



2014 Annual Report on the Environment

Environmental Quality Advisory Council

Detailed Report

A Fairfax County, Virginia
Publication
November 2014



To request this information in an alternate format, call the Department of Planning and Zoning: (703) 324-1380 TTY 711



The cover consists of pictures taken in Fairfax County. From top left clockwise: Red Fox, White-Tailed Deer, male Cardinal, American Toad, Mourning Dove, Grey Squirrel, Red-Shouldered Hawk, Great Blue Heron, Raccoon, Hoverfly, Robin Eggs, Garter Snake, Blue Dasher Dragonfly, female Cardinal, Bald-Faced Hornet.

Photos by Jack Baker. Cover design by Matthew Baker, Student Member, Environmental Quality Advisory Council.

ANNUAL REPORT
on the
ENVIRONMENT

2014



DETAILED REPORT

Fairfax County, Virginia

Environmental Quality Advisory Council
November 2014

Printed on recycled paper

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at www.fairfaxcounty.gov/eqac**

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Introduction

This year's Annual Report on the Environment has been prepared by the Environmental Quality Advisory Council. Staff support for the coordination and printing of the report has been provided by the Planning Division of the Department of Planning and Zoning.

The Annual Report on the Environment, which is an update on the state of the county's environment, serves a threefold purpose. First, it is intended to assist the Board of Supervisors in evaluating ongoing environmental programs and to provide the basis for proposing new programs. Second, the document aids public agencies in coordinating programs to jointly address environmental issues. Third, the report is intended to inform residents and others who are concerned with environmental issues.

This year's report in two formats: (1) a detailed report; and (2) a summary report providing highlights of recent activities, key issues and comments and recommendations associated with each of the major topical areas covered in the larger report. Both report formats are provided electronically, but only the summary document is being made available in hard copy.

The report includes chapters on major environmental topics including: climate change and energy; land use and transportation; air quality; water resources; solid waste; hazardous materials; ecological resources; wildlife management; and noise, light, and visual pollution. Also included are: EQAC's "Scorecard" of progress made on previous recommendations; contacts for reporting potential environmental crimes/violations; an overview of stewardship/volunteer opportunities; and a "spotlight" on three environmental initiatives of Fairfax County Public Schools--High performance and sustainable schools; Get2Green Environmental Education and Action; and collaboration between FCPS and the county's Stormwater Planning Division on stormwater management plans for school properties. EQAC commends FCPS for working towards improved environmental performance in these areas. In addition, the detailed report includes appendices addressing: state legislation relating to the environment; resolutions and positions taken by EQAC over the past year; the county's Environmental Excellence Awards; and acronyms and abbreviations used in this report. Finally, new to this year's report are the following: a summary of EQAC activities since the last report was published; and an appendix highlighting the county's Environmental Improvement Program and EIP project selection process.

Within each chapter of the detailed report are: a discussion of environmental issues; a summary of relevant data; and a discussion of applicable government programs. Most of the chapters include information regarding stewardship opportunities and conclude with recommendations that identify additional actions that EQAC feels are necessary to address environmental issues. References are generally presented only in the detailed report format. Recommendations are again presented in two formats: items addressing ongoing considerations and continued support for existing programs are noted as "comments." Comments may also provide information to support items in the "recommendations" section. Items addressing new considerations, significant refinements of previous recommendations or issues that EQAC otherwise wishes to stress are presented as "recommendations." EQAC requests that county staff provide its perspectives on items presented as "recommendations."

This report covers activities affecting the environment in 2013; however, in some cases, key activities from 2014 are also included.

While the Environmental Quality Advisory Council has prepared and is responsible for this report, contributions were made by numerous organizations and individuals. Many of the summaries provided within this report were taken verbatim from materials provided by these sources. EQAC therefore extends its appreciation to the following:

Alice Ferguson Foundation
Audubon Naturalist Society
Clean Air Partners
Clean Fairfax
Coalition for Smarter Growth
Fairfax County Airports Advisory Committee
Fairfax County Deer Management Committee
Fairfax County Department of Cable and Consumer Services
Fairfax County Department of Code Compliance
Fairfax County Department of Information Technology
Fairfax County Department of Neighborhood and Community Services
Fairfax County Department of Planning and Zoning
Fairfax County Department of Public Works and Environmental Services
Fairfax County Department of Transportation
Fairfax County Department of Vehicle Services
Fairfax County Executive's Office
Fairfax County Environmental Coordinator
Fairfax County Facilities Management Department
Fairfax County Fire and Rescue Department
Fairfax County Health Department
Fairfax County Office of Community Revitalization
Fairfax County Park Authority
Fairfax County Police Department, Division of Animal Services
Fairfax County Public Schools
Fairfax County Restoration Project
Fairfax County Wetlands Board
Fairfax County Wildlife Biologist
Fairfax Joint Local Emergency Planning Committee
Fairfax Master Naturalists
Fairfax ReLeaf
Fairfax Water
Federal Aviation Administration
Illuminating Engineering Society of North America
International Dark-Sky Association
Interstate Commission on the Potomac River Basin
Metropolitan Washington Airports Authority
Metropolitan Washington Council of Governments
Northern Virginia Conservation Trust
Northern Virginia Regional Commission
Northern Virginia Soil and Water Conservation District
NOVA Parks (Northern Virginia Regional Park Authority)
Occoquan Watershed Monitoring Laboratory
Potomac Conservancy
Reston Association
United States Fish and Wildlife Service
United States Geological Survey
United States National Museum of Natural History
Upper Occoquan Service Authority
Virginia Department of Environmental Quality
Virginia Department of Forestry
Virginia Department of Game and Inland Fisheries
Virginia Department of Transportation
Virginia Division of Legislative Services
Virginia Outdoor Lighting Taskforce
Virginia Outdoors Foundation

Finally, EQAC wishes to acknowledge the efforts of the county’s interagency Environmental Coordinating Committee, which coordinated the staff responses to the recommendations within EQAC’s 2013 *Annual Report on the Environment*, as well as the ongoing efforts of the interagency Energy Efficiency and Conservation Coordinating Committee.



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

Board of Supervisors
County of Fairfax
12000 Government Center Parkway
Fairfax, VA 22035

November 18, 2014

The Environmental Quality Advisory Council is pleased to present the 2014 Annual Report on the Environment. In this report, we discuss various environmental issues in Fairfax County and make recommendations as to what actions the county should take to resolve identified problems. This report covers 2013, but also includes significant actions from 2014 that could impact EQAC's comments and recommendations. We recognize that the report does not capture all ongoing actions; if we tried to accomplish this, the report would never be finished and would be even longer. The report consists of nine chapters – each chapter addressing a different aspect of the environment. The chapters are arranged to reflect the order of topics listed in the Board of Supervisors' Environmental Agenda. We have again have created two versions of the report; one a printed summary version, and two, an electronic complete version with all data included, available both on-line and in the CD attached to this report. We have again highlighted environmental stewardship opportunities within the report chapters and have retained a summary of these opportunities. We have also added to the detailed report an appendix on the Environmental Improvement Program funding, explaining the program, what the funds are used for and what the selection process is for the funds. In addition, we have added a section to both versions of the report summarizing EQAC's activities over the past year.

EQAC thanks the board for its continued strong support of environmental programs. We understand that budget constraints continue to impact all programs within the county.

EQAC's priority recommendations this year focus on three areas.

The first is the need for continuing long-term financial support to sustain three environmental programs that will only be effective and lasting if funded through multiple years. This includes: an **increase in the Stormwater Service District rate by one-quarter penny** that would again result in more funding for modest watershed improvement programs and a somewhat more realistic infrastructure replacement timeline; **continued funding of Environmental Improvement Program projects**, most of which will be cost effective and result in significant cost reduction; and

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increased funding for natural resource management and stewardship in the Fairfax County Park Authority.

The second recommendation is to develop and implement programs that are important to address climate change. First, an energy strategy is needed to support all sectors of Fairfax County from the county itself to the commercial and residential sectors. Second, planning is needed to avoid impacts of climate change, such as the rise in sea level that threatens those parts of Fairfax County that border the Potomac and the creeks that feed the Potomac.

Lastly, we would note that the county has moved to single stream recycling where all recyclable material is collected in a single bin. This has had some benefits; however, it has reduced the quality and value of collected recyclable materials. **To increase the value and environmental benefit of recycled materials, the county should investigate ways to improve the quality of recyclables collected at residential and commercial properties.** Removing glass from residential collection systems could significantly improve the quality of paper and plastic recycled. As such, alternative methods of glass recycling should be considered in addition to other ways to improve the quality of recyclables collected.

