

## **Gold Medal Winners**

### **City of Newport News**

The City of Newport News has been formally engaged in sustainability for many years. In September 2010, the Newport News City Council unanimously endorsed "Environmentally Sustainable Local Government Policies" as one of Eight Strategic Priorities to be given special attention by employees throughout the City. Those were refined in December 2012 into five broad strategic priorities, one of which is "Environmentally Sustainable Local Government Policies," which includes green purchasing, green fleet policies, sustainable design building standards, waste to energy programs, Environmental Management System (EMS), and advancement in the Virginia Municipal League Green Government Challenge. In February 2013, the City Council endorsed the "Roadmap to Sustainability," a report from the Sustainability Team recommending policies and practices in support of the City's vision of a sustainable community. The Team, comprised of subject-matter experts from departments across the City, as well as a fully engaged Citizen Advisory Team, provided specific recommendations including the establishment of a public/private sector Sustainability Steering Committee that would allow the City to move forward with the implementation of its sustainability program, now called "NN Green."

The City's award-winning environmental management system (EMS) is a cornerstone of the Sustainability Program and a key component to its success. The City has EMSs implemented at 25 facilities; all recognized by the Virginia Department of Environmental Quality's (DEQ) Virginia Environmental Excellence Program (VEEP) and leads the program with the most number of facilities achieving the highest level of certification. Partnerships, such as the City's successful relationship with Christopher Newport University, employee participation, and executive level support have been vital to the City's success. Recent projects include converting 26 City vehicles from gasoline powered to propane powered, LED retrofits at several large City buildings, installation of cisterns to capture storm water runoff that is used for washing fire trucks and watering plants, and undertaking an initiative to reduce wasted water. Environmental results of the City's initiatives include reductions in energy, fuel and water use, increases in materials reuse and recycling, and land conservation.

### **Elizabeth River Project's Dominion Virginia Power Learning Barge**

About 500,000 people live in the Elizabeth River watershed, one of the most severely impaired rivers in the United States, located in the coastal cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach. The Elizabeth River Project was incorporated in 1993 with a mission to restore the river to the highest level of environmental quality through citizen, government, and business partnerships. Its goals are for the neighboring Lafayette River to be fishable and swimmable by 2015 and for the Elizabeth River to be fishable and swimmable by 2020.

In 2009, after three years of fundraising, design, and construction, the Elizabeth River Project launched the Learning Barge with the idea of creating a mobile education center for citizens to get a closer look at the river's restoration sites. Now known as the world's first floating wetlands classroom and America's Greenest Vessel, the barge harnesses energy from the sun and wind and gets its fresh water from a rain collecting roof capturing 1,200 gallons for reuse. Designed in conjunction with the University of Virginia's School of Architecture, the barge is intended for river education and recruitment of stewards. Education programs take place while the barge is docked and activities are designed to utilize the river, nature, and the barge's unique green systems that students do not have in classroom settings. They learn to test water quality, use solar and wind power, identify native plants, river animals and wildlife, be innovative and create solutions to pollution, and work as a team. The design and the education programs have won numerous awards. To date, over 40,000 people have come aboard the barge to learn.

### **Locust Grove Farm Conservation Easement**

The property known as Locust Grove has been owned by the same family for approximately 350 years. It is located adjacent to the historic village of Walkerton in King and Queen County. This large property contains open flat farmland and mixed-hardwood/pine forest, with extensive tidal frontage and wetlands on the Mattaponi River and multiple tributaries. It borders the Natural Heritage designated Mattaponi-Walkerton Horse Landing Stream Conservation Unit, which supports several rare plants in the inter-tidal zone. It also contains the Fort Mattapony/Ryefield archeological site, which is on the National Register of Historic Places and the Virginia Landmarks Register. The site consists of two closely associated components: Fort Mattapony, circa 1679, a fortification built to protect early settlers, and an 18<sup>th</sup> century domestic structure known as Ryefield.

The conservation easement contains approximately 16,530 linear feet of forested/vegetated riparian buffers on the Mattaponi River, Clark Swamp, Nancymansco Creek, and Commodity Creek. These 100-foot-wide buffers prevent livestock from entering streams and protect the water quality from runoff and erosion. The Mattaponi is a major tributary to the York River, which supplies drinking water to many localities in southeastern Virginia. The river is also used by the Mattaponi Indians for shad fishing, which is their main source of income.

