

# CITY OF FAIRFAX ENVIRONMENTAL SUSTAINABILITY COMMITTEE 2012 ANNUAL REPORT



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## INTRODUCTION

This is the second annual report of the City of Fairfax Environmental Sustainability Committee (ESC) in accordance with the City Council's charter resolution that this committee advise the City Council, evaluate existing policies and programs and propose policies and programs to protect the environment. In 2012 the ESC has made great advances in becoming a known and valued resource for the city as staff and leaders deliberate on issues of consequence for the city's future. The ESC has several new members and the city has established a new staff position focused on sustainability. Long term goals remain the same for the ESC, while several new initiatives took place in 2012 and others are planned for 2013.



(Top Left) Ashby Pond Dedication (Top Right) Students marching with the ESC in the 2012 Independence Day Parade (Bottom Left) 2012 International Walk to School Day at Daniels Run Elementary (Bottom Right) Children learning what is recyclable at the ESC's tent at the 2012 Fall Festival





## OVERVIEW

The ESC focuses on issues that directly impact our environment. Our natural surroundings most definitely need a champion, and the ESC understands the importance of this role in addition to a more nuanced understanding of the interconnections of people and the environment encompassed by the idea of sustainability.

To ask whether the city is sustainable is a critically important one for the City Council. It is a fact of our interdependent modern world that through specialization communities world-wide have traded self-sufficiency and natural resource preservation for the rewards of all the conveniences and luxuries we enjoy today. The goal of sustainability, however, requires that a community take another look at its basic needs and how it can meet those needs by means that will not deplete resources.

To become sustainable it is necessary to identify the areas of dependence on non-renewable resources and work to reduce their use, to rely on readily renewable resources, to remediate and prevent ecological damage and in some cases to identify alternate ways of providing the necessities of life. The ESC recognizes its role as identifying areas of action related to resources and the environment that are both priorities and that can be addressed “here and now” at the local level. The daunting task of becoming more sustainable is one that the ESC encourages the city as a whole to take up as we move together into a future that will most certainly look different than our recent past.

## VISION

The Environmental Sustainability Committee (ESC) envisions an environmentally sustainable City of Fairfax that supports the well being of its residents and businesses.

## MISSION

The Environmental Sustainability Committee is committed to guiding the City of Fairfax to become an environmentally sustainable “green city.” This process involves resource conservation, preventing ecological harm, developing and using renewable resources and encouraging self-sufficient practices. To accomplish these goals, the ESC will recommend programs and policies and undertake actions that will engage residents and businesses in the creation of a sustainable city.



## 2012 WORK PLAN

The ESC identified the following issues as priorities in its 2012 work plan:

1. Monitoring storm water regulations
2. Comprehensive Plan review participation
3. Green building guidelines
4. Energy efficiency programs
5. Improved bicycle safety and use
6. Recycling program support
7. Invasive plant management
8. Outreach and partnerships

### 1. Stormwater Management

Stormwater issues are of paramount importance to the ESC in its efforts to help guide the city towards a more environmentally sustainable future. Severe storms overwhelm our current stormwater capability and cause downstream flooding, erosion of public and private property, increased turbidity of the water, habitat destruction, infrastructure damage and contaminated streams, rivers and coastal water. Citizens have voiced concern to the ESC about the harmful effect of stormwater on individual properties.

The ESC has continued to monitor the place of storm water management in the city's budget and policy planning. The City Council has approached the funding needs constructively over the past two fiscal years, and the city's administrators have also increased the level of detail in their planning for future needs as well as impending state and federal requirements. These external requirements are now coming to a head, with 1) two EPA Total Maximum Daily Load (TMDL) documents affecting the city's streams now published (one for the Accotink Creek watershed and a larger TMDL for the entire Chesapeake Bay coastal area), 2) a new Virginia storm water regulation (Virginia Stormwater Management Program - VSMP) that requires a city storm water management program to be in place by July 1, 2014, and 3) the need to renew the city's MS4 (Municipal Storm Sewer System) permit by July 1, 2013. The combined requirements will be enforceable by the state and federal government, and will require investment in funds and personnel to achieve the necessary outcomes.

