



County of Fairfax, Virginia

MEMORANDUM

DATE: MAR 25 2016

TO: Board of Supervisors

FROM: David J. Molchany 
Deputy County Executive

SUBJECT: Agency Responses to the Environmental Quality Advisory Council
Recommendations Contained within the 2015 Annual Report on the Environment

On November 17, 2015, the Environmental Quality Advisory Council (EQAC) presented its Annual Report on the Environment to the Board of Supervisors. The chapters in the EQAC report are arranged to reflect the order of topics listed in the Board of Supervisors' Environmental Agenda (Environmental Excellence for Fairfax County: *A 20-Year Vision* - <http://www.fairfaxcounty.gov/living/environment/eip/>). Similar to the 2014 Annual Report, the 2015 report presented recommendations in two formats: items addressing ongoing considerations and continued support for existing programs (presented in the EQAC report as "comments" or "comments and ongoing concerns") and items addressing new considerations, significant refinements of previous recommendations and issues that EQAC otherwise wished to stress (presented in the EQAC report as "recommendations"). EQAC and County staff have held discussions regarding the staff responses to EQAC recommendations and agreed to focus the staff response efforts on those items presented as "recommendations" in the EQAC report. This includes recommendations in areas of: Climate Change and Energy; Land Use and Transportation; Water Resources; Solid Waste; Ecological Resources; Wildlife Management, Noise and Light Pollution. Consistent with last year's effort, the Environmental Coordinating Committee (ECC) circulated EQAC's recommendations among appropriate County agencies and organizations, and coordinated a collaborative staff response to each of the recommendations for consideration by the Board.

The following County agencies were asked to respond to EQAC's recommendations:

- Department of Public Works and Environmental Services (DPWES)
- Fairfax County Park Authority (FCPA)
- Department of Planning and Zoning (DPZ)
- Division of Animal Services, Police Department (PD)

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- Department of Information Technology (DIT)
- Department of Cable and Consumer Services (DCCS)
- Department of Management and Budget (DMB)
- Department of Transportation (DOT)
- Office of Community Revitalization (OCR)
- Department of Code Compliance (DCC)
- Environmental Coordinator
- Fairfax County Public Schools (FCPS)

In addition, the Northern Virginia Regional Park Authority, the Office of Public Affairs, Neighborhood and Community Services, Fire and Rescue Department, Sheriff's Office, Office of the County Attorney, Facilities Management Department, Office of the County Executive and the Board of Supervisors Chairman's Office were asked to contribute to responses for at least one recommendation each. In order to facilitate agency responses and EQAC's review of these responses, each agency was asked to complete individual response forms for each of the recommendations directed to it. Eighteen of the 30 responses required input from more than one agency, although, as noted below, all recommendations were coordinated through an ECC review.

Each of the agencies listed above prepared its draft responses by February 5, 2016. The responses were then reviewed by the ECC, which is a collaborative interagency management committee chaired by Deputy County Executive David J. Molchany. Among other responsibilities, this committee was established to ensure an appropriate level of coordination and review of the County's environmental policies and initiatives. This is the fifteenth year that the ECC has reviewed the EQAC recommendations. While individual agencies took the lead in preparing responses to EQAC recommendations, the responses reflect the views of the entire ECC. One of several objectives of the ECC is to coordinate among the various County agencies, support deliberations, and make recommendations to the County Executive with regard to issues and initiatives associated with environmental sustainability, concerns, interests, and regulatory requirements as identified by County staff. The ECC has representation from the following agencies: Department of Public Works and Environmental Services; Department of Planning and Zoning; Department of Vehicle Services; Fairfax County Department of Transportation; Fairfax County Health Department; Fire and Rescue Department; Fairfax County Park Authority; Police Department; Office of Public Affairs; Fairfax County Water Authority; County Attorney's Office; Northern Virginia Soil and Water Conservation District; Department of Management and Budget; Department of Cable and Consumer Services; Facilities Management Department; Department of Information Technology; Fairfax County Public Schools; Virginia Department of Transportation; and the County Executive's Office.

A complete set of staff responses to EQAC's 2015 recommendations is enclosed as Attachment 1. The staff responses are provided in the same order as the corresponding recommendations in the Annual Report.

Five responses to EQAC recommendations that suggest actions with fiscal implications in the FY 2017 Advertised Budget Plan are as follows:

- The response to Land Use and Transportation 3a (addressing funding to comprehensively integrate nonresidential development data into the county's Integrated Parcel Lifecycle System to be used for the purpose of forecasting) states that for FY 2017, DIT will be submitting a Fund 10040 funding request for the Land Use System Modernization project to replace FIDO and LDS. This funding depends upon adoption of the County Executive's FY 2017 Advertised Budget Plan.
- The response to Water Resources 1 (addressing adequate funding for the Stormwater Program) states that the Board of Supervisors would need to approve the County Executive's FY 2017 Advertised Budget Plan that includes an increase in the Stormwater Service Tax rate from \$0.0250 to \$0.0275.
- The response to the three Wildlife Management – Deer recommendations (addressing funding for the Deer Management Program) state that in the County Executive's proposed FY 2017 Advertised Budget Plan, funding for the Fairfax County Deer Management Program is proposed to remain the same as the FY 2016 budgeted level. The budget in FY 2016 supports 1/1.0 FTE Naturalist IV position and associated operating costs in support of the program.

If you have questions about this memo, please contact Kambiz Agazi, Environmental Coordinator (703-324-1788). Thank you.

Attachment: As Stated

cc: Environmental Quality Advisory Council
Edward L. Long, Jr., County Executive
Environmental Coordinating Committee
Robert A. Stalzer, Deputy County Executive
Joseph Mondoro, Chief Financial Officer
Kambiz Agazi, Environmental Coordinator
Noel Kaplan, Senior Environmental Planner

Response to 2015 EQAC Recommendation

Climate Change and Energy #1

(Page 4 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

EQAC recommends that the County establish a program to evaluate and address the impacts of sea level rise. Last year, EQAC recommended that the County undertake an effort to identify all the impacts of climate change that might reasonably be expected to impact the County. County staff replied with a comprehensive list of such impacts, along with the climate drivers associated with each of the impacts (i.e., temperature changes, precipitation variability, severe storms and sea level rise). EQAC recommends that Fairfax County place sea level rise as a priority among the various impacts so that the impacts of sea level rise would be further evaluated and addressed through a program that would be dedicated to the reduction of impacts of sea level rise through proactive planning efforts, as other jurisdictions have done. An example of a possible outcome of this effort would be a consideration of land use policy changes that may be appropriate to address existing and potential future land uses within areas in Fairfax County that would be vulnerable to sea level rise.

