7644

Department of Fisheries

www.fisheries.vims.edu

Project #: 98-056

Plan: VIMS would like to develop an educational tool available on CD in to order educate Virginia citizens regarding oyster reef community restoration, shallow water habitats, and the ecological connections between the two.

Results: A CD-ROM, an educational tool, entitled Oyster Reef Communities in the Chesapeake Bay (ORCCB) was developed.

Website: (www.vims.edu/fish/oyreef/orccb.html).

Amount granted: \$22,508

Project #: 99-055

Plan: VIMS seeks to increase the awareness and scientific literacy of citizens through continued development of the oyster reef public education program and the tools to make it widely available at a cost of \$1.00 per student.

Amount granted: \$10,779

P.O. Box 1346 Gloucester Point, VA 23062 (804) 684-7360

York High School

Project #: 98-042

Plan: The high school is requesting funding so that it may begin a comprehensive survey of water quality, biota, soils, and hydrology of brackish water in a tributary of the York and the Bay, including a portion of the West Branch-Wormley Pond watershed.

Results: NA

Amount granted: \$2,635

9300 George Wash. Memorial Highway Yorktown, VA 23692 (757) 898-0354

Organization/Government Education

YOUTH

Alexandria Seaport Foundation

www.capaccess.org/snt/alexsea/index.htm

Project #: 99-001

Plan: The Water Quality/Rowboat program will involve underserved and minority youth groups in the building of 10 rowboats. The rowboats will be used on the Potomac River to educate youth about impacts of non-point source pollution so they will become more aware and concerned about the protection of the Potomac River watershed.

Amount granted: \$20,000

6129 Edgewood Terrace Alexandria, VA 22307 (703) 329-1341



An Achievable Dream Academy

Project #: 99-029

Plan: The Academy will sponsor a Bay field trip for students to help identify chemical pollution and how it affects the balance of the ecosystem. Also, approximately \$2,500 will be used to purchase a video microscope.

Amount granted: \$2,625

726 16th Street Newport News, VA 23607 (757) 928-6740

Chesapeake Bay Foundation

www.cbf.org



Project #: 97-061*

Plan: "Shad Festival" coinciding with the annual spawning migration.

Results: Approximately 400 people attended the Shad Festival.

† Full details of this project are under the restoration section.

Project #: 98-059

Plan: The Chesapeake Choices and Challenges (CCC) in Virginia, is a collaboration with the Department of Education to develop and implement an interdisciplinary middle school curriculum of Bay studies that would (i) establish an advisory panel of volunteers from various disciplines to help guide the curriculum development efforts, (ii) work closely with the state's Dept. of Education staff, (iii) create an instructional module that meets state-specific criteria, and (iv) develop a sustainable training program designed to disseminate information about the Virginia CCC module to middle school teachers from at least 50% of Virginia's public and private middle schools.

Results: The Watershed Action for Virginia's Environment (WAVE) was developed. The program is an environmental curriculum that draws on what students find in his or her backyard, community, and state. It provides a hands-on approach to learning.

Amount granted: \$25,000

1001 E Main Street, Suite 710 Richmond, VA 23219 (804) 780-1392

Chesapeake Volunteers in Youth Services

Project #: 98-071

Plan: The CBYCC in an effort to continue educating atrisk youths about the environment, is seeking funding to be able to continue to do this along the Bay.

Results: Supplies need for the various programs were purchased. Testing of water and constructing wildlife habitats continues. The project has received an award from the National Arbor Day Foundation and an educational award from the Virginia Petroleum Council.

Amount granted: \$3,600

Project #: 99-057

Plan: This organization seeks to continue giving youth the opportunity to learn about the environment through environmental community service projects and provide services to communities that require habitat enhancement.

Amount granted: \$15,000

301 Albemarle Drive Chesapeake, VA 23322 (757) 382-8153

Claude Moore Park - County of Loudoun

state.vipnet.org/loudoun/prcs/events/ claudemoorepark_/default.htm

Project #: 98-057

Plan: The Park is requesting funding to obtain materials for students of local schools and scout groups that will: (i) familiarize participants with pond environment, both plant and animals, (ii) examine the health of the ponds and (iii) teach how local residents affect the health of these ponds, the local watershed an the Bay.

Results: Materials to conduct studies of the water quality in ponds of the park were purchased. Members of the community conducted the studies.

Amount granted: \$1,800

Claude Moore Park - County of Loudoun (continued)

Project #: 99-033

Plan: The Park would like to purchase an EnviroScape II Wetlands Deluxe Unit, a watershed model, which would show how pollutants affect the local watershed. The Park also wants to drain and dredge the upper pond at the park and install a new set of weir drainage systems that would handle flooding in a controlled manner.

Amount granted: \$1,004

21544 Cascades Pkwy Sterling, VA 20164 (703) 421-0443

Fauquier Outdoor Education Association

Project #: 96-033

Plan: Conduct an environmental education program, "What's in Our Water", designed for 8th grade students and their teachers to help them understand that what they discard in sewage systems and what runs off from farms and lawns goes into local streams, ricers, and ponds and eventually into the Chesapeake Bay.

Results: 5 teachers and 225 students participated in the lesson. The lesson gave background information about the Chesapeake Bay Watershed (examples of sources of pollution and sample data tables), fieldwork activities, and experiments.

Amount granted: \$2,102

705 Waterloo Road Warrenton, VA 22186 (540) 347-8670

Friends of the Shenandoah River

Project #: 97-078

Plan: FSR is seeking funding to update and improve their education resources: a) upgrade of displays for presentations, b) purchase of a VCR for video presentations, c) Internet access, d) equipment for water quality study, and e) Shenandoah River video production. They routinely work with such groups as 4-H, Scouts, schools, CBF, adult groups, etc. to educate about preservation of the Bay.

Results: Educational displays were produced. Benthic monitoring occurred.

Amount granted: \$3,100

P.O. Box 410 Front Royal, VA 22630 (540) 536-4948

Greater Reedville Association, Inc. & Reedville Fishermen's Museum

Project #: 99-039

Plan: The Association is proposing a pilot program to introduce teachers of children K-12 to the environmental health of Bay as well as the maritime history associated with the lives of Bay watermen.

Amount granted: \$1,850

P.O. Box 306 Reedville, VA 22539 (804) 453-6529

Greater Richmond Area Health Education Center, Inc.

views.vcu.edu/ahec/richmond.htm

Project #: 99-025

Plan: This organization seeks to expand classroom research courses in which students monitor and assess water quality.

Amount granted: \$7,500

4901 Fitzhugh Ave, Suite 301 Richmond, VA 23230 (804) 358-7280

Keep Fauquier Clean, Inc. (Cedar Run Monitoring Project)

Project #: 99-015

Plan: Students at Fauquier High School will participate in Bay Foundation studies which include water testing and a weekend environmental study on watershed ecology. Data collected will be made available to the community to assist in the improvement of water quality in Cedar Run, a priority stream. Data will also be compared with that from Liberty High School students at Marsh Run.

Amount granted: \$3,014

98 Alexandria Pike Warrenton, VA 20186 (540) 347-3120

Mathematics & Science Center Foundation

Project #: 96-046

Plan: 6 days of teacher training workshop ("Environmental Studies of the Chesapeake Bay and its Tributaries") will educate 15 teachers (K through 12th grade). Teacher-participants will learn methods of collecting chemical, physical, geographical, and biological data.

Results: The Center conducted a 6-day class in ecological studies and environmental education, which was announced by brochures that were mailed to schools in the Richmond area. Fourteen teachers enrolled in the class and the Presquile field trip. Schools have reported they have developed environmental fairs, recycling projects, and ecology clubs as a result of greater faculty and student involvement in environmental issues.

Amount granted: \$16,068

2401 Hartman Street Richmond, VA 23223 (804) 343-6525

Nature's Wonder World, Inc.

Project #: 98-030

Plan: This organization is seeking funding to take the environmental workshop a step further by remaining involved in all facets of environmental education. They propose to do this by using existing curriculums in combination with field experiences that complement and expand current classroom goals of educating both teacher and student regarding watershed issues.

Results: 360 5th and 7th grade students visited the Occoquan Bay National Wildlife Refuge. The students and teachers participated in catch-and-release activities. Records were kept and the date was used to understand the qualities of water and differences in habitat components.

Amount granted: \$5,000

Project #: 99-049

Plan: This project seeks to increase knowledge and awareness of the interrelationships between water and other Bay habitat components. Hands-on field study will be provided to 7th graders and teachers.

Amount granted: \$4,100

2560 Paxton Street Woodbridge, VA 22192 (703) 490-0455

Norfolk Environmental Commission

Project #: 97-064

Plan: The Norfolk Environmental Commission will open the Ernie Morgan Environmental Action Center in May 1997. It is their hope to conduct tours for 500 4th and 5th graders, train 12 high school seniors on how to lead and teach elementary students, and to make presentations on Bay preservation to 100 business leaders in the facility.

Results: Twenty high school students were trained on how to lead presentations and teach elementary level students. The high school students assisted with the "Value of Wetlands" presentations conducted for 600 4th grade students in Norfolk schools. They also made presentations on pollution prevention, sustainable landscaping, and Bay preservation to 20 business leaders. An interactive hands-on exhibit has been designed to demonstrate the beneficial affects of vegetated buffers in waterways.

Amount granted: \$14,500

Room 790, City Hall Norfolk, VA 23510 (757) 441-5227

Northern Virginia Regional Park Authority

www.nvrpa.org



Project #: 97-008

Plan: Education Workshop/canoe trip with Arlington schools and the Potomac Overlook park in the topic area of Chesapeake Bay ecology. The trip will cover basic identification of common marsh plants and animals, use of maps, and a review of ecology principles learned during the workshops. This project will enable teachers to conduct classroom sessions on Bay issues. Schoolyard projects will focus on such areas as: Bay ecology; a detailed "walk-through" of Bay educational materials; and a how-to session involving erosion-control, tree planting, water catchments, composting, nutrient cycle studies and efforts to reduce nutrient run-off.

Results: A workshop was held for 30 teachers at Potomac Overlook and Pohick Bay Regional Parks. The workshop included a presentation on ecology, a discussion on schoolyard projects, and Chesapeake Bay field trips.

Amount granted: \$3,570

Project #: 99-012

Plan: The Potomac Overlook Regional Park will develop a series of 4 work sessions designed to educate the public about the improvements they can make in their homes and yards, thus improving the water quality of the Bay.

Amount granted: \$2,411.20

2845 Marcey Road Arlington, VA 22207 (703) 528-5406

Organization/Government Education

COMMUNITY

Alliance for the Chesapeake Bay

www.acb-online.org

Project #: 97-063*

Plan: This project focuses on restoration of riparian forests in the Chickahominy watershed by engaging businesses, neighborhoods and civic associations in restoration work.