### *Municipal Storm Sewer System (MS4)*

The city's current MS4 permit expires June 30, 2013. The city staff is already finalizing a new 2013-2018 permit application and plans to submit it by April 1, 2013. The new permit will incorporate requirements of the Chesapeake Bay TMDL now in force and will be updated over its lifespan. The Accotink TMDL has been remanded for EPA reconsideration by a federal district court order and is unlikely to affect the new city MS4 permit in the near term. Should EPA appeal the court decision or rewrite and recalculate the TMDL in accordance with the court's direction, it could be brought back into force, but either course of action would take time. It is important to note that either of these TMDLs will require considerable reduction of sedimentation, and nutrient drainage through the Accotink watershed and will require considerable cost and effort on the city's part to accomplish our allotted share of those reductions. The Chesapeake Bay TMDL progress will be reported annually, and the start of new implementation projects and any necessary retrofits must be begun in the next two years. Detailed implementation of the Accotink TMDL is less certain due to an ongoing legal challenge by the state and Fairfax County, but whatever the legal outcome, some requirements for reduction of sediments and nutrients will remain. Hopefully the two TMDLs can be harmonized in a way that will allow the city to effectively address all reductions under the same action approach.



### *Virginia Stormwater Management Plan (VSMP)*

The Virginia Stormwater Management Plan (VSMP) must be in place before July 1, 2014, and again the city staff has begun action to develop what will be the very comprehensive documentation required for plan submission. Key elements of this documentation are due by April 1, 2013. City staff has obtained an initial grant of \$25,000 for this plan development, but will require much greater support over the next year to successfully meet all the timelines.

The ESC believes that city staff has acted aggressively and effectively to engage these new regulatory demands, but there is no question that they will need more resources in staff and funding to complete the workload necessary over the next year and beyond. The ESC supports the proposed 2 cent real estate tax that will be dedicated to meet the City's stormwater needs.

Additionally, the ESC has reviewed the overall funding approach taken to finance the storm water program. We think that the efforts to create a dedicated revenue source through dedication of a small portion of the city real estate taxes have been very constructive. Yet, when we look at the details of recent CIP funding, we find that virtually all of the dedicated funds have been spent on maintenance of current systems, or

remedial drainage construction when some elements of existing storm water infrastructure have failed. Very little has been available for preparations to meet the upcoming regulatory requirements now on our doorstep. Many of the precise allocations of pollutants and regulatory details were unknown (and some still are unclear), and there is no question that maintenance and remedial efforts to reduce flooding are vital government responsibilities.

That being acknowledged, the ESC must still urge the staff and City Council to actively explore ways to ensure that a much larger and significant share of the CIP stormwater funding goes to preventive activities that will ensure that the city can meet its regulatory requirements in the future. As an example, none of the stormwater funds adopted in the 2013 CIP, and only 17% of those proposed for the 2014 CIP, are dedicated to projects that will reduce existing stormwater pollution. Albeit, some of the many other proposed projects may indirectly reduce pollutant loads in the Accotink watershed, and some may in effect exacerbate the impact of stormwater pollution on our streams by increasing flow. While we recognize that infrastructure maintenance and flood control are necessary, we cannot avoid the obvious conclusion that funds must be reserved to reduce the impact of stormwater pollution and meet our regulatory obligations. The crux of the matter is that the natural waterways of our city are the only available conduit for our stormwater runoff and in essence our streams are on the verge of becoming little more than open drainage culverts. Furthermore, our stormwater runoff is causing degradation of our region's waterways and adjacent land areas. It is our responsibility to reduce the amount of stormwater and the pollutants it carries, and to re-stabilize our streams as natural waterways.



*(Left) Naturalized stream channel in Fairfax Square Apartments  
(Right) Daniels Run along side a trail*

*In-stream erosion results in the release of nutrients into the streams. It's also important to notice the contaminants on the surface of the water in the left image.*



In earlier reports, the ESC has made a number of suggestions regarding the city's preparations for implementing new storm water requirements, such as inventorying all Best Management Practices (BMP) facilities, considering all city owned properties for BMP usage (e.g., stub end streets as potential swales or dry pond locations), and water-thirsty plantings at strategic watershed locations. We continue to support such efforts. However, the ESC would like to emphasize another suggested area for staff and City Council consideration, and that is a concerted effort to mobilize our city residents and businesses as a vital component of solving our storm water problems.

