

Blue Plains Advanced Wastewater Treatment Plant – D.C. Water and Sewer Authority

The D.C. Water and Sewer Authority distributes over 130 million gallons of water per day to businesses, residents and agencies throughout the District. It also treats much of the region's runoff and the wastewater from over 2 million customers in the District, Maryland and Virginia before discharging the treated water into the Potomac River.

The Authority's Blue Plains facility is the largest advanced wastewater treatment plant in the world, and can treat 370 million gallons per day. Visiting Blue Plains can improve students' understanding of wastewater treatment, the Potomac River and Chesapeake Bay watersheds, and the impact of human behavior on the environment.

Topics: Water pollution, treatment, uses and conservation; aquatic ecosystems

Serving: Grade 1 through college

Also see: Washington Aqueduct & Dalecarlia Water Treatment Plant, page

Resources

- * Tours of Blue Plains (grade 9 and up)

- * Speakers

- * Publications, fact sheets, and PowerPoint materials, many online.

- * Virtual tour on the DCWASA web site

- * Online lessons on water conservation, the water cycle, and the history of water treatment and supply in the District

- * Community service learning

- * College internships (paid)

Notes

- * To schedule a Blue Plains tour, contact the DCWASA Public Affairs Office or visit the DCWASA web site.

Location and Getting There

Exit 1 from I-295 in Southwest DC.

Metro: A4 or A5 bus; Anacostia (Green Line)

For More Information

DCWASA Public Affairs Office

Phone: (202) 787-2200

Fax: (202) 787-2210

Email: info@dcwasa.com

Address: 5000 Overlook Ave. SW, Washington, DC 20032

Web site: www.dcwasa.com

Bridge: Online Ocean Sciences Teacher Resource Center

The Bridge is a growing collection of the best marine education resources available on-line. It provides educators with a convenient source of accurate, useful information on global, national, and regional marine science topics, and gives researchers a contact point for educational outreach.

Topics: Marine science and ecosystems, wetlands, biodiversity, water quality and water pollution, climate change, oceanography

Serving: Grade 1 through 12

Standards: Bridge Data Tips classroom activities address National Science Education Standards.

Also see: Virginia Institute of Marine Science, page; ChesSIE, page

Resources

The Bridge provides links to online resources including:

- * Marine science lesson plans
- * Online marine science data and data-based classroom activities
- * Teacher professional development opportunities nationwide
- * Grant opportunities for educators
- * Student opportunities
- * Aquariums and marine research institutions
- * E-mail discussion list for educators and scientists

Notes

Location and Getting There

For More Information

Lisa Ayers Lawrence, Marine Education Specialist

Phone: (804) 684-7608

Fax: (804) 684-7161

Email: ayers@vims.edu

Address: Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, VA 23062

Website: www.marine-ed.org/bridge

Chesapeake Bay Program

The Chesapeake Bay Program is a unique regional partnership developed to lead and direct restoration of the Chesapeake Bay. Its partners include the District of Columbia; Maryland, Pennsylvania and Virginia; the Chesapeake Bay Commission, a tri-state legislative body; the U.S. Environmental Protection Agency; and participating citizen groups.

Topics: Aquatic and terrestrial ecosystems, biodiversity, agriculture, solid waste, land use, air and water pollution, environmental law

Serving: Pre-K through college

Resources

- * Technical and non-technical information on nutrient pollution; toxic pollution; fish, shellfish and other Bay wildlife; population growth and development; computer modeling; public access to the Bay and its tributaries; and other aspects of the Bay restoration effort
- * The *State of the Chesapeake Bay* report on restoration efforts and the Bay's health
- * *Bay-B-C's: A multidisciplinary approach to teaching about the Chesapeake Bay*
- * *Chesapeake Bay: Introduction to an Ecosystem*: a 30-page primer on the Chesapeake Bay Ecosystem
- * *How's the Bay Doing?*: an on-line slide show presentation about Bay restoration,
- * Posters and other public information material
- * Speakers
- * Preparatory and follow-up materials
- * Online student and teacher resources

Notes

Location and Getting There

For More Information

Phone: (800) YOUR BAY (800-968-7229)

Fax: (410) 267-5777

Email:

Address: 410 Severn Ave., Suite 109, Annapolis, MD 21403

Web site: www.chesapeakebay.net

ChesSIE: Chesapeake Science on the Internet for Educators

ChesSIE is a unique, web-based resource center and communications hub, broadly supporting Chesapeake Bay education throughout the Bay watershed, K through 12. ChesSIE provides educators with access to quality Bay-related education resources, online data, and professional development opportunities. It also provides researchers, resource managers and other Bay stakeholders with a venue for sharing information and connecting with K through 12 classrooms. ChesSIE supports all Chesapeake Bay Program Education Initiatives by providing a central contact point for all Chesapeake Bay Program education programs. ChesSIE is supported by the Environmental Protection Agency through the Chesapeake Bay Program.

Topics: Chesapeake Bay, marine ecosystems, wetlands

Serving: K through 12

Also see: Virginia Institute of Marine Science, page; BRIDGE, page

Resources

ChesSIE provides links to:

- * Chesapeake Bay topics, issues and education projects
- * Lesson plans and activities
- * Student opportunities
- * Teacher professional development programs in the District, Maryland, Virginia, Delaware, and Pennsylvania
- * Grant opportunities for teachers
- * State resources
- * Email discussion list and online bulletin board

Notes

Location and Getting There

For More Information

Susanna Musick

Phone: (804) 684-7609

Fax: (804) 684-7161

Email: sxmusi@vims.edu

Address: Virginia Institute of Marine Science, P.O. Box 1346,
Gloucester Point, VA 23062

Website: www.bayeducation.net

D.C. Commission on National and Community Service

The D.C. Commission on National and Community Service works to promote the District's spirit of service through national service programs, partnerships and volunteerism. The Commission awards grants to nonprofit organizations, government agencies, and schools in the District of Columbia to operate AmeriCorps and Citizen Corps programs. AmeriCorps gives residents opportunities to serve their communities by addressing issues related to the environment, education, public safety, and other human needs. Citizen Corps coordinates volunteer efforts to support emergency preparation, response and recovery.

Topics:

Serving: Pre-K through 12 students and citizens of all ages

Resources

- * Community service learning
- * Grants to operate these AmeriCorps programs:
 - * Eagle Conservation: Eagle Corps members create and maintain waterfront parks and the Anacostia Riverwalk; educate community visitors and school groups about the Anacostia River; and guide community boat trips on the river.
 - * Heads Up: A University Neighborhood Initiative serves students in DC elementary schools and neighborhoods through a summer academic enhancement program and an after-school tutoring and homework assistance program.
 - * Arch Training Center: KIDPLEDGE promotes academic and social development, mobilizes the community, and cultivates partnerships with individuals and organizations committed to youth development.

Notes

Location and Getting There

Metro: Judiciary Square (Red Line)

For More Information

Director of Programs and Accessibility

Phone: (202) 727-7937

Fax: (202) 727-9198

Email:

Address: 441 4th St. NW, Suite 1040 South, Washington, DC 20001

Web site: www.cnscs.dc.gov

D.C. Department of Parks and Recreation

The Department of Parks and Recreation collaborates with other agencies and with nonprofit partners to offer a variety of environmental education programs at many sites, including its large parks, Camp Riverview, and the Robert C. Lederer Youth Garden and Environmental Education Center. Programming at Watts Branch Park is offered by the Lederer Center, the Urban Park Rangers, and Washington Parks and People. Programming at Heritage and Kingman islands is offered by the Urban Park Rangers, the D.C. Department of Health's Watershed Protection Division, the Earth Conservation Corps, the Anacostia Watershed Society, D.C. Audubon, and other organizations. Most of these organizations are also featured in DC Naturally.

Resources

- * Curriculum-based and informal programs
- * Community service learning. Contact Volunteer Coordinator Gail Benjamin at (202) 282-0758 or gail.benjamin@dc.gov.
- * College internships (paid, year-round). Contact Internship Coordinator Brandi Bush Bergkvist at (202) 673-7664 or dprinterns@dc.gov.
- * Youth employment. Call the Department of Employment Services – Youth Employment Division at (202) 698-3492.

