

## Fostering Chesapeake Stewardship

## A Rich History and a Promising Future

The Chesapeake Bay and its rivers are dependent upon the actions of every citizen in the watershed, both today and in the future. Through their actions, each individual can contribute to the health and well-being of their neighborhood streams, rivers and the land that surrounds them, not only as ecological stewards of the Bay but also as members of watershed-wide communities. Therefore, the Chesapeake Executive Council has committed to engaging our citizens by promoting a broad conservation ethic throughout the fabric of community life, and fostering within all citizens a deeper understanding of their roles as trustees of their own local environments.

IN PARTICULAR, through the *Chesapeake* 2000 agreement the Chesapeake Executive Council committed to:

- Make environmental education and outreach a priority in order to achieve public awareness and personal involvement on behalf of the Bay and local watersheds.
- Provide information to enhance the ability of citizen and community groups to participate in Bay restoration activities on their property and in their local watershed.
- Enhance interpretation materials that promote stewardship at natural, recreational, historical and cultural public access points within the Chesapeake Bay watershed.
- Develop partnerships to enhance place-based interpretation of Bay-related resources and themes and stimulate volunteer involvement in resource restoration and conservation.
- Expand the use of new communication technologies to provide a comprehensive and interactive source of information on the Chesapeake Bay and its watershed for use by public and technical audiences; and develop and maintain a clearinghouse of this information specifically for use by educators.

The future of the Bay also depends on the actions of generations to follow, its stewardship soon resting in the hands of its youngest citizens. We acknowledge our duty to impart to these young people a sense of individual responsibility and our hope that they develop the skills to form a personal ethic regarding the natural world. Our students, future Bay leaders, should be armed with the knowledge and skills needed to make informed choices, have a sense of history and excitement about the nation's largest estuary and an understanding of how their individual actions affect this national treasure.

IN PARTICULAR, through the *Chesapeake* 2000 agreement the Chesapeake Executive Council committed to:

- Provide a meaningful Bay or stream outdoor experience for every school student in the watershed before graduation from high school.
- Provide students and teachers alike with opportunities to directly participate in local restoration and protection projects, and to support stewardship efforts in schools and on school property.
- Continue to forge partnerships with the Departments of Education and institutions of higher learning in each jurisdiction to integrate information about the Chesapeake Bay and its watershed into school curricula and university programs.

WE RECOGNIZE that environmental education coupled with hands-on, place-based field experiences, fosters positive attitudes toward environmental stewardship.

WE RECOGNIZE that environmental education taught in the context of existing learning standards increases student academic achievement in a variety of subjects.

WE EMBRACE the goal to provide every student in the watershed with meaningful watershed education experiences before graduation from high school.

WE RECOGNIZE the central, essential role that state and local education agencies play in the goal of providing every student in the watershed with meaningful watershed educational experiences. The involvement and interaction of education administrators at the state, district and individual school levels is fundamental to the success of this initiative, and we applaud the partnerships that have been established thus far.

WE RECOGNIZE the critical role that all partners, including federal, state and local natural resource agencies, and non-profit and community groups play in achieving our shared Chesapeake watershed education goals.

THEREFORE, the Chesapeake Bay Program will continue to focus and support the efforts of its Communications and Education Subcommittee on implementation of the Chesapeake Bay education and outreach commitments. The Chesapeake Bay Program will continue to host a suite of Internet Web sites to provide a comprehensive interactive source of information on the Chesapeake Bay and its watershed for the public and in particular the ChART (Chesapeake Academic Resources for Teachers) Web site to serve the special needs of educators. The

Chesapeake Bay Program will also continue to host regional Chesapeake Bay Education Summits on a biennial basis to further the educational goals of the watershed partnership.

