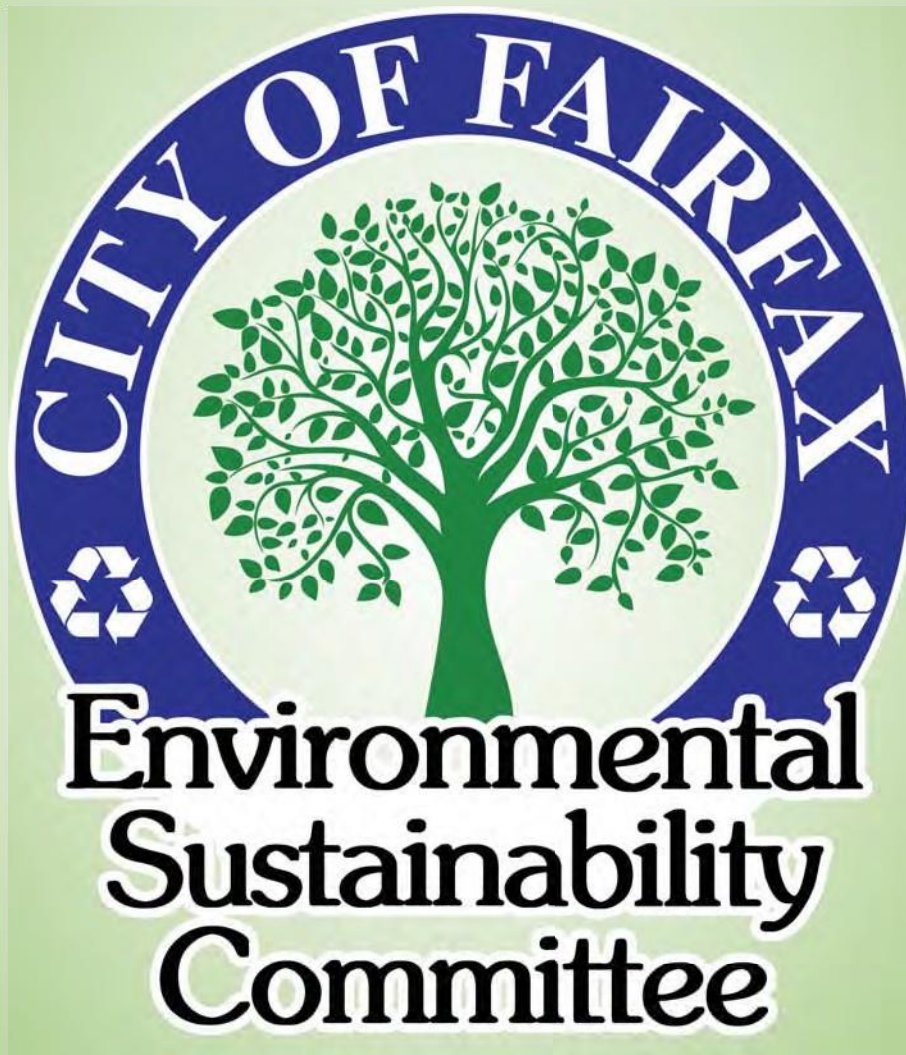


**CITY OF FAIRFAX**  
**ENVIRONMENTAL SUSTAINABILITY COMMITTEE**  
**2015 ANNUAL REPORT**



**Committee Members:**

Tim Killian (Chair)  
Bruce Knight  
Judy Fraser  
Jon Buttram

Susan Crate  
Adam Basinger  
Mark Chandler



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## INTRODUCTION

**This report summarizes the areas the Environmental Sustainability Committee (ESC) has focused on in the past year, identifies current programs and initiatives as well as unmet challenges that the City faces.**

During 2015, the ESC focused on stormwater management, solid waste, recycling, and invasive species as key focus areas. Several of our committee meetings were used as a platform for a speaker series consisting of experts in the area of tree and forest health, stormwater management, and invasive plants. The ESC continued to develop community relationships through its representation on the Zoning Rewrite Advisory Committee and the Solid Waste Management Plan Advisory Committee. The ESC supported Fairfax High School (FHS) environmental programs and the environmental club at Lanier Middle School, Daniels Run Elementary School and Providence Elementary School. The ESC membership went through a transition as four members resigned and two new members were appointed.