For More Information

Customer Service

Phone: (202) 673-7647

Fax:

E-mail:

Address:

Web site: www.dpr.dc.gov

D.C. Department of Parks and Recreation – Camps and Environmental Program

The Camps and Environmental Program's hands-on, science-based curricula and activities help youth acquire camping skills and learn about nature, environmental science, gardening and landscaping. Participants study, explore, and experience the urban environment and learn about the educational, recreational and career opportunities that it provides.

Topics: Ecology, wetlands, forests, biodiversity, agriculture, air and water pollution

Serving: Pre-K through 12

See also: D.C. Youth Garden Program, page; and D.C. Natural Fun Program, page

Resources

- * Environmental education programs, workshops and curricula
- * Resource center with a computer lab, videos and other resources.
- * D.C. Youth Garden Program
- * D.C. Natural Fun Program after school program and summer day camp at the Robert F. Lederer Environmental Education Center
- * Camp Riverview residential camping program
- * Field trips
- * Community service learning
- * College internships (paid)

Notes

- * Please see the Department of Parks and Recreation entry for contact information about internships and youth employment.

Location and Getting There

Department of Parks and Recreation Headquarters

Metro: bus S2 or S4; Columbia Heights (Green Line);

For More Information

Camps and Environmental Programs Supervisor

Phone: (202) 282-0727

Fax: (202) 282-0709

Email: joyce.perrin@dc.gov

Address: 3149 16th St. NW, Washington, DC 20010

Web site: www.dpr.dc.gov

D.C. Department of Parks and Recreation – Natural Fun Programs

The Natural Fun Programs at the Lederer Environmental Education Center offer youth opportunities to explore, study and improve the urban environment. Youth groups, day care centers, home-schooled students, and school groups visit the Center for workshops, classes and programs using its gardens, greenhouse, animals, computers, research equipment, references and curriculum materials.

Topics: Energy, ecology, recycling, wetlands, forests and trees, animals and habitat, air and water pollution

Serving: Ages 3 through 16

Resources

- * Field trips
- * Workshops and classes
- * Computer classes and computer-based lessons
- * Videos
- * Summer camp
- * After school youth programs
- * College internships (paid) and youth summer job opportunities

Notes

- * Please call to schedule group visits (weekdays, 10:00 am to 3:00 pm).
- * Students may drop in after school to work on science projects.
- * Please see the Department of Parks and Recreation entry for contact information about internships and youth employment.

Location and Getting There

Metro: U8 bus; Minnesota Avenue (Orange Line)

For More Information

Maisie Hughes, Recreation Specialist

Phone: (202) 727-6373

Fax: (202) 727-0134

Email: maisie.hughes@dc.gov

Address: Environmental Programs, 4801 Nannie Helen Burroughs Ave. NE Washington DC 20019

Web site: www.dpr.dc.gov

D.C. Department of Parks and Recreation – Youth Gardens Program

The Youth Gardens Program works with students to plant and maintain gardens. It engages over 300 inner-city youth each year in a comprehensive indoor and outdoor gardening program. Students learn to grow vegetables in their own garden plots while studying related concepts. Individuals and school groups are invited to participate in the program or visit the gardens.

Topics: Horticulture, ecology
Serving: Grades 3 through 6

Resources

- * Field trips to gardens
- * Gardening
- * Workshops, classes and curricula
- * In-school, summer and holiday youth programs
- * Holiday seasons craft workshops demonstrate using natural products in decorations and gifts.

Notes

Location and Getting There

Twin Oaks Youth Garden: 14th and Taylor streets NW
Metro: 62 or 70 bus; Georgia Avenue-Petworth (Green Line)

Lederer Youth Garden: 4801 Nannie Helen Burroughs Ave. NE
Metro: U8 bus; Minnesota Avenue (Orange Line)

For More Information

Jerome Smith, Youth Gardens Coordinator
Phone: (202) 576-6257
Fax: (202) 727-0134
Address: 4801 Nannie Helen Burroughs Ave. NE, Washington DC 20019

Web site: www.dc.dpr.gov

D.C. Energy Office

The D.C. Energy Office works to make the District energy-efficient. The Energy Office conducts public education programs and provides fuel and weatherization assistance to low-income households. It also works to ensure that the District's agencies, residents and businesses employ energy-efficient technology and have access to safe, reliable and adequate energy.

Topics: Energy, air quality, health, environmental economics
Serving: Grade 1 through college

Resources

- * Grants
- * Curricula
- * Energy Library offers publications and videos, listed on line. Videos may be viewed only at the library.
- * Energy Patrol Program. Students identify energy waste in their schools and homes, identify opportunities to conserve energy, and earn certificates at the end of the year
- * Teachers' Energy Technology Workshop helps educators integrate math, science and energy lessons.
- * Energy Auditor course at Coolidge High School offers students practical field experience with utility auditors conducting residential audits. Successful students may be hired for summer jobs in energy auditing and weatherization.
- * Alternative Fuels Mechanics Training course at Phelps High School. Students maintain and repair alternative fuel vehicles.

Notes

Location and Getting There

Metro: U Street-Cardozo (Green Line)

For More Information

Sharon Cooke, Public Education and Informational Programs Manager

Phone: (202) 673-6738 or (202) 673-6700

Fax: (202) 673-6725

Email: scookeyuba@aol.com

Address: 2000 14th St. NW, 300 East, Washington, DC 20009

Web site: www.dcenery.org

D.C. Fisheries and Wildlife Division – Environmental Health Administration – Department of Health

The D.C. Fisheries and Wildlife Division manages public fisheries and aquatic resources through regulation, research, education and outreach. It operates the District's Aquatic Resources Education Center on the banks of the Anacostia River and conducts environmental education programs. Staff are available to assist educators and to assist with projects related to aquatic resources.

Topics: Ecology, aquatic ecosystems, biology

Serving: Pre-K through 12

Also see: Aquatic Resources Education Center, page; and Project WET, page

Resources

- * Aquatic Resources Education Center
- * In-School Aquatic Education Program (K-12)
- * Teacher workshops may include Project WET (seat hours).
- * Curriculum resources include presentation materials, worksheets and the manuals.
- * Publications include the *Capital Geographic* newsletter.
- * Summer Angler Education Program (ages 5 through 16) teaches biology, ecology, conservation and ethical angling.
- * Fishing clinics and derbies, with equipment for loan
- * College internships (paid)

Notes

Location and Getting There

Metro: 80 bus from N. Capitol St.; Union Station (Red Line)

For More Information

Aquatic & Wildlife Resources Education Branch Chief

Phone: (202) 535-2260

Fax: (202) 535-1373

Email:

Address: 51 N St. NE, Washington, DC 20002-3323

Web site: www.dchealth.com/dfishandwildlife

D.C. Office of Recycling – Department of Public Works

The D.C. Office of Recycling oversees and promotes recycling and source reduction in the District. The Office works with Project Learning Tree to train DC teachers to use environmental activities in classrooms and to raise student awareness of environmental issues. These programs are designed to address federal standards of learning and can be adapted to address DC standard.

Topics: Waste reduction, recycling, composting, watershed management, forests
Serving: Pre-K through 12th Grade

Resources

- * Handouts and giveaways for activities
- * Field trips, by appointment only
- * Speakers (grades 5 through 12)
- * Teacher workshops with Project Learning Tree (credit)
- * Technical support for in-school recycling programs
- * Community service learning (in development)

Notes

Location and Getting There

For More Information

Education Specialist

Phone: (202) 645-8509 or (202) 645-8245

Fax: (202) 645-8518

Email: albert.ybarra@dc.gov

Address: 3220 Pennsylvania Ave. SE, Washington, DC 20020

Web site: www.dpw.washingtondc.gov

Eisenhower National Clearinghouse for Mathematics and Science Education

The Eisenhower National Clearinghouse is funded by the U.S. Department of Education to serve math and science educators. It maintains the most comprehensive collection of math and science curriculum resources in the nation; provides the best selection of math and science education resources on the internet; supports teachers' professional development in math, science, and the effective use of technology; and serves all K-12 educators, parents and students with free products and services.