Our citizens take immense pride in their city, and must be convinced, through a comprehensive outreach program, to participate as individuals to address these storm water problems. Actively engaged citizens are a vital component of the solution to our stormwater problems. A crosscutting element in all of the planning addressed above (MS4 permit, TMDLs, and VSWP) is an aggressive outreach and public participation requirement. If we can inform and appeal to all our 25,000 residents and supporting businesses, asking that they take available action to retain storm water and improve infiltration through home based steps such as rain barrels, rain gardens, permeable walks and driveways, appropriate plantings, etc, we are convinced that they will not disappoint our expectations. This will require extensive outreach and communications support of the city staff and its many boards and commissions, but the components are in place, and need only the leadership and basic funding to initiate such a citizen mobilization.

Regional groups and other jurisdictions are taking action on this front and the City should look for all opportunities to coordinate and collaborate with our neighboring jurisdictions and other non-governmental groups.



(Left) Informational sign about the rain garden at Daniels Run  
(Right) Painted rain barrel in the backyard of a home in the City








## 2. Comprehensive Plan review

After completing an overall review of the Comprehensive Plan and providing chapter-by-chapter comments to the Planning staff in 2011 the ESC awaits the commencement of the Comprehensive Plan revision due to take place. The ESC appreciated the opportunity to review, comment on and support the staff briefing paper on the environment presented to the Planning Commission in May 2012. The ESC plans to continue to monitor the revision process and advocate for sustainability as an underlying theme for the future Comprehensive Plan.

## 3. Green Building

The ESC developed recommendations for a residential green building policy for the City. City Council, in its resolution on green building (R-09-09)  voiced support for encouraging new construction to be more efficient and lower its environmental impact by following LEED or similar type green building programs. Building upon this council initiative, the ESC tasked itself with determining how best to encourage green construction practices in the City. Although the ESC strongly supports any efforts by builders or developers to pursue certification under these programs, the ESC was concerned that imposition of programs such as LEED might have the unintended result of discouraging new development due to cost and complications, particularly with regard to the type of new development currently envisioned for the City in its Comprehensive Plan. The ESC recommended that the city consider adopting a basic set of guidelines that would address local environmental priorities and issues as a simpler and less costly alternative to requiring or requesting adherence to green building programs. The goal was to provide a simplified, easily monitored list of expectations that would circumvent the need for intensive monitoring and prevent inappropriate, unnecessary or expensive “green” actions that, while meeting the requirements of a standardized green building program, may not have significant environmental value in our region.


The ESC provided staff with its initial policy recommendation for a voluntary green residential building program initiative in February 2012  and presented its recommendations to the Planning Commission in May 2012.  The ESC looks forward to discussion of the final report with the City Council in 2013.




*Best Buy in Fair City Mall,  
LEED Silver Certified*



## 4. Energy Efficiency Programs

The ESC held a workshop to help homeowners learn how to conserve energy.  The workshop focused on actions that can be taken to prepare for cold temperatures. The workshop received assistance from PEG Environmental Solutions, a city-based company owned by the ESC's business representative member, Matthew Cooper. Local businesses volunteered their expertise on heating and duct systems, windows and doors, caulking and sealing, thermostat use, chimneys and fireplaces, energy audits and how to recycle building material. The city's building official, Andrew Wilson, was on hand to answer permit and code questions, and Dale Lestina, chair of the Fairfax Home Renaissance Corporation board, spoke to homeowners about the Renaissance loan program. City staffers Kelly O'Brien and Stefanie Kupka provided significant support in the planning, development and execution of the event. The event provided a great deal of useful information and attendees were able to discuss issues and ask questions of the experts. Turnout was lower than expected, approximately thirty attendees. The ESC will continue to explore how to improve outreach on energy efficiency.


## 5. Bicycle Improvements

George Mason University's Transportation Office spearheaded a Mason to Metro bicycle route study and collaborated with a bicycle task force from the Parks and Recreation Advisory Board. The ESC provided input as the plan developed and recommended support for the overall project along with specific recommendations related to increasing bicycling safety in the city in a memo to City Council. 

## 6. Recycling Program Support

The ESC continues to support the city's recycling efforts with regular emails to the city's recycling coordinators. These "recycl-e-mails" offer tips and guidance for citizens on recycling in a format that is easy to email to residents or cut and paste into newsletters. In addition, city staff met with the ESC at its November 7 meeting to update the committee about the current status and hurdles of the city's recycling program. The ESC is currently developing a list of recommendations which will be provided to City Council early 2013.