## COMMITTEE ADMINISTRATION

The nine-member Committee currently has two vacant positions as four members resigned and two new members (Adam Basinger and Mark Chandler) were appointed. In July 2015, Tim Killian was elected by the Committee to serve in the role of ESC Chair. He replaced Judy Fraser who served in that role since the ESC was formed in 2009. In addition, Bruce Knight was elected to serve as Vice-Chair. Stefanie Kupka, the City's Sustainability Coordinator, is the ESC's staff liaison and provides administrative support to the committee. Several citizens informally support and advise the Committee on a regular basis and this number has grown in the last year. In addition, the Committee included a student representative from FHS.

The ESC met with the City Council for a work session in February 2015 to present the 2014 Annual Report. In addition, various Committee members participated in various other City working groups such as the Fairfax Zoning Rewrite Advisory Committee Meeting and the Solid Waste Management Plan Advisory Committee.

## OUTREACH AND EDUCATION

As part of its outreach efforts, the Committee sponsored the fifth annual Earth Art Show, supported solid waste survey efforts at Derby-Q, and had an informational booth at the Fall Festival. Further, several ESC meetings were platforms for the *Protecting Our Natural Environment* Speaker Series where Committee members and city residents listened to presentation from experts in the fields of tree and forest health, stormwater management, and invasive plant species.

This year the Earth Art Show included over 75 pieces of artwork from Daniels Run, Providence and Lanier. The Committee awarded prizes to two students from each school, and with the help of Cameron's, a city bakery, and city staff, held a reception in honor of the artists in our schools.



The ESC's Fall Festival participation was a great success due to a well-attended booth. ESC



members and citizen supporters distributed handouts on stormwater and pollution concerns, recycling information, composting, and invasive plant species. The ESC booth featured a recycling game where residents identified wastestreams that could be recycled and those that should be disposed as municipal solid waste. Another activity created and run by the FHS Green Club helped participants learn about invasive plants. In addition, Stormy the Raindrop from Fairfax County's Stormwater Planning Division, worn throughout the day by Green Club and committee members, engaged children and gave away coloring books and other stormwater educational materials.

For the second year in a row, ESC volunteer Frank Linton's observation hive was a noteworthy and popular draw to the booth. Dr. Linton spent the day educating visitors about the importance of pollinators, including bees, to our environment and food crops. The ESC also provided space for the FHS Green Club whose volunteers helped staff our booth. At the Derby-Q Festival and Fall Festival, the ESC supported the staff liaison with collecting solid waste and recycling data from city residents through a survey.







The ESC encouraged citizens to sign up for the new City Alert email, text and phone service. The Committee also maintains a page on Facebook as a tool for reaching citizens in addition to the official City website.

City Sustainability Coordinator Stefanie Kupka will be developing and launching a web-based Neighborhood and Workplace Sustainability Challenges in cooperation with several cities across the country under an innovative grant award. The challenges will encourage and recognize residents and businesses for being green, healthy and involved in the community. The development of the challenge website and implementation plan is currently in progress.

## SCHOOLS

The ESC continued to support the City of Fairfax schools through its liaison with the School Board and its close ties with the Green/ECO Clubs and environmental education efforts in the schools. The ESC supported the schools' educational programs on environmental stewardship, energy efficiencies, technologies and resource protection. As noted earlier, the ESC sponsored the Earth Art show and City students supported the ESC at the Committee's Fall Festival booth.

As a goal to reach out to the next generation of environmentally savvy professionals and leaders, the ESC has included a student liaison from FHS. Also, as a continuation of support to the high school's Advance Placement (AP) Environmental Studies class (Bradley Webster, teacher) the ESC funded a portion of the class project to design and transform one of the school's entrances with rain barrels, composters, native plants and a small garden.