As we do each year, EQAC would like to commend the outstanding efforts of the following groups whose actions improve and safeguard the environment in Fairfax County. The Northern Virginia Soil and Water Conservation District continues its work to provide excellent education programs, to consult with the county on innovative stream restoration work, to have a large and successful stream monitoring program and to be available to residents and developers alike for site work consultation. The Northern Virginia Conservation Trust continues to obtain easements on privately owned environmentally sensitive land. Fairfax ReLeaf continues to promote tree preservation and tree replacement programs. The Park Authority Natural Resources staff continues to provide exemplary service due to a small group of dedicated individuals, working with a very small budget, who are slowly enhancing environmental efforts in the county's parks. The members of EQAC thank all these groups, and all others who work to preserve and enhance the environment of the county.

Once again, EQAC would like to thank and commend the county staff for its continued outstanding work. We thank staff especially for providing the data for this report and for a continued willingness to meet with EQAC to discuss various issues. We commend the county's Environmental Coordinating Committee, which is chaired by Deputy County Executive David Molchany, for its continued efforts at managing environmental action within the county. We appreciate the ECC's willingness to meet with EQAC twice each year and to discuss issues of environmental significance.

As I do every year it gives me great pleasure as the representative of EQAC to thank and acknowledge the work of two individuals. Every year we do this and every year

Board of Supervisors
Continued

the members of council continue to be impressed with the work and input of these two people.

First, we need to truly thank Noel Kaplan of the Environment and Development Review Branch, Department of Planning and Zoning. Noel provides county staff support to EQAC. Noel sets up and tapes every EQAC meeting, follows up on actions generated from the meetings and coordinates the inputs and publication of the Annual Report. Although the members of EQAC write the Annual Report, it is Noel who makes publication of the document possible. Again EQAC cannot thank him enough for his hard work and long hours in our support.

Second, we thank Kambiz Agazi, Environmental Coordinator, Office of the County Executive, who also attends all of our meetings and provides helpful advice and suggestions. His insight and his overview of county environmental activities are invaluable to our work. EQAC thanks him for his assistance and valuable contributions.

Finally, as I did last year, I would like to personally recognize my fellow EQAC members. They represent a diversity of views that allows for knowledgeable discussions and results in thoughtful recommendations. They spend extensive time investigating issues, write excellent resolutions and produce comprehensive chapters on subjects they have carefully researched. They are to be commended for their efforts.

EQAC asks that you continue to support the environmental programs you have established. These programs are important if we are to maintain the high quality of life we have in Fairfax County and the high standards we have set for ourselves. We note that for Fairfax County residents, quality of life is not just about good schools and jobs but also about having a clean and healthy environment in which to live and recreate.

The members of EQAC thank the Board of Supervisors for its leadership and look forward to continue working with you to achieve the goals of the Environmental Agenda and protecting and enhancing Fairfax County's quality of life in the coming years.

Respectfully submitted,

A handwritten signature in cursive script that reads "Stella M. Koch".

Stella M. Koch, Chairman

SUMMARY OF EQAC ACITIVITIES, NOVEMBER 2013 THROUGH OCTOBER 2014

Between November 1, 2013 and October 31, 2014, EQAC held 11 meetings, including one public hearing, a joint meeting with the Fairfax County Park Authority Board and two joint meetings with the Fairfax County Environmental Coordinating Committee. During this period, EQAC issued six resolutions and positions (see Appendix B of the detailed version of this report). On November 19, 2013, EQAC presented its 2013 Annual Report on the Environment to the Board of Supervisors. On September 23, 2014, EQAC presented the 2014 Environmental Excellence Awards (see Appendix C of the detailed version of this report).

Key agenda items from EQAC's meetings were as follows:

November 13, 2013

- The FY 2015 Fairfax County budget process.
- The Countywide Dialogue on Transportation.
- The draft stormwater management ordinance.
- Consideration of correspondence to the Board of Supervisors regarding transportation priorities.

December 11, 2013

- Funding of monitoring efforts by the Occoquan Watershed Monitoring Laboratory: Discussion with Dr. Thomas J. Grizzard, Director, OWML
- Green building policy as it applies to hotels: Discussion with representatives from Cityline Partners and Hilton Worldwide
- Annual Report on the Environment: Discussion of the report preparation process and possible changes

January 13, 2014

- EQAC's annual public hearing
- Establishment of a nominating committee for EQAC officers for 2014.
- The annual report preparation process and possible changes.

March 12, 2014

- Joint meeting with Fairfax County’s Environmental Coordinating Committee
 - The FY 2015 Advertised Budget Plan
 - The Chairman’s Private Sector Energy Task Force—update on follow-up actions/Energy Alliance
 - Energy Action Fairfax: Update
 - Discussion of a proposed stream relocation project in Great Falls
- Election of officers for 2014
- Review of issues identified at the 2014 annual public hearing
- The annual report preparation process and possible changes

April 9, 2014

- Discussion of the Wildlife Biologist Office
- Discussion of the March 2014 draft Fairfax County Sustainability Initiatives document
- Identification of agenda items for a joint meeting with the Fairfax County Park Authority Board
- The annual report preparation process and possible changes

May 14, 2014

- The potential for hydraulic fracturing within the George Washington National Forest, and consideration of a related EQAC resolution
- 2014 Annual Report on the Environment
- Discussion of the adopted FY 2015 budget
- Student member committee report

June 11, 2014

- Stormwater update
- Funding of Environmental Improvement Program projects
- Follow-up discussion regarding hydraulic fracturing within the George Washington National Forest
- Identification of future agenda items, including the July joint meeting with the Environmental Coordinating Committee

July 9, 2014

- Joint meeting with Fairfax County's Environmental Coordinating Committee
 - Funding of long-term, ongoing projects through the Environmental Improvement Program
 - The Wildlife Management Specialist position
 - Activities of the county's Animal Shelter
 - Briefing on the proposed revision to the Noise Ordinance
 - Status of development of energy goals by the county's Energy Efficiency and Conservation Coordinating Committee
 - Staff responses to EQAC Annual Report recommendations
- Follow-up discussion regarding hydraulic fracturing within the George Washington National Forest
- Legislative proposals for the 2015 General Assembly
- Development of EQAC comments regarding the proposed Noise Ordinance revision
- Update on the green building policy revision
- Update on the review of the MITRE electric vehicle charging infrastructure report
- 2014 Annual Report on the Environment

August 13, 2014

- Update of the Solid Waste Management Plan, including a discussion of construction/demolition debris waste
- EQAC recommendations regarding the proposed revision to the Noise Ordinance
- Legislative proposals for the 2015 General Assembly
- Environmental Excellence Awards
- 2014 Annual Report on the Environment

September 10, 2014

- 2014 Annual Report on the Environment

October 8, 2014

- Joint meeting with the Fairfax County Park Authority Board
- 2014 Annual Report on the Environment

Approved minutes of EQAC meetings are available from EQAC's website, at <http://www.fairfaxcounty.gov/dpz/eqac/minutes>.

EQAC resolutions and positions were as follows:

| | |
|----------------|--|
| November 2013: | EQAC comments on the Countywide Dialogue on Transportation |
| March 2014: | Testimony on the FY 2015 Fairfax County budget |
| June 2014: | Funding of Environmental Improvement Program projects |
| July 2014: | EQAC position on the potential for hydraulic fracturing in the George Washington National Forest |
| July 2014: | Legislative proposal regarding disposable bags |
| August 2014: | EQAC position on Noise Ordinance modification proposal |

Details are available in Appendix B of the detailed version of this report as well as EQAC's website, at http://www.fairfaxcounty.gov/dpz/eqac/resolutions/dpz_eqac_resolutions.htm.