LEAD AGENCY: DPWES (LDS and Stormwater)

COORDINATING AGENCY/IES: DPZ; Environmental Coordinator

Please identify a lead agency contact person: *Paul Shirey, LDS, DPWES (response-only coordinator)*

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

There is not at this time a County program to address Sea Level Rise (SLR). As outlined in the County staff response to last year's EQAC recommendation, there are a large number of anticipated impacts to the County due to global climate change, and EQAC's recommendation for an emphasis on one of the identified climate drivers is appreciated.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The issue of SLR will be long term and cannot be addressed hastily. We will need to plan deliberately and carefully, partnering with others and utilizing all the resources made available to us by the State, Federal government and the Council of Governments (COG). Changes in weather patterns and SLR is such a complex and technical issue that we will need to rely on federal and state expertise to provide guidance in predicting these impacts.

Climate Change and Energy #1

Continued

This issue impacts not only DPZ and DPWES, but also affects the County's on-going hazard mitigation planning efforts currently led by the Office of Emergency Management (OEM). The State is currently looking at funding SLR initiatives through the Virginia Department of Emergency Management and this would make OEM a key agency in a County response program. Since SLR is a regional concern, the County would benefit greatly from partnering with neighboring counties and cities as proposed in the 2010 study on SLR completed by the NVRC.

Rather than developing a robust program at this time, it is recommended that the Environmental Coordinator identify the agencies that would be best suited to compile recommendations to address each of the anticipated climate change impacts related to SLR and to seek guidance from those agencies as to how to proceed on their respective issues.

Of the 30 potential climate change impacts identified in last year's staff response, 17 are at least in part driven by an anticipated rise in sea level. A few of these impacts relate, at least in part, to land use policy in areas that may be vulnerable to increased inundation resulting from a rising sea level and/or increased frequencies of storm surges associated with tropical storms.

EQAC has identified, as an example of a possible outcome of a program that would be developed to address potential SLR impacts, a consideration of possible land use policy changes to address existing and potential future land uses within areas that would be vulnerable to SLR. With respect to areas of existing development in vulnerable areas, there are concentrations of such development in the New Alexandria/Belle Haven/River Towers area along the tidal shoreline south of the Woodrow Wilson Bridge, as well as in the Huntington area near Cameron Run north of Huntington Avenue west of Richmond Highway.

There are many other residential properties elsewhere along the County's tidal shoreline that are not as concentrated as these two areas, but are nonetheless vulnerable to SLR. It is likely that the development potential of much of the remaining vacant land within the areas that are vulnerable to SLR would be highly constrained (e.g., Resource Protection Areas; floodplains; wetlands), but there may be some potential for residential infill development in places, particularly in the New Alexandria neighborhood. Natural resources along the entirety of the County's tidal shoreline are vulnerable to SLR.

The Concept for Future Development and Area IV Comprehensive Plan guidance generally support the existing character and intensities of development within areas that are vulnerable to SLR. A review of Comprehensive Plan guidance in these areas, though, may be a useful and appropriate effort within the context of the Concept for Future Development. However, any such review should consider efforts that may be pursued to protect properties within these areas (e.g., through installation of structural measures or a combination of structural and natural measures as deemed appropriate) because such measures would have profound implications regarding which properties may be viewed as "vulnerable."

Further, it would not be appropriate to limit the consideration of land use approaches to the Comprehensive Plan—of equal or even greater importance and value may be the use limitations that apply within vulnerable areas (e.g., use limitations within 100-year floodplains), and such

limitations would fall outside of the purview of the Comprehensive Plan. Ultimately, it may be determined that Comprehensive Plan changes would not be needed but that use limitations or other design requirements that would apply in vulnerable areas should be revised, whether or not development in those areas would require zoning approval.

What, if any, actions should be taken pursuant to EQAC's recommendation?

The County should investigate what actions may be taken within existing regulatory programs, specifically the floodplain regulations contained in Part 9 of Article 2 of the Zoning Ordinance, to mitigate the impact of SLR on proposed construction in the 100-year floodplain of the Potomac River below the fall line. Any changes to the regulations would be a longer term effort and would need to be added to the Zoning Ordinance Amendment Work Program.

With respect to the land use component of the SLR issue, we recommend that this issue be considered for inclusion within the Fairfax Forward work program. However, the scope of the review of this issue should be broader than Comprehensive Plan policy, and any such policy review would need to be informed by efforts that may be underway to consider structural or other measures to protect vulnerable properties as well as use limitations that could be pursued in addition to (or instead of) Comprehensive Plan changes.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

To initiate a SLR program in FY2017 would require additional resources or a reduction in service levels to other existing programs for all related agencies. A review of Comprehensive Plan policy in areas that are vulnerable to SLR would require considerable staff resources from at least two agencies (Department of Planning and Zoning; Department of Public Works and Environmental Services). Prioritization of any such review within the Fairfax Forward work program would need to consider available staff resources.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Yes. Long term, there will be significant financial resource and staffing requirements to respond to SLR.

Response to 2015 EQAC Recommendation

Climate Change and Energy #2

(Page 4 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

While Fairfax County has made significant strides in monitoring energy use, identifying opportunities for reducing energy use and reporting this information to the county government, the county has not yet completed and published an online energy dashboard as discussed at a meeting of the Board of Supervisors' Environmental Committee earlier in 2015. Just as this information has been useful to the county, it would also be helpful for businesses and residents to see the benefits of monitoring energy use as well as the significant savings that the county has realized. EQAC understands that a website similar to websites in Arlington, Los Angeles and other cities is affordable and would likely more than pay for itself as energy savings opportunities are identified and addressed. In June 2015, county staff provided EQAC with an update to its Environmental Committee presentation, and EQAC understands that a refined approach to the establishment of an online energy dashboard is getting under way. EQAC recommends that this effort be completed.

LEAD AGENCY: Environmental Coordinator
COORDINATING AGENCY/IES: FMD

Please identify a lead agency contact person: Kambiz Agazi

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

This recommendation is in the process of being addressed.

Sharing information about the county's energy consumption with the public is important and, as discussed at the Board of Supervisors Environmental Committee meeting in February 2015, staff is committed to developing dedicated webpages to make this information readily available to the community.

The purpose of the webpages is to provide transparency for the electricity and natural gas consumption of the county. The county intends to launch its energy consumption webpages in early spring 2016 and continue to refine the pages thereafter.

These pages will report on energy use since 2006 by over 240 county government buildings, as well as by government facilities ranging from the Noman M. Cole Jr. Pollution Control Plant to the more than 400 park locations throughout Fairfax County.