Throughout the year the ESC recognized the City's school's successes with multiple environment-related courses of studies and club activities that met the educational and character building needs of our students. To this end the ESC appreciated our schools' many environmental projects, awards and achievements including; the Virginia Naturally school award, national and regional environment related competitions in urban forestry, watershed conservation, and environmental protection and technologies (placing first, second and fifth in these competitions), and an invitation to the White House as part of an environmental education conference. The school district itself was again recognized as a leader in environmental practices by the Virginia School Boards Association (VSBA) 2015 Green Schools Challenge for all Virginia School Divisions with less than 5000 students. The Green Schools Challenge is a friendly competition designed to encourage implementation of specific environmental policies and practical actions that reduce carbon emissions.





The ESC would like to recognize that Ms. Faiza Alam, a Lanier Middle School science teacher and Lanier students were invited to the White House last August by invitation as part of their Climate Education and Literacy Initiative. The invitation was extended based on Lanier's record of environmental projects and competitions.



Finally, in an effort to provide incentive and a modest level of resources for student initiatives, the ESC provided funding to school efforts and investigated the introduction of small grants.



## ENERGY EFFICIENCY

The City teamed up with a non-profit, LEAP-VA to offer homeowners low-cost energy home checkups or audits. In 2016, the City will continue to promote LEAP's energy services to residents. The City will also be teaming up with LEAP and the Northern Virginia Regional Commission (NVRC) to participate in the Solarize NOVA program which will take place March 15 through May 15. The Solarize NOVA program offers bulk purchasing discounts and free solar site assessments to homeowners in select communities in Northern Virginia.

## STORMWATER MANAGEMENT

The impact of stormwater on our streams, parks and on city coffers remains of utmost concern. The Committee continued its work to both understand and improve awareness in the City of stormwater issues and programs. The ESC used the Fall Festival as an opportunity to increase awareness about the impact citizens have on stream health through proper disposal of pet waste and use of low impact design methods, such as rain barrels and rain gardens, on their property. The city will be hosting a rain barrel workshop on April 16, 2016.



In May 2015, an ESC member attended a two-day Virginia Department of Environmental Quality (DEQ) stormwater management course. Insights from that course on Stormwater Best Management Practices (BMPs) were shared with committee members during a presentation at regular ESC meeting. Participation in this course significantly increased the knowledge and understanding of the Committee on the available BMPs and other strategies to address stormwater management.

As part of the *Protecting Our Natural Environment* speaker series, Danielle Wynne, from the Fairfax County, Stormwater Planning Division, spoke on the biological health of our streams in May. The scope of her presentation covered the effect of stormwater management on drinking water, biodiversity, green space, recreation/use of water, and property value. We can help out watersheds with structural and non-structural solutions. Fairfax County, uses structural solutions such as stream restoration activities, pond retrofits, and low impact development (rain gardens). Non-structural initiatives include planting of native species.

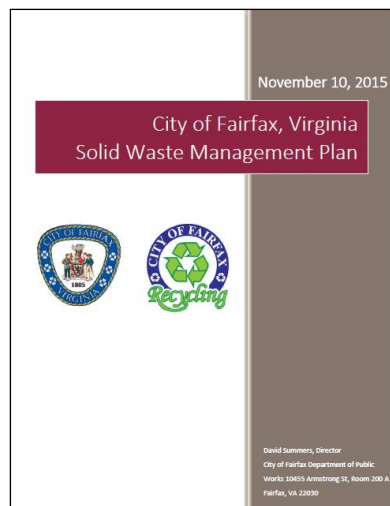


Developing adequate sources for stormwater funding continues to be a significant challenge for the City. The ESC continued to encourage the City to investigate how other jurisdictions are

funding stormwater management projects and total maximum daily load (TMDL) commitments.

## RECYCLING AND SOLID WASTE

In 2015, the City of Fairfax contracted Gershman, Brickner & Bratton, Inc. to develop a new Solid Waste Management Plan (SWMP). This effort was managed by our staff liaison, Stefanie Kupka. This Plan will be used to chart a course for administering solid waste programs and policies for the next twenty years. In Virginia, SWMPs have a 20-year planning horizon, and are updated every 5 years through a prescribed process implemented by the VDEQ. VDEQ receives, reviews, and approves the plan documents, and is also a repository of the information. The SWMP was approved by Mayor and City Council on November 10, 2015 and is currently undergoing VDEQ review.



