Education and Outreach Committee Report
for the Commission on the Environment and Sustainability

August 1, 2007

Commission Members
    Lauri Lee
    Wanda MacLachlan
    Betsy McMillion
    Candace Dodson Reed
    Elizabeth Singer

Ex-Officio Members
    Zarrin Caldwell
    Kimberley Flowers
    Mina Hilsenrath
    Laura Miller
    Mark Raab
    Evelyn Tomlin
“Public outreach and education are important to raise awareness about the cumulative positive or negative impacts individual lifestyle choices can have on the environment.”

From Chapter 6: Working With Nature, 2005 Update to Howard County General Plan

Community understanding and acceptance of policies designed to protect our environment, including reducing the use of fossil fuels for energy to reduce carbon emissions, protecting our water and preserving land are essential to sustaining Howard County in the years to come. Howard County Government should lead the way by its example, by creating awareness in the community and by creating educational opportunities for the people who live and work in the County.

Each of the other Committees of the Commission on Environment and Sustainability recommended education and outreach as an important tool to help solve the problems of sustainability for their respective topic area. For example, the Air and Water Quality Committee recommends a county-wide outreach and education effort for watershed protection issues and "how to" information about rain gardens, backyard riparian buffers and other low impact development methods. The Open Space and Land Committee recommends public outreach campaigns to encourage land owners to sell agricultural land to the County and to educate people about invasive plant species. The Green Building Committee recommends outreach about benefits of density and costs of sprawl.

Participants in the five public Dialogue Sessions held by the Commission at public libraries in Howard County during June and early July 2007 cited the need for enhanced information and outreach in Howard County. The Education and Outreach Committee initially limited its recommendations to programs under the purview of the County Executive. However, additional citizen input influenced the Committee to expand the initial draft report to include two additional avenues for coordinated community-oriented programs: the formal public and private education systems in Howard County and informal grassroots efforts that are beginning in the County to address the challenges of global climate change.

The Education and Outreach Committee discussed the need to recommend a coordinated framework in Howard County Government that will:

- provide a central source of consumer and technical information about energy conservation and environmental protection;
- develop community-based awareness and social marketing campaigns;
- conduct an ongoing program of community-based adult learning in small group settings;
- initiate partnerships with existing and new public education efforts in both the Howard County Public School System and Howard County Community College and in the local community.
The Commission’s Committee on Governance recommends the establishment of the Environmental Education and Outreach Program in the Howard County entity recommended by the Commission’s Governance Committee. This program would not replace specialized programs in the Department of Recreation and Parks, the Department of Public Works or other County initiatives designed to market services and recruit volunteers, but rather provide coordination and communication support to these initiatives.

**Recommendation 1: The Environmental Education and Outreach Program should provide a central source of information and resources for government programs and the community about protecting the environment and reducing the use of fossil fuels for energy.**

The Program should establish a clearinghouse, *Green Central Station*, to provide a central source of information and technical assistance for Howard County citizens, government and the private sector.

- Features of Green Central Station should include:
  - Website that is frequently updated
  - Staffed telephone and email response system
  - Production of brochures and publications
  - Exhibits at community events
  - Speakers’ bureau
  - Workshops and learning opportunities, i.e., Green Building Institute, storm water management and forest restoration

**Recommendation 2: The Environmental Education and Outreach program should develop prioritized awareness campaigns and education programs for the community.**

Committee members noted that information alone is not sufficient to accomplish changes in practices by individuals and institutions that will have a substantive impact on protecting the environment and reducing the carbon footprint in Howard County. The support of existing environmental groups in Howard County is essential. Other key audiences include residents, the public school system, private schools and home-schooled families, Howard Community College, Howard County Library, interfaith and community organizations (especially environmental groups), Columbia Association, homeowners associations, Columbia Village Boards, Columbia Council, and commercial and retail businesses, ranging from large national retail chains to local businesses and retail outlets.

