

ANNUAL REPORT 2010-2011

Committee Members: Tom Kennedy, Kate Bennett, Chris Todd, Bruce Knight, Susan Crate, Judy Fraser (Chair)

2011 ESC Annual Report

December 7, 2011

The members of the City of Fairfax Environmental Sustainability Committee (ESC) respectfully submit the following annual report in accordance with the City Council's charter resolution that the ESC provide the Council with an annual report summarizing its activities and recommendations. This report summarizes the committee's work since its presentation to the City Council in November 2010.

Vision

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

<u>Mission</u>

The Environmental Sustainability Committee is committed to guiding the City of Fairfax to become an environmentally sustainable city. The city needs to conserve and protect its natural resources, reduce the use of non–renewable resources, and develop and efficiently use renewable resources. To accomplish these goals, the ESC will identify and recommend programs and policies that will engage residents and businesses in the creation of a sustainable city.

2011 ESC Work Plan

To develop its 2011 work plan the ESC sought the views of City Council members and the assistance of City staff members. Through this process the ESC identified several priorities to address in its first year. The ESC presented the following list of priorities to the City Council on November 9, 2010:

- I. Monitoring storm water regulations
- 2. Comprehensive Plan review participation
- 3. Review of city environmental policies
- 4. Sustainable development guidelines
- 5. Outreach and education activities
- 6. City and regional partnerships
- 7. Energy efficiency programs
- 8. Measurement of city's sustainability
- 9. Funding strategies

The committee's recommendations and findings on these topics to date are summarized in the body of this report.

Stormwater Management

The committee has monitored the development of the new stormwater regulations and the Chesapeake Bay and Accotink Creek TMDLs and continues to assess the potential ramifications and costs for the city. The ESC supported the Council's dedication of a percentage of the real estate tax for stormwater funding. This will continue to be a major on-going issue for the ESC and the committee will continue to monitor developments and investigate opportunities for addressing this critical issue.

The city is facing new regulations from both the state and EPA regarding stormwater management:

- An EPA required Chesapeake Bay Total Maximum Daily Load (TMDL) report that will require the State of Virginia to significantly reduce the total discharge of phosphorous, nitrogen, and sediment into the Bay was established on December 29, 2010. Virginia state agencies are currently apportioning the required reduction tonnages of each of these pollutants by jurisdiction (e.g., Fairfax County, Fairfax City, etc.) and by agency (e.g. Virginia DOT). The anticipated submission date to EPA is March 2012.A separate EPA-developed Accotink Creek TMDL directly affects the City of Fairfax, and is unusual in its substitution of water flow reduction for the usual unit of measurement of tons of sediment to be reduced. This TMDL requires that the City reduce its storm water flow to the Accotink by nearly 50%. For a number of technical reasons including extensive impermeable surfaces already constructed in the city, lack of space for detention of storm water and soil types that limit natural infiltration, the city will have great difficulty in reaching such a level of storm water flow reduction.
- Virginia published a major revision to current state storm water regulations on August 29, 2011 which became effective on September 13, 2011. The new regulations amend the technical criteria applicable to storm water discharges from construction activities including post-development requirements, establish minimum criteria for locality-administered storm water management programs, and specify the authorization procedures and review procedures for local storm water management programs. The City now has between 15 and 21 months to adopt a local storm water management program for land disturbing activities that is consistent with the new regulations. The Virginia legislature has passed several new laws affecting storm water management and requiring further rule development.
- EPA issued a Federal Register Notice in December 2009 seeking stakeholder input to help shape a
 program to reduce storm water impacts. Under this proposed rulemaking, EPA is considering the
 following preliminary regulatory actions:
 - O Expanding the area subject to federal storm water regulations;
 - O Establishing specific requirements to control storm water discharges from newly developed and redeveloped sites;

- O Developing a single set of consistent storm water requirements for all Municipal Separate Storm Sewer Systems (MS4s the City holds a Phase II MS4 permit);
- O Requiring MS4s to address storm water discharges in areas of existing development through retrofitting; and
- O Exploring specific storm water provisions to protect sensitive areas (e.g. the Chesapeake Bay).

Although specific compliance requirements for the new TMDL and state regulations are not yet available, the committee recommends that the city:

- Work with other regional groups such as the Council of Governments and Northern Virginia
 Regional Commission to begin to seek the harmonization of the differing units of measurement of
 the two TMDLs (i.e., tonnage of sediment versus water flow rate) and coordinate future planning
 and actions;
- Determine how to adopt recent legislative changes into the city code within the required timeframe;
- Identify additional preventive measures to reduce release of sediment into the Accotink waterways by targeted plantings and maintenance of its storm water drainage system;
- Record existing public and private construction of Best Management Practices (BMP) to form a baseline for new management efforts.
- Analyze other city owned properties that have the potential for conversion to BMP storm water
 retention construction such as dry ponds or contoured swales. For example consider retrofitting
 stub end streets or unused intermittent extra road lanes to both reduce impermeable surface area
 and provide room for new retention construction
- Closely examine any new development planning for ways under the current code by which
 impermeable surface areas could be reduced and other stormwater BMP could be added to
 minimize future stormwater flow.