Topics: Comprehensive
Serving: Pre-K through college

Resources

All ENC products and services are free and available via the ENC Web site:

- * The ENC Collection describes more than 20,000 K-12 teaching resources and makes the information available through a searchable online database.
- * *ENC Focus* quarterly magazine covers education topics relevant to math and science teachers, with articles written by teachers and experts on classroom teaching and professional growth.
- * Classroom Calendar supplements and enriches lessons by providing overviews, ready-to-go activities, Internet sources, and suggested curriculum materials. Entries are based on the national math and science education standards.
- * Digital Dozen features 12 exemplary web sites carefully chosen each month for educators and students.
- * *The Guidebook of Federal Resources* is a compilation of programs and services available from 16 federal agencies supporting math and science education.

Notes

A subset of the materials in the ENC collections is available for inspection at the Capital Collection and Demonstration Site at George Washington University. For information about visiting the Capital Collection or about professional development opportunities, please contact Shirley Butler at (202) 994-7048 or sdelaney@gwu.edu.

Location and Getting There

For More Information

Phone: (800) 621-5785 or (614) 292-7784.

Fax: (614) 292-2066

Email: info@enc.org

Address: Eisenhower National Clearinghouse, Ohio State University, 1929 Kenny Road, Columbus, OH 43210-1079

Website: www.enc.org

The GLOBE Program: Global Learning and Observation to Benefit the Environment

GLOBE is an international hands-on, school-based science education program supported and operated in the United States by the National Aeronautics and Space Administration, the National Science Foundation, the U.S. Environmental Protection Agency, and the Department of State in cooperation with local and state education organizations. GLOBE has been adopted by schools in every U.S. state, the District of Columbia, and more than 100 countries. Students in more than 10,000 schools have taken part in GLOBE.

GLOBE helps teachers and students meet education standards, participate in research, and share information. Participants can communicate with students, teachers and scientists around the world through GLOBE-Mail. Teachers completing GLOBE workshops can have their students collect and report scientific data via the GLOBE web site. The data submitted are used by students and scientists around the world.

Topics: Atmosphere, soil, hydrology, land cover, measurements, scientific process

Serving: K through 12

Standards: GLOBE resources address national standards of learning

Resources

- * Professional development workshops for K-12 teachers about hands-on Earth science field and lab work (credit)
- * Free educational materials (print, video, and online) for teachers who attend workshops
- * Extensive interactive web site for student inquiry and analysis
- * E-mail system for schools around the world to engage in cooperative work
- * College internships (unpaid)

Notes

Location and Getting There

- * Please see GLOBE's web site to find the GLOBE partner contact for your state.

For More Information

GLOBE Help Desk

Phone: (888) 858-9947

Email: info@globe.gov

Address: 1800 G St. NW, Washington DC 20006

Web site: www.globe.gov

Interstate Commission on the Potomac River Basin

The Interstate Commission on the Potomac River Basin is an advisory agency established to help protect the Potomac River and its 14,670-square-mile watershed. Its mission covers all water and related land resources in the basin as well as water quality. The ICPRB coordinates environmental protection activity within the basin, stimulates federal and state action, conducts research, serves as a liaison with citizens, disseminates information about the Potomac, and provides technical support to participating state and local governments.

Topics: Aquatic ecosystems, wetlands, habitat restoration, biodiversity, environmental economics, water pollution, water quality
Serving: Grade 1 through college

Resources

- * *Potomac Basin Reporter* newsletter includes information and projects affecting the Potomac River basin. (free)
- * Educational publications, videos, slide shows, and other materials for loan
- * Resource library
- * Presentations on related subjects
- * Community service learning
- * College internships (generally unpaid)

Notes

- * Please call or e-mail to use the library or to request a presentation.
- * The ICPRB will try to adapt programs to accommodate students with special needs.

Location and Getting There

Metro: Ride-On bus 5, 26, 81; White Flint (Red Line)

For More Information

Curtis Dalpra, Communications Manager

Phone: (301) 984-1908 ext. 107

Fax: (301) 984-5841

Email: info@icprb.org

Address: Suite 300, 6110 Executive Blvd., Rockville, MD 20852-3903

Web site: www.potomacriver.org

Martin Luther King Jr. Memorial Library – Washingtoniana Division

The Library's Washingtoniana Division is a great source of information on the history of DC neighborhoods and a good place to track down old maps. It houses District government publications and statutes. Local history is an important component of any environmental education program focusing on local resources and the interaction between humans and the land. By learning about the history of our neighborhoods, we can identify the impact of human activity on our environment, and look for ways to live more lightly on the land.

Topics: Ecology, geology, transportation, community history
Serving: Elementary through college

Resources

- * DC government publications and regulations
- * Old maps of DC neighborhoods
- * Reference materials on DC history
- * Instruction for classes on use of resources, by appointment only.
- * Community service learning.
- * Internships (unpaid)

Notes

- * The Division is wheelchair-accessible.
- * The Library has staff who work with vision-impaired and hearing-impaired visitors. Sign language is available for tours with one week notice.

Location and Getting There

Metro: Gallery Place (Red, Green and Yellow lines)

For More Information

Librarian

Phone: (202) 727-1213

Fax: (202) 727-1129

Email:

Address: Martin Luther King Jr. Memorial Library, 901 G St. NW, Room 307, Washington, DC 20001

Web site: www.dclibrary.org/washingtoniana/index.html

Maryland Department of Natural Resources

The Maryland Department of Natural Resources manages Maryland's natural resources, and works to inspire people to enjoy and live in harmony with their environment, and to protect the Chesapeake Bay and Maryland's diverse landscapes, flora and fauna, and natural resources. It offers many educational programs opportunities for adults, students, educators, and community organizations.

Topics: Ecology, geology, freshwater and marine ecosystems, wetlands, forests and other terrestrial ecosystems, biodiversity and endangered species, habitat restoration, land use, energy, water quality

Serving: K through adult

Also see: Chesapeake Bay Program, page; Project WET, page; Project WILD; Project Learning Tree, page

Standards: Programs address Maryland and national standards of learning.

Resources

- * Curricula on an array of subjects (K through 12)
- * Curriculum-based programs through Projects WET, WILD, and Learning Tree
- * Videos and fact sheets
- * Interactive, hands-on classroom programs include Grasses in Classes and other habitat restoration projects.
- * Speakers
- * Preparatory and follow-up activities
- * Gardening activities
- * Water testing
- * Community service learning for Maryland students, and scout programs
- * Professional development opportunities in forestry, wildlife, aquatics, and other areas (credit in some cases)
- * College internships (sometimes paid)
- * Camping and after school, weekend and summer youth activities
- * Grants

Notes

- * Most professional development workshops are free or cost less than \$50.
- * The Department works to accommodate students with hearing or vision impairments with 30 days notice.
- * Programs are open to non-Maryland teachers and students.

Location and Getting There

For More Information

Elena Takaki, Education Program Manager

Phone: (410) 260-8715

Fax: (410) 260-8709

Email: etakaki@dnr.state.md.us

Address: Education Program, Maryland Department of Natural Resources, Tawes State Office Bldg., E2, 580 Taylor Ave., Annapolis, MD 21401

Website: www.dnr.state.md.us/education

Maryland Energy Administration

The Maryland Energy Administration's mission is to provide resources and to develop policies that maximize energy conservation through increased efficiency and increased use of renewable energy, thereby promoting economic development, protecting Maryland energy supplies, and protecting the environment. The MEA sponsors and provides technical support for an array of educational programs.