The Environmental Education and Outreach Program should develop multi-year “Go Green” information campaigns for Howard County on topics prioritized by the impact on the environment. An overall theme such as “Howard County Goes Greener” would serve
as an umbrella for separate action-oriented campaigns. Citizen volunteers from throughout the county should be invited to membership on Ad Hoc Working Groups focused on particular audiences. The Working Group members and County employees would develop specific messages that would be pre-tested with focus groups of the relevant audiences and disseminated through the complete range of County and local communication networks and media.

Recommendation 3: The Environmental Education and Outreach Program should lead a community education program that uses a model of small group, facilitated training and dialogue sessions for citizens in Howard County.

Community-based information and education campaigns will take a substantial period of time to develop, even after the County government is organized to accomplish such campaigns. The Committee recommends that the Environmental Education and Outreach Program co-sponsor “short-course” adult education using a four-session, “discussion circle” model that would provide access to a standard curriculum of information about energy conservation and lowering carbon emissions to interested groups and individuals.

Several such curricula exist, including “Global Warming: Changing CO2urse, published by the Northwest Earth Institute http://www.nwei.org/images/GWcourse.pdf and “Low Carbon Diet” published by the Empowerment Institute http://www.empowermentinstitute.net/lcd/. Both follow a peer-facilitated model of 8 to 12 participants per group. Discussion groups grow as individuals who have participated in one group begin new groups in the community. Resources required are primarily staff time to coordinate meetings, recruit community members and host a website. A pilot program of volunteers in Howard County is currently evaluating curricula under the auspices of a local environmental coalition and provides a ready-made framework for grassroots education.

Recommendation 4: The Environmental Education and Outreach Program should initiate partnerships with: 1) the Howard County Public Schools System, the Howard County Community College, private and parochial schools, the home-school community and 2) local civic, environmental, and business groups, Village Boards and Columbia Association and other community organizations to realize synergy with efforts in the private sector and coordinate efforts.

The participation of the Howard County Public School System (HCPSS), Howard Community College, private and parochial schools, and the home-school community is extremely important because the schools are responsible for the primary education of our citizens and the development of their role as stewards of the environment in which we live.

The school system is not only responsible for educating nearly 50,000 students annually, but it is the largest land holder, facilities operator and employer in Howard County. The Committee is appreciative of information provided by Curriculum Coordinators for the County and The Howard County School Board that describes environmental curricula
and programs and the important efforts to employ environmentally sound policies to school construction and renovation, custodial and grounds-keeping services, operations and maintenance, and risk management. Additional information is contained in the Attachments to this report.

The Howard Environmental Education Resource Organization (HEERO) was created to help HCPSS meet the expectations of the Chesapeake Bay 2000 mandate to provide meaningful watershed education experiences to students. It brings together representatives from various agencies: the Capital Region Earth Force, the Chesapeake Bay Foundation, the Chesapeake Bay Trust, the Columbia Association, Girl Scouts of Central Maryland, the Green Building Institute, the Howard County Public Schools, Howard County Conservancy, Howard County Parks and Recreation, Howard County Soil Conservation Service, Howard County Master Gardeners, the Maryland Association for Environmental and Outdoor Education, the Middle Patuxent Environmental Area, and the Robinson Center Foundation.

HEERO has already brought together many of the main players in the environmental education arena, and they have begun to coordinate some of the environmental education offerings for public school students. For example, the Master Gardeners already have a partnership with HCPSS in which fifth graders plant riparian buffers (Schools and Streams Program). In addition, the Howard County Conservancy offers numerous field trip opportunities for school children that are aligned with the HCPSS environmental science curriculum.

These efforts are commendable and the Education and Outreach Subcommittee would like to see an organization such as HEERO expanded and institutionalized to serve all of the students in our county, not only those who attend the K-12 public schools. The establishment of the position of an Environmental Education Coordinator would help to ensure that the current environmental education efforts are continued and built upon well into the future.

Howard Community College (HCC) signed the American College and University Presidents Climate Commitment in April 2007. The Committee commends HCC’s efforts to develop and implement sustainable initiatives and their commitment to reduce greenhouse gas emissions. This committee hopes that HCC will continue to take a leadership role in this regard, and that they will expand their environmental course offerings to enrolled students and to other members of the community. We strongly recommend a formal partnership between Howard County Government and Howard Community College for community and student seminars and education programs.