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SCORECARD
Progress Report on 2013 Recommendations

1. CLIMATE CHANGE AND ENERGY

| Climate Change & Energy Recommendation | Action taken by Agency or Department | EQAC Comments | Completed |
|---|---|--|------------------|
| <p>1. While the county has promoted the incorporation of energy efficient certification, such as LEED at the Silver level or higher, EQAC recommends that the Board of Supervisors also promote periodic (e.g., bi-annual) evaluation of the GHG footprints for buildings and facilities. Such a step would be a natural follow up action to education and outreach that has been started in 2012 for residential energy use and that is envisioned for the commercial sector. While EQAC is encouraged that plans are being developed that would address this recommendation, additional work will be needed before this recommendation can be fulfilled. We are hopeful that the work of the Energy Manager will help with the implementation of this recommendation.</p> | <p>The staff response noted the Energy Action Fairfax pilot, outreach on energy issues that include social media and the Energy Dashboard, which has been under consideration for the Fairfax County Government Center and the use of real-time energy monitoring for several county buildings.</p> | <p>The county is to be commended for the progress made to date. However, the Energy Dashboard has not yet been highlighted for the public. If this information is made public, it may serve as an incentive to homeowners and private sector businesses to track their energy.</p> | <p>No.</p> |

| Climate Change & Energy Recommendation | Action taken by Agency or Department | EQAC Comments | Completed |
|--|--|---|------------------|
| <p>2. EQAC recommends that Fairfax County continue to fund a program to serve as follow-on to the Energy Action Fairfax. The EAF program completed a small number of outreach events and audits and developed a website and educational videos. The program educated county residents on energy conservation and greenhouse gas emission reductions. EQAC feels that it would be beneficial if the program was to continue. Given the significant efforts and expenditures made by the county to get this program started, it would be most cost-efficient to continue the program at this time rather than stop it and then try to re-start it at some future date.</p> | <p>The pilot program funded with the Energy Efficiency and Conservation Block Grant has expired. Recognizing the need for the EAF program, the county is seeking short and long term objectives to replace the pilot. As part of this work, the county is pursuing a green certification program for the commercial sector, which will recognize ENERGY STAR[®], LEED[®] and other certifications.</p> | <p>EQAC commends the county for recognizing the importance of this work and pursuing both short and long term.</p> | <p>No.</p> |
| <p>3. Given the importance of the work of the private sector, the EQAC strongly supports the continuation of work started by the Chair’s Energy Task Force be continued through the Energy Alliance.</p> | <p>County and board staff members have re-connected with members of the former Private Sector Energy Task Force to promote formation of the Energy Alliance, which would undertake implementation of the Task Force’s recommendations.</p> | <p>EQAC appreciates that both board and county staffs are working to facilitate the formation of the Energy Alliance.</p> | <p>No.</p> |

II. LAND USE AND TRANSPORTATION

| Land Use & Transportation Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|--|---|-------------|
| <p>I.a. The new Fairfax Forward planning process is the right step forward to update our planning practices. With Fairfax Forward being such a new process for the county, EQAC recommends that:</p> <p>(i) Fairfax Forward be identified as the preferred long term process to update with Comprehensive Plan and completely replace the APR process.</p> <p>(ii) All the processes necessary to sustain Fairfax Forward be established now, rather than waiting for the current Work Program to be completed. This includes:</p> <ul style="list-style-type: none"> • The mechanisms to continuously update and improve the Fairfax Forward program. • The process for identifying and prioritizing future work programs. • The means of engaging the public and encouraging meaningful public participation in the program. | <p>The Board of Supervisors adopted Fairfax Forward on July 9, 2013 and directed staff to evaluate the efficiency, effectiveness, accessibility and impact for two years.</p> <p>Processes to maintain the long term sustainability are developed and monitoring is underway as part of the two-year evaluation.</p> | <p>EQAC is satisfied that Fairfax Forward has become the accepted process for updating the Comprehensive Plan and that the county has a thoughtful process in place for improvement and evaluation.</p> | <p>Yes.</p> |

| <p>Land Use & Transportation Recommendations</p> | <p>Action taken by Agency or Department</p> | <p>EQAC Comments</p> | <p>Completed</p> |
|--|--|--|-------------------------|
| <p>1.b. EQAC recommends that the county work to integrate social media into the planning process and other outreach efforts. This allows community participation through the Internet technologies and is more cost effective and far reaching than traditional media and outreach. The concept of a virtual town-hall meeting with community participation and instant feedback is now possible. Social media is very powerful for encouraging and educating people about alternative transportation options.</p> | <p>The Department of Planning and Zoning appreciates EQAC advocacy for social media. DPZ already uses social platforms, such as Facebook, Twitter, Flickr and YouTube to engage the public.</p> <p>Public participation tools are adopted on a countywide basis and follow countywide policy.</p> <p>A dedicated social media staff person may be recommended in the future.</p> | <p>EQAC will continue to encourage the county to leverage new social media technology. This is especially useful for land use and transportation issues that affect a large portion of county residents.</p> | <p>Ongoing.</p> |
| <p>1.c. EQAC recommends that the county leverage the geographic information system in comprehensive planning, that GIS technology be incorporated directly into the planning process and that the use of modeling be expanded to help understand future conditions and scenarios.</p> | <p>DPZ notes several strides made in 2013 to utilize GIS for comprehensive planning. Several tools have been developed for outreach efforts and more tools are being considered.</p> | <p>The county is doing a good job utilizing data sources and GIS layers into useful tools. EQAC encourages the adoption of modeling tools to run scenarios and experiments.</p> | <p>Ongoing.</p> |

| Land Use & Transportation Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|---|---|---|
| <p>1.d. EQAC recommends that the county continue to refine and formalize the process for revitalization, especially in mixed-use centers. There are several success stories across the county, such as Merrifield, that have been through a sustained transformation and have a wealth of lessons learned. Topics such as transportation modeling, land consolidation, public/private partnerships, mixed use development and transit connectivity apply across the county. Capturing these techniques into processes to reapply will increase the success of the new revitalization efforts. EQAC supports an evaluation of revitalization incentives and better understanding of incentive effectiveness.</p> | <p>The Office of Community Revitalization completed a year-long assessment of revitalization incentives for the board. There is a multi-agency effort underway to develop a work plan to implement those recommendations.</p> | <p>The incentive study is an excellent review of opportunities to improve development through incentives.</p> <p>This recommendation encourages the county to use the wealth of experience gained from successful revitalization projects to build a quantitative model of the incentive efficacy. While every project is different, there are many lessons to be shared.</p> | <p>Ongoing through the OCR Incentives Work Program.</p> |

| Land Use & Transportation Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|--|---|--------------------|
| <p>1.e. This year EQAC submitted a resolution urging that urban design standards be applied to mixed-use centers; EQAC reiterates this recommendation. The urban standards are driving the potential in Tysons Corner and can apply equally well to all transit areas, as well as Suburban Centers and Community Business Centers. Urban standards are designed to improve the environment, quality of life, balance and safety of a well-planned mixed-use place.</p> | <p>The county and the Virginia Department of Transportation are working to develop multi-modal system plans for Suburban, Community Business, and Transit Station areas.</p> | <p>Multi-modal system plans are an important and necessary improvement of the transportation planning process. We encourage urban standards to be leveraged to build better places.</p> | <p>In process.</p> |
| <p>2.a. EQAC recommends that nonresidential data be comprehensively integrated into a GIS based life-cycle system. Residential data are effectively captured and available for many applications via the Integrated Parcel Lifecycle System. Nonresidential data exist in disparate systems, such as zoning and site planning, but have not been fully brought into the lifecycle planning process and cannot be used for applications such as forecasting or plan revisions.</p> | <p>This recommendation is in the process of being addressed by the Department of Planning and Zoning and will require collaboration with the Department of Information Technology, the Department of Neighborhood and Community Services and the Department of Public Works and Environmental Services. Staff is continuing to bring systems together to refine its forecasting methodology.</p> | <p>EQAC appreciates the complexity of migrating legacy and new systems together. We refined this recommendation to be more precise for 2014.</p> | <p>Ongoing.</p> |