Climate Change and Energy #2
Continued

In addition to the energy consumption webpages, the county's commitment to reducing its energy use and the county's efforts to achieve it are already described in Fairfax County Sustainability Initiatives, available at [\(http://www.fairfaxcounty.gov/living/environment/sustainability/\)](http://www.fairfaxcounty.gov/living/environment/sustainability/).

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with the EQAC recommendation.

What, if any, actions should be taken pursuant to EQAC's recommendation?

See above.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

None anticipated.

Response to 2015 EQAC Recommendation

Climate Change and Energy #3

(Page 4 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

While EQAC appreciates the efforts of Fairfax County to reengage the private sector on energy efficiency, sustainability and "green" technology, the work of the Private Sector Energy Task Force to help Fairfax County position itself as a leader in the area of energy efficiency, sustainability and "green" technology stopped years ago. The Private Sector Energy Task Force was a good beginning, but the work recommended by the task force is languishing and needs to be reinvigorated. More specifically, EQAC recommends that the county facilitate meetings of the private sector so that private sector entities can be acknowledged for their energy efficiency accomplishments in Fairfax County and so that steps can be taken to encourage and facilitate continued dialogue among private sector entities. We are hoping that Fairfax County will have private sector discussions on energy efficiency and acknowledge accomplishments like Arlington and other nearby jurisdictions have done.

LEAD AGENCY: Environmental Coordinator

COORDINATING AGENCY/IES: Chairman's Office; Cable and Consumer Services

Please identify a lead agency contact person: DCCS/Susan Hafeli

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Staff action to implement this recommendation is underway. The county's Energy Action Fairfax program is developing a Green Business Partners (GBP) program that will address and further the objectives of this recommendation. The GBP program is designed to recognize private sector accomplishments and to facilitate dialogue with interested businesses on energy efficiency and sustainability topics.

The program's recognition component will highlight those businesses throughout Fairfax County that are demonstrating leadership in the areas of energy use and sustainability. Staff has identified more than a hundred businesses for potential recognition. These businesses include recipients of awards issued by the U.S. Environmental Protection Agency and owners or managers of buildings located in the county that have been certified by either the federal government's ENERGY STAR[®] program or the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED[®]) program. These and other businesses interested in receiving recognition or participating in the program need only submit a simple application

Climate Change and Energy #3

Continued

describing their energy efficiency and sustainability efforts. Businesses whose applications are accepted will be included in a green business directory that will be posted on the Green Business Partners website and will receive certain promotional benefits. The program will supplement the recognition component with activities that encourage dialogue and further private sector efforts. These activities include meetings, presentations and educational seminars or workshops, as well as opportunities for interested participants to mentor other businesses with less sustainability experience. Staff anticipates an FY2016 program launch, though staffing constraints may push the launch into early FY2017.

Staff is also participating in regional efforts that encourage dialogue on energy efficiency and sustainability topics among private sector entities. One such effort is the Tysons Sustainability Council. The Council's objective is to establish a collaborative platform that will fortify a Tysons-wide commitment to sustainable practices and leverage members' collective capacity for environmental responsibility. Using avenues including quarterly meetings and social media, the Council will identify common challenges, craft and share solutions, and increase awareness of policies and best practices to enhance sustainability.

These staff efforts are consistent with and reflect the county's overarching framework. This framework includes the Board of Supervisors' (Board) priorities (including ensuring a clean, sustainable environment), the Environmental Agenda the Board adopted in 2004 and updated in 2007, and the Board's 2015 Strategic Plan to Facilitate the Economic Success of Fairfax County.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with this EQAC recommendation.

What, if any, actions should be taken pursuant to EQAC's recommendation?

See above.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Yes. As is the case for all EIP actions both past and future, programs and initiatives will continue to be supported by the General Fund and will be subject to availability of General Fund monies.

Response to 2015 EQAC Recommendation

Climate Change and Energy #4

(Page 4 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

While the county staff is pursuing opportunities with a composting facility in Prince William County and the county's Solid Waste Management Plan clearly identifies recycling as preferable over incineration and landfilling, EQAC continues to recommend that the Board of Supervisors direct county staff to evaluate alternatives for the county to further reduce greenhouse gas emissions from the incineration of waste. It is unclear if facilities in nearby counties will accommodate additional waste streams from Fairfax County. The long-term goal should provide for expanding the recycling of all waste streams, including composting of compostable waste. The expansion of waste streams recycled should be considered as the county develops a strategic plan for the management of county waste. Specific recommendations related to the support of recycling are included in the Solid Waste chapter.

LEAD AGENCY: DPWES-Solid Waste

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Charlie Forbes

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

This recommendation is in the process of being addressed.

As part of an ongoing review of cost and disposal volume reduction opportunities, DPWES-Solid Waste is actively exploring alternatives to further reduce greenhouse gas emissions from its waste disposal operations. Specific to the Prince William County composting facility, that facility is being designed and project economics have been based on the delivery of compostable materials from Fairfax County. County staff are participating in ongoing discussions with their Prince William counterparts to establish appropriate terms (through a document such as a waste delivery agreement or memorandum of understanding).

In addition, to serve a long-term goal of expanding Fairfax recycling operations to include composting, DPWES-Solid Waste has approached the Virginia Department of Environmental Quality (DEQ) about the process to establish an experimental or pilot-scale organic waste composting facility at the I-95 landfill. The concepts being considered are still a work in progress, but are likely to include evaluating blends of various types of institutional food, vegetative, and other organic wastes generated by County operations. It will also be important to discuss this proposal with community stakeholders, to address any questions or concerns before the facility is put into operation.

Climate Change and Energy #4

Continued

Further project and program activities intended to address this broad recommendation are described in the responses to Solid Waste recommendations #1 and #3.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

Proposed actions by DPWES-Solid Waste are summarized above.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Budget implications for FY2017 related to the actions proposed above are anticipated to be minimal. Although there will be user fees and transportation costs for transporting compostable wastes to the Prince William facility, these costs will be off-set by the avoided cost of disposal for materials handled through the new facility. In any event, the facility is not anticipated to commence commercial operations until FY2018 or later.

Similarly, although there will be additional costs for preparing the anticipated program and facility design submittals required for DEQ approval of an experimental facility and for the rental of windrow turning equipment and other minor equipment needs, DPWES-Solid Waste believes that these costs will be off-set to some degree by the avoided cost of disposal for materials handled through the new facility. With DEQ and community consent to proceed with a small compost facility, the necessary budget adjustments will be made to accommodate any minor additional costs associated with project start-up.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

To the greatest degree possible, DPWES-Solid Waste works to develop disposal alternatives that are cost-competitive with disposal. Specific to composting, it is anticipated that longer-range fiscal impacts from such a program would be positive, i.e., the new facilities will reduce waste management costs over the long run, particularly when considering the avoided cost of long-term monitoring and post-closure care of landfilled waste and ash.