**Nature Centers and Education in Howard County**

Progress in the past few years in the development of environmental education areas and centers is encouraging. Howard County is currently planning for the establishment of at least two additional environmental education areas, the Robinson Nature Center and the Blandair property. **The County’s environmental education offerings would be greatly**
enhanced by the provision of overnight facilities for students, either at one of these locations or at another as yet to be determined location.

The Howard County Conservancy has an outstanding facility at Mount Pleasant, but it is able to offer programs only for small groups of students at any given time.

The Middle Patuxent Environmental Area (MPEA) hosts groups of secondary school students for outdoor learning opportunities, but it has no restroom facilities, parking areas, or storage space, which is extremely limiting for teachers who would like to bring groups of students there.

Howard County currently has no environmental education facility that offers a bunkhouse or other dormitory-like overnight facilities; therefore, students must leave the County for residential environmental education programs during the school year and summer (for example, Howard County sixth graders go to Montgomery County for their Outdoor Education experience). Many surrounding counties have overnight environmental education centers; the majority of them are funded and operated either by the school system or as a joint effort between the school system and county agencies such as the Department of Recreation and Parks.

Highlights of Existing Howard County Government Environmental Outreach Programs

Howard County Government sponsors outreach programs in the Department of Recreation and Parks and the Department of Public Works. These activities are listed in reports provided to the Commission on Environment and Sustainability from four Howard County Government Departments: The Department of Planning and Zoning; the Department of Public Works; the Department of Recreation and Parks; and the Department of Health’s Bureau of Environmental Health.

The Department of Planning and Zoning suggested that it would like to have additional staff and funding to develop an Environmental Education and Outreach Program, described as a “comprehensive program using a variety of tools and techniques targeted to individuals, community and business groups.”

The Department of Public Works, Bureau of Environmental Services, provides education and outreach for environmental issues such as the value of clean water and the ways the public can personally improve water quality, increase recycling and minimize waste. The Recycling Division develops local and regional recycling and waste reduction educational and promotional programs.

The Bureau of Engineering provides education classes and testing leading to the issuance of "green card" certifications or certifications for Maryland Responsible Personnel Training and Certification in Erosion and Sediment Control. The person responsible for
erosion and sediment control on all construction sites must be certified by the State of Maryland. Bureau of Engineering conducts about eight sessions a year training approximately 300 people in a MDE approved course leading to a certification card to those individuals passing a written test.

The Director of Public Works has a customer service person responsible for answering questions and providing information on the various DPW activities, including environmental matters. The Bureau of Utilities provides tours of the wastewater treatment facility. The Bureau of Highways has the Adopt a Road program for volunteer trash cleanup promotion and administration including 140 road segments totaling 190 miles, volunteers picked up 1935 bags of trash in the past year.

The Department of Recreation and Parks, Division of Natural Resources (DNR), has many community outreach programs. For example, in 2005 and 2006, 809 volunteers contributed 3,381 hours of volunteer service to programs such as Stream Team, Nest Box Monitoring, Weed Warriors, Frogwatch USA, Stream and Pond Clean-ups, Storm Drain Painting, Eagle Scout Projects and Conservation Stewardship Project, to name a few. In addition to program development and design, implementation of each of these programs involves volunteer recruitment, training, data collection and review, production of newsletters and grant writing. The report indicates that additional staff is needed to oversee brochure development, website content and updating, marketing and volunteer recruitment, development and retention. The Middle Patuxent Environmental Area partners with HCPSS and Howard Community College’s Environmental Science program and has created outreach materials for volunteers and friends, including an e-newsletter, brochures and tours.

The Howard County Health Department is part of the government of the state of Maryland. The Bureau of Environmental Health, www.hchealth.org has three programmatic areas: Food Protection, Community Hygiene Program and the Well and Septic program. Outreach and education programs are not identified by the Bureau.

8/1/2007