Topics: Energy, sustainability, climate change, ozone depletion, transportation, environmental economics
Serving: Grades 1 through 12

See also: Alliance to Save Energy, page; American Wind Energy Association, page; DC Energy Office, page; Maryland-DC-Virginia Solar Energy Industry Association, page

Resources

- * Curriculum materials, fact sheets and maps.
- * Maryland Solar Schools Program provides partial funding for installation of photovoltaic solar energy systems on Maryland schools, providing students with opportunities to study clean, renewable energy. The MEA also plans to offer partial funding for solar hot water systems.
- * Community Energy Loan Program offers low interest loans to schools and other organizations for cost-effective energy conservation projects.
- * Sponsorship and technical support for High-Performance School Buildings and Green Schools programs. Also sponsors a student poster contest and the American Tour de Sol.
- * Workshops and conferences on energy conservation and efficiency, and on renewable energy.

Notes

Location and Getting There

For More Information

Program Manager

Phone: (800) 723-6374

Fax: (410) 974-2250

Email: mea@energy.state.md.us

Address: 623 Forest Drive, Suite 300, Annapolis, MD, 21403

Website: www.energy.state.md.us

Maryland Sea Grant College

The Maryland Sea Grant College supports innovative marine research and education, with a special focus on the Chesapeake Bay. Sea Grant-supported research targets practical problems, with the aim of promoting wise decision-making. As a gateway to relevant, reliable scientific information, Maryland Sea Grant helps people make informed choices about their use and stewardship of marine resources. Maryland Sea Grant is part of a network of 30 university-based Sea Grant programs around the country. It is hosted by the University of Maryland's College Park campus, and administered by the University's Center for Environmental Science. Maryland Sea Grants programs are open to teachers and students from other states.

Topics: Ecology, freshwater and marine ecosystems, wetlands, biodiversity, habitat restoration, sustainability, land use, energy, water quality, climate change

Serving: Grade 1 through college

Standards: Programs address Maryland and national standards.

Also see:

Resources

- * Online and computer-based curriculum materials
- * Educational programs for K through college. Curriculum materials focus on grades 6 through 12.
- * SciTech Education Program in Baltimore gives students opportunities to perform biotechnology experiments. (K through 12)
- * Site visits and field activities, with pre- and post-visit activities
- * Documentary and educational videos illustrate key issues including fisheries, water quality, invasive species, and aquaculture
- * Publications include facts sheets and *Chesapeake Quarterly*, *Maryland Aquafarmer*, and *Maryland Sea Grant Schools Network News* magazines. (free online and in print)
- * Summer fellowships for teachers at research institutions (stipend)
- * Teacher workshops and professional development programs (credit)
- * After school youth activities
- * High school (unpaid) and college (paid) internships

Notes

- * To schedule visits to the SciTech Education Program lab, please call (410) 576-5778 or visit www.umbi.umd.edu/~scitech.

Location and Getting There

SciTech Education Program: Columbus Center, Baltimore Inner Harbor, 701 E. Pratt St.

For More Information

Adam Frederick or Jackie Takacs

Phone: (410) 234-8850 or (410) 326-7356

Fax: (410) 234-8896

Email: frederic@mdsg.umd.edu

Address: Center of Marine Biotechnology, 701 E. Pratt St., Baltimore, MD 21202

Website: www.mdsg.umd.edu

Metropolitan Washington Council of Governments

The Metropolitan Washington Council of Governments is the regional planning organization serving the Washington area's municipal, county and state governments. COG conducts research and public education and helps coordinate regional planning on an array of issues including air quality, transportation, water/wastewater pollution, water conservation, regional homeland security, watershed restoration, energy, [reforestation](#), [submerged aquatic vegetation](#), and solid waste.

From late Spring to early Fall, COG publishes daily air quality forecasts, advisories and reports. In working with Anacostia Watershed Restoration Committee, COG designed the Small Habitat Improvement Program develop small-scale restoration projects that citizens and community groups can implement. [COG continuously monitors, assesses and reports on](#) regional precipitation and water supply conditions. [It also helps](#) manage regional water resources.

COG's offers technical and policy materials for professionals, information on regional issues, and a forum for the resolution and coordination of those issues. COG has a long history and experience in regional education efforts from school-aged children to adults. Much of its information is available online and in COG's Public Information Center.

Topics: Aquatic ecosystems, forests, sustainability, submerged aquatic plant control, living resources, solid waste, transportation, land use, energy, air quality, water conservation and quality, pollution prevention, climate change, environmental law.

Serving: Grade 1 through college

Resources

- * Public Information Center
- * Chesapeake Bay Community Action Guide
- * Speakers
- * School-based Pollution Prevention program
- * Water Conservation education
- * Forums on regional issues
- * Technical assistance for watershed protection, community environmental restoration projects and other topics
- * College internships (generally summer)

Notes

- * COG's facilities are wheelchair-accessible.

Location and Getting There

Metro: Union Station (Red Line)

For More Information

Director Water Resources, Department of Environmental Programs

Phone: (202) 962-3352

Fax: (202) 962-3201

Email: tgraham@mwcog.org

Address: 777 North Capitol St. NE, Suite 300, Washington, DC 20002

Website: www.mwcog.org

Montgomery County Materials Recovery Facility – Montgomery County Division of Solid Waste Services

Montgomery County's state-of-the-art Materials Recycling Facility separates recyclable materials and sends them to recycling plants. The facility accepts paper and cardboard, glass bottles and jars, all plastic bottles with "necks", bi-metal ("tin") cans, aluminum and yard trimmings. Classes and community groups can tour the facility to learn about this process and the importance of recycling.

Topics: Waste reduction, recycling, "disposal"
Serving: Pre-K through college

Resources

- * Free tours on weekdays (all ages)
- * Speakers and exhibits in Montgomery County. Contact (240) 777-6400 or info@mcrecycles.org.
- * Volunteer opportunities through the Division's Master Recycler/Composter Program. Contact the program manager at (301) 840-2852 or volunteers@mcrecycles.org.
- * Community service learning through the Master Recycler/Composter Program.
- * Internships (unpaid, occasional)

Notes

- * The recycling facility is wheelchair-accessible.
- * Tour reservations required four days in advance.
- * The Recycling Facility can provide sign language interpretation with four days notice.

Location and Getting There

Route 355 just south of Shady Grove Road in Rockville
Metro: Ride-On bus 55, 59, or 61; Shady Grove (Red Line);

For More Information

Staff

Phone: (301) 417-1433

Fax:

Email: info@mcrecycles.org

Address: 16105 Frederick Road, Rockville, MD 20855

Website: www.mcrecycles.org

National Aeronautics and Space Administration – Earth Science Enterprise

NASA's Earth Science Enterprise program studies the Earth's air, land, water, and life as a complex, integrated system. It also delivers NASA's unique Earth system science research and technology to all education audiences. Earth system science transcends disciplinary boundaries to treat the Earth as an integrated system and seeks a deeper understanding of the physical, chemical, biological and human interactions that determine the Earth's past, current, and future states – providing a physical basis for understanding the world in which we live .

Topics: Earth system science and applications

Serving: K through college

Also see: GLOBE Program, page

Resources

* Field trips to the Goddard Space Flight Center in Greenbelt, Maryland, or to the Virginia Air and Space Center in Hampton, Virginia. Call (301) 286-8981 or (757) 727-0900.

* NASA Educator Resource Center offers teacher workshops and curriculum materials. Call (202) 274-6287 or (301) 286-8570.

* *Our Mission to Planet Earth* guide to teaching Earth science (K-3). Visit <http://spacelink.nasa.gov/Instructional.Materials/NASA.Educational.Products/Our.Mission.to.Planet.Earth>

* The GLOBE program offers teacher workshops and educational materials. Visit www.globe.gov.

* Online catalog of Earth system science resources for teachers and primary, secondary, and college students includes curricula, student and teacher training, grants, internships, and professional development opportunities. Visit www.earth.nasa.gov/education/catalog .

* Online catalog of resources includes videos, slides, computer-based and online materials, fact sheets and maps. Search by topic or medium. Call NASA's Central Operation of Resources for Education (CORE) at (866) 776-CORE, or visit <http://core.nasa.gov> .

* For Kids Only offers online lessons, games, teacher's guides, and other resources. Visit <http://kids.earth.nasa.gov> .

* NASA Summer High School Apprenticeship Research Program. Call (301) 985-5171 or visit www.nasasharp.com . (paid)

* NASA Undergraduate Student Research Program. Visit <http://education.nasa.gov/usrp> .