### **Luck Companies**

Luck Companies is a private, Virginia-based company with four primary business divisions: Luck Stone, the country's largest private family-owned aggregate stone quarry business; Charles Luck Stone Centers, which operates five retail studios, numerous contractor distribution yards, and two fabrication shops in the Mid-Atlantic; Har-Tru Sports, a leading distributor of clay court tennis aggregates and tennis accessories; and, Luck Development Partners, a real estate development firm focused on creating sustainable environments that embody a unique sense of place.

Luck Companies define sustainability as the integration of environmental, economic, and social responsibility best practices into their business strategies to ensure the long-term health of the company, their associates, their communities, and the planet. Luck's various business units are recognized as leaders in sustainability. The company views the participation of all of its associates as critical to its success. As part of the company's EMS, all sites meet to establish environmental goals for the coming year. Each facility in Luck Stone creates goals to reduce dust emissions, improve water quality discharge, recycle, and improve community involvement. As members of VEEP, all quarries document their goals and report numerical results each year. Seven quarries are currently at the E3 level, and the remaining quarries are on a path to become E3. Har-Tru Sports has established an EMS and documents similar goals and community projects. The Charles Luck Stone Centers are Charter Members of the VEEP Sustainability Partners program. Each facility is challenged to establish at least two goals for environmental improvement each year and two collaborative partnerships with the public. Luck Development Partners has an immense opportunity to influence environmental stewardship in the low impact development methods they plan to use.

Results of Luck's many efforts include reducing greenhouse gas emissions by 5% from 2011 to 2012; recycling over 7,000 tons of steel, manganese and brass; saving 300,000 gallons of water per year with no-flush toilets; conserving 24,300 linear feet of streams and 154 acres of forested buffers through easements; creating 5.4 acres of new wetlands and 1.1 acres of open water; creating the New Kent Wetlands Bank with 470 acres of preserved wetlands and 80 acres of created wetlands; and, installing energy saving techniques such as solar panels and motion detectors.

## **Silver Medal Winners**

### **Chesterfield County Fleet Management**

The Chesterfield County Fleet Management Division's mission is to provide safe, reliable, and dependable automotive vehicles and equipment through inspection, scheduled services, maintenance and repair, and procurement services to the Chesterfield County Government and Chesterfield County Public Schools in the most effective and efficient manner possible. The Fleet Management Division manages their EMS as a sustainability program. A commitment to protecting and preserving the environment is an integral part of all services and actions. The Division is annually assessed by an outside auditor and has been found in conformance with the ISO 14001:2004 standard, one of a very select group of fleets in the nation to be in conformance with this standard.

One of the key benefits resulting from the Division's EMS is increased awareness of pollution prevention activities by all employees, not just upper management and the EMS team, but also by front line employees. Significant cost savings have resulted from improved environmental compliance and other EMS-initiated programs. The Division's relationships with regulatory agencies and other departments within the county have vastly improved. The Fleet Management EMS team has mentored other county departments and divisions and firmly believes that their EMS provides them with a system to consistently manage not only their environmental impacts but also their everyday operations.

### **James Madison University – East Campus Hillside Naturalization Project**

James Madison University transformed a traditionally manicured grassy area, known as the East Campus Hillside Area, into a unique naturalized educational landscape. The project consisted of three parts: a 1.6 acre native meadow on a hillside; a 2 acre tree planting area; and, a 1,000 linear foot restored stream channel with riparian buffer. The project began in the 2010-11 academic year when faculty, students, campus facilities staff, a dean, the campus environmental stewardship coordinator, and community representatives collaborated with a Scholar-In-Residence to create the educational landscape. The group proposed an expanded vision of the educational and functional roles of the grounds, diversifying the landscape aesthetic, providing educational programming for the campus and the broader community, and demonstrating environmental stewardship.

The resulting project is eye-catching from the interstate and has received compliments and criticism for its atypical appearance. It is a bold departure for a university previously noted for its hand-watered flower beds and manicured lawns. An important goal of the project was reducing the need for chemicals, thereby reducing pollutant runoff into the Chesapeake Bay. Equally important, the naturalization project plays an educational role for a variety of the university's departments and colleges and is an important resource for visitor and outreach programs. The project serves as an affordable and replicable initiative with potentially high educational impact and measurable environmental impact.