## 7. Invasive Plant Management Plan

At the request of the ESC the Parks and Recreation Department presented a draft Invasive Plant Management plan (IPMP) to the committee on March 7, 2012. Staff members Mike McCarty and Gregg Tonge met with the ESC to discuss the plan and the ESC provided written comments to staff. 

## 8. Outreach and Partnering

As part of its mission, the ESC has actively worked to create partnerships with other groups in and around the city. The ESC:

- Created a Facebook page for the committee. Kelly O'Brien, a member of the planning staff and interim committee staff person, maintains the page as a volunteer effort ([facebook.com/FairfaxESC](https://www.facebook.com/FairfaxESC))
- Created and disseminated a survey of city residents. 
- Established the practice of a City Council Earth Day proclamation in April to promote awareness of Earth Day activities in and around the city. 
- Participated in the Independence Day parade, highlighting city school environmental clubs. Several student members of the Lanier eco-team joined the committee in the 4th of July parade and carried the Green Flag that Lanier earned through the international Eco-School program.
- Organized and manned a booth at the 2012 Fall Festival providing festival attendees with information about key local environmental issues.
- Chair and staff member met with Fairfax Renaissance Housing Corporation to discuss how to encourage the use of the Renaissance program for energy efficient rehabilitation projects





Lanier Middle School students marching with ESC members in the 2012 Independence Day Parade





*(Left) ESC member Chris McGough discussing local programs with a 2012 Fall Festival attendee (Right) Mayor Silverthorne presenting members of Lanier Middle's Eco Club with the America Recycles Day Proclamation*

- Supported the America Recycles Day Proclamation by Mayor Silverthorne on November 13, 2012 and highlighted the recycling work of the Lanier Middle School Eco Club. 
- Collaborates with GMU. The Director of the GMU Sustainability Office is an official liaison to the committee. The ESC supports the city's participation in the GMU Mason Sustainability Institute, a community outreach arm of the Sustainability Office which has provided numerous workshops for the local community on environmental and sustainability issues. The City has provided meeting space at Green Acres Center for these workshops.
- Has a student liaison position, currently a Fairfax High School senior and member of the school's Green Club, who attends the ESC meetings, reports to the ESC about green projects at FHS and actively participates in ESC activities.
- Supports the environmental programs at the city schools. The ESC is encouraged by the habitat restoration and educational work taking place during the Lanier Middle School afterschool enrichment program. The ESC publicized the activities at Lanier at the Fall Festival and has a member assisting with the afterschool program. The ESC recommended Lanier for recognition as a Virginia Naturally School through the Virginia Department of Game and Inland Fisheries. 
- Is represented at the Fairfax area Green Breakfast Group facilitated by the Northern Virginia Soil and Water Conservation District, a networking event for environmental groups in the region to learn more about each other and environmental issues facing the region.






- Initiated and hosted a joint meeting with Fairfax County's Environmental Quality Advisory Council (EQAC) in April 2012.
- Met with representatives of the City of Falls Church Environmental Services Council in August 2012 and plans to meet with the full committee in 2013.
- Plans to meet with Board of Architectural Review in early 2013
- Initiated a relationship with the Northern Virginia Soils and Water Conservation District to explore hosting rain barrel workshops at Green Acres Community Center in the spring of 2013.
- Sponsored an environment-focused art show, for a second year, featuring work from all of the city's schools during Spotlight on the Arts Festival. The show represents a collaboration between Parks and Recreation Department, Commission on the Arts and the ESC. This year the exhibit included a reception for which two new community businesses Bakery, Bread and Grill and Everlasting Cafe, provided refreshments. Prizes, donated by Ace Hardware, were awarded to students from each school. The reception brought together students, parents, teachers, principals, school board and city council members, and Arts Commission members in celebration of our students' creativity and sense of earth stewardship.