* Challenger Center for Space Science Education in Alexandria, VA. Call (703) 683-9740, or visit www.challenger.org.

Location and Getting There

* Goddard Center: 800 Greenbelt Road, Greenbelt

Metro: bus T15, T16, T17; Greenbelt (Green Line)

For More Information

* NASA Teacher Resource Center for DC and Maryland

Dr. Robert Gabrys, Chief of the Education Office

Phone: (301) 286-7205 or (301) 286-4495

Email:

Address: Mail Code 130.3, NASA Goddard Space Flight Center, Greenbelt, MD 20771-0001

* NASA Teacher Resource Center for Virginia

Dr. William B. Williams

Phone: (757) 864-9728

Email:

Address: Building 1216 Room 107 MS 400, NASA Langley Research Center, 17 Langley Blvd.,
Hampton, VA 23681-0001

National Institute of Environmental Health Sciences

The National Institute of Environmental Health Sciences works to reduce the burden of human illness and dysfunction from environmental causes. NIEHS combines multidisciplinary biomedical research programs, prevention and intervention efforts, and communication strategies that encompass training, education, technology transfer and community outreach.

NIEHS supports and provides a wealth of educational resources on asthma and air pollution, lead, mercury, pesticides, electric and magnetic fields, and many other environmental health topics. It also funds centers for environmental health studies at major universities across the country. NIEHS's DC-area local partner in community outreach and education Program is the Johns Hopkins University Center in Urban Environmental Health.

Topics: Fresh and saltwater ecosystems, genetically modified organisms, water pollution, outdoor and indoor air pollution, solid waste, transportation, climate change, ozone depletion, environmental ethics

Serving: Pre-K through college

Standards: Some NIEHS resources meet national standards of learning.

Resources

- * Online Teacher Support page offers lessons and curriculum materials on environmental health topics (K through 12).
- * NIEHS Kids' Page offers games, puzzles, coloring books, music and more.
- * Videos, slide shows, fact sheets, booklets and maps
- * NIEHS News e-mail list
- * Speakers, lectures, symposia, town hall meetings, and field trips to NIEHS. For information on town meetings, see www.niehs.nih.gov/od/tnhome.htm.
- * *Environmental Health Perspectives* monthly scientific journal, in print and on line
- * National Toxicology Program's searchable database offers facts about common chemicals.
- * High school and college internships (some paid)
- * Teacher workshops (some with stipends and/or credit)
- * Grants

Notes

- * To receive announcements of press releases, seminars, and other special events, subscribe to <http://list.niehs.nih.gov/mailman/listinfo/niehs-newslist>.

Location and Getting There

For More Information

John Peterson, Public Affairs Specialist

Phone: (919) 541-7860 or (919) 541-3345

Fax: (919) 541-4395

Email: booklet@niehs.nih.gov

Address: NIEHS Office of Communications, P.O. Box 12233, Research Triangle Park, NC 27709

Attention: John Peterson, Mail Drop EC-12

Web site: www.niehs.nih.gov

National Oceanic and Atmospheric Administration

The National Oceanic and Atmospheric Administration's mission is to describe and predict changes in the Earth's environment and to promote global environmental stewardship. Its functions include weather forecasting and warning services; assessing long-term global climate change; protecting threatened marine mammals; and promoting healthy coastal ecosystems. NOAA bureaus include the National Weather Service, the Office of Oceanic and Atmospheric Research, the National Ocean Service, the National Marine Fisheries Service, and the National Environmental Satellite, Data and Information Service.

Topics: climate change, ozone depletion, weather, endangered marine mammals, natural hazards, freshwater and marine ecosystems, satellites and space, geodesy

Serving: Pre-K through college

Standards: NOAA resources often meet state standards of learning, but this varies by region.

Resources

- * Education Web site offers abundant resources for teachers, students and the general public.
- * Teachers guides and curricula can be ordered by topic and grade level.
- * Videos, fact sheets, maps, posters, and online lessons
- * Resource catalogs on weather; climate change and Earth; oceans and coasts; and satellites and space.
- * Teacher training and professional development programs can be custom-designed to meet teacher needs. (some for credit)

* Teachers at Sea

Notes

* Students interested in working with NOAA should visit www.education.noaa.gov/students.html to learn about jobs and careers.

Location and Getting There

Metro: Silver Spring (Red Line), a Metrobus and Ride-On bus hub

For More Information

Outreach Unit, Office of Public Affairs

Phone: (301) 713-1208

Fax: (301) 713-1211

Email: NOAA-outreach@noaa.gov

Address: 1305 East West Highway, #1W514, Silver Spring, MD 20910

Web site: www.education.noaa.gov

National Park Service – National Capital Region

The National Park Service works to preserve and protect the nation's natural and cultural resources. Each of the 35 national park sites in the greater Washington metropolitan area offers its own educational programs and opportunities. The NPS Center for Urban Ecology carries out scientific research on the natural resources of the District and other urban areas.

Topics: Ecology, geology, aquatic and terrestrial ecosystems, biodiversity, habitat restoration, agriculture, sustainability, land use, air and water pollution, climate change, ozone depletion, weather, American and local history, anthropology, archaeology, Industrial Revolution in America, history of transportation in the area

Serving: Pre-K through college, lifelong learning

Standards: Programs address national standards of learning, and often address state and local standards.

Also see: Many entries under Parks and Natural Areas; Parks as Classrooms, page; Bridging the Watershed, page

Resources

- * Environmental and heritage curriculum-based education programs for all ages cover a wide range of topics and vary by park.
- * Junior Rangers (generally ages 8 through 16, varies by park)
- * Curriculum-based education materials – online, computer-based and printed
- * Publications for students and teachers
- * Speakers
- * Videos and slide shows
- * Teacher workshops and professional development (credit)
- * Special events
- * Tent and cabin camping
- * Community service learning
- * High school and college internships (paid and unpaid).

Notes

- * Please contact individual parks for information on hours of operation, access and services for visitors with special needs, community service learning, internships, and other resources. Also, visit the National Park Service web site and check the page for each park.
- * Please call ahead for park information and reservations for the formal park programs.

Locations and Directions

Please visit the NPS web site and the home page for each park site.

For More Information

Division of Education and Interpretation

Phone: (202) 619-7077

Fax: (202) 619-7159

Email: sue_hansen@nps.gov

Address: 1100 Ohio Drive SW, Room 139, Washington, DC 20242

Website: www.nps.gov

National Park Service – Youth Conservation Corps

The Youth Conservation Corps is an eight-week summer employment program for young adults, who work, learn, and earn together by accomplishing needed conservation projects on public lands. Participants develop an understanding and appreciation of the nation's natural environment and heritage.

Activities include building trails and campground facilities; planting trees, shrubs, and flowers; clearing streams, removing invasive plants, and cleaning up litter; improving wildlife habitat; monitoring streams and vegetation; and enhancing office skills.

Topics: Streams, estuaries and marine ecosystems, wetlands, forests, habitat restoration, sustainability, environmental ethics

Serving: Ages 15 through 18

Also see: National Park Service – National Capital Region Educational Programs, page

Resources

Notes

Applicants must submit applications by April 15th. Applicants must be at least 15 years of age, and not have reached 19 years of age during the term of employment. They must be able to participate in outdoor work and training projects. Applications are available at any National Park. The Park Service will work to accommodate participants with special needs.

Location and Getting There

Parks throughout the Washington area

For More Information

Cynthia Salter-Stith, Youth Programs Coordinator

Phone: (202) 619-7055

Fax: (202) 619-7169

Email: cynthia_salter-stith@nps.gov

Address: Youth Conservation Corps, 100 Ohio Drive SW, Room 359, Washington, DC 20242

Website: www.inside.nps.gov

National Science Foundation

The National Science Foundation is an independent federal agency that funds institutions to provide or develop educational resources and materials including science, math, engineering, and technology curriculum and professional development activities for teachers. Though the NSF does not directly supply educational materials, many materials used in classrooms across the U.S. have been developed with NSF funding.