Response to 2015 EQAC Recommendation

Land Use and Transportation # 1

(Page 15 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Continue to Innovate with Social Media

EQAC commends the county for embracing new technology and leveraging the Web to share and interact with public. We recommend that the county continue 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. Social media is very powerful for encouraging and educating people about alternative transportation options. The Envision 7 crowd sourcing map is one innovative example that can be replicated: www.envisionroute7.com/crowdsource/map.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: OPA; FCDOT

Please identify a lead agency contact person: Aaron Klibaner, DPZ

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Staff agrees that integrating social media into the planning process can be a powerful and effective tool to enhance public outreach capabilities and public participation opportunities. The Department of Planning and Zoning (DPZ) already has been using social media and continues to explore ways to expand its activities.

As mentioned in the 2014 response, DPZ continues to use social media to connect with the community through Facebook, YouTube, and SlideShare. The Fairfax County Land Use Planning Facebook page <https://www.facebook.com/fairfaxlanduse> enables the public to receive timely announcements about public meetings and other news related to ongoing studies. Maps and photos from public meetings are also posted on the Facebook page. The page has received a steady increase in “likes,” as well as posting shares and comments about specific posts. As of January 21, 2016, Land Use Planning Facebook page received 256 likes. In addition to information about planning projects, posts have linked to articles about current planning best practices and research and relevant news for partner agencies such as the Fairfax County Department of Transportation (FCDOT).

A Comprehensive Planning 101 video can be found on the Fairfax County Comprehensive Plan webpage (<http://www.fairfaxcounty.gov/dpz/comprehensiveplan/>) and individual webpages for areawide planning studies. For example, the link to the video from the Lincolnia Planning District Study webpage can be found here:

Land Use and Transportation #1

Continued

<http://www.fairfaxcounty.gov/dpz/lincolnia/presentations.htm>. The video is also linked to YouTube. As of January 21, 2016, the Comprehensive Planning 101 video has received approximately 1,300 views.

DPZ will continue to develop webpages for individual planning studies and explore using virtual meetings to communicate information and encourage participation from interested citizens who are unable to attend face-to-face public meetings, similar to the Envision 7 project webpage. For example, the Seven Corners Community Business Center Study included a Virtual Open House where interested community members could view a SlideShare presentation online and also share the presentation via email, Facebook, and other social media methods:

<http://www.fairfaxcounty.gov/dpz/sevencorners/7corners-open-house-comments.htm>. The same webpage included a form that allowed a person to comment on proposed land use concepts.

DPZ planning study email listservs continue to be an effective way for the public to receive current news about meeting dates, project updates, and staff report postings. As of January 21, 2016, the Comprehensive Plan Announcements Listserv had approximately 1,600 subscribers. Separate listservs are also maintained for Fairfax Forward Area Studies, including the Fairfax Center Area Planning Study, the Lincolnia Planning District Study and the Dulles Suburban Center study. The number of listserv subscribers continues to grow as studies are advanced. As planning studies are completed, listservs may remain active in order to provide subscribers with information about progress on implementation. It is important to note that community members can sign up for more than one listserv and that county staff is not permitted to add email addresses of community members to any listserv.

FCDOT is also actively expanding their own social media presence for planning and other purposes in an integrated manner through platforms such as Twitter, Facebook, IdeaScale, YouTube, Flickr and SlideShare. FCDOT instituted the use of social media advertising which resulted in targeted reach of geographically unique areas in Fairfax County, as well as targeted reach of individuals interested in specific issues such as transit, planning and environmental issues. FCDOT has also expanded the use of video and audio, along with other rich content, on all of its social media platforms.

The county continues to believe that coordinating traditional outreach methods with social media can be an effective strategy to increase the number of community stakeholders who are reached. As the county explores new social platforms, DPZ will continue to look at using more social and public participation tools in concert with county policy that governs social media use. The policy was established based upon extensive review by senior executives, county attorneys, information technology staff, and communications professionals. It has been adopted on countywide basis to ensure that the county can reach the most financially efficient agreements with the providers, and terms and conditions meet legal approval, among other reasons.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The recommendation is being addressed as described above.

What, if any, actions should be taken pursuant to EQAC's recommendation?

The Department of Planning and Zoning staff appreciates EQAC's advocacy for the use of social media in planning processes. As the county as a whole looks at new social platforms, department staff will continue to explore new social media options. Monitoring the evolution of social media technology and changes in popularity and/or utility of certain types of social media over time should also be considered. Staff is encouraged by the ability to include more user-friendly and interactive applications online and the implementation of the Facebook page, and recommends continued dialogue with partner agencies to discuss the opportunities and challenges of social media use to conduct county business.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

There are no anticipated budget implications for FY 2017.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

A dedicated social media staff person in DPZ may be recommended in the future as needed.

Response to 2015 EQAC Recommendation

Land Use and Transportation # 2

(Page 15 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Urban guidelines are designed to improve the environment, quality of life, balance and safety of a well-planned mixed-use place. These new guidelines 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. EQAC recommends that the county develop one countywide set of urban design guidelines that would have sufficient breadth to address variations in circumstances among mixed-use centers within the county, as opposed to the development of multiple area-specific urban design guidelines. These urban design guidelines should be the baseline expectation for development in mixed-use centers, with exceptions as necessary to accommodate site-specific considerations.

LEAD AGENCY: OCR

COORDINATING AGENCIES: OPA; FCDOT

Please identify a lead agency contact person: Elizabeth Hagg

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

The county is developing urban street standards for its mixed-use activity centers that will uniformly adhere to the Virginia Department of Rail and Public Transportation's (VDRPT) Multimodal System Design Guidelines. VDRPT's Guidelines establishes a typology of streets and standardizes the dimensions and nomenclature for streetscape elements. Applying this approach to each of the mixed-use centers will ensure a consistent streetscape design and roadway cross-sections while allowing flexibility (within limits) for responding to differences in local conditions, modal-mix and character. Thus, any future updates to or development of Urban Design Guidelines for the CRDs/CRA's and Tysons/Reston will conform to the Urban Street Standards resulting in a degree of standardization for each area that will define the baseline expectation for development while providing needed flexibility to accommodate local variations. Having flexibility for local circumstances is critical to allowing areas to have a unique character and sense of place, and is something that is strongly supported by community stakeholders. As such, it is staff's view that the current approach of developing urban design guidelines specific to each activity center is appropriate.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Is being addressed in the approach being taken.