Results: Educational programs were presented to school and youth organizations in the watershed. The Chickahominy River Monitoring Project was sustained and expanded by training and equipping citizen volunteers. Restoration projects in the Chickahominy watershed were carried out.

Amount granted: \$25,000

Project #: 98-041

Plan: Requesting funding to continue the Chickahominy Watershed Project, specifically in the sub-watershed of the Henrico County and the City of Richmond. The proposed project includes the training of water monitoring volunteers, implementation of several restoration projects, and provides education programs.

Results: The Chickahominy Watershed project was sustained and expanded by training and equipping citizen volunteers. The Jordan's Branch restoration project was initiated, with long term planning and a project kick-off clean-up event.

Amount granted: \$10,000

P.O. Box 1981 Richmond, VA 23218 (804) 775-0951



Audubon Naturalist Society & The Woodbridge Foundation

www.AudubonNaturalist.org

Project #: 96-013

Plan: A model environmental watershed education/stewardship project in Northern VA to expand participants' awareness about local stream health and to involve them in activities related to local water quality and the Chesapeake Bay restoration effort. In addition, it will enhance environmental curriculum for students K-12. The proposed program will be a partnership effort with local governments and will serve as a regional resource for Northern VA/Potomac watershed jurisdictions. Features: slide show presentation, watershed walks, workshops, teacher training programs, and government and organization connections.

Results: Over 450 people participated in the water-quality awareness and monitoring activities in Prince William County. Monitoring has taken place at sites in the Occoquan watershed. 30 participants attended 7 workshops. Exhibits were displayed and presentations were given at 7 special events (Earth Day Fairs, etc) through out Northern Virginia.

Amount granted: \$27,350

ANS of Cent Atlantic States 8940 Jones Mill Road Chevy Chase, MD 20815 (301) 652-9188

The Woodbridge Foundation 14344 Jefferson Davis Highway Woodbridge, VA 22191



Chesapeake Bay Foundation, York Chapter

Project #: 97-086

Plan: Development of an educational tabletop display featuring Bay information to be used at local festivals and events.

Results: An interactive exhibit, including photos and maps, was developed. It has been used at local and regional events.

Amount granted: \$1,150

P.O. Box 643 Yorktown, VA 23690

City of Hampton Public Works Environmental Relations Office

Project #: 99-043

Plan: The Environmental Relations Office will build a 3D cross-section model of a home and lot demonstrating the path of waste and storm water and a brochure explaining the model's purpose. This will be used in a campaign to restore Newmarket Creek.

Amount granted: \$4,000

22 Lincoln Street Hampton, VA 23669 (757) 727-6325

City of Norfolk, Division of Environmental Storm Water Management

www.norfolk.va.us/publicworks/stormwater.htm

Project #: 98-076

Plan: In an effort to create a greater awareness of the connection between actions on land and water quality, the City of Norfolk proposes an intensive public education campaign to publicize its storm drain/Bay poster that carries the message: "Storm Drains are Pathways to Our Bay and Our Waterways. Make the Connection."

Results: A colorful poster depicting a litter-strewn storm drain pouring aimlessly into a wildlife-rich waterway was made. The poster was advertised in theaters, billboards, newspapers, and on t-shirts. The department has also created coloring books for kids and brochures for adults. Anti-pollution messages were inserted in monthly utility bills.

Amount granted: \$22,700

2233 McKann Ave Norfolk, VA 23509 (757) 441-2408

Committee for the Bessie Weller Green Laboratory

Project #: 97-021

Plan: This project creates the Bessie Weller Green Laboratory with specific goals in mind: 1) stabilize stream bed erosion; 2) provide access to the stream and forest areas; and 3) purchase curriculum support materials (books, microscopes, hand lens, aquariums and measuring devices).

Results: The Committee has mapped and cleared a trail; done an extensive bird census; located a site and started work on a bridge to span the creek. Materials, such as a microprojector, aquarium kits, and scopes, for the curriculum were purchased.

Amount granted: \$1,600

313 Old Greenville Road Staunton, VA 24401 (540) 885-4878

Department of Conservation and Recreation

www.state.va.us/~dcr/dcr_home.htm



Project #: 97-054

Plan: Methods of Riparian Restoration for Channel & Streambank Stability: Training & Demonstration Approach. Hands-on field workshops for the Shenandoah Valley, North & South Piedmont and coastal Virginia. Materials needed to install vegetative and structure stream stability and bank stability practices.

Results: 4 riparian restoration workshops were held with 360 persons attending. On the 2nd day of the workshop, participants installed stream and river bank stabilization practices.

Amount granted: \$20,000

203 Governor Street, Suite 206 Richmond, VA 23219 (804) 371-7486

Department of Forestry

state.vipnet.org/dof/index.html

Project #: 97-007

Plan: Restoration of a streamside forest on a Great Run tributary to investigate, design, implement, and demonstrate effective and environmentally sound riparian restoration in Virginia.

Results: A *Riparian Forest Handbook*, a field guide, was printed.

Amount granted: \$9,000

P.O. Box 3758 900 Natural Resources Drive Charlottesville, VA 22903-0758 (804) 977-6555



Eastern Shore of Virginia Earth Day Committee, Inc.

Project #: 97-082

Plan: In an effort to broaden environmental education at the schools of Accomack and Northhampton, this project proposes to organize 4 assemblies (approximately 800 students) and demonstrate the Virginia Marine Science Museum Mobil Lab (co-sponsored by Virginia Marine Science Museum Chesapeake Bay Marine Lab).

Results: VMSM staff visited Occohannock and Kiptopeke Elementary Schools. Over 650 students in 3rd to 5th grade participated in the program. The program involved presentations and lab tours.

Amount granted: \$500

Project #: 98-024

Plan: Virginia Earth Day is in two parts and is in keeping with last year's project (97-082). This project combines environmental education with conservation/restoration. The committee would like to hold another Earth Day program for the students in both Accomack and Northampton Counties as well as hold a litter clean up for the 2 counties.

Results: Approximately 800 4th and 5th grade students participated in a program about the Chesapeake Bay. The Virginia Marine Science Museum co-sponsored the program.

Amount granted: \$550

P.O. Box 538 Eastville, VA 23347 (757) 678-0442

Elizabeth River Project

www.pilot.infi.net/~erp/index.htm

Project #: 97-106

Plan: State of the River Report. This report is to be published in the fall of 1997 as a report card to the public on the community's progress with implementing the Elizabeth River Project's 18-point action plan for reducing toxic impacts in the Elizabeth River. Funding is for the development and printing of the report as well as for a public seminar. Funding is also for printing of the organization's quarterly newsletter.

Results: Production of State of the River Report and continued publication of a newsletter. Subscribers increased from 1,400 to 2,000. Over 200 people attended a public seminar and over 70 leaders attended the leadership summit.

Amount granted: \$17,600

Project #: 98-016

Plan: This multi-faceted project combines both environmental education (Elizabeth River Appreciation Day and Art Exhibit; storm water pollution exhibit and newsletter) with restoration and conservation (wetlands restoration and a survey of human consumption of fish).

Results: An interactive exhibit on urban stormwater runoff was opened at the National Maritime Center. A project involving design, excavation and replanting with native marsh and upland plants was completed with the help of 80 volunteers. A survey of human

consumption of fish on the Elizabeth River was designed and is ready for implementation. The newsletter, <u>Mudflats</u>, continues to grow.

Amount granted: \$15,000

Project #: 99-024

Plan: The project proposes to continue to increase public awareness and knowledge about how to restore the Elizabeth River, 1 of 3 "toxic hotspots" on the Bay.

Amount granted: \$28,500

801 Boush Street, Suite 204 Norfolk, VA 23510 (757) 625-3648

Fairfax ReLeaf. Inc.

www.geocities.com/RainForest/5663



Project #: 99-019

Plan: The applicant proposes to develop several pilot demonstration projects to assist neighborhoods to restore woodland landscape and semi-natural habitat in quasiriparian areas.

Amount granted: \$6,000

P.O. Box 6141 McLean, VA 22106 (703) 324-1409

Friends of the Rappahannock

www.crrl.org/for

Project #: 97-005

Plan: Establish a BMP Education/Outreach project for land developers in the Rappahannock watershed. The goal of this project is to educate, motivate and enable the land developers to implement enhance BMPs at new and existing developments in the watershed.

Results: "Growing Greener in Your Rappahannock River Watershed" guidebook was produced. This serves as a tool to "market" the economic benefits of reduced-impact development practices to developers and site planners.

Amount granted: \$3,200

P.O. Box 7254 Fredericksburg, VA 22404 (540) 373-3448



Friends of the Rivers of Virginia (FORVA)

Project #: 97-003

Plan: Create "State of the Rivers Report" for Virginia that would provide information to the citizens of the Commonwealth in laymen's terms explaining the status of Virginia's waters. This report would encourage citizens to become active in the conservation of the state's rivers and streams.

Results: This project has been extended to June 1999 because of changes in EPA water quality reporting requirements.

Amount granted: \$25,000

1302 Second Street SW Roanoke, VA 24016 (540) 343-3696

Hoffler Creek Wildlife Foundation, Inc.

Project #: 96-015

Plan: This project is to acquaint people with native ecosystems by providing opportunities to observe and study plants and animals living freely in and around the Hoffler Creek watershed. An objective is to teach people about the habitat's impact on the health of the Chesapeake Bay. Maps and brochures for a trail system with identification signs will be established.

Results: The Foundation produced an exhibit that has been displayed at several events.. Maps, signs, brochures, and other presentation tools were produced to educate the community about the Foundation. Community volunteers donated over 2,100 hours of service during 1997-98. The Foundation accomplished construction of 2 complete trails with signs and brochures as guides to the trails and its habitat.

Amount granted: \$13,425

Hoffler Creek Wildlife Foundation, Inc. (continued)

Project #: 99-050

Plan: The HCWF is requesting funds to provide another trail at the preserve, to produce and install 2 more interpretative signs, to offer volunteer training and support for guides and docents, and to expand public outreach programs.

Amount granted: \$17,900

4704 River Shore Road Portsmouth, VA 23703 (757) 483-3054

James River Association

www.jamesriverassociation.org

Project #: 96-049

Plan: Expand the educational program Educational regarding the benefits of the fish passages and other efforts to restore anadromous fish species, such as striped bass, shad, and river herring, in the James River and Chesapeake Bay Watersheds. To be accomplished by producing audio-visual materials and field activities for school groups and the general public.