*Artwork from the 2011 and 2012 eARTH show receptions.*



## OTHER ACTIONS DURING 2012

The ESC also supported the City's participation in the VML green government program, provided advisory memos on the George Mason Square development proposal  and continued to support the volunteer recycling coordinator program. The committee provided comments to the City Council on the 2012 CIP.  The ESC recommended two environment-related additions to the City Council 2013 legislative package.  The committee supported the City's participation in a joint resolution of the Northern Virginia Regional Commission to encourage adoption of the 2012 International Energy Construction Code (IECC) by the Virginia legislature.  The ESC supported citizen efforts to establish a zoning provision to allow beekeeping on residential properties in the City.  The committee also supported the International Walk/Bike to School Day at Daniel's Run, a program funded by a grant from Virginia's Safe Routes to School program.

## LOOKING AHEAD

Stormwater management concerns, reviewing city policies and budget allocations, supporting school environmental programs, and strengthening our city and regional partnerships will remain integral elements of the committee's work in the coming year.

The ESC has identified the following action areas and goals for 2013:

1. Bike and Pedestrian Planning - encouragement of the development of master plans
2. Green Economy - outreach to local businesses
3. Green Buildings - green building policy adoption
4. Waste Management - recycling and waste plan update
5. Ecosystem Stewardship - invasive plant management plan in place





## IN CONCLUSION

The committee appreciates the time and talent generously provided by City staff to help the committee understand and begin to address the environmental issues confronting the City. The beneficial partnership between staff members Adrian Fremont, Kelly O'Brien and the committee members made it possible to accomplish the varied and challenging work of the committee. The ESC looks forward to the additional impact of its work through the valuable addition of Stefanie Kupka in the city's new staff position of Sustainability Coordinator. Additional staff have provided their time and energy to the ESC as well, in particular the ESC wants to thank Jo Ormesher for her work integrating the Earth Art Show into the city's Spotlight on the Arts Festival. There is a great deal that needs to be done and we will endeavor to identify the most critical and productive actions as we all work together towards a more sustainable future for the City of Fairfax.



## ESC MEETING TOPICS 2012

### *January*

CIP review; George Mason Square/Kitty Pozer Garden; Public outreach planning; Discussion items for future joint meeting with Fairfax County EQAC

### *February*

Green scorecard and building checklist; Public input discussion/survey; Earth Week; Fairfax Mason to Metro Study; Upcoming joint meeting with EQAC (continued)

### *March*

Discussion of City Parks with Parks Director; Green scorecard and building checklist (continued); Public input discussion/survey; Input for City Budget; Briefing Paper on Sustainability; Fairfax Mason to Metro Study

### *April*

Joint meeting with EQAC – Coordination of City/County environmental issues; City of Fairfax role as stakeholder in County environmental decisions; EQAC's process for developing recommendations and other background information; Environmental/Sustainability issues relating to County facilities located within the City; Stormwater management/TMDL issues; Funding

### *May*

Comments from joint meeting with EQAC; Survey results; Role of local governments and community organizations as energy efficient partners; 2012 work plan

### *June*

Survey results memo; Role of local governments and community organizations as energy efficient partners (continued); 2012 work plan (continued); July 4th parade; Performance contract update; Ashby Pond; Fairfax Mason to Metro study update; Trails Day

### *July*

Summary of 2012 Work Plan; Biking in the City/Fairfax Mason to Metro study; Comprehensive Plan/Briefing Papers; Solar in Small Communities webinar review; Fairfax Renaissance Housing Corporation

### *August*

State Legislative items; Energy Conservation Program; Fall Festival; Future joint meeting with Falls Church ESC; PRAB meeting attendance; Green Government Challenge; committee website update; Bicycle Task Force – Fairfax Mason to Metro Study update; Beekeeping



### *September*

Capital Improvement Projects (CIP) process; State Legislative items; Energy Conservation Program and Fall Festival; Beekeeping (continued); Future joint meeting with Board of Architectural Review; Bicycle Task Force – Fairfax Mason to Metro Study update

### *October*

Bicycle/Pedestrian Safety Discussion including Walk to School event and Fairfax Mason to Metro Study; Energy / Weatherization Workshop and Fall Festival preparation; Discuss Letters to Mayor and Council regarding Legislative Package and International Energy Conservation Code – NVRC support; Annual Report Discussion

### *November*

Recycling Discussion with member of City Public Works Department Director and staff; Stormwater Regulations Update; Final preparations for Energy / Weatherization Workshop; 2013 Goals Discussion

### *December*

Work session to discuss 2013 goals and Work Plan