The ESC played a significant role in the development of the SWMP with two of its members on the Solid Waste Management Plan Advisory Committee. In addition, all members of the ESC had the opportunity to provide comment and input to the Draft SWMP. Further, our support of the SWMP and to the Solid Waste and Recycling Coordinator position identified therein was expressed on the record to Mayor and City Council through email and in person. During the course of the SWMP development process, ESC members and residents had the opportunity to visit and tour the Fairfax County I-66 Transfer Station on West Ox Road.

The City distributed a Solid Waste Services Guide and recycling magnet to all residents living in single family homes and townhomes. The guide featured information on all of the City’s residential curbside collection services such as recycling, yard waste, large items, hazardous waste, etc. The City also updated the City’s website to revise content and improve layout (www.fairfaxva.gov/recycling). The ESC reviewed and provided feedback on the





magnet, guide and website.

In May 2015, when the ESC became aware of the Prescription Medicine Take Back Day sponsored by the City of Fairfax Police Department, we inquired into the management and fate of the collected pharmaceuticals. Specifically, we had concerns regarding the pharmaceutical waste entering wastewater or direct placement into landfills since many common pharmaceuticals are hazardous waste (e.g., Coumadin or warfarin, insulin, nicotine patches) or contain hazardous constituents. It was confirmed that all collected pharmaceuticals were sent to the Covanta facility in Lorton for incineration. The ESC understands this is currently the accepted and appropriate management method for such waste. The ESC plans to include pharmaceutical waste management in future education and outreach efforts.

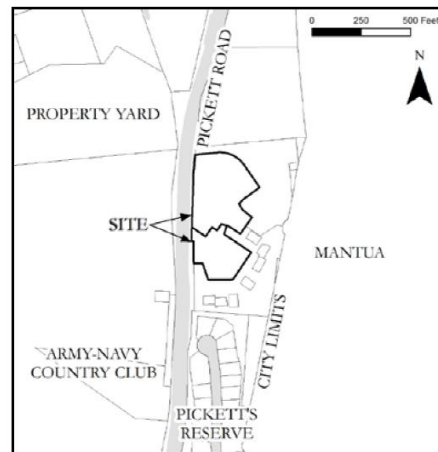
### OTC, Prescription Medicine Drop-Off Set for May 30

Participate in Medicine Take-Back Day by bringing unwanted prescription and over-the-counter medications to the City of Fairfax Police Station, 3730 Old Lee Highway.

Pills, ointments and liquids in sealed containers will be accepted from 10 a.m. to 2 p.m. May 30 at the police station. Drop-off is anonymous. Information: 703-385-7829.

## DEVELOPMENT REVIEW AND COMMENT

The ESC sought and took advantage of the opportunity to review and comment on a proposed redevelopment project in the City. The review process piloted by the committee involved reviewing the Generalized Development Plan (GDP) for the Mantua Professional Center Development Project (The Enclave). The Committee review addressed potential environmental and sustainability issues of the proposed development. Members of the committee met twice to review the GDP, and develop questions and comments for consideration by the city staff, the Mayor and City Council and the developer. Subsequent to the two meetings, committee members conducted further reviews of staff and topical documentation to better address and refine the ESC questions and comments. The committee submitted their comments in September prior to final approval of the developer's plan.

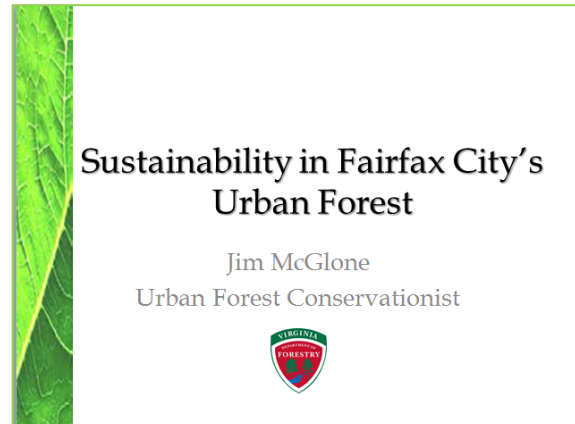


The ESC stands ready to assist in further reviews of future development/redevelopment projects in support of the City's environmental and sustainability goals.