Results: Funds were used for production of educational brochures on the fish restoration project. This included review of information available; design, layout, and production of artwork for the interactive brochure/mobile kit; review of materials by educators who provided input on revisions; and printing of brochure kits. A transmittal package for distribution of the brochures is near completion.

Amount granted: \$15,000

James River Association (continued)

Project #: 97-060

Plan: To improve water quality, the James River Watershed Coalition (made up of the James River Association and all 17 SWCDs in the basin) hopes to implement a comprehensive GIS mapping project to identify land uses and resources in the watershed and to provide tools for watershed planning and tributary strategy development.

Results: Hosted 2 workshops on land planning and easements. GIS maps were completed and distributed to areas from Richmond to Hampton Roads. The Association held a conference to discuss conservation projects and environmental solutions.

Amount granted: \$20,000

Project #: 98-014

Plan: This project is seeking funding for various components of this on-going project, including GIS map production, Internet home page input, slide program and development, and assisting riparian land owners with conservation easement donations.

Results: GIS maps were completed and are to be distributed to the SWCDs at a meeting of the James Watershed Conservation Committee, planning district commissions, and local governments. The James River Conference was conducted. JRA also has participated in planning meetings, established a riparian restoration program, and hosted citizen workshops.

Amount granted: \$20,000

P.O. Box 110 Richmond, VA 23218 (804) 730-2898

Lewis Ginter Botanical Garden

www.ego.net/us/va/ric/gardens/index.htm

Project #: 97-050

Plan: Natural Landscape Symposium. An educational opportunity targeted toward newcomers to the Richmond area emphasizing gardening practices and their effects on the Bay. This year's focus is on the dangers of invasive plants.

Results: The symposium, entitled "Go Native!" was a 2-day event. A total of 113 people attended. The program included a keynote speaker, lecture topics, and a field trip to the Cumberland marsh Preserve.

Amount granted: \$3,300

1800 Lakeside Ave Richmond, VA 23228-4700 (804) 262-9887

Loudoun Wildlife Conservancy

Project #: 98-033

Plan: In an effort to educate county residents on the importance of water quality and to build on the already successful project (comprised of the Audubon Naturalist Society and North Fork Goose Creek/Catoctin Watershed Project), the Loudoun Wildlife Conservancy is seeking funding to expand into the eastern section of the county where the greatest threat to water quality from development exists.

Results: A slide show on stream preservation, a display on healthy watersheds used at fairs, and a training/demonstration program on riparian buffers was developed. Also 2 years of stream monitoring data was imputed into the Loudon County's computer system. A workshop was to be conducted on how to prevent soil erosion and control sediment runoff and a report on "The State of Loudon County's Watershed" will be published.

Amount granted: \$7,800

19499 Yellow Schoolhouse Road Round Hill, VA 20141 (540) 554-2542

Piedmont Environmental Council (PEC)

www.pec-va.org



Project #: 98-019

Plan: The PEC proposes to develop a comprehensive set of maps illustrating easements and development potential for the entire county of Albemarle. This information will then be used to inform landowners about the environmental and tax benefits of conservation easements and to generate easement donations in Albemarle County.

Results: Neighborhood maps for Albemarle County landowners were created to show land protected under permanent conservation. PEC held events to present information on conservation easements. More easements were recorded in Albemarle than in any other county in the Commonwealth during this year.. 17 landowners placed over 3,600 acres under permanent conservation easements.

Amount granted: \$15,000

Project #: 99-006

Plan: The PEC proposes to create maps for its Orange County easement education project. It is also requesting \$5,000 for updating easement maps created for Albemarle County using last year's grant monies.

Amount granted: \$20,000

1111 Rose Hill Drive, Suite 1 Charlottesville, VA 22903 (804) 977-2687

Prince William County Department of Public Utilities

Project #: 98-075

Plan: The PWC Dept of Public Utilities is seeking funding for its project that focuses on proper disposal of hazardous waste. The Department will hold workshops that are tailored to specific types of businesses.

Results: Workshop conducted for dry cleaning professionals to help them safely and effectively handle, store, and dispose of chemicals. The workshops provide updates to regulations and new techniques and serve as a forum to ask questions and seek explanations.

Amount granted: \$1,000

4379 Ridgewood Center Drive Prince William, VA 22192 (703) 792-7070

Prince William County Department of Public Works

www.co.prince-william.va.us/pworks

Project #: 98-044

Plan: PWS Dept of Public Works will purchase an EnviroScape watershed model for classroom presentations and special events to help increase public awareness about local waters, pollution prevention and the proper disposal of hazardous materials.

Results: The EnviroScape model was purchased for classroom and special event presentations. In addition, the department bought several add-on models to discuss hazardous waste, groundwater and riparian restoration.

Amount granted: \$1,711

4379 Ridgewood Center Drive Prince William, VA 22192 (703) 792-6819



Rappahannock River Resources Council

Project #: 96-031

Plan: A joint effort between the RRRC and 3 Planning District Commissions to create a shoreline planning strategies manual for the lower Rappahannock River region.

Results: After advisory meetings, issues and concerns were established as areas to address in the manual. Data and information was collected through forums. Based on the issues and information gathered, a manual was produced. The Council is working on education and distribution to the public.

Amount granted: \$30,000

Box 220 Tappahannock, VA 22560 (804) 443-5629

Reston Environmental Education Foundation

Project #: 96-053

Plan: Contract with a design firm to draft plans for a mapscape of the western edge of Fairfax County to the Eastern Shore. This will provide hands-on learning of watersheds within the greater Chesapeake Bay ecosystem.

Results: NA

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Amount granted: \$10,000

P.O. Box 3421 Reston, VA 22090 (703) 648-4463

SciNet Associates

Project #: 96-056

Plan: An educational summit that will bring together present and potential environmental leaders from 5 historically black Virginia colleges and universities. The focus will be on the participants', primarily African-American, potential contributions to the restoration and protection of the Chesapeake Bay.

Results: NA

Amount granted: \$5,875

P.O. Box 35196 Richmond, VA 23235 (804) 745-5508

Shea Terrace Civic League

Project #: 97-093

Plan: To begin restoration efforts in Scott's Creek, which at one time supported oysters, but which has silted in. The goal is to restore its ecosystem and treat storm water runoff by dredging all fingers of the Creek and implementing BMPs. Funding is sought for (i) a wetland park feasibility study; (ii) wetland permit and construction; (iii) community education; and (iv) borings and testing of sediments.

Results: The newsletter, Shea Terrace Matters, continues to be published. Meetings have been held to discuss Vision 2005. Studies have been done in preparation for the park development, which has altered the plans.

Amount granted: \$9,000

131 Jamestown Ave Portsmouth, VA 23704 (757) 399-6774

Shenandoah Valley Pure Water 2000 Forum, Inc.

www.cisat.jmu.edu/projects/forum/forum.htm



Project #: 99-054

Plan: The Forum proposes to expand and refine the 1999 version of the Shenandoah Valley Environmental Education Conference.

Amount granted: \$1,825

701 Carrier Drive, MSC 4102 Harrisonburg, VA 22807 (540) 568-8793

Soil & Water Conservation Districts

Culpeper

Project #: 96-072

Plan: To fund the purchase of a Watershed Model, to be used in 4th grade classes, and a Groundwater Flow Model, to be used in 7th grade curriculum and above grade levels. District includes: Culpeper, Greene, Madison, and Rappahannock counties. Schools: 19 elementary, 5 intermediate, 5 high schools, 2 technical, 8 private/religious. Approximately 15,400 students total. Models are currently being borrowed from adjacent District, which is limited usage.

Results: Models purchased. Presentations to all grade levels. Models used for other programs and activities, such as fairs and adult groups. Models are accessible to schools and other groups in the district.

Amount granted: \$1,074.16

604 S Main Street Culpeper, VA 22701 (703) 825-8591

Eastern Shore

Project #: 98-011

Plan: This SWCD seeks funding for a Pentium 586 computer, so that they may run a nutrient management software program to aid in mitigating nutrient runoff and leaching.

Results: The district purchased a computer, which has helped in writing Nutrient management plans. The district wrote plans for 60 farm tracts covering 2,983 acres in one year.

Amount granted: \$1,343.87

23378 Commerce Drive, Suite 3 Accomac, VA 23301-1315 (757) 787-1251

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Headwaters

Project #: 98-051

Plan: The HSWCD, together with a number of other state and federal natural resource agencies, is planning a workshop to educate the citizens of the area about these agencies.

Results: An invitation and informative brochure mailing of 988 pieces was sent out to landowners in the district to inform the public about Conservation Assistance Information Day. 8 agencies set up displays and materials. Representatives of the agencies presented an overview of the agencies to the 55 members of the public.

Amount granted: \$250

Project #: 98-053

Plan: The SWCD seeks funding to send 30 local teachers to a workshop sponsored by the Chesapeake Bay Foundation.

Results: 16 teachers traveled to Port Isobel for 3 days of study concerning the problems and potential solutions of the Chesapeake Bay.

Amount granted: \$3,000

Headwaters

(continued)

Project #: 99-010

Plan: The SWCD will host a 1-day "Water Bus Tour" for 45 teachers to a local weather purification plant, the sewage treatment plant, and management practice sites. The program will include a workshop on using the EnviroScape Model in public schools. The tour will be filmed for future use.

Amount granted: \$1,229

Project #: 99-060

Plan: SWCD proposes to compile a permanent resource collection for each high school's Envirothon coach and team in the district and send these teams to a Bay workshop next summer.

Amount granted: \$3,380

P.O. Box 70 Verona, VA 24482-0070 (540) 248-4328

James River

Project #: 98-009

Plan: The SWCD wants funding to construct an "EnviroScape" to be used at field days, educational expositions and other activities. Possible teacher training on the model may also be initiated.

Results: The EnviroScape model was completed in the spring of 1998. The model has been used for over 12 demonstrations to school groups and for several district events. Results of the use of the model are an increased awareness of sources of non-point pollution as well as ways to decrease the amount of such pollution.

Amount granted: \$950

6450 Courthouse Road Prince George, VA 23875 (804) 748-2235

John Marshall

Project #: 99-008

Plan: The SWCD will develop a wetlands landscape addon, video, and environmental resource guides for students in grades 4 and 7.

Amount granted: \$520.95

98 Alexandria Pike, Suite 31 Warrenton, VA 20186-2849 (540) 347-3120

Loudoun

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Project #: 98-015

Plan: The Loudoun SWCD is seeking funding for an education workshop to make students and other citizens aware of the BMPs involved in establishing riparian buffer areas and streambank stabilization.