| Land Use & Transportation Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|---|---|------------------|
| 2.b. EQAC continues to recommend that the Comprehensive Plan be reflected and modeled in the GIS. Applications such as the internal Comprehensive Plan Potential and the Comprehensive Plan Amendment applications (used to gather data for the State of the Plan report) are very useful for understanding the real time status of the Comprehensive Plan. These applications should be available to the public on the Comprehensive Plan website. | <p>In December 2013, the Plan Amendment Database layer was added to the GIS. Staff will discuss the benefits of incorporating the quantification of land use density change into GIS in the future. A subset of changes is available via Fairfax Forward.</p> <p>In 2013, DPZ added the Comprehensive Plan base map to the GIS. In 2014, it will be added to the public portal. This will show the Comprehensive Plan map, but note that Area Plans have more details to complement the Comprehensive Plan.</p> | This response highlights the reality that the county is transitioning from a paper-based planning process to a digital one. Great strides are being made and there are more opportunities. The goal of this recommendation remains. | Ongoing. |
| 2.c. EQAC recommends that the county acquire new data sources and incorporate them into the business process. Planimetric data have proven to be both cost effective and transformative. The county has an opportunity to acquire multi-spectral imagery which also has the potential to greatly enhance our knowledge of the county for answering questions such as tree species identification and tree canopy density. | <p>The county has acquired highly accurate raster land cover data from multi-spectral satellite imagery. This was used to model canopy coverage effects on stormwater runoff.</p> <p>The Department of Information Technology/GIS also acquired LIDAR for 30% of the county. This has potential utility for many areas.</p> | EQAC appreciates the proactive focus of GIS to acquire new data and incorporate it into county business processes. | Yes. |

| Land Use & Transportation Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|--|---|----------------------|------------------|
|--|---|----------------------|------------------|

| | | | |
|---|---|--|-----------------|
| <p>3. This year the General Assembly passed legislation raising additional revenue for transportation. As the county enters a community dialogue to prioritize the allocation of these funds, EQAC recommends that the county provide priority for non-motorized/multi-modal transportation options. . . . Proper implementation of the non-motorized/multi-modal master plan needs to include:</p> <ul style="list-style-type: none"> • Implementation of the bicycle master plan. . . . • Expanded bicycle parking guidelines modeled on successful programs such as the new secure bicycle parking facilities at Silver Line stations and other county park-and-ride/transit facilities. • Funding for implementation of both capital and non-capital elements of the county’s bicycle master plan. • Implementation of an outreach and education program for encouraging/promoting bicycling as a transportation mode. . . . • Engagement of the private sector. . . . | <p>Much of the new funding must be used for regional transportation projects and projects that can demonstrate congestion relief. However, the new funding has enabled Fairfax County to undertake a more comprehensive review of all transportation needs in the county.</p> <p>As a result of outreach efforts, of the \$1.4 billion approved over the next six years, approximately \$200 million was approved for bicycle and pedestrian projects.</p> <p>Specific recommendations are underway as part of a long term effort. Funding for capital improvement is included in the transportation plan. Non-capital elements require annual funding approval of the board.</p> | <p>EQAC appreciates the renewed focus and dedication of resources to pedestrian and bicycle transportation.</p> <p>These modes of transportation will require outreach and education as the public adopts new means to move about. Our foremost concern is public safety, especially as vehicles and bicycles share the same multi-modal system.</p> | <p>Ongoing.</p> |
|---|---|--|-----------------|

III. AIR QUALITY

There were no recommendations in the 2013 Annual Report

IV. WATER RESOURCES

| Water Resources Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|--|--|-------------|
| <p>1. EQAC recommends that Fairfax County continue to adequately fund and implement its ongoing stormwater program, which includes dam maintenance, infrastructure replacement, water resource monitoring and management, watershed restoration and educational stewardship programs. . . .</p> <p>EQAC recommends that the Stormwater Service District rate be increased in FY 2015 by at least one-quarter penny, from a rate of 2.0 cents per \$100 assessed real estate value to 2.25 cents per \$100. . . . This would, once again, result in more funding for modest watershed improvement programs and a somewhat more realistic infrastructure replacement timeline. We realize that there will likely be a need for additional increases for water quality projects to meet future permit conditions, and for infrastructure reinvestment, as the system is continually growing and aging.</p> | <p>The adopted FY 2015 county budget included this recommendation.</p> | <p>EQAC commends the board for including this in budget.</p> | <p>Yes.</p> |

| Water Resources Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|---|--|------------------|
| <p>2. Fairfax County is preparing a Stormwater Management Ordinance in response to state regulations requiring localities to adopt ordinances and take over reviews and inspections for Virginia Stormwater Management Program general permits relating to stormwater runoff from construction sites effective July 1, 2014. EQAC has recommended that this new Stormwater Management Ordinance maximize stream protection and lessen no current protection, in order not to have an adverse impact on the environment.</p> | <p>The state-required adequate outfall and nutrient removal standards in the ordinance are more stringent than the county's earlier requirements. Only in a few instances do the state's required design standards for water control facilities have lower standards for the PFM. Where the county had the option to retain its level of environmental protection in design standards, that level has been maintained with one significant exception. The single family infill exception lowered regulation requirements.</p> | <p>With the exception of the requirements for single family infill requirements the county did not lessen protection for county streams.</p> | <p>Yes.</p> |

V. SOLID WASTE

| Solid Waste Resources Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|--|--|--|------------|
| <p>1. EQAC recommends investigation of furthering composting efforts to collect food waste and properly eliminate it from the waste stream by routing it into a process whereby composted material would produce a useful product.</p> | <p>As part of the research conducted during the negotiations with Covanta, a request for expressions of interest was published to gauge the state of alternative technologies for handling wastes beyond landfill or incineration. The RFEI resulted in five proposals and two subsequent ones that offered to develop pilot projects for the county that gasify, compost or pelletize waste. None offered a viable alternative to the contract with Covanta to handle the bulk of the county's waste stream. Moreover, the alternatives required a site, guaranteed waste stream and other support from the county. In the final analysis, county staff will continue to explore other options for diverting portions of the county's waste stream such as organics. The county is in the process of evaluating the development of a pilot-scale organic material processing facility at one of its operational locations. This evaluation will be done in conjunction with the required revision to the county's solid waste management plan, due to the Virginia Department of Environmental Quality in June 2015. The county envisions a pilot-scale project using yard waste as the organic material to be processed.</p> | <p>EQAC recommends the continued investigation of alternative waste stream reduction including food waste composting. Regional cooperation should be considered.</p> | <p>No.</p> |

VI. HAZARDOUS MATERIALS

There were no recommendations in the 2013 Annual Report

VII. ECOLOGICAL RESOURCES

| Ecological Resources Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|---|--|------------|
| <p>1. The Fairfax County Park Authority approved a Natural Resource Management Plan in 2004. Substantial staff and monetary resources will be needed to implement [a revised NRMP]. For the 2004 plan, FCPA staff estimated that full implementation would require approximately \$8 million per year and dozens of staff positions. This included about \$3.5 million to focus on general natural resource management and \$4.5 million for a non-native invasive plant control program. A more phased approach to funding would have allowed FCPA to begin to manage 10 percent of parklands and set up the program to be phased in over time. Phase 1 with this approach would have required \$650,000 and six positions. It is anticipated that similar needs will be identified for the new plan. EQAC strongly feels that a Natural Resource Management Plan needs to be implemented. Therefore, EQAC recommends that the Board of Supervisors provide sufficient funding to implement an initial phase for natural resource management efforts and that the Fairfax County Park Authority Board apply this funding accordingly. EQAC recognizes that in today's budget climate, such increased funding may be difficult to achieve. However, EQAC recommends some increase in funding by the Board of Supervisors. And, once the county's budget problems are eased, EQAC further recommends that the Board of Supervisors increase funding as a high priority. Ultimately, this increased funding should support the full implementation of the Natural Resource Management Plan.</p> | <p>The Fairfax County Park Authority adopted a revised Natural Resources Management Plan on January 22, 2014. The needs of staff and monetary resources are estimated to be about the same as under the 2004 plan. While full funding to implement the plan is not in place, FCPA has secured some funding through sources such as the Environmental Improvement Program (for the Invasive Management Area Program), bonds, proffers and telecommunications fee funds. FCPA is currently conducting a Needs Assessment to determine how resources can be best used to meet community needs. Part of that assessment will be the development of a cost basis for doing work to restore and manage natural capital so that FCPA can better prepare estimates to seek funding and complete resource management activities.</p> | <p>The revision and adoption of the Natural Resource Management Plan is a step in the right direction. However, having a plan is the first step. Funding and staff are needed to implement the plan and these are lacking. While FCPA has secured some funding for some limited efforts, a significant shortfall exists. EQAC continues in its recommendation that funding and staff be made available. The first step should be to fund Phase 1 with \$650,000 and six new staff positions.</p> | <p>No.</p> |

