

Response to Questions on the FY 2016 Budget

Request By: Supervisor Gross

Question: Please provide a list of environmental initiatives that the County supports.

Response: Fairfax County government has long been proactive in its environmental stewardship and the Board of Supervisors has set the framework for the county's environmental initiatives through its vision, goals, policies and ordinances and has dedicated considerable resources to implementing these initiatives. For example, significant efforts have been made over time in the areas of air quality, land use planning and zoning, transportation, tree and open space preservation, solid waste management, recycling, energy conservation and efficiency, renewable energy and water conservation and reuse.

It should be noted that in the area of solid waste management the County continues to provide efficient and effective collection, recycling, and disposal in an environmentally responsible manner. The Solid Waste Management Program improves the quality of life for Fairfax County residents and businesses by properly managing wastes produced in the county, ensuring that:

- waste is collected according to County Code;
- materials are recycled;
- waste is disposed efficiently and economically;
- pollutants are reduced; and
- economics are considered.

The Solid Waste Management Program supports the development and implementation of a comprehensive Plan for how waste and recycling are managed in the county in compliance with federal and state regulations and permits. The program:

- exceeds the state's mandate to recycle at least 25% of the solid waste stream; (the Calendar Year 2014 recycling rate in Fairfax County was 48 percent)
- developed an innovative arrangement to build and support a waste-to-energy facility; (the new contract with Covanta Fairfax, Inc. begins February 2, 2016)
- collects waste and recycling from 44,000 homes located in sanitary districts;
- consolidates 3 collection trucks of waste delivered to the Transfer Station into one transfer trailer before transport to the waste-to-energy facility, saving energy and reducing air pollution by reducing the number of trucks on the roads;
- maintains closure oversight for 2 landfills that must meet permit standards for air, groundwater and landfill gas emissions;
- supports residents by operating 2 recycling and Disposal Centers, e-waste collection, household hazardous waste collections, yardwaste recycling, management of used tires, paper shredding events, and many other programs that benefit the environment; and
- explores innovative technologies/processes that address waste management and keep the county's integrated solid waste management system functioning well.

For more information about the Solid Waste Program, please see <http://www.fairfaxcounty.gov/living/recycling/>.

In addition, the Stormwater Management Program develops and maintains a comprehensive watershed and infrastructure management program that protects property, health and safety, enhances the quality of life and preserves and improves the environment. The Stormwater Management Program is supported by a dedicated funding source for environmental mandates such as those aimed at protecting the Chesapeake Bay and the water quality of other local jurisdictional waterways. Projects in this fund include repairs to stormwater infrastructure, measures to improve water quality such as stream stabilization, rehabilitation, safety upgrades of state regulated dams, repair and replacement of underground pipe systems, surface channels, structural flood proofing and best management practices (BMP), site retrofits and improvements. In FY 2016, the stormwater service rate will increase from \$0.0225 to \$0.0250 per \$100 of assessed real estate value and generate approximately \$56.5 million. For more information about the Stormwater Program, please see: <http://www.fairfaxcounty.gov/dpwes/stormwater>

The basis for these efforts is Fairfax County's strategic direction and commitment to achieve environmental and energy goals, including those set forth in the Board's 2004 Environmental Agenda, the 2007 Cool Counties Initiative, the 2009 Energy Policy and the County's Comprehensive Plan. County staff support environmental initiatives through several county agencies and funds. The county's actions in support of this strategic direction and commitment are documented in its FY 2015 Sustainability Initiatives report, available at www.fairfaxcounty.gov/living/environment/sustainability/.

Although the county supports environmental initiatives in the Board-adopted Environmental Excellence 20-year Vision Plan (Environmental Agenda) through several county agencies and funds including but not limited to the Capital Improvement Program (CIP), the information provided below focuses on environmental initiatives and projects that are supported through the County's Environmental Improvement Program (EIP), which funds projects identified through a collaborative and coordinated process and based on a rigorous project selection process.

As a result of this process, the FY 2016 Advertised Budget Plan includes funding of \$535,000 for environmental initiatives. The specific projects are detailed below:

- An amount of **\$150,000** is included to continue the Invasive Plant Removal Program. The Park Authority manages this volunteer program, as well as other invasive removal initiatives. These programs restore hundreds of acres of important natural areas, protect tree canopy, and reach thousands of volunteers. Currently more than 10,000 trained volunteer leaders have contributed 34,000 hours of service since the Program's inception in 2005, improving over 1,000 acres of parkland.
- An amount of **\$75,000** is included for Energy Education and Outreach initiatives. This program is intended to increase the awareness of Fairfax County residents and businesses regarding their energy consumption and to encourage them to reduce consumption. Program objectives include educating residents and businesses about home and workplace energy consumption, explaining the energy assessment (audit) process, and encouraging residents and businesses to undertake energy-savings measures.