Results: The "Streambank Stabilization and Riparian Restoration Workshop" was completed. Approximately 600 linear feet of severely eroded streambank was structurally and vegetatively restored and over 23 acres of Riparian forest established. Additionally, 75 middle and high school students visited and participated in the project.

Amount granted: \$4,905

Project #: 99-045

Plan: The SWCD will develop and offer a riparian restoration workshop at Wheatland Farm, Waterford to teach the value of riparian zones of the Bay tributaries.

Amount granted: \$3,900

30-H Catoctin Circle SE Leesburg, VA 20175 (703) 777-0457

Monacan

Project #: 96-090 & 96-091

Plan: A joint cooperative stream monitoring effort between the Monacan district and Goochland and Powhatan high school students to determine the present water quality conditions and derive strategies for the James River's preservation and improvement.

Results: 4 monitoring kits were purchased. Goochland and Powhatan high schools each received a kit and have continued the monitoring program. The other 2 kits are for new volunteer participants. The new participants will attend a day of introduction and training.

Amount granted: \$880 each

Project #: 97-014 & 97-016

Plan: The Soil & Water Conservation District (SWCD), in cooperation with Powhatan and Goochland high schools proposes to conduct a stream water monitoring project. Lab equipment is necessary for this project so biology students can collect water samples for analysis to determine nutrient levels.

Results: Several groups have been monitoring the streams in Powhatan County. The lead group is from Powhatan High School who has developed a natural resource conservation class.

Amount granted: \$1,600 each

Project #: 98-047 & 98-048

Plan: Goochland County and Powhatan County and surrounding area schools have been successful in implementing this water monitoring project for the past 2 years and would like to continue the effort. They are requesting funding for monitoring kits so that participating students will be able to restock their supply, thus carrying this program into future years.

Results: NA

Amount granted: \$958.66 each

P.O. Box 66 Goochland, VA 23063 (804) 556-4936 **Mountain**

Project #: 96-093

Plan: Develop base-line date from monitoring of the quality of the Jackson River upstream and downstream of the Kim-Stan landfill. The study includes: orientation, discussion and training of methodology for the studies of aquatic ecology and water quality; data collection and collation from four sample sites; analysis of data, discussion of findings and a draft report.

Results: Completed and successful. A professor and 2 college students conducted the study and produced a report. Conclusion of study was that the release of leachates from the Kim-Stan landfill caused degradation and perturbation of the river community.

Amount granted: \$1,700

P.O. Box 310 Warm Springs, VA 24484 (703) 893-7281

Natural Bridge

Project #: 97-042

Plan: The district, as part of its program to educate students and citizens about the Chesapeake Bay, needs certain equipment and training aids to enhance its training component.

Results: An EnviroScape model was purchased and used for demonstrations at schools and community events. One teacher from Rockbridge County High School went the Patuxent River Trip.

Amount granted: \$1,354

Natural Bridge (continued)

Project #: 98-043

Plan: As part of the educational outreach, the NBSWCD is seeking funding for a groundwater component for their EnviroScape model, earth science video lab, 3 teacher training/education scholarships, topographic quadrangle maps, and seminar on water quality monitoring.

Results: The EnviroScape Model groundwater component was purchased and used in demonstrations in Rockbridge County and Lexington City schools. Activity booklets, bookmarks or other conservation education literature was distributed to students and adult participants. 10 teachers participated in the "Blue Ridge to the Bay Teacher's Trip." 19 topographic guadrangle maps of Rockbridge County were purchased. The maps have been useful in locating farms and other sites and are on display for public view and use.

Amount granted: \$1,217

Project #: 99-031

Plan: This environmental education project would offer teacher training/education scholarships for 10 individuals, update and print "Resource Handbook" for the Rockbridge area, and provide educational resource and instructional equipment items for use in area high schools.

Amount granted: \$1,500

30 E Preston Street Lexington, VA 24450 (540) 463-7125 **Northern Virginia**

Project #: 98-028

Plan: NVSWCD is requesting funds to purchase an EnviroScape Model to educate teachers and students alike about watersheds and how their activities affect water quality. Additionally, NVSWCD will create materials for small groups to us in conducting soil an water conservation experiments.

Results: A comprehensive hands-on education program for educating teachers, students, and youth groups about watersheds was created.

Amount granted: \$1,361.31

12055 Government Center Pkwy #905 Fairfax, VA 22035 (703) 324-1460

Peter Francisco

Project #: 97-006

Plan: Bear Creek Lake Watershed Project - develop a cooperative approach to comprehensive watershed management by combining professionals and local expertise. This project will provide an opportunity to review and revise BMPs.

Results: Sediment monitoring stations were set up around Bear Creek Lake. Education tours of youth groups and teachers were conducted (approximately 200 people). Landowners were contacted about the potential damage of soil erosion and nutrient runoff and instructed on best management practices.

Amount granted: \$1,900

P.O. Box 80 Cumberland, VA 23040-0080 (804) 492-4390

Piedmont

Project #: 97-108

Plan: In an effort to reduce tributary stream miles adversely impacted by NPS, this project seeks to develop a pilot "Adopt-A-Watershed" curriculum for the schools in Amelia, Nottoway, and Prince Edward counties.

Results: A curriculum for grades K-12 was developed and provided to the teachers in the Piedmont region of the James River Watershed. Remaining unused money is scheduled to be used for a teachers' conference.

Amount granted: \$3,600

103 S Main Street Farmville, VA 23901 (804) 392-3782

Prince William

Project #: 97-031

Plan: Conduct BMP and NPS seminars for part-time farmers in the Prince William County area. Costs to be paid for by grant money are mileage expense, bullhorns, postage, paper, copying and district logo folders.

Results: The District held 2 seminars about pollution reduction and BMP installation and maintenance. Several media organizations received a news release about the seminars.

Amount granted: \$1,358

Project #: 98-031

Plan: PWSWCD, in an effort to inform teachers of the many opportunities to enhance and reinforce conservation education, and educate children on non-point source pollution, would like to create a Conservation Education Resource Display for school libraries and teachers' lounges.

Results: A display of pictures was used at the District's annual events and programs. Brochures and samples of new materials and activities were also provided. A field trip of a park on the Potomac was conducted.

Amount granted: \$1,300

Prince William

(continued)

Project #: 98-032

Plan: PWSWCD would like funding to update and reprint the publication "Citizens Action Directory for Water Quality in Prince William County" for distribution to county residents.

Results: The "Citizens Action Directory for Water Quality" was revised and reprinted. Additions include frequently asked questions, websites and email addresses.

Amount granted: \$1,022.50

9263 Corporate Circle Manassas, VA 20110 (703) 361-1710

Robert E Lee

Project #: 97-071

Plan: The Blackwater Creek watershed education project is a watershed-based environmental education program which would compile existing information about the watershed, develop a K-12 curriculum, deliver programs to school children from Lynchburg and Bedford County. In addition, a brochure will be printed describing BMPs for creekside property owners and public officials.

Results: The District printed 2,500 brochures that were distributed through local service group, mailings, and City/County offices. Workshops were conducted at five schools held either outside or on field trips to streams. Newspaper articles were written about he workshops. A brochure describing best management practices was produced.

Amount granted: \$6,100

Route 4, Box 99K Appomattox, VA 24522

Shenandoah Valley

Project #: 97-009

Plan: In the spring of 1996, the District took BayScapes, an original 7-piece publication of the Alliance for the Chesapeake Bay and the U.S. Fish & Wildlife Service, and edited the publication into a more user friendly document. This document/guide is distributed among homeowners, property owners, associations and garden clubs. Additional copies of the Guide will be needed in the future in order to continue distribution.

Results: 500 additional copies of the BayScapes publication, a homeowner's guide, were reprinted. Copies were provided to local organizations, civic groups, and state and municipal offices and agencies.

Amount granted: \$1,860

Project #: 98-062

Plan: This project seeks funding to broaden the existing Envirothon program within the district. This grant would allow a portion of the district that is not currently benefiting from the program to provide workshops to science and agriculture teachers, assisting them in preparing resources for student participation.

Results: The SWCD got schools to participate in the Envirothon, provided materials to study, broke down barriers around the teachers to get them to participate and provide an understanding of natural resource principles.

Amount granted: \$1,500

1934 Deyerle Ave, Suite B Harrisonburg, VA 22801 (540) 433-2853

Thomas Jefferson

monticello.avenue.gen.va.us/tjswcd/home.html

Project #: 98-001

Plan: In an effort to improve water quality, TJSWCD proposes to install a model riparian forested buffer to: (i) educate landowners of the community and (ii) provide a permanent easement. Additionally, a step-by-step guidebook will be published summarizing the steps involved in the acquisition and management of riparian easements.

Results: A landowner guidebook on conservation easements was published. The TJSWCD worked with 2 adjacent landowners along the James River in Nelson County to install or enhance approximately 2600 feet of riparian buffer and with individual landowners to promote the installation of riparian buffers and the acquisition of riparian easements.

Amount granted: \$5,250

695 Berkmar Court, Suite 2 Charlottesville, VA 22901-1406 (804) 975-0224

Three Rivers

Project #: 96-112

Plan: Educate and involve teachers, students and volunteers in non-point pollution, stream and river monitoring in the counties of King & Queen, King William, and Essex. Schools included: Essex High School, St. Margaret's School, King William High School, King & Queen High School, West Point High School, and Rappahannock Community College-Warsaw Campus. Students and volunteers will conduct chemical and biological testing 6 times per year.

Results: Purchased testing kits. 3 sites (Jackpen Creek, Tappahannock Creek and Piscataway Creek) were monitored. Students from Essex High School and St. Margaret's School went on field days. Students learned about testing water quality for monitoring purposes, restoring degrading streamside forests and the benefits of wetlands.

Amount granted: \$2,500

P.O. Box 815 Tappahannock, VA 22560 (804) 443-2327

Tidewater

Project #: 96-115

Plan: Scientific investigation by high school students of selected small watersheds in Glouceseter, Mathews, and Middlesex counties. Data collected will aid local governments and others in making land use decisions.

Results: Purchased test kits. Approximately 200 students participated in the water testing programs. The streams and creeks tested were Urbanna Creek in Middlesex and Morris Creek in Mathews. These areas were chosen because of the increased pressure from urban growth activities.

Amount granted: \$2,225

P.O. Box 677 Gloucester, VA 23061 (804) 693-3562

Tri County/City

Project #: 96-119

Plan: Create a wetland in a stormwater basin in the high priority watershed of Massaponax Creek Watershed for non-point pollution. The wetland would be used as an outdoor classroom to study wetland benefits such as pollutant removal, stormwater retention and habitat improvement.