VIII-1. IMPACTS OF DEER IN FAIRFAX COUNTY

| Deer Management Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|--|---|---|---|
| 1. Managed hunts should be continued as they have become both cost-effective and efficient in reducing excesses in the deer herd. | The Fairfax County Deer Management Program will continue to utilize all available deer management tools for population control. Public managed hunts will continue to be used at selected parks to implement sustainable hunting pressures. | The numbers of hunts and the success rates have been what could be reasonably expected given the level of staffing availability. | Yes. |
| 2. The sharpshooter events should be continued because they are both humane and cost-effective. | Sharpshooting operations will continue to be used at night to implement sustainable hunting pressures at selected parks. | The number of sharpshooter events and the success rates has been what could be reasonably expected given the level of staffing availability. | Yes. |
| 3. The newly begun archery program should be continued as a means of controlling deer depredation of vegetation on residential properties where firearms cannot be used. | The Archery Program will continue to be used at selected parks to implement sustainable hunting pressures. | The archery program has been very successful in addressing one of the key needs of homeowners to control the environmental destruction caused by deer in residential neighborhoods. | Yes, within the limits of staff availability. Expanded effort would be desirable. |

VIII-2. IMPACTS OF GEESE IN FAIRFAX COUNTY

| Geese Management Recommendations | Action taken by Agency or Department | EQAC Comments | Completed |
|---|--|--|--|
| <p>1. EQAC strongly recommends that the goose management program be continued, particularly the public outreach and training activities so that a cadre of volunteers can be created to provide the labor to do the actual egg-oiling that is the principal control measure. In addition, the shotgun hunt pilot test conducted by the Park Authority should be expanded into an established program.</p> | <p>Community outreach and a public education program to train volunteers to “addle” (oil) eggs will continue to be used as management tools to control the resident Canada geese population at selected sites.</p> <p>To date it appears that the majority of the egg oiling activity remains concentrated on public lands. In order to be effective at reducing local resident goose populations, efforts will need to be greatly expanded on both public and private lands county and region wide, particularly by land managers and volunteers working on properties which contain large amounts of managed turf and/or water features.</p> <p>Egg oiling efforts should be combined with habitat modification to reduce the amount of suitable habitat for resident geese; behavior modification to discourage use of lands by resident geese; and goose population control (hunting) to better manage resident goose populations.</p> | <p>With the increases in the resident goose population, it is desirable to increase the staffing for this program as soon as the budget situation permits.</p> | <p>Yes, within the limits of staff availability.</p> |

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VIII-3. COYOTES IN FAIRFAX COUNTY

There were no recommendations in the 2013 Annual Report

VIII-4. WILDLIFE BORNE DISEASES OF CONCERN IN FAIRFAX COUNTY

There were no recommendations in the 2013 Annual Report

IX-1. NOISE

| Noise Recommendation | Action taken by Agency or Department | EQAC Comments | Completed |
|--|---|--|---------------------|
| <p>1. The noise monitor at Great Falls Elementary, which primarily served Reagan National Airport, has been decommissioned with no plans for a replacement as there are currently few complaints about noise at that site. EQAC recommends that MWAA’s decision to decommission this monitoring station be referred to the county’s Airports Advisory Committee for review and recommendation. EQAC further recommends that the Airports Advisory Committee be asked whether it may be appropriate to consider if this monitoring station should be relocated elsewhere in the county, recognizing MWAA staff’s perspective as to why such an effort may not be appropriate.</p> | <p>Staff communicated EQAC’s recommendation to the Airports Advisory Committee, and the committee discussed this matter at its October 8, 2013 meeting. At that meeting, the committee agreed to review and make recommendations about the noise monitor, and it voted to recommend that the Board of Supervisors request to MWAA that the decommissioned monitoring station be placed in the area with the most noise complaints that is currently not being served by a monitor. The committee agreed that it would ask MWAA for the past five years of complaint data in order to identify a potential site for this monitoring station.</p> | <p>EQAC approves of the decision made by the Airports Advisory Committee to recommend that the board request to MWAA that the monitor be installed in the area with the most noise complaints currently not served by a monitor. EQAC is tracking the progress of the AAC.</p> | <p>In progress.</p> |

| Noise Recommendation | Action taken by Agency or Department | EQAC Comments | Completed |
|---|--|---|---------------------|
| <p>2. EQAC supports efforts by the Metropolitan Washington Airports Authority to report, on its website, results from the new noise monitoring system for Washington Dulles International and Ronald Reagan Washington National Airports. EQAC recommends, however, that the Board of Supervisors request to MWAA that these results be reported on a quarterly basis and that the data be posted more promptly, ideally within three months.</p> | <p>EQAC’s recommendation has been communicated to MWAA’s Airport Noise Office. Staff from that office has indicated that: (1) MWAA will be considering the posting of monitoring results on a quarterly basis; and (2) MWAA’s public portal was to be upgraded in early 2014 and that it is possible that this upgrade will accomplish EQAC’s preference for more frequent posting of noise monitoring data.</p> | <p>EQAC notes that the MWAA public portal upgrade completed in 2014 did not include reporting of monitoring results on a quarterly basis. As MWAA is currently considering replacing the current exterior noise monitoring technology, EQAC will track MWAA’s process and determine whether to continue to recommend more frequent reporting.</p> | <p>In progress.</p> |

IX-2. LIGHT POLLUTION

There were no recommendations in the 2013 Annual Report

IX-3. VISUAL POLLUTION

There were no recommendations in the 2013 Annual Report



Spotlight on Fairfax County Public Schools

Fairfax County Public Schools is the largest school district in Virginia (the 10th largest in U.S.) and has an enrollment of over 187,994 students for the 2014-2015 school year. Over 14 percent of Virginia’s K-12 students are enrolled in FCPS.

In this Spotlight, EQAC wants to provide recognition and highlighting for three areas where FCPS is working towards improved environmental performance. These areas are:

- High Performance and Sustainable Schools.
- Get2Green Environmental Education and Action.
- Collaboration between FCPS and the county’s stormwater program.

High Performance and Sustainable Schools (Facilities and Transportation) – A high performance school implements design, construction and implementation strategies intended to create a learning environment which is: healthy; thermally, visually and acoustically comfortable; efficient in its use of energy, water and materials; easy to maintain and operate; environmentally responsible; a learning tool; safe and secure; and a community resource. Benefits of a high performance school include: heightened student performance; increased daily attendance; better student and teacher health; improved teacher satisfaction; improved indoor air quality; and reduced environmental impact.

FCPS uses the Collaborative for High Performance Schools, (see <http://www.chps.net/dev/Drupal/node>), specifically the Virginia-CHPS Criteria, as its standard for sustainable design and benchmarking. CHPS offers resources for different phases and types of projects, including planning, designing, operating, specifying for, commissioning or maintaining a school. In addition, it offers a “Best Practices Manual” to help schools, districts and practitioners to achieve: high performance design, construction and operations; assessment tools for new construction, major modernizations and relocatable classrooms; and recognition programs.

FCPS policy is for all 2013 bond (and beyond) projects to be CHPS-designed under the VA-CHPS Criteria. FCPS’s Office of Design and Construction Services led the efforts to create the VA-CHPS Criteria that are now available to all school districts in Virginia. Before being approved and adopted by CHPS, the VA-CHPS Criteria had to comply with the CHPS National Core Criteria and be approved by the CHPS Technical Committee. In addition, it underwent two public reviews before being approved by the CHPS Board of Directors. FCPS did not provide information for this report to identify the extent to which its schools are currently meeting these criteria.

The Office of Facility Management Energy Management Section prepares an annual greenhouse gas inventory for all of FCPS (annual reports from 2008 to 2013 are available at <http://www.fcps.edu/fts/facmanagement/greenhousegas/index.shtml>).

FCPS has contracted with Cenergistic, Inc., to implement an energy conservation program. Work started February 1, 2014, and Cenergistic engineers and experts will be working throughout the district to implement conservation procedures in all facilities. Ten energy specialists will be conducting energy audits to ensure that students and teachers are comfortable during class time and scheduled activities and that energy is used only as necessary. Energy specialists are responsible for helping to motivate everyone in the school district to use energy wisely, keep classrooms comfortable and practice smart energy strategies—ensuring that the energy management program is implemented district-wide.