Topics:

Serving: Pre-K through college

Also see:

Resources

- * Grants. Teachers applying for grants must do so through a school or schools a system.
- * Instructional Materials Development develops instructional and assessment materials designed to enhance students' knowledge, thinking skills, and problem-solving abilities. Materials incorporate advances in content, research on teaching and learning, and instructional technologies.
- * Teacher Professional Continuum addresses critical issues and needs in recruiting, preparing, enhancing, and retaining of science, technology, and math teachers (K through 12). Its goals to develop and disseminate the resources and models that improve the quality and coherence of the learning experiences that prepare and enhance teachers
- * Advanced Technology Education promotes technological education in secondary schools and colleges through curriculum development; professional development of college faculty and secondary school teachers; internships and field experiences for faculty, teachers, and students; and other activities.
- * Math and Science Partnership supports partnerships between schools (K through 12), colleges and universities, and other stakeholders.
- * Informal Science Education promotes public interest, understanding, and engagement in science, technology, engineering, and mathematics through voluntary, self-directed, and lifelong learning opportunities. It supports: television programs, films, and radio shows; exhibits and educational programs at museums, aquaria, nature centers, zoos, and libraries; and educational programs through community and youth-based programs.
- * The Presidential Awards for Excellence in Mathematics and Science Teaching identifies outstanding math and science teachers (K through 12) in each state and the four U.S. jurisdictions.

Notes

Location and Getting There

For More Information

Dr. David Campbell

Phone: (703) 292-5093 or TDD (703) 292-5090

Fax:

Email: dcampbel@nsf.gov

Address: Division of Elementary, Secondary, and Informal Education, Room 885, National Science Foundation, 4201 Wilson Blvd., Arlington, VA 22230

Website: www.nsf.gov

Natural Resources Conservation Service – US Department of Agriculture

The Natural Resources Conservation Service (formerly the Soil Conservation Service) works with citizen groups, community organizations, schools and local governments to help them **manage and protect** natural resources. The NRCS field office work closely with the D.C. Soil and Water Conservation District. NCRS partners also include local communities, nonprofits, environmental groups, universities and professional societies.

Topics: Soil and water conservation, wetland creation and restoration, stream bank stabilization, backyard conservation, ecology, geology, aquatic and terrestrial ecosystems, sustainability, land use, water pollution, environmental law

Serving: Pre-K through 12

Resources

- * Technical assistance for environmental outdoor classrooms and environmental projects
- * Technical assistance for soil erosion problems
- * Education outreach and training
- * Water quality projects
- * Events and meetings
- * Publications and curriculum materials, including:
 - ** SK Worm Teaches Soils
 - ** Living in Harmony with Wetlands
 - ** PLANTS Database, an online source of comprehensive information on plants and crops
 - ** Backyard Conservation series of fact sheets and booklet. Call (888) LANDCARE.
 - ** *Dig In! Hands-On Soil Investigations* booklet (grades K through 4). Call (800) 277-5300.
- * Earth Team volunteer opportunities
- * Youth programs and environmental education camping trips
- * Environmental projects for community service hours
- * Environmental community outreach efforts
- * Soil information and soil surveys

Notes

- * The NRCS office is wheelchair accessible.

Location and Getting There

Metro: 80 bus from N. Capitol St.; Union Station (Red Line)

For More Information

Program Manager

Phone: (202) 535-2242

Fax: (202) 535-1364

Email: iburks@md.usda.gov or leslie.burks@dc.gov

Address: USDA-NRCS, 51 N St. NE, Room 5022, Washington, DC 20002

Web site: www.nrcs.usda.gov

U.S. Environmental Protection Agency – Office of Environmental Education

The U.S. Environmental Protection Agency's Office of Environmental Education supports efforts to develop an environmentally conscious and responsible public and to inspire personal responsibility in caring for the environment. Most EPA-OEE resources are available online. The EPA also sponsors professional development programs through the Environmental Education and Training Partnership and the National Conservation Training Center.

Topics: Comprehensive

Serving: Grade 1 through college

Standards: Resources generally address national standards of learning where applicable. The EPA funded the development of standards that correlate to national standards in 11 subject areas. See the North American Association for Environmental Education web site at

www.naaee.org/npeee/learner_guidelines.php

Also see: Environmental Education and Training Partnership, page; and National Conservation Training Center, page.

Resources

- * Environmental Education Grant Program. Call OEE or (202) 260-8619, or see www.epa.gov/enviroed/grants.html.
- * Educator Training (credit). All EPA teacher professional development programs are offered through the Environmental Education Training Partnership or through a cooperative arrangement with the U.S. Fish and Wildlife Service's National Conservation Training Center. See www.eetap.org, www.epa.gov/enviroed/nctc.html or www.epa.gov/enviroed/educate.html.
- * President's Environmental Youth Awards for Students (K through 12). See www.epa.gov/enviroed/awards.html.
- * Select EPA educational materials by issue. See www.epa.gov/enviroed/selecteparesources.html.
- * Publications. See www.epa.gov/enviroed/eepubsEPA.htm.
- * Environmental Education Guidelines. See www.epa.gov/enviroed/webguide.html
- * Federal government environmental education web sites. See www.epa.gov/enviroed/ftfee.html.
- * EPA kids' site with many activities and lessons. See www.epa.gov/kids.
- * EPA students' site offers abundant information on issues, service learning, awards, and careers, scholarships and internships. See www.epa.gov/students.
- * EPA teachers' site offers information on grants, workshops and conferences, scholarships, community service projects, and a broad array of curriculum materials. See www.epa.gov/teachers.
- * College fellowships through the National Network for Environmental Management Studies. See www.epa.gov/enviroed/nnems/index.html
- * Undergraduate and graduate internships. See www.epa.gov/enviroed/students.html.

Notes

Location and Getting There

1200 Pennsylvania Ave. NW, Room 1426, Washington, DC

Metro: Federal Triangle (Blue and Orange lines)

For More Information

Drew Burnett, Environmental Education Specialist

Phone: (202) 564-0448 or (202) 564-0443

Fax: (202) 564-2754

Email: burnett.andrew@epa.gov

Address: 1200 Pennsylvania Ave. NW (MC 1704A), Washington, DC 20460

Web site: www.epa.gov/enviroed

U.S. Fish and Wildlife Service – Chesapeake Bay Field Office

The Chesapeake Bay Field Office promotes public awareness of the living resources in the Bay ecosystem, the problems they face, and efforts to protect and restore them. It works to foster individual responsibility and stewardship of the Bay's resources.

Topics: Fresh and saltwater ecosystems, wetlands, forests and other terrestrial ecosystems, habitat restoration, biodiversity, endangered species
Serving: Grade 1 through college

Resources

- * Curriculum materials on the bay watershed include the Chesapeake Reading Series–Waterfowl (grades 1 and 2); Bay B, C's (grades 1 through 6); Changing Chesapeake (grades 1 through 6); and the Watershed Activity Kit (grades 6 through 9)
- * Publications include wildlife fact sheets, brochures, and more.
- * Schoolyard Habitat assistance includes a manual, mini-grants information, teacher workshops and technical assistance. See www.fws.gov/r5cbfo/schoolyd.htm or call (410) 573-4500
- * Profiles of bay watershed species, on line and in print
- * Teacher's packet, slide show, fact sheets, games, resource list and more on Endangered Species and the Endangered Species Act. See <http://endangered.fws.gov/kids/heyteach.htm>
- * Teacher workshops for the Schoolyard Habitat program (credit)

Notes

Location and Getting There

For More Information

Laurie Hewitt,

Phone: (410) 573-4500

Fax: (410) 224-2781

Email: laurie_hewitt@fws.gov

Address: 177 Admiral Cochrane Drive, Annapolis, MD 21401

Web site: www.fws.gov/r5cbfo

U.S. Fish and Wildlife Service – National Conservation Training Center

The National Conservation Training Center trains natural resource managers to conserve fish, wildlife, plants, and their habitats. As the 'home of the Fish and Wildlife Service,' the NCTC brings exceptional training and education opportunities to Service employees and others. It provides gathering place where educators and conservation professionals from all sectors can share and learn skills and perspectives in a collaborative environment.