### **Joint Base Langley-Eustis – Fort Eustis Conservation Branch**

Fort Eustis is a multifunctional installation that includes office parks, an Army training campus, research and development facilities, as well as other military activities; approximately 12,400 people work and live at the installation. With over twenty miles of shoreline, the installation provides habitat for a multitude of migratory waterfowl and wading birds and is home to six active bald eagle nests on the James and Warwick Rivers. The Fort has more than 3,600 acres of wetlands and over 2,700 acres of commercial timber, key habitat for wildlife, and a filter system to prevent pollutants from reaching the Chesapeake Bay. The Fort Eustis Conservation Branch uses an ecosystem management approach to maintain environmental compliance, ecosystem viability, sustainability of military training lands, ecological integrity, biological communities including sensitive, rare, threatened, and endangered species, and outdoor recreation opportunities. The Branch also protects, preserves, and publicizes the 232 archaeological sites managed by Fort Eustis.

The Branch has on-going partnerships with the College of William and Mary, the US Fish and Wildlife Service, the US Department of Agriculture – Wildlife Services, the Fort Eustis Historical and Archaeological Association, and several Boy Scout Troops among others, and is currently developing a partnership with Christopher Newport University's Public History program. Public involvement and outreach have been key to the success of Fort Eustis' Cultural and Natural Resources programs. Social media is used to publicize events, including the annual Earth Day Celebration, an annual open house for Archaeology Month, and Clean the Bay Day.

### **Loudoun County Public Schools**

Loudoun County Public Schools (LCPS), the third largest school district in Virginia, is responsible for over ten million square feet of buildings and 68,000 students in 13 high schools, 14 middle schools, 55 elementary schools, as well as a technology center, and an alternative education school. LCPS includes sustainable principles and practices in a wide variety of areas. These include: Community Involvement, Construction, Energy and Water Management, Extra-Curricular Programs, Facilities and Grounds, Food Service, Instructional Programs, Purchasing, Recycling, Safety and Security, Technology Services, and Transportation. LCPS stakeholders at many levels are included in the planning, development, and implementation of sustainability practices and programs.

The school system has been recognized by numerous organizations for its sustainability efforts. LCPS was named ENERGY STAR "Partner of the Year" for 2010 and 2011, and in 2012 and 2013 was given the designation "Sustained Excellence" by the ENERGY STAR program. In addition, LCPS won the Virginia School Boards Association's Green Schools Challenge and has qualified as a platinum level district for each year of the competition. Fourteen LCPS schools have been recognized by the Virginia Department of Game and Inland Fisheries as "Virginia Naturally Schools." Over the last nineteen years, LCPS has saved over \$54 million through its sustainability programs.

### **Novozymes**

Novozymes, a biotech company with a strong focus on enzyme production, is a world leader in bioinnovation. The company believes that by using industrial biotechnology, thousands of everyday products can potentially be re-engineered to deliver enhanced sustainability performance, reduced energy costs, and decreased raw material costs. In addition to producing greener products, the company requires all parts of the business to be ISO 14001:2004 certified. Novozymes has global targets for reducing the consumption of energy and water in their manufacturing processes, and local targets for waste minimization and recycling.

The Salem plant develops and manufactures environmentally friendly biological solutions based on naturally occurring microorganisms for cleaning, wastewater, aquaculture, and agriculture through fermentation, drying, and formulation processes. Since 2009, the plant has improved productivity through green investments resulting in reductions in energy use by 30%, water use by 43%, waste generation by 64%, and cost by almost \$400,000. Novozymes is also the leading corporate sponsor for greenways development in the Roanoke Valley, providing funds as well as volunteer hours building bridges, clearing trails, planting trees, chairing meetings and volunteering for special events.