Results: Outside funding provide money to create the basin. This grant provided money to enhance the basin with vegetation and to maintain the basin as an outdoor classroom.

Amount granted: \$6,000

Tri County/City (continued)

Project #: 97-024

Plan: A 2-day education conference to provide educators with the tools necessary to address environmental topics relating to the Bay and its tributaries. This conference is designed to link environmental resources, curriculum and educators. Many of the conferences' sessions will be accredited toward teacher re-certification.

Results: Science educators, college and high school students recently attended the Environmental Link to Learning Regional Environmental Education Conference. Hands-on activities included identifying aquatic insects, handling soil, using field guides and evaluating a site for development. The afternoon session consisted of a mock Envirothon, an outdoor, environmental competition among students.

Amount granted: \$2,000

605-A William Street Fredericksburg, VA 24401 (540) 373-8592

Thomas Jefferson Planning District Commission

monticello.avenue.gen.va.us/tjpdc/home.html

(Partner: Environmental Education Center)

Project #: 99-042

Plan: The PDC will build an interactive educational kiosk to publicize the findings of various projects and provide for public involvement within sight of the Rivanna.

Amount granted: \$2,000

300 E Main Street P.O. Box 1505 Charlottesville, VA 22902 (804) 979-7310

Tidewater Oyster Gardener's Association

Project #: 98-052

Plan: This organization seeks to establish a Master Oyster Gardeners program similar to the program at VPI-SU. It will serve as a way to train individuals who will be key players in assisting oyster gardeners.

Results: An Oyster Gardener's manual was produced to be used in accordance with an advance educational course on oyster aquaculture.

Amount granted: \$5,230

Project #: 99-048

Plan: The Association would like help with the purchase of Mapinfo software to locate oyster gardener sites. The project will also collect water quality data, which will result in information on the growth and morality of the planted oysters.

Amount granted: \$2,370

8218 Hell Neck Road Gloucester, VA 23061-2528 (804) 694-4407

Valley Conservation Council (VCC)

Project #: 96-036

Plan: Public education on the benefits of conserving open lands and to promote voluntary protection tools and land management practices that will benefit water resources.

Results: Report fact sheets and watershed brochure produced and distributed to landowners.

Amount granted: \$3,000

Valley Conservation Council (VCC) (continued)

Project #: 97-092*

Plan: VCC proposes to build community support in Waynesboro to create a riparian zone greenway, to increase public awareness with regard to water quality and to create a model educational program that can be replicated in other Bay watershed communities.

Results: A 3-panel educational exhibit that graphically depicts the importance of greenways was produced. In addition a brochure describing the Greenway Project and a handout about the planning process were printed and distributed throughout the community. A slide presentation was prepared and utilized in public workshops and group meetings. Landownership maps and a greenway map were prepared to help locate a viable trail route along the South River. Students from Kate Collins Middle School planted over 100 riparian tress along the South River in Ridgeview Park.

Amount granted: \$6,000

Project #: 98-023

Plan: The VCC requests funding to educate land owners about the use of BMPs in conjunction with conservation easements on streams and related uplands by holding four field day workshops. Funds will also be used to acquire easements on riparian corridors and related upland in watersheds at the headwaters of the James River.

Results: The Headwaters Riparian Partnership Project is providing a comprehensive effort to promote riparian forested buffers for the purpose of reducing non-point nutrient and sedimentation pollution in the Upper James River and Shenandoah/Potomac Rivers watersheds. Partnerships with Dept. of Forestry, four Soil & Water Conservation districts, and private organizations, including the Nature Conservancy, have been formed. Over 300 individuals attended the 7 workshops and a field day given by VCC and its partners.

Amount granted: \$20,000

Valley Conservation Council (VCC) (continued)

Project #: 99-020

Plan: The VCC wants to continue the Headwater Riparian Partnership Project, which would educate landowners about the use of conservation easements on streams and related uplands. By acquiring easements on riparian corridors and related uplands in watersheds at the headquarters of the James River, water quality is protected.

Amount granted: \$20,000

P.O. Box 2335 Staunton, VA 24402 (540) 886-3541

Virginia Cooperative Extension

Virginia Cooperative Extension

Knowledge for the Common Wealth

Accomack County

www.ext.vt.edu/offices/accomack

Project #: 96-008

Plan: An ongoing project conducted by Accomack County 4-H and the Chesapeake Bay Foundation to involve teens in Bay restoration awareness and leadership development projects and activities. The camp is on Port Isobel and Tangier Island.

Results: 23 teens and adults participated in an educational awareness and conservation program conducted at the study site of the Chesapeake Bay Foundation at Port Isobel. The program is a 3-day, 2-night stay on the island including hands-on activities, a canoe trip, and a hike of the island.

Amount granted: \$1,100

P.O. Box 60 Accomack, VA 23301 (804) 787-1361 **Culpeper Unit**

www.ext.vt.edu/offices/culpeper

Project #: 99-009

Plan: VCE will develop a 4-H project that provides students ages 12 to 18 with knowledge of the challenges facing the Bay.

Amount granted: \$500

101 South West Street Culpeper, VA 22701 (540) 727-3435

Dinwiddie & Isle of Wright County

Project #: 97-039

Plan: Environmental education for 4-H teens in Dinwiddie and Isle of Wright counties. Teens will visit Port Isobel for a 3 day trip to experience marsh hikes, habitat studies, canoeing, commercial crabbing and study the crisis of watermen dependent upon the bay for their livelihood. They'll also spend some time on Tangier learning about their island and talking with local watemen about crab shedding operations and life on the water.

Results: 24 teens and adults participated in a 3-day, 2-night stay at the Port Isobel Island Study Center. The camp stimulated awareness of recycling and water usage.

Amount granted: \$1,035

P.O. Box 399 Dinwiddie, VA 23841 (804) 469-4514

Eastern Shore Agricultural Research Center

www.vaes.vt.edu/painter/index.html

Project #: 97-027

Plan: Develop alternative management strategies for tomato production which are economically feasible and environmentally friendly; strategies to consist of narrower plant beds, cover crops, strip tillage v. clean culture with and without soil fumigation. This proposal grows out of issues surrounding "Plasticulture."

Results: 6 plantings were established to examine the production potential of four on-bed management strategies. Soil samples were collected for nematode evaluations. Tomato production is more economically feasible with plastic mulch than with straw but there was little difference between standard and narrower beds.

Amount granted: \$20,000

Project #: 99-017

Plan: This project focuses on how to protect water quality from non-point sources of water pollution resulting from use of land. The objective is to develop between-bed management strategies that will minimize soil movement from tomato crops and determine the impact during growing season. This will be conducted at the Eastern Shore Agricultural Research and Extension Center.

Amount granted: \$8,200

33446 Research Drive Painter, VA 23420 (757) 414-0724

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Isle of Wright County

Project #: 97-040

Plan: Soil sampling project near Cypress Creek. Isle of Wright 4-H'ers and county public school science students will be testing soil from a large tract of land that is to be developed into an 18-hole golf course and 400 residential sites. The project will begin with collection of soil and testing before development begins. Monthly testing will follow to document any changes in soil or water quality and analyze the effects the development has on the soil and water quality in the areas. Request for funding of the 1st year of a 5-year long project.

Results: 2 sampling kits were assembled to equip teams of students involved in environmental education at both high schools. Teams conducted monthly sampling of water/soil at sites located upstream and downstream from the construction site of a major golf course/residential development being built adjacent to Cypress Creek. Students from Windsor H.S. Environmental Team won 2nd place in a Regional Science Fair Project, earning them a competition spot at the State Science Fair.

Amount granted: \$1,616

17100 Monument Circle, Suite B Isle of Wright, VA 23397-9999 (757) 365-6257

Northampton County

www.ext.vt.edu/offices/northampton

Project #: 98-037

Plan: The Northampton County 4-H program seeks funding to take teen youths to Port Isobel to learn about the ecology of the Bay through marsh hikes, habitat studies, and canoe trips.

Results: 14 teens and 2 adults wen to the Karen Noonan Center and learned about the oysters and the marshland. 10 youths and an adult studied fresh water tidal lands, oysters, and human impact at the Clagett Farm. A presentation was designed of the trips.

Amount granted: \$1,906

5432-A Bayside Road Exmore, VA 23350 (757) 414-0731

Spotsylvania County 4-H

www.ext.vt.edu/offices/spotsylvania

Project #: 97-020

Plan: In an effort to continue training the 4-H'ers and their leaders, the Spotsylvania county VCE will purchase field microscopes, hand lenses, identification books, wetland plants, and training materials so that their program "Beyond the Backyard" can continue yearly and provide the participants with knowledge of conservation of the environment as it relates to the Bay.

Results: 15 youth and 5 adults traveled to the Karen Noonan Center where they stayed for 3 days and 2 nights. They learned about erosion, depletion of crab populations, and other environmental issues. 8 leaders who received the "Wonders of Nature" training took 9 youth and 2 adults to play environmental games, participate in a forest scavenger hunt, and take a nature hike. A group then assisted in adopting a wetland program that involved trail building and wetland tree and shrub planting.

Amount granted: \$1,000

Project #: 99-051

Plan: The VCE, working with 4-H, seeks funds to enhance an adopted wetlands area and to increase user's awareness by labeling trees and shrubs planted, and building a footbridge over 2 creek beds.

Amount granted: \$1,300

P.O. Box 95, 8800 Courthouse Road Marshall Center Spotsylvania, VA 22553-0095 (540) 582-7096

Virginia Division of Izaak Walton League (Save Our Streams)

www.iwla.org/SOS

Project #: 98-074

Plan: The Izaak Walton League seeks funding to continue its Save Our Stream (SOS) Project which focuses on training students in field monitoring and stream bank restoration.

Results: Agreements with DEQ and DCR to generate and use volunteer data to supplement agency assessment work. Several training sessions for volunteer of macrobiotic monitoring were conducted. 30 new monitors were certified.

Amount granted: \$10,000

Project #: 99-032

Plan: Conduct training sessions for citizens interested in becoming water monitoring volunteers to include collecting freshwater aquatic macroinvertebrates and identifying them to the taxonomic level of "Order."

Amount granted: \$10,000

7598 N Lee Highway Raphine, VA 24472 (540) 377-6179



Virginia Living Museum

www.valivingmuseum.org

Project #: 99-053

Plan: The Museum will produce 3 copies of each of its 2 Bay series Discovery Boxes entitled "Under the Bay" and "Shark Secrets" due to increasing requests for those educational resources and to broaden the regional impact of these Bay-related programs.