Get2Green Environmental Education and Action – FCPS Get2Green (see <http://www.fcps.edu/is/science/get2green/>) is in its fourth year. It was started as a means to help attain the School Board goal to graduate environmental stewards. Get2Green is providing technical support for schools to participate in environment-related projects or to become Eco-schools, providing professional development for teachers and principals and building relationships around environmental stewardship that will help pyramids develop successful, student driven programs. Get2Green staff collaborates closely with service learning and STEAM (Science, Technology, Engineering, Art and Math) resource personnel since most of the projects students are engaged in or incorporate all these important components. Efforts are under way to develop problem-based learning models with the environment as the underlying concept.

FCPS has formally partnered with the National Wildlife Federation Eco-Schools USA program to assist with these endeavors. The Eco-Schools USA program is based upon student-driven action teams that work on issues such as schoolyard wildlife habitat, recycling, composting, energy conservation and other environment and health related topics. In an effort to promote environmental action among students, FCPS sees the Eco-Schools USA program as a framework to facilitate this at any school. Eco-Schools USA provides sample action materials, curriculum and background information on its website and personnel are available to lend expertise to FCPS teacher trainings and meetings.

To date, FCPS has over 130 schools that are involved in some type of environmental project area. Additional metrics include: schoolyard habitats (80+ schools); edible gardens (50+ schools); staff training (2,000); and Blackboard Get2Green Community Members (600). As of August 2014, FCPS had five Green Flag Eco Schools, the highest honor in the Eco School process. They are Lanier Middle School, Churchill Road ES, Centreville ES, Lake Anne ES and Flint Hill ES.

Get2Green collaborates with a wide variety of internal FCPS departments to assist schools in their “greening” efforts, as well as a group of Get2Green principals that meets quarterly. Get2Green is collaborating with Cenergistic in the district’s efforts to conserve energy. The school district works with many external partners across the county and region to bring expertise and resources to the schools. Get2Green is also working on efforts to improve communication both internally and externally and started a new Facebook page (Get2Green) in spring 2014.

Get2Green in Fairfax County is part of a regional and national movement to make schools healthier environments for students and staff. The Virginia Resource Use Education Council is

developing a policy on environmental education and proposing a state-wide environmental education organization. Further, Virginia is participating in the U.S. Department of Education's Green Ribbon Schools program. This year Virginia is hosting the Green Schools National Conference in Virginia Beach in March 2015.

Recycling efforts have been under way at Fairfax County schools for several years. The district's waste hauler, Potomac Disposal Services, provides a consultant to assist schools in setting up recycling efforts. All schools are getting new outdoor recycling stations installed by Facilities and Maintenance and Get2Green will be encouraging their use.

During the 2013-14 school year, FCPS ran a Business Case Competition among high school business and eco team students to develop a marketing plan to better inform students and staff about how to recycle and the benefits of recycling. Students will roll out this plan and monitor its success during the 2014-15 school year. Ernst and Young is partnering with FCPS on this effort. Stuart HS took first place in the competition with Langley HS in second place and Thomas Jefferson HSST in third. Oakton, Centreville and Herndon HS were also involved.

Collaboration between Fairfax County Public Schools and the County's Stormwater Planning Division on Stormwater Management Plans--In November 2012, staff from FCPS and from the county's Department of Public Works and Environmental Services provided a briefing to EQAC regarding the identification of opportunities to enhance stormwater management efforts (beyond code requirements) on school properties through FCPS and DPWES collaboration. These efforts have targeted events of two inches or less of rainfall, which is 98% of all rainfall events. There was an identification of opportunities to implement stormwater management measures during school renovation/construction processes (the Capital Improvement Program for schools), and funding of enhancements through the Stormwater Service District revenue.

All FCPS bond projects entering design since the 2013 ARE have involved the county's Stormwater Planning Division early on to assess whether there are opportunities for advancing stormwater management efforts. Most projects are incorporating extra stormwater management efforts through this collaboration, though in a few isolated cases it was determined that the installation of stormwater enhancements was not practical or cost effective based on the schedule or scope of that capital project. FCPS provided a list of schools where advanced/extra stormwater management activities are being installed at FCPS facilities, and the nature of those improvements. This table is included at the end of this section, on the next page. A broader list that also identifies joint projects that are being planned is provided in the detailed Water Resources chapter of this report.

In addition, extra stormwater management efforts are being implemented at three school projects under design and are being evaluated for 14 additional projects that are in design.

EQAC notes that it would be beneficial if the advanced stormwater management activities that are installed at FCPS facilities would include visible signage that describes the nature of the improvement. Such signage could help students and others at the schools to increase their appreciation of the efforts and be useful as an educational tool.

| Location | | Plan Status | Facility Descriptions |
|----------------|------------|--------------------|--|
| Langley | High | Under Construction | Underground storage / filtration |
| Marshall | High | Under Construction | Cistern - Irrigation system |
| Mt Vernon | High | In Construction | Added storage to Turf |
| Ravensworth | Elementary | Under Construction | Bio-Retention, Amended Soils |
| Sunrise Valley | Elementary | Under Construction | Pervious Pavement, Vegetative Swale, Underground Detention / Infiltration Trench |
| Terraset | Elementary | Under Construction | Pervious Pavement, Filterras, Permeable Pavers, Underground Detention |

Environmental Stewardship/Volunteer Opportunities in Fairfax County

Environmental Quality is a team effort. We need partnerships with government, commercial and volunteer organizations to strive to improve our environment as is described throughout this annual report. We give details of stewardship efforts and best practices supporting government and non-government resources and broader environmental needs. This section is provided to highlight a group of governmental and non-governmental opportunities that individuals or organizations might consider supporting with their time and focus. Many of these organizations rely on volunteer resources to be effective, and greater participation may allow the organizations to expand the scope of their current work. EQAC does not assert that these are the only organizations making a valuable contribution to our environment, and we hope, in future reports, to expand the list of activities that are identified--this is the second year that we have provided this section and we hope to make it more valuable to the county leadership and to environmentally-conscious members of the community in the future. Some government organizations are listed if they either organize environmental activities or provide a good source for members of the community who want to contribute their time to improving environmental quality.

1. NOVA PARKS (NORTHERN VIRGINIA REGIONAL PARK AUTHORITY)

For the environmentally-conscious park enthusiast, we recommend contacting NOVA Parks (the Northern Virginia Regional Park Authority), <http://www.NVRPA.org/>. NOVA Parks continues to have a roving park naturalist regularly visit the high-attendance parks such as pools, campgrounds and golf courses, bringing live wildlife and other exhibits and providing programming about nature and the environment. The naturalist also attends events and functions such as the Dominion W&OD Trail Mix, the Walter Mess 5K race and the Friends of the W&OD 10K race.

In 2012, the Northern Virginia Regional Park Foundation gave grants through its Nature Nuts Program to 11 Fairfax County public schools for children to attend environmental education camps at Hemlock Overlook Regional Park. Adventure Links at Hemlock Overlook Regional Park in Clifton offers a variety of outdoor and environmental education, team development programs for public and private schools, religious and community groups, sports teams, corporations, professional organizations and local, state and federal government and military agencies. Also in 2012, Meadowlark partnered with the Volgenau Foundation to provide teacher training and student field trips to Meadowlark Botanical Gardens and Potomac Overlook Regional Park. These trips focus on the natural history of the Potomac River basin, conserving native plants and animals.

NOVA Parks partners with REI's adventure school, introducing people to the outdoors at Pohick Bay, Hemlock Overlook and Fountainhead Regional Parks. NOVA Parks' naturalists hold regular educational canoe and kayak trips at Pohick

Bay, and the roving naturalist conducts environmental programs at Meadowlark Botanical Gardens as well as at Bull Run and Pohick Bay Regional Park campgrounds. Potomac Overlook Regional Park and W&OD Trail staff hosted booths at various county fairs to give environmental information to the public.

Occoquan Regional Park hosted two clean up events on the Occoquan River and added five new recycling bins at its picnic shelters and boat ramp. Fountainhead and Bull Run Marina were host sites for the Friend of the Occoquan clean-up days, removing dozens of bags of trash from the reservoir area. At Sandy Run Regional Park, rowing crew teams took part in water clean-up days, removing trash from the Occoquan Reservoir around Sandy Run. New trash cans were installed at Fountainhead and the W&OD Trail to prevent tipping and foraging by wildlife.

Environmental stewardship opportunities for volunteers are available at Meadowlark Botanical Gardens, Potomac Overlook Regional Park, Upton Hill Regional Park, Pohick Bay Regional Park and various other parks on occasion. NOVA Parks implemented a program that allows youth to access its fee-based park facilities through volunteer service. It has a wide variety of community partnerships in place that encourage groups to take advantage of the regional parks for environmental and historic education and service projects.