FURTHERMORE, the Chesapeake Executive Council recognizes the efforts of state and local education agencies, federal, state and local natural resource agencies, non-profit and community groups and educators throughout the Chesapeake Bay watershed to engage our citizens and educate our children through programs and initiatives such as these:

- The state Departments of Education in the Chesapeake watershed will continue to support the effort to provide every student in the watershed with meaningful watershed education experiences and to provide teacher professional development focused on Chesapeake Bay watershed education. The states will also coordinate with the Chesapeake Bay Program's Education Workgroup to track and measure their accomplishments relative to the educational goals.
- ❖ The District of Columbia will continue to support the DC Public School System to provide meaningful watershed experiences to District youth. This will include working with the school system to incorporate watershed experiences into the science learning standards, helping the school system to secure added funding for watershed outdoor experiences, and partnering with individual schools and local environmental organizations to provide students with hands-on, outdoor, water-related activities that emphasize the Anacostia and Potomac Rivers, and the Chesapeake Bay. The District will also continue to support its Aquatic Resources Education Center located on the banks of the Anacostia River; here, youth and other residents can enhance their knowledge and understanding of our urban aquatic and wildlife resources. It will also provide teachers, parents, and students with environmental education materials through its Environmental Health Administration's Environmental Resource Center and teacher trainings. To foster conservation, the District will continue to provide teachers with training and financial resources through its "Greener Schools, Cleaner Water" program. This program will allow District teachers to design, install and maintain conservation sites on their school grounds and integrate them into their school curriculum. Lastly, the city will support a yearly youth summit to recognize schools and students participation in meaningful watershed activities.
- ❖ The Commonwealth of Virginia will continue its commitment for the restoration of the Chesapeake Bay through its educational efforts. In January 2003, the Board of Education adopted the Revised Virginia Science Standards of Learning, which have incorporated a significant focus on watershed and bay-

- related science concepts that support teachers' efforts to educate Virginia students about the importance of the Chesapeake Bay. The Virginia strategy continues to focus on comprehensive integration within the science education community through professional development, such as the Chesapeake Bay and Headwaters Academies, conducted with natural resource agency and local education agency partners. The creation of the Virginia Naturally Classroom Grants Program and supporting educational materials such as *Lessons from the Bay* provide a mechanism for teachers to provide meaningful watershed educational experiences to Virginia students. Virginia continually seeks new funding sources to provide opportunities for students in the areas of stewardship, restoration, and service learning related to the Chesapeake Bay watershed.
- The Maryland State Departments of Natural Resources, Environment, Agriculture, Planning, Transportation and Education will continue to work together to provide students with a variety of environmental education programs such as Tree-mendous Maryland, Eyes on the Bay, web-based lessons, Grime Crime, and World Water Monitoring Day. The Maryland State Department of Education will continue its support of local school systems through State environmental education regulations, the state curriculum, and annual meaningful watershed experiences. In addition, the Social Studies and Environmental Education offices will continue their partnership with the Maryland Geographic Alliance, which has yielded a series of lesson plans and classroom materials for the John Smith Chesapeake Bay Exploration Program. These lessons, accompanied by maps from The National Geographic Society, are being presented to teachers through a professional development initiative.
- The Pennsylvania Departments of Education, Environmental Protection, and Conservation and Natural Resources will continue their partnership to help foster meaningful watershed educational experiences and standards based curriculum for all students in the Commonwealth. Recent passage of the Pennsylvania Chesapeake Bay Watershed Education Program Act empowers the Department of Education (PDE) to work with school districts on watershed education, and provide students with opportunities to participate in meaningful outdoor stream experiences. In its first year of funding in 2005, \$300,000 was appropriated to the (PDE) to provide grants to school districts. The Department of Environmental Protection's (DEP) Environmental Education Grants Program also funds watershed education projects. The program is funded through the allocation of 5% of fines and penalties collected annually, over \$300,000 per year. Grants are awarded to schools, conservation and education organizations and county conservation districts. The

Department of Conservation and Natural Resources (DCNR) offers standards based meaningful watershed educational experiences through their Watershed Education Program for grades 6–12. DCNR provides teacher training, student training, annual student summits, and a comprehensive study of a student's local watershed and river basin.