Land Use and Transportation #2
Continued

What, if any, actions should be taken pursuant to EQAC's recommendation?

None.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Minimal costs anticipated for publications.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

None.

Response to 2015 EQAC Recommendation

Land Use and Transportation #3a

(Page 16 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Data and Modeling

- a. EQAC recommends that nonresidential development data be comprehensively integrated into the county's Integrated Parcel Lifecycle System and used for forecasting, as demonstrated by residential data that have been harnessed in IPLS for that purpose. Currently, nonresidential data on proposed development projects are captured in disparate systems for zoning and site plan applications, but have not been fully brought into IPLS, and, therefore, cannot be used for forecasting.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: DIT-GIS; Neighborhood and Community Services (NCS)

Please identify a lead agency contact person: Kristen Hushour

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

This recommendation is in the process of being addressed.

DPZ staff has advocated that the County's IT systems capture essential, nonresidential data related to development submissions from the inception to completion of a project. Staff has recommended that a long-term solution is to upgrade the current land development information technology systems into a unified system. However, current plans to upgrade the current land development information technology systems include only the replacement and consolidation of the FIDO, and LDS (PAWA, ZAPS) systems into a unified system. Therefore, DPZ staff continues to recommend interim modifications to existing systems that would feed data into IPLS.

Responses in the following sections are similar to the ones provided in 2015, with notable updates. Please refer to the 2014 staff response on this item for a comprehensive background of this project.

Land Use and Transportation #3a

Continued

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with the recommendation and it is in the process of being addressed.

In 2014, DPZ staff briefed and subsequently gained the support of the Departments of Public Works and Environmental Services (DPWES) and Information Technology (DIT) regarding a change to the IT system that captures site plan data (PAWS). The modification to this existing system would allow more than one gross floor area (GFA) to be entered for multiple uses. Currently, PAWS allows more than one use to be entered, but only one GFA. For mixed-use projects, this limitation makes it difficult to determine how much of the GFA can be attributed to multi-family residential uses as opposed to nonresidential uses, for example.

The PAWS Change Management Committee met in January 2015 to set the IT priorities for the calendar year. The Committee approved DPZ's request to modify the GFA field in PAWS and placed it on the list of priority projects. DIT staff will be able to make the modification in-house and without expending additional funds. Only new site plans being entered into the system will be affected. This modification is underway, with an expected completion in FY 2016.

Additionally, as part of this IT modification, DPWES will evaluate improvements to site plan submissions that would require additional information be printed on the cover pages to make it easier for staff to transfer information into PAWS.

Once the modification to PAWS is complete, DPZ and NCS staff will work on importing the nonresidential and mixed-use site plan data from PAWS into IPLS.

The Zoning Applications Processing System (ZAPS) was modified to allow staff coordinators to note zoning cases that have been approved with multiple development options, existing uses to remain, no additional buildings to be constructed, and no new uses. These notations will appear in an IPLS table as land uses and eventually be used to make better employment forecasts.

No additional changes have been made to the system that captures building permit data (FIDO). While one general use per building is being captured, the system does not allow more than one use to be entered for mixed-use buildings, nor a GFA. Depending upon the scope of the Land Use System Modernization project, it would be beneficial if FIDO or its replacement could capture multiple uses per building and a corresponding GFA for new commercial buildings, but it needs to be determined what staff group would be responsible for the data entry.

The attribute table for a GIS layer that captures new buildings shown on approved site plans was expanded to include the uses and corresponding GFAs. The building polygons and data provide a good link to addresses for building permits captured in FIDO. This layer has been useful for researching data requests related to transportation modeling and is being used to develop employment forecasts.

Land Use and Transportation #3a

Continued

What, if any, actions should be taken pursuant to EQAC's recommendation?

Staff believes that the Land Use System Modernization project (replacement of LDS/FIDO) presents a good opportunity to capture and track a development project and its associated data as it is processed at different stages, beginning with a zoning case and through project completion at the building permit stage. Having a unified IT system that tracks this "evolution" of development cases would allow one to address the popular question: What development is in pipeline? However, this requirement is not included in the current scope of the Land Use System Modernization project; it may be addressed in subsequent project phases that will require additional funding request(s).

As an interim step, and once the modification to PAWS is made, staff will be able to incorporate the nonresidential data into IPLS. Once in IPLS, staff will need to work on writing business rules that attempt to process the data gathered at various stages in the development process. Programming code would need to be written to harness the data for employment forecasting purposes.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

A Fund 10040 funding request for the Land Use System Modernization project to replace FIDO and LDS is included in the *FY 2017 Advertised Budget Plan*.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

A long-term solution will require an update to the land development IT systems. The Departments of Information Technology and Public Works and Environmental Services are jointly managing the Land Use System Modernization project, including the prioritization of new requests for additional functionality, and corresponding budget implications.

Response to 2015 EQAC Recommendation

Land Use and Transportation #3b

(Page 16 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Data and Modeling

- a. 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.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: DIT-GIS

Please identify a lead agency contact person: Kristen Hushour

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Staff is still pursuing solutions for this recommendation.

Similar to item 3a above, DPZ staff recommends that the quantification of Comprehensive Plan land uses be accessible in the new land development tracking system, developed from the Land Use System Modernization project, so that staff, developers, and the public are able to understand a development project within the greater context of what is ultimately recommended by the Comprehensive Plan. However, this would be a new initiative that is not included in the scope of the IT Systems Modernization Project. This recommendation would be subject to future funding.

In the interim, staff will explore options on an effective way to make quantifiable land use recommendations available to the public, described in more detail below.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The Comprehensive Plan, a guiding document with recommendations for future land use, communicates policies that represent a shared community vision. Plan information that can be provided to the public in a variety of ways helps to further the County's goal of increased community participation with planning studies. The Comprehensive Plan Base Map indicates

Land Use and Transportation #3b Continued

primary land use recommendations, while the Area Plans text describes any additional land use recommendations, some of which have densities and intensities above the baseline recommendation.

Approximately 10% of the County is located within development centers, where multiple land use options differ from the baseline recommendations, as articulated in the Area Plans text. Therefore, the Area Plans need to be consulted in conjunction with the Baseline Plan Map. Presently, there is no IT system that provides the public with a comparison of existing land use conditions, the Comprehensive Plan's baseline recommendation, and any optional development recommendations at the parcel level or larger in a tabular and online map format. However, staff would like to explore this as a possible solution to this recommendation.