2. FAIRFAX COUNTY PARK AUTHORITY

The Fairfax County Park Authority offers a number of opportunities for volunteers, and EQAC encourages county residents to take advantage of these opportunities. Information about these opportunities is available at <http://www.fairfaxcounty.gov/parks/volunteer/>.

More information about FCPA and its programs is available at: <http://www.fairfaxcounty.gov/parks/resources>.

Many of the stewardship activities that occur on parkland could not take place without the efforts of many volunteers and partners. Groups and individuals participate in a wide range of volunteer opportunities in environmental stewardship on parkland, from becoming a permanent volunteer for the Park Authority to one-off events. In FY 2013, volunteers contributed over 26,000 hours to natural resource stewardship activities on parkland.

Specifically, volunteers engage in programming, leading walks and tours, writing fliers or brochures, answering the phone when a resident calls with an environmental question and/or hands-on resource management. FCPA partners with local agencies and nonprofits in two different annual stream clean-up events, although many individuals and friends groups participate in more regular clean-ups along certain sections of stream throughout the year. FCPA also has habitat restoration events, including invasive plant removal and native species planting that attract day participants and more committed volunteers, e.g. the IMA Volunteer Leaders. Wildlife monitors work on birds and salamanders and everything in

between, often in coordination with a long-term wildlife monitoring program such as the Virginia Bluebird Society. The Fairfax Master Naturalists have taken on some of these projects or created new opportunities to contribute hundreds of hours to Park Authority sites. FCPA continues to offer many of its environmental stewardship opportunities for youth to get involved in their local parks to include as permanent volunteers, as students for their community service hours and scouts for Eagle and Gold Award projects. FCPA encourages its volunteers, be they individuals, groups, students or scouts, to propose ideas of how they can help steward the parks.

3. NORTHERN VIRGINIA SOIL AND WATER CONSERVATION DISTRICT

The Northern Virginia Soil and Water Conservation District supports numerous opportunities throughout the year to participate in stream cleanups, storm drain labeling, volunteer water quality monitoring and tree planting projects. Interested parties can send an e-mail to NVSWCD at <https://www.fairfaxcounty.gov/contact/mailform.aspx?ref=9990> or call 703-324-1460. It is also a good resource for advice to homeowners on problems with ponds, eroding streams, drainage, problem soils and other natural resource concerns. More information about managing land for a healthier watershed is available from the NVSWCD publications "You and Your Land, a Homeowner's Guide for the Potomac River Watershed" (<http://www.fairfaxcounty.gov/nvswcd/youyourland/>) and the "Water Quality Stewardship Guide" (<http://www.fairfaxcounty.gov/nvswcd/waterqualitybk.htm>). NVSWCD can assess the problems and advise on possible solutions.

4. FAIRFAX COUNTY DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES

There are numerous opportunities throughout the year to participate in stream cleanups, storm drain labeling, volunteer water quality monitoring and tree planting projects. Interested parties can send an e-mail to NVSWCD at <https://www.fairfaxcounty.gov/contact/mailform.aspx?ref=9990> or call 703-324-1460. Additionally, DPWES-Stormwater Management provides links to information about these popular volunteer programs on its website at <http://www.fairfaxcounty.gov/dpwes/stormwater/>. For a list of common household hazardous materials and how to dispose of them, go to <http://www.fairfaxcounty.gov/dpwes/trash/disphhw.htm>.

5. ENERGY ACTION FAIRFAX PILOT PROGRAM

Fairfax County has implemented the Energy Action Fairfax pilot program to provide ways for residents to learn about their energy consumption and how to reduce it through improved energy efficiency. The program has been narrowly focused and aimed at homeowners in Fairfax County, particularly those occupying single-family homes and townhouses. The program's direct outreach has included presentations at homeowner association meetings, small "audit parties" within selected communities

and the distribution of informative brochures at events and fairs. The program also generated stories for local media and created a multi-faceted presence on the county website (www.fairfaxcounty.gov/energyactionfairfax/) that includes tips sheets, checklists and short how-to videos. Groups or individuals may want to contact Energy Action Fairfax to discuss ways to support their educational efforts within a specific community.

6. THE NORTHERN VIRGINIA CLEAN WATER PARTNERS EFFORTS TO MANAGE PET WASTE

Examples of activity of this group include its Dog Blog and Facebook pages for dog owners. During 2012, the blog and Facebook pages had more than 88,000 views, up from about 24,000 views in 2011. Based on the success of the 2010 and 2011 contests, the organization held the Third Annual Dog Blog Essay Contest. Eleven nonprofit organizations submitted an entry into the “Bark Your Piece” contest, which resulted in 10,360 votes. The three winning organizations received \$5,000 in grants to use toward veterinary care, spaying and neutering, dog food and pet owner education. Find out more about this organization at its website at <http://www.onlyrain.org>.

7. CLEAN FAIRFAX

Clean Fairfax Council, now known as Clean Fairfax, is a private, nonprofit (501(c)(3)) corporation dedicated to educating residents, students and businesses in Fairfax County about litter prevention and recycling. Clean Fairfax focuses on environmental education provided to students and adults throughout the county. Clean Fairfax continues efforts of updating the educational and interactive programs for students, community service opportunities for students (i.e., support at the council’s office or organizing clean ups), classroom presentations and presentations to homeowner associations and other groups.

A key effort of the council is the sponsorship of spring and fall cleanups. These cleanups rely on volunteers who desire to clean up a certain area of the county. The council asks volunteers to plan their cleanup by selecting a site, gathering volunteers and setting a date and time. Clean Fairfax supplies all the necessary tools provided (gloves, trash bags, recycling bags, vests and safety tips) for a successful cleanup. A follow-up form is available on the Clean Fairfax website to track progress, tally volunteer hours and trash pickup tonnage. Last year, Clean Fairfax worked with over 2,310 volunteers at 90 assisted clean ups, picking up over 7,800 bags of trash, on and around Fairfax County’s roads, parks and side streets. Clean Fairfax also organizes periodic clean-up projects around the Government Center, with Fairfax County employees and area businesses.

Clean Fairfax continues to organize and lead the Earth Day/Arbor Day event, now called SpringFest Fairfax, in partnership with the Department of Public Works and Environmental Services, the Fairfax County Park Authority and Workhouse Arts.

Now in its second year at The Workhouse, over 5,000 children and families attended this all day, Virginia Green certified event which included environmental education and entertainment, local food vendors, urban forestry workshops and open studio artist exhibitions. Other major continuing projects include: outreach on reducing residents' reliance on plastic grocery bags; cigarette butt litter education and reduction through a unique partnership with northern Virginia auto dealerships; promotion of the use of rain barrels; advising and mentoring environmental clubs in the school system; encouragement of small scale, backyard composting, grass-cycling, rain and pollinator gardens and other sustainable practices; and encouragement of community gardens and micro farms at schools and churches.

Clean Fairfax reaches Fairfax County residents by e-newsletters, Facebook and Twitter as well as an environmental blog updated twice weekly at www.cleanfairfax.org.

There are many other programs offered by Clean Fairfax, including programs beyond litter prevention and control. For more information, please visit the website at www.cleanfairfax.org or the SpringFest Fairfax website at www.springfestfairfax.org

8. ALICE FERGUSON FOUNDATION

The nonprofit Alice Ferguson Foundation was established in 1954. While chartered in Maryland, it has implemented programs throughout the Potomac River watershed, with benefits to the main stem of the river as well as tributaries in Washington, D.C., Maryland, Pennsylvania, West Virginia and Virginia. As stated on its website, the foundation's mission is "to provide experiences that encourage connections between people, the natural environment, farming and the cultural heritage of the Potomac River Watershed, which lead to personal environmental responsibility."

In April 2014, the foundation held its 26th annual Potomac River Watershed Cleanup. While not all data is currently available from these cleanups, preliminary reports show that over 11,375 volunteers removed almost 220 tons trash and debris from the region at 318 cleanup sites throughout Washington, D.C., Maryland, Virginia, West Virginia and Pennsylvania. The trash collected during the cleanup included 938 tires, 205,200 beverage containers, 35,500 plastic bags and 18,600 cigarette butts.