## TREES, LAND AND PARK STEWARDSHIP

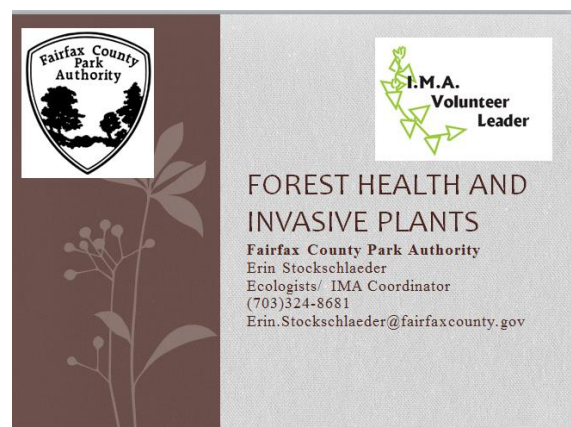
In March 2015, as part of the *Protecting Our Natural Environment* speaker series, Jim McGlone, Urban Forest Conservationist with the Virginia Department of Forestry, spoke about the many issues that affect urban forests and the benefits from maintaining a health urban forest. Mr. McGlone identified urban forest issues for street trees (e.g., restricted rooting space & compacted soil, equipment damage, road salt, poor architecture, and insects/disease) and park trees (e.g., deer, non-native invasive plants, insects/disease, poor soils, and equipment damage). The use of native trees was identified as being critical to the health of urban forests. The benefits from maintaining health urban forests include: improved air quality, stormwater management, habitats for animals, recycle oxygen, and habitats for people (e.g., lower energy costs, higher property values, stress reduction and better health).



## INVASIVE PLANT SPECIES

The issue of invasive plant species was a key area of focus for the ESC in 2015. We had two guest speakers on the subject during the course of the year.

In June 2015, as part of the *Protecting Our Natural Environment* speaker series, Erin Stocksclaeder, an ecologist with the Fairfax County Park Authority, spoke on the benefits of maintaining a health forest and highly diverse forest. Invasive species are harmful to our environment because they result in a loss of biodiversity, impact ecosystem services, affect industry and recreation negatively, and have many undesirable impacts on our parks such as tree death, habitat alteration, and loss of species. They are historically not grown naturally in Fairfax County and out-compete native species. In addition, wildlife (e.g., deer, rabbits) do not eat usually eat them as they are not as nutritious as native plants. Further,



some invasive species change the soil chemistry inhibiting the growth of native plants. Healthy forest can be restored by removing vines from trees, clearing out invasive species by hand, and replanting with natives plant species. Native plants have been growing in Fairfax County historically and are used to competing with other native species. They enhance biodiversity and provide habitat for wildlife.

In September 2015, City resident, Valerie Morgan gave a presentation to the committee on invasive plants in the City. She led the ESC on a tour of the wooded area adjacent to Sherwood Community Center. She identified several common invasive plants and some valuable native plants. She also noted that several trees were endangered due to the presence of English Ivy and other invasive plant species.

## PROTECTING OUR NATURAL ENVIRONMENT SPEAKER SERIES

The *Protecting Our Natural Environment* speaker series has been referenced throughout the 2015 Annual Report. The series was undertaken as part of the ESC's outreach and education efforts. The ESC invited the staff, City Council, and the general public through the City Scene, the City alert email system, and word of mouth. The guest speakers provided a wealth of information in short order and gave the ESC and its guests an introduction to the kinds of actions the city can take to protect our natural areas. The speakers were:

- Jim McGlone, Virginia Department of Forestry: *Sustainability in Fairfax City's Urban Forest*
- Danielle Wynne, Fairfax County, Stormwater Planning Division
- Erin Stocksclaeder, Fairfax County Park Authority: *Forest Health and Invasive Plants*

The three speakers provided expertise on trees, streams and plants. We learned that there are many well tested stewardship policies and practices available to the City to improve the functioning of the natural environment even in a highly urbanized setting. We also became aware that the City is behind the curve on appropriate policies and actions that can be pursued at the municipal level.

The **ESC assessment** presented below is that the lack of staff time and insufficient funding are the significant hurdles. Further, the ESC concludes that the actions the City takes to meet state and federal mandates are not enough to successfully protect our streams and woods.