Comprehensive Plan Review

The second major project the ESC undertook during the previous year was a review of the Comprehensive Plan. With the expectation that the City will extensively rewrite the current (2004) Comprehensive Plan in the near future, the ESC reviewed each chapter and discussed in detail the role of sustainability in each subject area covered in the Comprehensive Plan. The ESC identified two related general concerns. First, sustainability is a larger issue not limited to specific environmental concerns, and so should no longer be a subtopic of the Environment chapter. because sustainability affects many different areas of city life and is

more relevant as a gauge by which all city planning decisions need to be measured moving forward. In that the Comprehensive Plan is a road map for future development, sustainability gets to the heart of what will allow the City of Fairfax to remain a prosperous, appealing and safe place in the future. The ESC concluded that sustainability needs to be considered an underlying theme for the future plan. The ESC presented a summary of its findings to the Planning Commission on May 23, 2011, summarized here:

- Add sustainability as a basic guiding principle and incorporate sustainability goals that recognize the
 three interdependent spheres in sustainability planning of environmental, social and economic in its
 Comprehensive Plan. The ESC provided staff with edits and recommendations that would
 incorporate sustainability into the current update of the 2004 Comprehensive Plan.
- The ESC made detailed recommendations on the existing Environment chapter to staff for addressing the condition and treatment of our natural surroundings and resources.
- The ESC also recommends that the City Council adopt a Sustainability Plan to provide specific steps and goals for becoming a sustainable city. Once completed, the Sustainability Plan could then be used as a reference for the Comprehensive Plan.

The ESC expects to remain involved during the current update and rewrite of the Comprehensive Plan.

City Tree Policy Review

Another area of concern for the ESC is the condition of trees within the city. An initial review of tree policies revealed several areas where improvements could be made.

- The ESC recommends that the city maintain its status as a Tree City, a program of the Arbor Day Foundation, by adhering to at least the minimum requirements of the program. The ESC recommends City Council request an annual review by staff to ensure the City meets the Arbor Day Foundation stipulations and to report any shortfall.
- The proper care and removal of trees is also an area where improvements can be made. The city's
 mature trees are an asset as well as a shared responsibility. Pertinent information should be made
 available to residents via staff contact, website, brochures, workshops. ESC recognizes that staff
 efforts in these areas are limited by budget, manpower, and the need for specialized expertise.
- The ESC reviewed current policies regarding trees and found that, while providing guidance and standards, the policies would benefit from a careful review and update, and recommends considering combining the current policies together in a single ordinance or policy statement.
- The ESC also recommends that the City's tree care policies include guidance on the protection of forest ecosystems in addition to individual trees in the city.
- The ESC encourages the city to conduct a tree survey. Assistance may be available through Virginia Tech Extension Service and affiliated organizations.

The ESC recommends that the City create a staff position tasked with tree and native habitat preservation. This staffperson would supervise the care of city-owned trees, identify issues of tree and habitat health, specify appropriate preventative and beneficial practices, be in contact with utility companies, provide outreach to residents and businesses, update and coordinate tree policies, supervise a tree survey and improve the overall level of tree and ecosystem protection in the City.

Sustainable Development

The ESC discussed potential directions for a 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 is 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 recommends 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 is 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 intends to develop separate recommendations for new residential construction, new commercial construction, and commercial and residential renovations. In August 2011 the ESC discussed a preliminary draft of recommended compliance items for new residential construction. The ESC is currently seeking staff input and expects to finalize its recommendations for new residential construction during the spring of 2012.

The ESC explored the potential use of the Renaissance Housing program as a vehicle for encouraging energy and sustainability improvements with the chair of its board,

The program is currently limited due to current economic conditions but the ESC recommends that the program be adapted to encourage sustainable building practices in the improvement of the City's existing housing stock.

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:

- established an ongoing relationship with George Mason University The Director of the GMU Sustainability Office is typically in attendance at our meetings. The ESC values the opportunity for close collaboration with GMU. GMU represents both a resource for the City and is also a neighboring community similar in size and environmental impact to the City, and both the City and GMU are confronting similar and shared sustainability issues. The ESC also met with the GMU Professor currently holding the position of Fellow of Sustainability Studies in October 2010 to discuss opportunities for collaboration within the academic program, for example, internship and independent studies that might further the city's environmental projects.
- created a student liaison position, currently filled by a city resident who attends Thomas Jefferson High School.
- supported the Lanier Middle School National Wildlife Federation eco-school program by having a member participate in the eco group meetings, by displaying information at the 2010 Fall Festival, and through the creation of an environment-focused art show featuring work from all of the city's schools and supporting grant applications for the creation of a vernal pool habitat area. Several members of the Lanier eco-team joined the committee in the 4th of July parade. The committee also sponsored a logo competition among Lanier art students for a sign and tee shirt for the ESC.
- Sends a representative to 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.
- met with planners from Fairfax County who staff the County's Environmental Quality Advisory
 Council (EQAC) and plan to meet with EQAC during the spring of 2012.
- Promoted the schools' environmental programs at the 2011 Fall Festival.