Amount granted: \$5,000

524 J Clyde Morris Blvd Newport News, VA 23601 (804) 595-1900

Virginia Marine Science Museum

www.vabeach.com/va-marine-sciencemuseum/index.html

Project #: 96-004

Plan: Creation of a "Bay Lab" that will provide interactive educational programs for all ages. Features: wet lab, aquariums, a touch tank and microscopes with counter space for microscopic investigations. Located at First Landing/Seashore on the shores of the Chesapeake Bay at Cape Henry.

Results: Construction of the lab began. In the meantime, funds have been used to purchase equipment and program development.

Amount granted: \$28,536

Project #: 98-054

Plan: The museum seeks funding for field testing equipment for hands-on educational experiences. They will study freshwater and saltwater sites, testing the chemical and physical parameters of both waters. This will result in the lab's visitors seeing first hand the factors that determine the health of the animals and plants that depend on these waters for survival.

Results: The Educational Resource Guide was printed and sent out to local, regional, and statewide teachers and facilities.

Amount granted: \$3,900

Project #: 99-041

Plan: Through Young Audiences of Virginia and Rainbow Products, the Museum will create a theatrical program focusing on salt marshes in Virginia and the exhibits at the Owls Creek Marsh Pavilion.

Amount granted: \$10,800

717 General Booth Blvd Virginia Beach, VA 23451 (757) 437-6030

The Watermen's Museum

Project #: 99-005

Plan: The Museum proposes to provide hands-on learning stations for grades K-6th in which they are taught about Virginia watermen, the Bay, ecology, and conservation.

Amount granted: \$4,000

P.O. Box 531 Yorktown, VA 23690 (757) 887-2641

York County Board of Supervisors/ York County Wetlands Board

www.co.york.va.us/wetlands/index.htm

Project #: 99-007

Plan: The Wetlands Board will develop a 30-minute video to inform the public of the importance of preserving wetlands, the agencies involved in granting project approval, projects permitted in wetlands, assistance available, types of preserving structures considered, and the process by which they are best built.

Amount granted: \$10,000

219 Hounds Chase Yorktown, VA 23693 (757) 867-6722



RESTORATION/CONSERVATION PROJECTS

WATER-QUALITY
MONITORING
AND
EASEMENTS

* Projects listed under both education and restoration/conservation sections.

Monitoring & Restoration Efforts

Alliance for the Chesapeake Bay

www.acb-online.org

Project #: 97-063

Plan: This project focuses on restoration of riparian forests in the Chickahominy watershed by engaging businesses, neighborhoods and civic associations in restoration work.

Results: Restoration projects in the Chickahominy watershed were carried out.

† Full details of this project are under the education section.



Audubon Naturalist Society of the Central Atlantic States

www.AudubonNaturalist.org

Project #: 97-091

Plan: The ANS, with the Loudoun Wildlife Conservancy, proposes to develop/continue its watershed awareness and volunteer water quality monitoring program throughout Northern Virginia.

Results: More than 1,500 people participated in the Northern Virginia water quality awareness and monitoring activities, including monitoring, workshops, training, slide show presentations, and outreach activities.

Amount granted: \$13,291

8940 Jones Mill Road Chevy Chase, MD 20815 (301) 652-9188



Chesapeake Bay Foundation

www.cbf.org



Project #: 96-034

Plan: 4-part restoration/conservation project designed to encourage wetland and streambank restoration projects within Virginia and to increase public awareness of the importance of such restoration and resources. The project includes: 1) Demonstration Wetland Restoration Project (groundwater monitoring and planting vegetation); 2) Streambank Restoration Projects (establish demonstration sites of buffers); 3) Wetlands Awareness Campaign (video, printed hand-outs, and advertisements via magazine, TV, and radio); and 4) Decision Maker Field Programs (to provide information to government officials and community and business leaders).

Results: A 1,100 acre area on the Rappahannock River in Richmond County was obtained and planted with wetland-dependent tree and shrub species. Another 224acre parcel of land in Westmoreland County was restored. The combined lands form the Rappahannock River Valley National Wildlife Refuge. The Streambank Restoration Projects included bioengineering treatments, repair of stream bank areas, and cedar tree revetment. "Wetlands Work for Chesapeake Bay" is a video produced to address wetland issues and demonstrate how individuals can help. It is shown at fairs, festivals, and public speaking opportunities. An article and an advertisement discussing wetland restoration have been published in several magazines and newsletters. Brochures were also produced for distribution among landowners. Several field trips were conducted to inform government officials and community leaders about the restoration project.

Amount granted: \$28,750

Chesapeake Bay Foundation

(continued)

Project #: 97-061*

Plan: Restore shad populations and increase public awareness by: 1) "School in Schools," a middle school project to raise and release shad larvae, and 2) establish a "Shad Festival" coinciding with the annual spawning migration.

Results: 4 schools participated in the "Schools in Schools" project. Each school received approximately 1,000 shad fry. Students were responsible for monitoring and managing the development of the shad to be released in the James River and Rappahannock River. Approximately 400 people attended the Shad Festival.

Amount granted: \$9,800

Project #: 99-026

Plan: Restore submerged aquatic vegetation in the Back, Lafayette, and Lynnhaven Rivers by reducing pollution in the watershed and promoting stewardship and community involvement.

Amount granted: \$20,000

1001 E Main Street, Suite 710 Richmond, VA 23219 (804) 780-1392

County of Louisa

www.louisacounty.com

Project #: 99-022

Plan: Reduction of nutrient loading from individual septic systems in the NE Creek/Contrary Creek Watershed and Lake Louisa by water supply testing, septic system assessments, and public education.

Amount granted: \$7,500

1 Woolfolk Ave Louisa, VA 23093 (540) 967-0401



Elizabeth River Project

www.pilot.infi.net/~erp/index.htm

Project #: 96-032

Plan: Elizabeth River restoration effort including: (i) implementing recommendations of the ERP's Watershed Project Team; (ii) designing and constructing of a wetlands restoration project; and (iii) engaging in public education efforts (newsletter and conferences).

Results: Construction of wetlands restoration demonstration project at the Larchmont Branch Library was completed. 4 editions of the newsletter, Mudflats, have been mailed out to about 1,700. About 400 people attended public conferences.

Amount granted: \$10,100

109 E Main Street, Suite 109 Norfolk, VA 23510 (757) 625-3648

The Environmental Education Center (EEC)

monticello.avenue.gen.va.us/Community/Environ/ EnvironEdCenter/Organization.html

Project #: 98-013

Plan: The Environmental Education Center (EEC) is seeking funding to continue its monitoring activities so that the efforts in designing and implementing the Rivanna River Basin Project can continue. The EEC has coordinated volunteer teams assessing the status of the Rivanna River and its tributaries at 14 monitoring sites throughout the basin.

Results: Purchased monitoring kits, guidebook, and other necessary equipment for monitoring. With the help of volunteers and the purchase of the mentioned equipment, the Rivanna River Basin project continues.

Amount granted: \$2,000

1108 E High Street, Suite 100 Charlottesville, VA 22902 (804) 961-0303

Fairfax County Park Authority

www.co.fairfax.va.us/parks/parks.htm

Project #: 96-037

Plan: Water quality monitoring program at Huntley Meadows Park, including: 1) determining chemical, biological, and physical impacts; 2) projecting water quality concerns to plan resource management; and 3) involving citizens in monitoring, volunteering, and education.

Results: 2 part-time monitoring specialists were hired to research sampling methods, draft a plan, and make recommendations for supplies and equipment.

Amount granted: \$9,880

3701 Lockheed Blvd Alexandria, VA 22306 (703) 768-2525



Fairfax ReLeaf, Inc.

www.geocities.com/RainForest/5663

Project #: 96-040

Plan: Accelerate public and private efforts to restore riparian forest buffers in the Difficult Run, Bull Run and Sugarland Run watersheds. Plant 6,000 trees, saplings, and seedlings on sites most needing restoration (approximately 30 acres).

Results: Riparian projects restored vegetation to the park authority areas and some barren, publicly owned land. ReLeaf has received a certificate of commendation from the VA Dept of Forestry. More than 3,100 trees, saplings and seedlings were planted on 24 acres of public land.

Amount granted: \$10,030

P.O. Box 6141 McLean, VA 22106 (703) 324-1409



Friends of the Rappahannock

www.crrl.org/for

Project #: 98-058

Plan: The goal of this project is to (i) prioritize sites in the Rapidan River basin for streambank and riparian forest restoration efforts and (ii) conduct field studies.

Results: A survey was conducted of the Rapidan River basin. Studies are in the process of being conducted.

Amount granted: \$12,000

P.O. Box 7254 Fredericksburg, VA 22404 (540) 373-3448



Herndon Middle School and Tree-Action

www.fcps.k12.va.us/HerndonMS

Project #: 96-047

Plan: Re-landscape a school site to reduce water use and stormwater run-off and provide habitat. The site will be used to provide hands-on learning opportunities.

Results: Project Wild was planned out and put into action. Soil preparation and maintenance of landscape has taken place. 28 students, teachers, and volunteers participated in a Project Wild workshop. Other activities, such as planting beds, composting, brush piles, hedgerow, and ponds, are in progress.

Amount granted: \$6,853

901 Locust Street Herndon, VA 22070 (703) 904-4800

Keep Fauquier Clean, Inc.

Project #: 96-050

Plan: Stream analysis and education on the use of practical, low-cost pollution control through planting of riparian tree buffers. Locations affected are: sections of the Rappahannock River, Broad Run, Licking Run, Carter Run and Marsh Run.

Results: Extension requested. 2 riparian buffers were planted beside Marsh Run. Students from Central Elementary and Mary Walter Elementary planted 2,000 trees at Marsh Run. Another 1,000 trees were planted at Marsh Run and Rappahannock River. A riparian workshop was also held. Students from Liberty High School set up a monitoring program.

Amount granted: \$3,770.15

Project #: 98-017

Plan: Fauquier County's goal is to (i) develop a water monitoring program of Marsh Run to teach children about a career in science and (ii) use the data from this program to actually clean-up Marsh Run. This project is a continuation from its 1996 project (96-050) which installed low-cost pollution control through planting riparian free buffers.

Results: Biology classes tested two different sites. They collected samples and conducted experiments. Staff from DEQ provided education on the monitoring techniques.

Amount granted: \$2,598

P.O. Box 337 Warrenton, VA 20188 (540) 364-1652

Madison County Nature Area Committee

Project #: 98-040

Plan: The Nature Area Committee established in Madison County for the purpose of developing and maintaining a natural area on the Middle River. This project seeks funding for the development of (i) a wildlife management area; (ii) a forestry management area and walking tour of various species of trees; (iii) a riparian buffer along the Middle River; and (iv) an educational center and primitive camping area.