- **STAFFING** A relatively small investment in staff time and training can yield large returns.

Staff expertise is critical, and should be accomplished by both in-service education and hiring practices. Some solutions include:

- Well written policies and guidelines can save the City money, both in terms of strategically and wisely using available resources and identifying sources of assistance and funding. Cross departmental staff training in best practices would likely yield great savings over time.
  - Volunteers and outside organizations can provide a great deal of free assistance over the long term but a volunteer program will need to be instituted and managed by the City.
- **FUNDING:** In light of the human impacts on urban streams and woods it will be necessary to have ongoing funding to successfully restore and protect our natural areas. Some solutions include:
    - Fairfax County's stormwater service district tax is used for stream care projects (2.5/100 currently with 1/4 penny increase each year going forward for the next five years),
    - State assistance for some of these actions, and
    - Partnering with outside organizations could provide funding and other assistance if there is staff to coordinate with other agencies and organizations.
  - **SETTING GOALS:** If the City is going to be a better steward of its natural spaces, we must set goals that go beyond meeting regulatory requirements.
    - Develop an Environmental Strategic Plan that addresses protection, preservation and restoration of our natural areas and tie it into the soon-to-be revised Comprehensive Plan and Citywide policies/guidelines.

The ESC's general observations from the speaker series are as follows:

- Because these issues cross departmental lines there needs to be positive and ongoing interdepartmental coordination.
- Successfully addressing the health and rehabilitation of our natural areas will demand the commitment of permanent staff time. Consultants can be used on an ad hoc basis and volunteers can provide some much needed energy, but these activities require that staff be tasked with these issues in a substantive and permanent manner and develop city policies, performance goals, and periodic public review.
- Partnering and expertise are available to the City on all these issues from State, County and private sources.





## CONCLUSION

The Committee members are residents who have volunteered to serve on the ESC in order to help the City improve its environmental sustainability. In its sixth year, the ESC has become better known and more visible throughout the community, but the members see that much greater outreach on issues of the environment and sustainability is needed if the City and its citizens are to become active partners in protecting and supporting our natural resources in the local ecosystem. We look forward to more opportunities to review and comment on proposed development projects in the City. Further, we are excited to support the roll out of the Solid Waste Management Plan upon review and approval by DEQ. As always we will continue to share our insights and raise awareness with regard to stormwater management, solid/recycling, energy efficiency, and other issues and challenges that affect our City's sustainability goals.

The City's sustainability ultimately will rely on proactive leadership and an engaged and informed citizenry. The Committee appreciates input from residents and welcomes all interested parties at ESC meetings. We thank the City Council and Mayor for their continuing support and staff members for their attentiveness to our concerns as we all work together to improve the current and future sustainability of the City and its residents.





## 2016 WORK PLAN

There are certain key activities inherent in the ESC charter and in consideration of our support to the City's Sustainability Coordinator that will be on our agenda for 2016. These activities involve items that continue to be and will likely always be recurring on our yearly work plan such as support of school environmental programs at all of the City schools, reviewing and commenting on land use and development proposals, and providing recommendations for the General Assembly legislation package (e.g., reduction or elimination of bottled water and plastic shopping bags).

In addition, the ESC expects to be involved in several new activities and initiatives on the City calendar for 2016. The ESC plans to play a role on the Advisory Committee for integrating sustainability into the City Comprehensive Plan. We will support the implementation of the *Workplace and Neighborhood Sustainability Challenges*, *Sustainability Procurement "Playbook"* and *STAR Leading Indicators Pilot Project* grant initiatives. In addition, we plan to support the implementation of Solid Waste Management Plan including the hiring of a Solid Waste and Recycling Coordinator.

In 2016 the ESC plans to address the following environmental and sustainability priorities:

- Increase understanding and awareness of the City's natural resources
- Current and future stormwater management actions and policies
- City adoption and implementation of an invasive plant species management plan
- Identify opportunities to educate citizens on energy, environmental and sustainability issues
- Identify multi-modal transportation opportunities within the City
- Determine impact of VDEQ revised aboveground storage tank regulations on fuel storage tanks in the City
- Support solid waste and recycling program implementation within the City