In 2015, baseline uses and densities/intensities, if specified, at a parcel level were made available to the public online with the interactive, GIS-based Comprehensive Plan map (see <http://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=fc55a66dd3fd44e5ac9f4860f6b8db62>). Staff will explore the possibility of including the maximum development options above the baseline into this online map application.

What, if any, actions should be taken pursuant to EQAC's recommendation?

Staff will discuss how to provide development options in a publically-accessible GIS application. Additionally, staff will address how to quantify the remainder of the County that does not have optional land use recommendations to aid in planning studies, forecasting, and reports such as *The State of the Plan*.

For parcels with development options above the baseline recommendation, staff utilizes an in-house database called the Comprehensive Plan Quantification Database that tabulates all possible development options including the highest residential and highest nonresidential scenarios as described in the Comprehensive Plan. These data are imported annually into the county's Integrated Parcel Lifecycle System and used for residential forecasting. Staff will discuss the feasibility of incorporating elements of this database into the GIS-based Comprehensive Plan map to help a variety of audiences better-understand planned land use densities and potential changes recommended by the Comprehensive Plan. Eventually, the County might wish to integrate these tools into My Neighborhood as well.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Staff will work with existing resources to explore the short-term solutions discussed herein.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

In the long-term, staff recommends that Comprehensive Plan land use recommendations be made accessible in the new system that could be developed out of the Land Use System Modernization

Land Use and Transportation #3b
Continued

project. However, this would be a new initiative that is not included in the current scope of the IT Systems Modernization Project. This recommendation would be subject to future funding.

Response to 2015 EQAC Recommendation

Land Use and Transportation #3c

(Page 16 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

- 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. Multi-spectral imagery has the potential to enhance our knowledge of the county by answering questions such as tree species identification and tree canopy density.

LEAD AGENCY: DIT-GIS

COORDINATING AGENCY/IES: DPWES-Stormwater

Please identify a lead agency contact person: Thomas Conry

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

GIS data are being used increasingly in county information systems (e.g., ICARE, Tririga, LDS, Project Docx, Master Address Repository, LDW, Infor), in analyses and in decision making. The growing trove of data builds an increasingly detailed and robust model of the county's natural and built environments, constituents and operations. The newest data acquisitions include LIDAR and Multispectral satellite imagery of the county and its neighbors. Obtained in partnership with the US Geological Survey and DPWES, the LIDAR provides immensely detailed elevation values of the county. Over 9 billion discrete LIDAR readings were taken, providing X,Y and most importantly, Z values of virtually every feature of the county. (see examples below). These data have been processed to provide a detailed, seamless elevation model of the county and its neighbors – which helps improve wider stormwater modeling. Additionally, the county acquired multispectral satellite imagery in 2011 and has just updated that with 2015 satellite imagery. That 8-band (red, red edge, coastal, blue, green, yellow, near-infrared 1 (IR1) and near-IR2) imagery serves as the foundation for determining land use countywide. It is combined with the LIDAR and zoning data. The results have proven highly valuable for Stormwater Planning as well as Urban Forestry (see multi spectral imagery examples below). Because of the need for timeliness, the plan is to acquire the imagery and do the analyses biennially, but there will be challenges with the satellite acquisition due to cloud cover, and competition for use of the cameras on other areas.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Concur. As spatial data is increasingly used across county agencies, existing data must be updated in order to maintain its value in operations and decision making. Much of the data is incorporated in County environmental stewardship work. In addition, as the county faces increasing challenges and demands for services, the need for additional data and data types will increase.

Land Use and Transportation #3c Continued

What, if any, actions should be taken pursuant to EQAC's recommendation?

As the spatial data resources grow, the GIS office works to broaden and heighten awareness of the data content and value of these resources, so that others can realize and utilize the value of the data. Since LIDAR is the newest and most highly detailed data set, the GIS office is preparing products, considering application development and training sessions for other agencies to help them realize the value.

Maintenance of existing spatial data assets is essential, particularly those essential to environmental activities. Much like capital assets, without updates the data degrades. As a result establishing maintenance cycles helps budgeting, and define the limits of the data being used in decision making.

Refresh cycles have been established for the following heavily used data sets.

- Aerial/Ortho imagery – cooperatively with the state of Virginia every 4 years
- Oblique aerial Imagery (from Pictometry) – every two years.
- Multi-spectral imagery (from Digital Globe) – every two years (ideally – weather can extend the cycle)

The update cycle for planimetric data has not been definitively established due to its relatively high cost (about 11 times the cost of the Aerial/Ortho imagery). The intent now is for it to be updated every 8 years. Since the last update was based on 2009 imagery, the next update cycle will begin with the 2017 imagery.

Similarly, an update cycle for LIDAR has yet to be determined. That will depend on the extent of integration into County operations and the value it adds. The US Geological survey has floated the idea of an 8 year update cycle. Since the current LIDAR was flown in 2014, 2022 might be the next update.

Funding of the updates of the planimetric data, LIDAR and multispectral data has been evenly shared by DIT and DPWES. The other data has been funded solely by DIT.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No additional request is necessary for 2017. However, capital assets require consistent investment to maintain their value and ensure their availability. Oblique and Aerial/Ortho imagery have been consistently funded through fund 10040 since 2003 and Oblique imagery has been funded for FY 2017. The Planimetric update already has partial funding through incremental annual funding contributions and with an initial commitment to fully fund the remaining amount in the years it is actually needed. The recent update of the multi-spectral imagery was jointly funded by DPWES and DIT – using fund 10040.

Land Use and Transportation #3c
Continued

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Because these are regularly used assets that must be regularly updated, they will have ongoing funding requirements. Because of their varying update cycles (every year for oblique (Pictometry), every four years for aerial/ortho imagery, and every 2-4 years for multi-spectral imagery, as well as every 8 years for planimetric updates), establishing an agreed to funding approach and schedule will assist in budgeting and allocating staff time for the projects as well as assure agencies of the refresh cycle for these heavily used assets. Occoquan Area Quality –