The NCTC campus provides full-service residential facilities, complemented by professional staff, cutting-edge programs and curricula, and advanced technology available.

Topics: Ecology, freshwater ecosystems, wetlands, biodiversity and endangered species, habitat restoration, sustainability, land use

Serving: Grade 1 through college

Also see: National Fish and Wildlife Foundation, page

Resources

- * Videos, fact sheets and maps.
- * Teacher professional development opportunities (credit)
- * College internships
- * Wild Things Electronic Field Trips, a free, live, interactive satellite learning adventure, is offered each October. (grades 5 through 7)
- * Shorebird Sister Schools Program, an Internet-based program, connects students, educators, biologists, and birding enthusiasts along migratory flyways using a curriculum, email network, and web site. (grades 2 through 12)
- * Web Resources for Environmental Education online catalog of environmental education resources available through the NCTC Conservation Library web page.
- * Educating for Conservation Student Web Page offers students of all ages information about fish, wildlife, plants, and their habitats and how students can conserve, protect and enhance them.
- * Educating for Conservation Educator's Web Page offers curricula, resources, and activities.
- * Endangered Species Slide Show on the NCTC's Division of Education Outreach Web site.
- * The Nature of Learning is the National Wildlife Refuge System's new community-based environmental education initiative challenge grant program, and is available through the National Fish and Wildlife Foundation.
- * International Migratory Bird Day is celebrated in Canada, the U.S., Mexico and Central America through bird festivals and bird walks, education programs, and Bird Day!

Notes

- * The NCTC is wheelchair-accessible and will work to accommodate participants with hearing or vision impairments
- * Many resources listed above are available online.
- * Specific publications and posters are available through the NCTC Publications Unit.

Location and Getting There

75 miles west of Washington, DC

For More Information

Division of Education Outreach

Phone: (304) 876-7319

Fax: (304) 876-7231

Email: <http://faq.fws.gov/>

Address: 698 Conservation Way, Shepherdstown, WV 25443

Website: www.fws.gov

U.S. Fish and Wildlife Service – Publications Unit and Division of Education Outreach

The U.S. Fish and Wildlife Service works to preserve and protect our nation's wildlife by maintaining wildlife refuges across the country, conducting wildlife research, and offering public education programs. Its Publications Unit offers a wealth of information to supplement environmental education curricula, much of which is available on the agency's Web site.

Topics: Freshwater and saltwater ecosystems, wetlands, forests and other terrestrial ecosystems, habitat restoration, biodiversity, endangered species, environmental law

Serving: Grades 1 through 12

Also see: Fish and Wildlife Service – Chesapeake Bay Office, page.; National Conservation Training Center, page; and numerous wildlife refuges under Parks and Natural Areas.

Resources

* Publications on endangered species, wetlands and wildlife (general interest publications list available)

* Curriculum materials, including teacher's packet on endangered species, at <http://endangered.fws.gov/kids/heyteach.htm>

* Videos and slide shows include *Endangered Means There Is Still Time* (available on line)

* *Biologue* fact sheets on many mammals, birds and reptiles. See <http://species.fws.gov/#fact>.

* National Image Library offers hundreds of slides, photos and sketches of species and ecosystems. See <http://images.fws.gov>.

* Additional resources via the National Wetlands Inventory site. See <http://wetlands.fws.gov/educator.htm>.

Notes

Location and Getting There

For More Information

Staff Member

Phone: (800) 344-9453 or (304) 876-7203

Fax: (304) 876-7689

Email: john_fisher@fws.gov

Address: National Conservation Training Center, Route 1, Box 166, Shepherdstown, WV 25443

Web site: <http://training.fws.gov/library/pubs.html>

U.S. Forest Service – U.S. Department of Agriculture

The U.S. Forest Service manages and maintains the public forest resources in the National Forests across of the United States. The Service's Conservation Education program helps people of all ages understand, appreciate, and learn to conserve our country's natural and cultural resources. It also teaches people how natural and cultural resources and ecosystems affect each other and how resources can be used wisely.

Topics: Ecology, wetlands and forests, land use, solid waste, endangered species, air and water quality

Serving: Pre-K through college

Standards: Some curriculum materials address national standards of learning. The Service is working to align others.

Resources

- * Videos, fact sheets, maps and newsmagazine
- * Online, web-based and printed curriculum materials include:
 - ** *Ecosystem Matters*, a hands-on, interdisciplinary curriculum guide (K through 12)
 - ** Urban Forestry Laboratory Exercises, with field and lab activities and teacher guides (grades 1 through 12);
 - ** Investigating Your Environment, a broad-based, supplemental interdisciplinary curriculum (K through 6)
- * Teacher workshops
- * Information Center features interactive conservation displays, and a rustic lodge with 1900-1950 artifacts and videos. Call (202) 205-1680.
- * Smokey and Woodsy Owl costumes and educational material
- * Weekend youth activities

Notes

- * The Information Center is wheelchair-accessible.
- * The Center provides sign language interpretation and will adapt programs for vision-impaired visitors.

Location and Getting There

Yates Federal Building, 14th Street and Independence Ave. SW, Washington, DC

Metro: Smithsonian (Blue and Orange lines)

For More Information

Conservation Education

Phone: (202) 205-5681

Fax: (202) 690-5658

Email:

Address: 1400 Independence Ave. SW, Mail Stop 1147, Washington, DC 20250

Web site: www.na.fs.fed.us/spfo/ce/

U.S. Geological Survey

The U.S. Geological Survey's Earth Science Information Center offers a huge array of educational resources. Created by an act of Congress in 1879, the USGS has provided natural science information to the public and educators over the ensuing 120 years. Its research focuses on water resources; energy and mineral resources; geology; invasive species; wildlife disease; and natural hazards such as earthquakes, volcanoes, landslides and floods. The USGS is sought out for its natural science expertise and its vast earth and biological data holdings to help resolve natural resource problems across the Nation and around the world. It manages the nation's civilian mapping program, and applies new technology to studying the Earth.

Topics: Geology, aquatic and terrestrial ecosystems, biodiversity, energy, climate change, water pollution, natural hazards, invasive species, wildlife disease

Serving: K through 12

Standards: USGS educational products and teachers packets address national standards of learning.

Resources

- * Topographic and geologic maps of the United States
- * Videos, reports and other materials on many topics
- * Field trips to the ESIC Visitor's Center feature hands-on activities.
- * The Learning Web at www.usgs.gov/education offers:
 - ** Lesson plans and activities on life sciences, global change, mapping and Earth hazards;
 - ** Student resources such as *Finding a Balance*, a program to encourage students to study and discuss environmental dilemmas from various perspectives; and
 - ** Topical links to many educational resources, such as *Acid Rain in Our Nation's Capital*, a study and field guide to the causes and impact of acid rain. See <http://pubs.usgs.gov/gip/acidrain/contents.html>.
 - ** Real-time hazard information – earthquake magnitude and location within minutes of an event. See <http://earthquake.usgs.gov>.

Notes

- * Reservations required for field trips to the ESIC Visitor Center. Please call (703) 648-4748.
- * Staff will work to accommodate students with special needs, but asks that visiting group provide their own sign language interpreters if needed.

Location and Getting There

For More Information

Earth Science Information Center

Phone: (888) ASK-USGS (888-275-8747)

Fax: (703) 648-5548

Email: ask@usgs.gov

Address: 507 National Center, 12201 Sunrise Valley Drive, Room 1C100, Reston, VA 20192

Web site: www.usgs.gov/education or <http://pubs.usgs.gov>

University of the District of Columbia Cooperative Extension Service – Ag In The Classroom and Project Learning Tree in the City

Offered through the University of the District of Columbia Cooperative Extension Service, Agriculture in the Classroom teaches students about our food and fiber system, about the role of agriculture in our economy and society, and about careers in agriculture. It emphasizes integrating agriculture into existing curricula in a broad range of subjects.