Results: A 6-acre tract of land was redeveloped. First, the land was cleared and excavated. Then a 360-foot riparian buffer was installed along the riverbank. Over 500 trees were planted, wildlife and critical areas seeded and a backyard habitat installed. Educational programs for schools and landowners are being planned.

Amount granted: \$3,000

P.O. Box 10 Madison, VA 22727-0010 (540) 948-6881

Mattaponi Heritage Foundation, Inc.

www.baylink.org/Mattaponi/shad.html

Project #: 97-028

Plan: To increase the size and scope of fish hatchery on the Mattaponi River north of West Point to support rockfish, shad, and perhaps other species.

Results: Expansion of existing facility by adding hatchery tanks and thus doubling the capacity. Meanwhile, construction of a larger hatchery has begun and should be completed by summer of 1998. The smaller hatchery would then become a water quality monitoring station. A nature interpretative exhibit and trail are also being built on the Reservation.

Amount granted: \$27,140.35

Mattaponi Heritage Foundation, Inc. (continued)

Project #: 98-065

Plan: This 2-fold project seeks funding to continue its project to expand shad hatchery by purchasing a boat for the purpose of allowing rapid purchase of shad and bringing the fish back to the hatchery. The second portion of this project would involve school students from mills Godwin High in the Mattaponi Water Quality Monitoring Project by purchasing water sampling equipment so that they can collect water samples as a means of monitoring the river. Their findings and interpretations will be made available on the Internet so students from other schools may participate.

Results: The Mattaponi Shad Hatchery acquired spawning shad from fisherman immediately after the catch. This increased fertilization rates and an increase in the number of fry hatched and released back into the Mattaponi River.

Amount granted: \$7,500

Project #: 99-002

Plan: The Foundation wants to complete the hatchery and marine activities facility so that the building will be equipped for hatchery and tagging operations.

Amount granted: \$40,000

1467 Mattaponi Reservation Circle West Point, VA 23181 (804) 769-4508

Portsmouth Public School William E Waters Middle School

peic.pps.k12.va.us/~watersms/homepage.htm

Project #: 98-005

Plan: The goal of this project is to enable 7th grade students at William Waters Middle School to participate in an EPA program initiative to reconstruct an oyster broodstock in Lynnhaven River. The objective is to teach students the importance of man's interaction with the Bay environment while learning real world problem-solving skills.

Results: 7th grade students participated in an environmental project to increase the oyster population in the Elizabeth River. Students collected and analyzed date on water quality and investigated the diversity of life by taking a trip aboard the Chesapeake Bay Foundation research vessel, Baywatcher,. The students then obtained 2,000 oysters. They studied the life cycle and importance of oysters to water quality by creating an oyster reef sanctuary. The project was made public by the education television channel, news media coverage, and student-generated displays.

Amount granted: \$5,621

Project #: 99-014

Plan: 7th grade students will participate in watershedwide shad restoration effort, which will demonstrate the importance of man's interaction with the Bay's environment.

Amount granted: \$4,000

600 Roosevelt Blvd Portsmouth, VA 23701 (757) 558-2813

Soil & Water Conservation Districts

Henricopolis

Project #: 96-066

Plan: Reduce over-fertilization of urban lawns through a process that targets a specified portion of a watershed and to educate homeowners on proper techniques of fertilizer and lawn maintenance. Homeowners will be offered cost sharing in soil testing services.

Results: The Henrico Extension Service has extended soil testing to county residents to help identify and target homeowners with a need and interest in the soil test program. There were an estimated 585 soil tests during the testing period and 119 cost shared by the grant. A reduction of approximately 7,375 lbs. or 3.7 tons of fertilizer resulted from the soil testing. An extension of the soil testing was requested because a small portion of the funds remained unused.

Amount granted: \$1,500

Project #: 97-109

Plan: In an effort to continue its stream restoration projects in Henrico, this project is seeking funding for 200 soil tests for homeowners and businesses.

Results: Over 90 soil test coupons have been issued to homeowners. The program has reduced the overapplication of nutrients to lawns.

Amount granted: \$1,400

8600 Dixon Powers Drive P.O. Box 27032, Room 3024 Richmond, VA 23273-7032 (804) 672-5175

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Mountain Castles

Project #: 98-063

Plan: The Mountain Castles SWCD is seeking funding for conservation practice installation (creek crossings, stream stabilization, temporary fencing and seeding) and public education support programs (farm tours).

Results: 2 on-farm demonstrations were held where livestock were fenced from streams and various grazing management practices used to reduce run-off to streams. Sign-up for cost share practices have increased.

Amount granted: \$11,500

770B Roanoke Road P.O. Box 162 Daleville, VA 24083 (540) 992-1779

Shenandoah Valley

Project #: 97-041

Plan: The district proposes to test a method for treating manure during storage. The projects' 3 objectives are to improve the water quality of the wells by reducing nitrate levels, reducing odors associated with anaerobic digestion, and improving soil quality by encouraging the humification process.

Results: Tests were conducted for monitoring soil nitrate levels. From the data collected, it was concluded that increasing soil temperature stimulates nitrate production in soil. The use of pro-biotic products to treat liquid dairy manure in storage pits was beneficial during the testing period.

Amount granted: \$2,050

1934 Deyerle Ave, Suite B Harrisonburg, VA 22801 (540) 433-2853

Students Against Global Abuse (SAGA) Herndon High School

www.fcps.k12.va.us/HerndonHS/index.htm

Project #: 97-097

Plan: Sugarland & Difficult Run Watershed Native Habitat Restoration. Project 2 of SAGA proposes to reestablish native trees and plants for wildlife and erosion control to these areas through the development of a 3-D watershed model, propagation of native trees and plants in the HHS greenhouse, salvaging plants from commercial development sites, and transplanting native trees and plants.

Results: Over 100 tons of white office, mixed and newspaper and aluminum can refuse were collected from over 150 Northern Virginia businesses, churches, schools, and libraries. A record number (10,000+) of native Virginia plants, shrubs and trees were planted in the Sugarland and Difficult Run watersheds, many of which were reclaimed from pre-development sties and/or propagated in the HHS greenhouse.

Amount granted: \$1,300

Project #: 98-018

Plan: This project is 2-fold. SAGA proposes to construct a working rain garden in order to teach how landscaping designs can best be used to hold run-off water out of Sugarland Run. SAGA also would like to continue its project from 1997 (97-097) which involved rescuing endangered plants, caring for and replanting them where needed.

Results: A greenhouse has been completed and further projects are being conducted.

Amount granted: \$4,000

Project #: 99-059

Plan: SAGA seeks funds to continue a project to recover native species from predevelopment sites and to provide care and propagate these species in the Herndon High greenhouse. These plants, trees, and shrubs will be replanted in riparian and wetlands areas.

Amount granted: \$1,500

700 Bennett Street Herndon, VA 20170 (703) 810-2200

Tidewater Resource Conservation & Development Area

Project #: 96-009

Plan: The Piankatank River Watershed project is an attempt to reduce non-point source pollution and improve water quality in the Piankatank River from Healy Creek. The project will be accomplished by: 1) determining causes and developing a plan for resolving the problem; 2) reducing shoreline and streambank erosion; and 3) collecting data of the riparian and wetland areas.

Results: Working with Virginia Polytechnic Institute and State University, the project was able to identify sources of high fecal coliform in Healy Creek. Citizen awareness increased because of media coverage of the project. A citizen-monitored water quality station has been permanently placed on Healy Creek. Results identified the problem is a combination of non-human and human sources.

Amount granted: \$17,275

Route 2, Box 6 Tappahannock, VA 22560-9302 (804) 443-1118

Town of Cape Charles

Project #: 99-004

Plan: With Cape Charles being the only public beach on the Eastern Shore of Virginia, the town wants to clean its beach on a regular basis to prevent trash and contaminants from washing back into the Bay.

Amount granted: \$4,020

2 Plum Street Cape Charles, VA 23310 (757) 331-2176

Town of Urbanna, Virginia

www.urbanna.com/default.htm

Project #: 99-038

Plan: To protect its shoreline from erosion, Urbanna proposes 100 plantings, 50 trees, mulch and bedding material, and water quality educational markers.

Amount granted: \$4,600

P.O. Box 179 Urbanna, VA 23175-0179 (804) 758-2613

Turner Ashby High School Ecology & Conservation II Class

www.rockingham.k12.va.us/TAHS/tahs.html

Project #: 97-068

Plan: Cooks Creek Restoration. Cooks Creek is a small tributary of the North River, which feeds the Shenandoah and Potomac Rivers. This project would protect a small portion of it from sediment and nutrient loading as well as educate the public.

Results: The ecology students have monitored water, planted riparian buffers, installed stream bank control methods, and created wetlands area. The students' efforts have been publicized through presentations and newspaper articles.

Amount granted: \$2,148

800 E Main Street Bridgewater, VA 22812

Valley Conservation Council (VCC)

Project #: 97-092

Plan: VCC proposes to build community support in Waynesboro to create a riparian zone greenway.

Results: Students from Kate Collins Middle School planted over 100 riparian tress along the South River in Ridgeview Park.

† Full description of project under the education section.

Virginia Cooperative Extension

Virginia Cooperative Extension

Knowledge for the Common Wealth

King George County

www.ext.vt.edu/offices/king.george

Project #: 99-052

Plan: This project proposes to implement integrated pest management strategies for vegetable producers. Included in the request is the purchase of three weather stations in Planning District 16 to record temperature information and the purchase of yellow sticky tapes for field monitoring.

Amount granted: \$5,367

P.O. Box 410 King George, VA 22485 (540) 775-3062

Virginia Division of Izaak Walton League (Save Our Streams)

www.iwla.org/SOS

Project #: 97-026

Plan: Save Our Streams program. Continuation of a statewide project to train and provide support for a network of citizen water quality monitoring groups.

Results: Training sessions held in over 15 counties. The program was described and demonstrated to several groups, schools, and teachers.

Amount granted: \$20,000

7598 N Lee Highway Raphine, VA 24472



Virginia Marine Resources Commission Conservation & Replenishment Division

www.state.va.us/mrc/page1h.htm

Project #: 96-024

Plan: An effort to restore oyster reef habitat and seagrass habitat simultaneously, in close proximity to each other, in order to investigate the possible interaction or synergism between the habitat types towards the eventual success of both projects.

Results: Eelgrass was transplanted with and without oyster shell at several sites in the lower Bay. Early in the studies, oyster shell does not appear to have an affect on the survival of eelgrass. However, growth has occurred near the oyster reefs.