Other issues during 2010-2011

An oil leak discovered at the Pickett Road tank facility prompted the ESC to research the history of the tank farm facility problems and policies in order to identify the environmental concerns and options at the facility. The ESC encouraged and supported the city's efforts to achieve corrective state legislation to bring the tank facility into conformance with current standards for above ground storage facilities. The ESC also identified energy assistance programs available to citizens, encouraged the City's participation in the VML green government program, and assisted with the development of a volunteer recycling coordinator program.

The ESC assisted with the development of the Recycling Coordinator's program. All neighborhood associations in the city have been asked to appoint a recycling coordinator. Initial meetings of the group were poorly attended and the quarterly meetings have been discontinued at this time. Two members of the coordinator's group instituted a monthly "Recycl-e-mail", which is sent to each of the coordinators or for associations that have not appointed a coordinator the information is sent to the association president. The

emails include tips and information to share with their neighborhoods via email, websites or newsletters. The current efforts are primarily voluntary and minimal in scope when compared to other jurisdictions in the region. The ESC is concerned that, unlike other local jurisdictions, the city does not have a staff person whose responsibilities include improving and increasing recycling and reuse efforts.

The ESC, created during a time of very tight budgets, has sought to identify no-cost, and even money-saving means of becoming more environmentally sustainable in the City. However, the ESC expects that the City will need to allocate funds for the vital work ahead. The ESC members will also be alert for outside sources of funding for specific projects as opportunities arise.

Looking Ahead

The ESC has identified its priorities for 2012 as follows:

- 1. Continued involvement in the Comprehensive Plan review
- 2. Completion of green building guidelines
- 3. Stormwater planning
- 4. Development of baseline information regarding the status of many current city policies and programs by which the city will measure its progress in environmental sustainability. As an illustration, while there is much anecdotal information, the ESC was unable to find current data on tree coverage in the city. The ESC will address this data shortfall over the coming year.
- 5. School programs The ESC will identify how the City can best support and further the environmental programs beginning to take place at the City schools.
- 6. Outreach to citizens and city committees, NVSWCD, Fairfax County EQAC.
- 7. Recycling, bike trail improvements, native habitat guidelines, grant opportunities.

In Conclusion The ESC has covered a lot of ground in 2011. The committee members appreciate the time and talent generously provided by City staff as the committee works to identify and address the environmental issues confronting the City. There is a great deal that needs to be done and we will continue to rely on City Council and staff to help us focus on the most critical and productive actions as we all work together towards a more sustainable future for the City of Fairfax.

ESC Meeting Topics 2010-2011

Feb-March 2010

introductions and initial conversations about areas of interest, issues,

focus of committee, review of existing sustainability programs

April 2010

Summary of budget and process by David Hodgkins

May 2010

Renaissance Program discussion with Dale and Danielle; options for

funding energy efficiency upgrades

PACE funding options

Memo to City Council on energy programs available to city residents

memo to City Council on CFL report recycling coordinators meeting?

June 2010

Comprehensive Plan overview by Dave Hudson

July 2010

Mission and vision statement preparation

tree policy discussion

August 2010

Presentation on Accotink TMDL

work on CC presentation

Tank facility concerns - tracking of clean up

September 2010

CC presentation development

tree recommendations draft review/ tree survey/zoning rewrite/

Fall Festival booth

October 2010

Discussion with Dann Sklarew of GMU - student projects/ internships

TMDL update;

energy audit

discussion of development of indicators

November 2010

CC presentation - nov 9

Comp plan discussion

December 2010

review of council comments

Comp Plan

Sustainability Institute

Tank farm report

January 2011

Comp Plan review

February 2011

Comp Plan review

GMU research topics suggestions

ICLEI membership

March 2011

Comp plan review

Earth Day proclamation

memo to CC re stormwater fund

April 2011

prep for planning commission work session

Earth Week art exhibit of city school artwork at City Hall

Advise CC on support for I cent stormwater funding

May 2011

Planning Commission work session on Comp. Plan

Lanier eco schools

logo design project for Lanier

building performance contract update

June 2011

Added high school liaison from TJ (city res)

post-work session discussion

Lands and Waters presentation on stream and habitat restoration

projects at Daniels Run, Providence and Lanier

TMDL update

Lanier Eco School award

July 2011

green govt/energy improvement plan review

Parade participation

tree policy summation

Facebook page

August 2011

Green building discussion/ development of sustainable building program $% \left(1\right) =\left(1\right) \left(1\right) \left($

draft checklist for new single family residential construction

September 2011

Presentation by Fairfax County planners Noel Kaplan and Kambiz Agazi

October 2011

Annual report draft

November 2011

Panel discussion with staff on green building

December 2011

Review of Annual Report

Planning for public outreach meeting