Other programs implemented by the foundation include:

- **Trash Free Potomac Watershed Initiative:** This is a program to reduce trash, increase recycling and provide education regarding trash issues in the watershed.
- **Potomac Watershed Trash Summit:** The foundation convenes this meeting annually to provide a venue for key stakeholders to collaborate on strategies to eliminate trash from waterways, communities, streets and public lands, including regional public policy, model best management practices, business actions and public education.

- **Enforcement:** In April 2014, the foundation worked in partnership with the Metropolitan Washington Council of Governments and nine local jurisdictions in a campaign to reduce littering and illegal dumping through enforcement of local laws. This effort provided a focus on litter-related crimes and raised awareness of the harmful effects trash has on communities and the environment.

There are numerous other programs and initiatives that are implemented by the foundation; the reader is encouraged to visit the foundation’s website at www.fergusonfoundation.org.

9. CLEAN AIR PARTNERS

Residents of Fairfax County have many opportunities to contribute to improvements in air quality. While some of the Metropolitan Washington area ozone problem originates outside of the area and is beyond the control of Virginia, Maryland and the District of Columbia, there are many aspects of our daily lives that can affect the quality of our air. A significant contributor to air quality issues is vehicle miles traveled. As discussed above, Virginians drive many millions of miles each year. Reducing the amount of driving, as well as the use of other combustion devices, especially during times where ground-level ozone is of concern (e.g., on hot days with lots of sun and little or no wind), can help to improve air quality. Examples of actions that can be taken include: carpooling; taking mass transit; reducing or postponing lawn-mowing, paving and outdoor painting; limiting vehicle idling; bringing a lunch to work; avoiding drive-thru windows; and refueling after dark.

The following are tips provided on the Clean Air Partners website (www.cleanairpartners.net):

Small Changes Make A Big Difference

Begin the day right. Check [today’s air quality forecast](#) and modify your plans if unhealthy air quality is predicted. Protect yourself and others in your care, by taking the appropriate actions. Making small changes in your lifestyle at home, at work, and on the road can make a big difference.

At Home:

- *Postpone mowing and trimming or use electric garden equipment.*
- *Postpone painting or use water-based paint instead of oil-based paint.*
- *Replace your charcoal grill with a propane gas grill.*
- *Choose ENERGY STAR™ appliances and lighting.*
- *Cut back on heating and air conditioning when you can and turn off lights and appliances when not in use.*
- *Clean heating filters each month.*

At Work:

Employers have a unique opportunity to make a difference. They can promote programs that help employees make positive lifestyle changes. For example, employers can encourage staff to use public transportation or carpool. Employers also can give employees the option of working from home. Encourage employees to sign up for [AirAlerts](http://www.cleanairpartners.net/airalert.cfm), a free service that delivers air quality information straight to their inbox <http://www.cleanairpartners.net/airalert.cfm>.

On the Road:

- *Keep driving to a minimum.*
- *Fill up your gas tank during evening hours. Avoid spilling gas and “topping off” the tank. Replace gas tank cap tightly.*
- *Have your car tuned regularly by replacing the oil and air filter, and keep tires properly inflated and aligned.*
- *Carpool or use public transportation when possible.*
- *Combine your errands into one trip.*
- *Avoid revving or idling your engine.*
- *Avoid long drive-through lines; instead, park your car and go in.*
- *Looking for a new vehicle? Consider purchasing a fuel-efficient model or a hybrid that runs on an electric motor and gasoline engine.*

| <u>HOW TO REPORT ENVIRONMENTAL CRIMES OR CONCERNS IN FAIRFAX COUNTY</u> | |
|--|--|
| <u>TTY 711 for all phone numbers</u> | |
| Type of Incident | Phone Number |
| <p><u>RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT—ACTIVE RELEASE, DANGEROUS, OR UNKNOWN</u></p> <p>If the dumping of any substance into a stream, into a manhole, into a storm drain or onto the ground is witnessed, assumptions regarding the contents of the materials should not be made. 911 should be called immediately. When calling 911, be prepared to provide specific information regarding the location and nature of the incident. The local office of the U.S. Environmental Protection Agency (703-235-1113) can be called in addition to (but not instead of) 911.</p> | 911 |
| <p><u>RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT—NO IMMEDIATE DANGER</u></p> <p>If a known discharge of hazardous materials has occurred in the past and no lives or property are in immediate danger; this should be reported to the Fairfax County Fire and Rescue Department’s Hazardous Materials and Investigative Services Section at this number (includes Towns of Clifton, Herndon and Vienna). If there is any question about whether a release may still be active or whether there may be any immediate danger, 911 should be called.</p> | 703-246-4386 (working hours) 703-691-2131 (after hours) |
| <p><u>RELEASE OF ANY MATERIAL INTO THE ENVIRONMENT</u></p> <p>Any release of materials into the environment, whether hazardous or not, should be reported to the Northern Regional Office of the Virginia Department of Environmental Quality at the above number. If the release is an active one, call 911.</p> | 703-583-3800 OR 911 |
| <p><u>LAND CLEARING; TREE REMOVAL; DUMPING OF FILL</u></p> <p>To report the suspected illegal removal of trees, clearing of land, digging or dumping of fill dirt, contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | 703-324-1300 |
| <p><u>SOIL EROSION</u> To report soil erosion from private properties or construction sites, contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | 703-324-1300 |

| Type of Incident | <u>Phone Number</u> |
|--|-----------------------------------|
| <p><u>GENERATION OF DUST FROM CONSTRUCTION, GRADING OR LAND CLEARING</u> Contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | <p>703-324-1300</p> |
| <p><u>CONSTRUCTION NOISE</u> To report construction noise outside between 9 p.m. and 7 a.m. or before 9 a.m. on Sundays and federal holidays, contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | <p>703-324-1300</p> |
| <p><u>NOISE IN A RESIDENTIAL AREA</u> To make a complaint about nuisance noises (e.g. barking dogs or loud music) in residential areas only, call the Fairfax County Police non-emergency number.</p> | <p>703-691-2131</p> |
| <p><u>TRASH COLLECTION BETWEEN 9:00 P.M. AND 6:00 A.M.</u> Call the Department of Public Works and Environmental Services. If possible, provide descriptive information about the truck, such as color, truck number, and license plate number.</p> | <p>703-324-5230</p> |
| <p><u>SIGNS ON ROADS AND MEDIANS</u> If a sign on a road or median poses a safety hazard, call the Virginia Department of Transportation to have it removed. Fairfax County performs monthly collections of illegal roadway signs on certain designated roads. More information at www.fairfaxcounty.gov/code/signs.</p> | <p>1-800-367-7623</p> |
| <p><u>SIGNS ON PRIVATE PROPERTY</u> There are restrictions for signs on private property. For more information contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | <p><u>703-324-1300</u></p> |
| <p><u>POORLY MAINTAINED HOMES</u> To report problems including broken windows and gutters, junk or debris in yards and tall, uncut grass, contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | <p>703-324-1300</p> |
| <p><u>OUTDOOR LIGHTING CONCERNS</u> To report problems with glare, overlighting or other issues, contact the Department of Code Compliance, or visit www.fairfaxcounty.gov/code.</p> | <p>703-324-1300</p> |

| Type of Incident | <u>Phone Number</u> |
|---|---|
| <p><u>AIR POLLUTANTS</u> Air pollutants are emitted by stationary sources, such as power plants, gasoline service stations, and dry cleaners, as well as by mobile and area sources, such as from automobiles, trucks and other highway activities. This phone number is for the Virginia Department of Environmental Quality Northern Regional Office.</p> | <p>703-583-3800</p> <p>After hours, call 1-800-468-8892</p> |
| <p><u>NO RECYCLING IN SCHOOLS</u> Section IX of the Fairfax County School Board’s Policy 8542 states that “Schools and centers will have mandatory recycling programs for paper products, cans, and bottles. Construction waste materials will be separated and recycled.” To report schools that are not recycling in accordance with this policy, contact the Fairfax County Public Schools Office of Facilities Management, Plant Operations Section. More information is available at: http://www.fcps.edu/fts/facmanagement/recycle.shtml</p> | <p>703-764-2459</p> |
| <p><u>HEALTH HAZARDS</u> For information and guidance on a suspected environmental hazard that may pose a public health risk, call the Health Department’s Division of Environmental Health. These hazards include unsanitary storage or disposal of waste; unburied dead animals; medical waste; insect infestations; and mosquito breeding sites.</p> | <p>703-246-2444</p> |