Amount granted: \$8,000

Project #: 97-004

Plan: Continuation of efforts (similar to 1996 project, only larger scale) to restore oyster reef and seagrass habitat simultaneously, in close proximity, in order to investigate the likely interaction or synergism between the habitat types. The Commission would like to continue these same efforts with a site in the Lynnhaven River by constructing a 500 x 60 oyster reef and plant an acre of seagrass. Recent discoveries of a small quantity of very large and very old oysters that have been rescued are believed to have survived exposures to disease and might possibly possess some natural resistance.

Results: An oyster reef was constructed in the Lynnhaven River with the help of school children and local citizens. Afterwards, the eelgrass was planted.

Amount granted: \$20,000

Virginia Marine Resources Commission Conservation & Replenishment Division

(continued)

Project #: 98-029

Plan: In an effort to increase a current reef construction project in the western branch of the Elizabeth River, VRMC is seeking funding to purchase enough oyster shell so that the restoration project meets minimum size requirement.

Results: The program constructed an oyster reef in the Western Branch of the Elizabeth River. A reef site was located and 43,484 bushels of oyster shells were transported into a 60' x 500' reef structure. 9 schools in Norfolk and Portsmouth grew more than 20,000 oysters by aquacultural methods that were placed on the reef.

Amount granted: \$18,000

Project #: 99-036

Plan: VMRC proposes to rebuild an oyster reef in the Lafayette River in an effort to restore oyster populations. This will also provide middle and high school students with an opportunity to become actively engaged in a resource restoration project.

Amount granted: \$18,000

2600 Washington Ave, 3rd Floor P.O. Box 756 Newport News, VA 23607-0756 (804) 247-2121

Waynesboro Parks and Recreation

Project #: 99-037

Plan: This project will allow the City of Waynesboro to fund Phase II development of a riparian buffer along a riverbank stabilization project in the City.

Amount granted: \$2,500

413 Port Republic Road Waynesboro, VA 22908 (540) 942-6735

Conservation Easements

Friends of Dragon Run, Inc.

Project #: 97-029

Plan: In an effort to preserve Dragon Run and its watershed, the organization proposes to save the swamp forest by purchasing the ancient trees and establish conservation easements with landowners in order to keep them from being harvested so that the health of the ecosystem is not threatened, and the wetland may continue to fulfill its function as a natural buffer for maintenance of water quality.

Results: Acquisition of 2 conservation easements on property bordering the Dragon Run stream: 1st easement is a 5 acre parcel of timberland in King and Queen County; 2nd easement is 23.36 acres of property, of which the stream runs through the center, located in King and Queen and Essex Counties.

Amount granted: \$19,000

P.O. Box 895 Gloucester, VA 23061 (804) 693-2993

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James River Association

www.jamesriverassociation.org

Project #: 99-035

Plan: The Association proposes to implement projects, such as the donation of easements and buffer planting, to reduce nutrients flowing into the James River and the Bay to improve wildlife habitat in the riparian zone.

Amount granted: \$20,000

P.O. Box 110 Richmond, VA 23218-0110 (804) 730-2898

60

FINANCIAL SUMMARIES

1996

Received 130 proposals requesting funds in excess of \$1.8 million for the \$306,945 in the Fund.

In 1996, the Chesapeake Bay Restoration Advisory Committee recommended grants for thirty-three applicants, totaling \$305,917.

- * Thirty-one recipients were approved by the General Assembly, totaling \$281,962.03 awarded.
- * Two recipients declined the money as awarded by the General Assembly, totaling \$23,955:

Total: \$281,697.03 Max: \$30,000 Average: \$9,398.73 Min: \$1074.16

1997

Received 109 proposals requesting funds in excess of \$1.8 million for the \$342,335 in the Fund.

In 1997, the Chesapeake Bay Restoration Advisory Committee recommended grants for forty-four applicants, totaling \$341,749.

* Forty-three recipients were approved by the General Assembly, totaling \$ 338,474.68 awarded.

Total: \$338,474.68 Max: \$27,140.35 Average: \$5,565.47 Min: \$400

1998

Received 78 proposals requesting funds in excess of \$1 million for the \$ 386,646 in the Fund.

In 1998, the Chesapeake Bay Restoration Advisory Committee recommended grants for fifty-four applicants, totaling \$341,729.

- * Fifty-two recipients were approved by the General Assembly, totaling \$341,371.18 awarded.
- * Two recipients declined the money as awarded by the General Assembly, totaling \$6.000.

Total: \$335,371.18 Max: \$25,000 Average: \$6,823.93

Min: \$250

1999

Received 60 proposals requesting funds totaling \$599,688 for the \$385,000 in the Fund.

In 1999, the Chesapeake Bay Restoration Advisory Committee recommended grants for forty-eight applicants, totaling \$379,795.15.

* Forty-eight recipients were approved by the General Assembly, totaling \$379,795.15 awarded.

Total: \$379,795.15 Average: \$6,402.97 Max: \$40,000 Min: \$500

Websites & Other Sources

Agencies & Institutions

AGENCIES

Chesapeake Bay Commission

http://www2.ari.net/cbc

A Tri-State Legislative Advisory Commission serving Maryland, Virginia and Pennsylvania and dedicated to the protection and restoration of the Chesapeake Bay.

Chesapeake Bay Local Assistance Department

http://www.cblad.state.va.us

Clean Water Initiative

http://www.cleanwater.gov

Environmental Protection Agency (EPA)

main page: http://www.epa.gov watershed: http://www.epa.gov/surf

data: http://www.epa/gov/enviro/index_java.html

USDA Water Quality Database

http://hermes.ecn.purdue.edu:8001/server/water/water.html

U.S. Geological Survey, Water Resources Division, Virginia

main page: http://va.water.usgs.gov

Chesapeake: http://chesapeake.usgs.gov/chesbay Includes information on land use, mapping, water quality, etc.

Virginia General Assembly

main page: http://legis.state.va.us DLS: http://dls.state.va.us

Water Quality VA Cooperative Extension: Knowledge for the Commonwealth

http://www.ext.vt.edu:4040/eis/owa/docdb.getcat?cat=ir-nrem-wq

INSTITUTIONS

Canaan Valley Institute

http://www.www.nrac.wvu.edu/cvi/default.htm

For the environmental and economic health of the Mid-Atlantic Highlands of Maryland, Pennsylvania, Virginia, and West Virginia.

Information

GENERAL/REGIONAL

Chesapeake Bay - The Chesapeake Bay.com

http://www.thechesapeakebay.com

Chesapeake Bay regional on-line magazine and information source.

Chesapeake Bay-Net

http://www.chesbaynet.com

Most comprehensive online directory of Nautical Providers and Food, Fascinating Features and Fun found on the entire Chesapeake Bay region!

Chesapeake Bay Program

main page: http://www.chesapeakebay.net

How's the Chesapeake Bay doing? Learn about the progress we're making and how you can help. Learn about the Chesapeake Bay Program, a unique, regional partnership that leads the Chesapeake Bay restoration. Crabs, critters, and rivers of the Chesapeake Bay. Scientific data, environmental indicators, educational resources and more.

Water Quality Database: http://www.chesapeake.net/water_quality

watershed: http://www.chesapeakebay.net/wshed/protect.htm

Help protect and restore the watershed by linking to activities, agencies, citizens' groups, and other conservation resources. Activities: Participate, volunteer, or peruse calendars of events.

Chesapeake Bay Sampler

http://www.chesapeakebaysampler.com

Places, People, Products Calendar of Events for the "Eastern Shore of Virginia"

Chesapeake Bay Visitor's Guide

http://www.chesapeake-bay.com

Visitors Guide to the Chesapeake Bay providing maps and links to lodging, dining, marinas, charters and places to visit around the Bay.

Environmental Law: an Overview

http://www.law.cornell.edu/topics/environmental.html

EDUCATIONAL

Alternate Spring Break | Chesapeake Bay Foundation; A Lil' Island in the Middle of the Chesapeake

http://dolphin.upenn.edu/~altbreak/chesapeake.html

This site addresses environmental issues. The Chesapeake Bay Foundation is fighting against toxic pollution, damaged wetlands, and sediment clogged creeks.

Army Chesapeake Bay Initiative

http://www.hqda.army.mil/acsim/env/cbi

The Army manages approximately 217,000 acres of land on 19 installations within the Bay watershed, 82% of which is undeveloped, in a manner consistent with the goals of the overall Chesapeake Bay Program.

Bay Link

http://www.baylink.org

Bay Link is an educational site centered on the Chesapeake Bay estuary, the people living on its drainage area, and the effect the various natural and human forces have on the Bay.

Center for Environmental Studies

main page: http://www.vcu.edu/cesweb

James River Basin info: http://www.vcu.edu/cesweb/jrbi/jrbi.html

Index to Enviroweb

main page: http://www.enviroweb.org/enviroissues

activism (training & resources): http://www.enviroweb.org/enviroissues/activism

VAT (Voyage Across Technology): Chesapeake Resources

http://www.chre.vt.edu/f-s/phl/resources/default.html

Provides lesson plans, maps, and links for environmental education of K-12.

Welcome to BIOS (Basin-wide Information On-line Service)

http://web.gmu.edu/bios

Watershed homepages for Chesapeake Bay, its tributaries (e.g., Potomac River), & other basins. On-site environmental education includes ecological facts, news, activities, & organizations.

Organizations

CHESAPEAKE BAY

Chesapeake Bay Information Network

http://cblcbos1.cbl.cees.edu

Links to Federal and State programs, Chesapeake research, citizen access, and Chesapeake Bay researcher's directory.

WATERSHED

EPA's Watershed Approach

http://www.epa/gov/OWOW/watershed/index.html

National Association of Counties (NACO)

main page: http://www.naco.org/index.cfm

watershed: http://www.naco.org/programs/environ/watermgt.cfm

National Watershed Network

http://www.ctic.purdue.edu/watershed/watershedoptions.html

River Network

http://www.rivernetwork.org/index.htm

Our mission is to help people organize to protect and restore rivers and watersheds.

The Watershed Management Council

http://watershed.org/wmc

Financial Resources

Appalachian Regional Commission

http://arc.gov

Our mission is to be an advocate for and partner with the people of Appalachia to create opportunities for self-sustaining economic development and improved quality of life.

Catalog of Federal Funding Sources for Watershed Protection

http://www.epa.gov/owow/watershed/wacademy/fund.html

EPA Grants Information

http://www.epa.gov/ogd/grants.htm

Virginia Sea Grant

http://www.virginia.edu/virginia-sea-grant

Watershed reclamation project funding opportunities - US Dept of Interior

http://www.osmre.gov/funding1.htm

The list of links may be useful for identifying potential funding sources for watershed restoration projects.



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