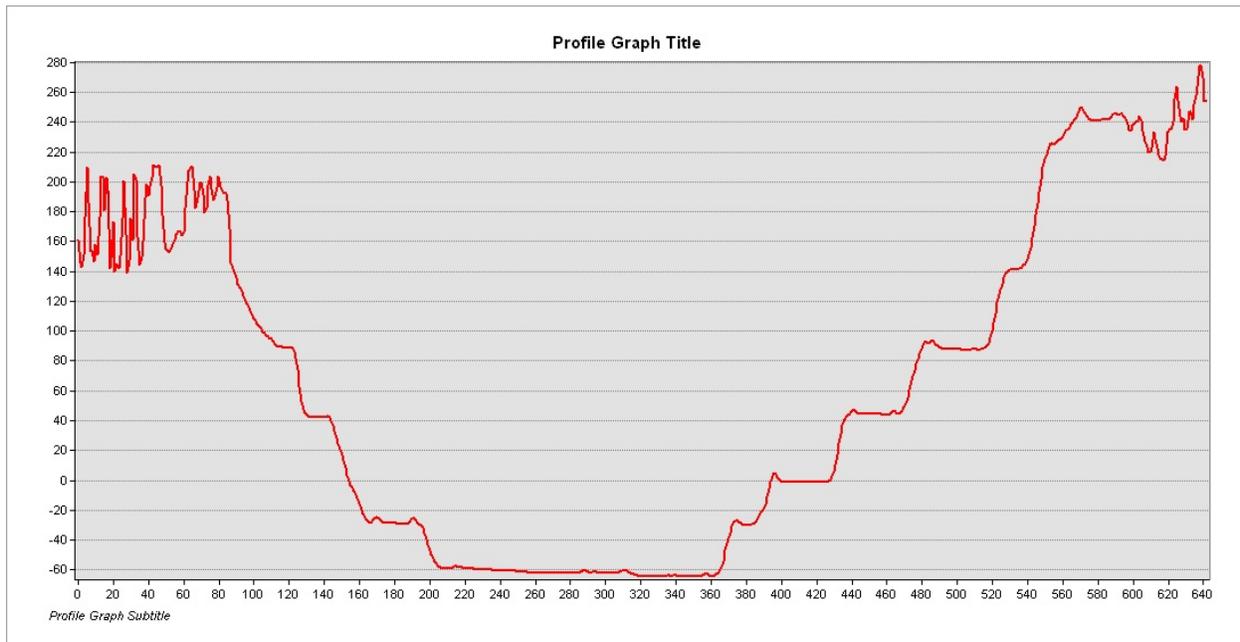
**Land Use and Transportation #3c
Continued**

LIDAR Image with Red Profile Marker



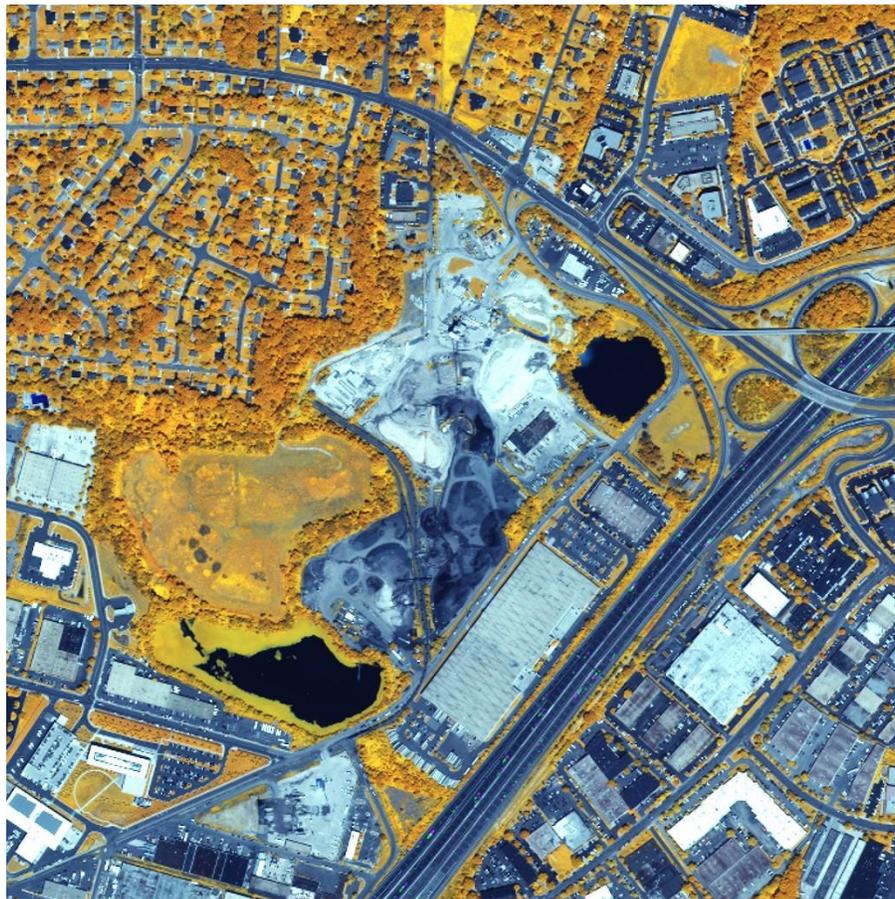
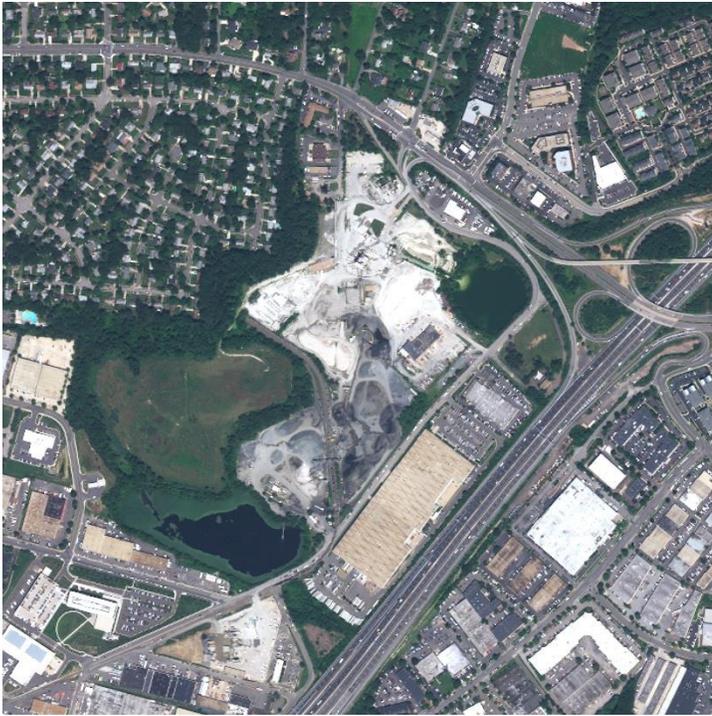
Land Use and Transportation #3c Continued

Profile View of Quarry along the Profile Line



The images below are derived from multispectral data from the World View 3 satellite. They illustrate some of the environmental information that can be derived from 8 bands of spectral data. The first image is the natural color (red, green, blue) imagery. The second one, with red, is a mix of the near infrared 1 band and the red and green ones. It distinguishes between vegetation, urban areas and water. The third image (yellow) is derived from the red edge, near infrared 1 and green bands. It highlights vegetation based on water content and cell structure so that the healthiest vegetation shows up as a bright yellow.