Project Learning Tree (PLT in the City) connects the classroom to the community through education workshops and hands-on community action projects. The Extension Service collaborates with the DC Office of Recycling and with the DC Environmental Health Administration in offering PLT in the City

Topics: Ecology, forests, biodiversity, sustainability, agriculture, solid waste, land use, environmental economics, ozone depletion, weather, composting, soils and fertilizers, plant growth and propagation

Serving: Ag in the Classroom serves Pre-K through 6. Project Learning Tree (Pre-K through 12)

Standards: Both programs address DC and national standards of learning.

Also see: DC Office of Recycling, page; and DC Environmental Health Administration, page.

Resources

- * Curriculum materials – online, computer-based and printed
- * Speakers and lectures
- * Field trips
- * Pre- and post-visit activities
- * Gardening at schools
- * Teacher training programs (Both programs offer seat hours.)
- * Professional development courses through the U.S. Department of Agriculture's TEACH US program offers opportunities to study abroad.

Notes

Location and Getting There

Metro: Van Ness-UDC (Red Line)

For More Information

Barbara Brooks Evans, Program Coordinator

Phone: (202) 274-7160

Fax: (202) 274-7130

Email: bevans@udc.edu

Address: UDC Cooperative Extension Service, 4200 Connecticut Ave. NW, Building 52, Room 322F, Washington, DC 20008

Web site: www.udc.edu/coes/ces/naturalresources.htm

University of the District of Columbia Cooperative Extension Service – Junior Master Gardener Program

The Junior Master Gardener Program at the University of the District of Columbia uses lessons, hands-on activities, and peer and intergenerational mentoring to teach ecology and horticulture and to raise awareness of environmental and community issues. Participants gain leadership skills and a sense of pride and responsibility as they earn Junior Master Gardener certificates. They also learn about career opportunities in agriculture. The program also fosters parental involvement in the community.

Topics: Horticulture, ecology, sustainable agriculture

Serving: Grades 3 through 8

Standards: The Program addresses national and DC standards of learning.

Resources

* Workshops for trainers

* Curricula and materials developed by the Junior Master Gardener Program's national office at Texas A&M University. For more information about the national program, visit www.jmg.org.

Notes

* Facilities are accessible to people with special needs.

Location and Getting There

Metro: Van Ness-UDC (Red Line)

For More Information

Sandra Farber, Environmental & Natural Resources Extension Agent

Phone: (202) 274-7166

Fax: (202) 274-7130

Email: sfarber@udc.edu

Address: UDC Cooperative Extension Service, 4200 Connecticut Ave. NW, Building 52, Room 322F, Washington, DC 20008

University of the District of Columbia Cooperative Extension Service – Agricultural Experiment Station

The Agricultural Experiment Station studies sustainable agriculture, food quality and storage, nutrition, water quality, herbicide and pesticide management, and other environmental concerns of interest to urban communities. The Station conducts crop experiments at its 143-acre Muirkirk Farm in Beltsville, Maryland.

Topics: Agriculture, freshwater and marine ecosystems, wetlands, habitat restoration, biodiversity, agriculture, sustainability, land use, solid waste, water and air quality, and environmental ethics and economics

Serving: Grade 1 through college

Standards: The Station works with teachers to address national and DC standards.

Resources

- * Speakers and lectures
- * Fact sheets and newsmagazine
- * Curriculum materials
- * Fields trips
- * Activity guide being developed with teachers (grades 5 through 9)
- * Preparatory and follow-up activities
- * Soil testing and gardening equipment
- * Water Environment Studies in Schools (WESS) includes a Teacher Training Institute component to prepare teachers to give lessons in water quality testing and remote sensing. Middle schools teachers are encouraged to register for the summer training program. (seat hours)
- * Community service learning
- * After school, weekend and summer youth programs

Notes

- * The Station's facilities are wheelchair-accessible.

Location and Getting There

Metro: Van Ness-UDC (Red Line)

For More Information

Dr. JoAnne Favors

Phone: (202) 274-7170

Fax: (202) 274-7113

Email: jfavors@udc.edu

Address: 4200 Connecticut Ave. NW, Building 52, Suite B08, Washington, DC 20008

Web site: www.udc.edu

Virginia Institute of Marine Science

The Virginia Institute of Marine Science conducts interdisciplinary research in coastal ocean and estuarine science, educates students and citizens, and advises policy makers, industry, and the public. Its School of Marine Science is the professional graduate school in marine science for the College of William & Mary. Chartered in 1940, VIMS is the third largest marine research and education center in the United States.

Except for high school internships, VIMS programs are open to non-Virginia teachers and students.

Topics: Ecology, geology, marine ecosystems, wetlands

Serving: K through college

Also see: BRIDGE, page; ChesSIE, page

Resources

- * Online curricula
- * Fact sheets and newsletter
- * Site visits, lectures and symposia
- * Teacher workshops and summer teacher professional development opportunities (CEUs or graduate credit; travel stipends for some)
- * High schools internships include the Governor's School Marine Science Mentorships and FIRST (Female Initiation into Research in Science and Technology) internships (both unpaid).
- * College internships (some paid)
- * Graduate program in marine science
- * BRIDGE: Online Ocean Sciences Teacher Resource Center (K through 12)
- * Chesapeake Science on the Internet for Educators (ChesSIE) resource center

Notes

Location and Getting There

Roughly 15 miles east of Williamsburg

For More Information

Public Relations Coordinator

Phone: (804) 684-7000

Fax: (804) 684-7097

Email: wmaster@vims.edu

Address: Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, VA 23062

Website: www.vims.edu

Virginia Naturally – Virginia Department of Environmental Quality – Office of Environmental Education

Virginia Naturally, the Commonwealth of Virginia's official environmental education initiative, is a virtual association of public and private agencies, schools, and individuals working together to deliver environmental education programs to Virginians of all ages and to promote stewardship of natural and historic resources.

Virginia Naturally provides a gateway to formal and informal environmental education resources; highlights exemplary efforts and makes it easy for schools and communities to access resources and deliver environmental education programs; and links public and private groups together to enhance understanding of scientific and economic challenges.

Virginia Naturally's online Environmental Education Directory provides an excellent searchable database of relatively local and locally relevant resources

Topics: Ecology, freshwater and marine ecosystems, wetlands, habitat restoration, sustainability, water quality, indoor and outdoor air quality, solid waste, energy, climate change, ozone depletion

Serving: K through college

Also see: Project WET, page

Standards: Programs address Virginia and national standards of learning.

Resources

- * Curriculum-based programs include Project WET
- * Videos, PowerPoint materials, fact sheets, and maps
- * Online, computer-based and printed curricula
- * Online, searchable Environmental Education Directory. Search by topic or organization. See www.deq.state.va.us/eed .
- * Monthly email updates
- * Teacher workshops and professional development programs include the Chesapeake Bay Academy and Meaningful Watershed Educational Experience symposia (credit)
- * Teacher stipends and classroom grants

Notes

- * It is not clear which programs are open to non-Virginia teachers.

Location and Getting There

For More Information

Jennifer Comfort, Virginia Naturally Coordinator

Phone: (804) 698-4235

Fax: (804) 698-4533

Email: vanaturally@deq.state.va.us or jkcomfort@deq.state.va.us

Website: www.vanaturally.com

Washington Aqueduct & Dalecarlia Water Treatment Plant – U.S. Army Corps of Engineers

The Dalecarlia plant treats the District's water supply drawn from the Potomac River. Plant tours show the treatment process from the time water enters the system until it is sent to a reservoir for transfer to homes and businesses. The Corps of Engineers also manages the McMillan Water Treatment Plant at North Capitol Street and Michigan Avenue.

Topics: Water quality and treatment
Serving: Grade 4 and up

Resources

- * Tours (grade 4 and up)
- * Information on water quality and treatment

Notes

- * Please call for tour reservations and wheelchair access information.

Location and Getting There

In the Palisades neighborhood of the District, on the Maryland border.

For More Information

Tywannda Earby, Secretary of Plant Operations

Phone: (202) 764-2701

Fax: (202) 764-2401

Email: tywannda.earby@wad01.usace.army.mil

Address: 5900 MacArthur Blvd. NW, Washington, DC 20315-0220