- The National Oceanic and Atmospheric Administration supports the Chesapeake Bay education program, including the B-WET (Bay Watershed Education and Training) grant program which provides resources for curriculum development, teacher training and field experiences. NOAA also supports the on-water interpretive activities of the Captain John Smith Chesapeake National Historic Water Trail.
- ❖ The U.S. Fish and Wildlife Service will continue to support meaningful watershed educational experiences and the NOAA B-WET program by providing technical assistance to schools and teacher training through its Schoolyard Habitat Program.
- The Chesapeake Bay Foundation will provide over 35,000 annual outdoor, field experiences to students and teachers throughout the Chesapeake Bay watershed; will train over 250 teachers annually in providing MWEE's to their students through CBF's teacher professional development program; will work collaboratively with federal, state, and private partners in providing needed teacher resources like CBF's online community; will offer extended, authentic, meaningful, and academically rigorous summer experiences to high school students that extend classroom instruction during the academic year and provides vocational and life skills; will begin working with county and district school systems to integrate Bay content into county curriculum by training public school system curriculum writers; and will develop strategic partnerships to promote and support resources available to schools, students, and teachers.
- ❖ The Conservation Fund will support the Agreement signatories through strategic partnerships that complement the mission of The Fund. In cooperation with the Friends of the Captain John Smith Chesapeake National Historic Water Trail, The Fund will develop related educational resources and support the National Park Service's trail feasibility study. In addition, The Fund will support the development of NOAA's Chesapeake interpretive buoy project—a major educational component of the John Smith water trail.
- National Geographic (NG), in partnership with the Lenfest Foundation, established a \$2,000,000 endowment, the "Chesapeake Bay Geography Education Fund," to encourage and support geography and

- environmental education pertaining to the Chesapeake Bay. In addition, NG will distribute 100,000 state-of-the-arts, large-format maps of the Bay depicting the Bay in John Smith's time on one side and with a focus on the environmental health of the Bay today on the other. This map has also been configured for grades 2-6. Both maps will be distributed free of charge to educators throughout the Bay watershed. NG will also launch a web resource, "Exploring the Chesapeake: Then & Now", for learning about the Chesapeake Bay in John Smith's era and today. Readers will link to resources located elsewhere on Nationalgeographic.com, Xpeditions, and the NG EdNet gaining access to news stories, lesson plans, and curriculum for each grade level. NG Television & Film has produced a short documentary on John Smith and his explorations of the Bay and will make two thousand DVD's available to educators throughout the Bay watershed. NG also awarded a grant, to the Sultana Projects, Inc., to support their efforts to build a replica of the shallop used by Captain John Smith to explore the bay. This is all possible, in part, because of the generosity of Dupont, Lockheed Martin, and The Conservation Fund.
- The National Park Service, in cooperation with Chesapeake Bay Program partners will continue to coordinate the Chesapeake Bay Gateways Network as a key means to fulfill several Chesapeake 2000 commitments. Gateways are bonded in a joint strategy to communicate the values of the Chesapeake in recreational learning settings open to families, individuals, and groups. Many Gateways offer curriculumoriented educational programs that help deliver meaningful watershed educational experiences for students. The Park Service is also committed to a study of the feasibility of designating the Captain John Smith Chesapeake National Historic Water Trail. In recognition of the keen interest in Jamestown and Captain John Smith the Gateways Network has already commissioned a number of Network-wide and site-specific interpretive initiatives related to this historic occasion. Furthermore, the Jamestown 2007 commemoration will harness the energy of many federal, state, local, non-profit and corporate sponsors to create a number of signature events that focus on the 400th Anniversary of the founding of the Virginia Colony at Jamestown and the historic voyages of exploration of the Chesapeake Bay by Captain John Smith. In particular, a number of these initiatives, such as the National Teach-In and the "Jamestown Journey" Web site will help leverage public and student interest into a life-long commitment to Chesapeake Bay watershed protection and restoration.

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