- An amount of **\$10,000** is included for the Green Purchasing Program. This program is designed to support two interns to assist in clearly specifying environmental attributes during the County's procurement process. Fairfax County has a current inventory of over 2,400 contracts and emphasizing environmental attributes such as recycling, energy efficiency, durability and reduced toxicity during the procurement process can contribute to the purchase of green products, creating fiscal and environmental saving.
- An amount of **\$75,000** is included for the Watershed Protection and Energy Conservation Matching Grant Program. This program is intended to support the Energy Education and Outreach initiatives and promote community engagement around sustainability and conservation issues. Specifically, the Watershed Protection and Energy Conservation matching grant program would provide financial incentives to empower homeowners through their associations to implement on-the-ground sustainability projects. The initiative would build on current programs that provide technical assistance, hands-on support, outreach and education to Fairfax County homeowners and residents. Projects would improve water quality, reduce greenhouse gas emissions and conserve energy and water. The \$75,000 program funding level would include printing and materials, matching grants of \$500 - \$3,500 up to \$35,000 total for all grants and one limited term full-time position to support the program, conduct outreach and education, site assessments, inspections and other responsibilities.
- An amount of **\$95,000** is included to install Water Smart web-based irrigation controllers utilizing ET (Evapotranspiration) weather technology at 20 Park facilities that have existing irrigation systems with the opportunity to reduce energy use, water consumption and reduce environmental impacts.
- An amount of **\$105,000** is included for lighting retrofits and upgrades at Fairfax County Park Authority facilities for energy efficiency and conservation. Lighting will be upgraded to LED fixtures and lighting controls will be installed to manage operating hours more efficiently. These energy saving retrofit replacements will reduce approximately 80 percent of energy usage, improve lighting, reduce the Greenhouse gas inventory and contribute to the dark skies initiative.
- An amount of **\$25,000** is included to install a Variable Frequency Drive (VFD) at two RECenter pools. A VFD is a type of [adjustable-speed drive](#) used to control motor speed by varying motor input frequency and voltage. VFDs have been shown to increase performance in pool pumping applications. A VFD could save up to 60% or more on a pump's electricity usage. The pool pump will operate more efficiently, which will result in a cost savings to the county due to lower electricity use and reduced maintenance costs.

EIP projects were first funded as part of the FY 2004 Carryover Review (September 2004). To date, the total EIP project funding including the FY 2014 Carryover Review (September 2014) is roughly \$6.8 million. These initiatives generally support the Board of Supervisors Environmental Agenda.

The projects listed below have been supported by the county's General Fund; however other environmental projects have been supported by the Energy Efficiency and

Conservation Block Grant (as part of the American Recovery and Reinvestment Act of 2009) and by the county's Contributory Fund (the latter of which funded tree planting partnerships with three non-profit organizations). In addition, several important environmental program areas and initiatives are supported through funding sources outside of the EIP and General Fund.

Projects funded through the EIP to date include:

- Purchase of wind energy.
- Air quality education and Clean Air Partners (media sponsorship to continue public outreach to improve air quality).
- Conversion of 163 Fairfax Connector buses to ultra-low sulfur fuel and addition of particulate traps to reduce emissions.
- Community cleanup/revitalization/blight abatement projects.
- Toxicity reduction public outreach program.
- Expansion of the business recycling program.
- Pedestrian improvements in the Richmond Highway corridor.
- Riparian buffer restoration.
- Cleanup of unauthorized dumpsites.
- Park Authority stewardship education.
- GIS-data green infrastructure for park natural resource management.
- Low impact development demonstration projects.
- Park trails mapping (comprehensive mapping program to allow the Park Authority to better manage and plan the trail system).
- Invasive Management Area program.
- Landfill gas utilization project at the I-95 Landfill.
- Remote household hazardous waste collection events.
- Tree canopy campaign at county facilities.
- Energy efficiency/renewable energy at county facilities.
- Litter campaign.
- Lighting retrofits and upgrades at Fairfax County Park Authority facilities.
- Green Purchasing.
- Energy Education and Outreach.
- Water Conservation and Efficiency at Park Authority facilities.