## **Bronze Medal Winners**

### **Marstel-Day, LLC**

Marstel-Day, LLC, provides environmental consulting services to both the public and private sector. Headquartered in Fredericksburg, the company also has offices in California, Mississippi and Texas. The company specializes in solutions to landscape-scale conservation of natural resources, climate adaptation, energy planning and "net zero" strategies, water security, smart growth and transportation, and the management of issues relating to encroachment pressures on government and private lands, open space, and habitat. At the same time, Marstel-Day incorporates a green ethic into their internal processes and practices on a daily basis. By "practicing what they preach," the company is able to experience and solve many of the same issues that their clients face in their journey toward becoming more sustainable. The company's "Green Housekeeping Guidance" is a compendium of best practice that employees are expected to follow on a daily basis. It encompasses recycling, printing, purchasing, patio and outdoor gardens, composting, and energy use.

### **Steward School - Bryan Innovation Lab**

The Bryan Innovation Lab at the Steward School in Richmond was developed to serve as a "learning lab" to promote student and staff awareness and understanding in the areas of energy and resources, health and wellness, and the interaction of the built and natural environment. To attain these goals, many initiatives in the area of sustainability have been implemented as a part of the curriculum. Applicable to the study of energy and resources, the Bryan Innovation Lab has in place a solar-thermal unit, geothermal units, and photo-voltaic solar panel systems. These systems are open to the students for study, and the data is collected on energy production and savings on a dashboard application. Within the realm of health and wellness, Student Gardens were developed. The gardens are tended to by students, harvested for use in the school and by local charities, and watered using rainwater collected from the roof. Also, two water retention ponds have been created for natural habitats and are connected by a "Blue Bird Sanctuary Trail." Standard sustainability practices, such as recycling, energy conservation, and composting, have taken root not only in the Bryan Lab, but as a school-wide effort among students, faculty, and staff.

### **Virginia Tech Dining Services**

Virginia Tech's Dining Services serves approximately 7.1 million meals per year in twelve dining facilities. For the last eight years, Tech's Dining Services has been ranked within the top four nationally by The Princeton Review. One of Tech Dining Services' guiding principles states that they will work to "promote a sustainable dining and food system at Virginia Tech and therefore the greater community." They focus on three major themes in order to meet their goal: sustainability in what you eat; sustainability in where it goes; and sustainability in what you use. The Farms and Fields Project in the Owens Food Court serves as the gold standard for sustainable dining at Tech. This shop offers sustainable, organic, and local options throughout the school year. The Dining Services Garden at Kentland Farm grows fruits, vegetables, and herbs that are used throughout the year, and milk harvested from the campus dairy herd is served as well. All dining halls compost their pre- and post-consumer waste, resulting in the diversion of 1,700 tons of waste from the landfill. Reusable to-go containers were introduced last year and have gained positive attention throughout the campus community.

## Honorable Mention Winners

### **Clem Family Farm Conservation Easement**

The Clem Family Farm property is a mix of open fields and upland just east of Edinburg in Shenandoah County. The farm has been in the same family for over 100 years and is used for cattle, hay, and timber. The land fronts the Shenandoah River for over 4,000 feet in an area eligible for listing as a State Scenic River and as a “Blueway,” which is a Department of Game and Inland Fisheries designation for waterways used recreationally by the public. This section of the river is also habitat for species that are rare in Virginia.

### **DNC Parks & Resorts at Shenandoah**

DNC Parks and Resorts at Shenandoah operates a concession contract with the National Park Service which includes lodging, restaurants, retail, fuel station, public showering/laundry facilities, and a horse stable. DNC’s corporate sustainability program, called GreenPath, was developed to care for and protect natural, cultural, and historical resources while striving for continual improvement, pollution prevention, and compliance with environmental requirements. The platform was designed to be compatible with the ISO 14001:2004 Standard for EMS and provides the company with a framework that is incorporated throughout the entire business and guides them with the tools to plan, implement, evaluate, and adjust in order to achieve progress.

### **Jackson Ferry Farm Conservation Easement**

The Jackson Ferry Farm, which has been in the same family for over 200 years, is bounded by the New River Trail State Park and surrounds Shot Tower Historical State Park. An area of woodlands supports a globally vulnerable community known as a Southern Appalachian Limestone Rich Cove Forest. The property is adjacent to two existing Virginia Outdoors Foundation easements, bringing the total area of protected contiguous lands to over 1,100 acres. The property contains a historically significant log house and smokehouse. It is located on the Virginia Birding and Wildlife Trail and is highly visible from Interstate 77 and US Route 52.