Land Use and Transportation #3c
Continued



Response to 2015 EQAC Recommendation

Land Use and Transportation #4

(Page 16 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Transportation

EQAC recommends that the county provide priority for non-motorized/multi-modal transportation options. EQAC supports the goals of Fairfax Advocates for Better Bicycling which include:

- Implementation of the bicycle master plan, which is now complete and ready for implementation.
- Growing the bike share community in Fairfax County.
- Encouraging the Safe Routes to School project with Fairfax County Public Schools.
- Implementation of an outreach and education program for encouraging/promoting bicycling as a transportation mode. This could be called “Bike Fairfax!”

LEAD AGENCY: FCDOT

COORDINATING AGENCY/IES: FCPS—Safe Routes to Schools

Please identify a lead agency contact person: Angela Martinez

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Implementation of the Bicycle Master Plan

The Bicycle Master Plan was approved by the Board of Supervisors in October of 2014. Since then, the Fairfax County Department of Transportation (FCDOT) has worked on implementing projects recommended in the plan by taking advantage of opportunities to construct facilities in the short term while also planning for long term improvements. In 2015, FCDOT partnered with the Virginia Department of Transportation (VDOT) during its annual road maintenance and repaving operations to install over 30 miles of on-road facilities as recommended in the Bicycle Master Plan. By timing improvements with annual road maintenance the County is able to implement bicycle facilities recommended in the plan with minimal cost and delay. The adoption of the Bicycle Master Plan in 2014, coupled with a large maintenance budget for VDOT, resulted in 2015 being the most successful year for bike facility implementation in Fairfax County to date.

Recommendations in the Bicycle Master Plan are considered on a site-by-site basis in the development review process. Developers are responsible for constructing bicycle facilities on or

Land Use and Transportation #4 Continued

near their property if they are recommended in the plan. Developers may also be responsible for constructing additional facilities to increase safety and connectivity. In these instances facilities may not be constructed for several years but their inclusion in the site plan ensures that Bicycle Master Plan recommendations and other necessary bicycle facilities are constructed when development moves forward.

The County is also working on implementing bicycle facility projects through the 6 year Transportation Priorities Program approved by the Board of Supervisors in January 2014. The Transportation Priorities Program includes \$203.93 million for 228 bicycle and pedestrian improvement projects: <http://www.fairfaxcounty.gov/fcdot/cdot/projects/approved.htm>

Growing Bikeshare

There has long been interest in launching a bikeshare system in Fairfax County and in recent years FCDOT has made great strides toward making that vision a reality. In 2014, FCDOT completed the Reston Bikeshare Feasibility Study which determined that a bikeshare system in Reston was feasible and could enhance the mobility needs of residents, workers, and visitors in the community. In the summer of 2015, after several miles of bike lanes were added in Tysons under recommendation in the Tysons Bicycle Master Plan, the Tysons Partnership approached FCDOT with a proposal to bring bikeshare to Tysons. The Tysons Partnership is willing to partner with the County financially to support the cost of launching and running the system.

In January 2016, the Board of Supervisors approved a \$1.7 million dollar plan to launch the Capital Bikeshare system in Reston and Tysons. The plan will bring 15 Capital Bikeshare stations and 132 bicycles to Reston, and 11 Capital Bikeshare stations and 80 bicycles to Tysons. The county is in the process of finalizing station locations in Reston and is moving ahead with the initial purchase of equipment. The first phase of the system is anticipated to launch in the fall of 2016. FCDOT will continue to evaluate potential areas to expand the system in the future.

Safe Routes to School

For decades before the modern Safe Routes to Schools (SRTS) movement, Fairfax County utilized different programs in collaboration with Fairfax County Public Schools (FCPS) to provide direct Fairfax County funding to build sidewalks needed to walk to schools.

Currently, FCPS staff sends sidewalk and trail requests to FCDOT. FCDOT coordinates with FCPS staff on these requests and determines the best source of funding for projects. Projects are selected for funding based on FCPS priority and site-specific engineering and needs.

FCDOT is currently implementing four SRTS-funded projects. These projects are: a refuge island, upgraded ramps, and pavement striping at Terra Centre Elementary School currently authorized for construction and expected to be complete in 2016; a raised crosswalk, upgraded ramps, and flashing beacons at Flint Hill Elementary School currently in design and expected to be complete in 2017; and a new refuge island, upgraded ramps and flashing beacons at Graham Road Elementary School currently in design and expected to be complete in 2017; and a new concrete sidewalk and upgraded ramps along Old Courthouse Road from Creek Crossing Road to Country Club Drive at Westbriar Elementary School currently in survey.

Land Use and Transportation #4 Continued

On January 28, 2014 the Board adopted Transportation Project Priorities (TPP) for FY 2015 – FY 2020. The TPP will provide additional funding for 23 new sidewalk projects that will allow students to walk to school, the funding for these projects totals \$22 million.

Implementing a Bicycle Outreach Program

FCDOT Bicycle Program works with the Marketing Section and Transportation Demand Management (TDM) program on outreach events to the community and employers on a regular basis. More outreach and education events are planned in 2016; they include plans for several events throughout the year. These events would be coordinated with and planned in tandem with community groups, and would provide education and outreach to residents and businesses about different TDM measures in the County.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

These recommendations have been addressed in the past and the County continues to advance these recommendations as evidenced by new initiatives such implementing on-road bicycle facilities at virtually zero cost with VDOT's repaving program, the launch of Capital Bikeshare, and the inclusion of 23 new sidewalk projects in the TPP that will allow more students to walk to school. These recommendations are important to the continued expansion and success of Fairfax County's multimodal transportation system.

What, if any, actions should be taken pursuant to EQAC's recommendation?

FCDOT will continue making progress on implementing EQAC recommendations.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

In 2014, The Board of Supervisors approved \$1.4 billion in transportation funding for projects through FY2020, including \$203.93 million for bicycle and pedestrian improvements. Included in these improvements are projects recommended in the Bicycle Master Plan and construction of walkways to schools.

Additional funding has been approved for the implementation of Capital Bikeshare in Tysons and Reston, while operational funding for the system will be an ongoing expense. Expanding the education and outreach elements will need additional funding to grow and expand.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Funding for Capital Bikeshare operations will have an ongoing, annual cost that will grow as more stations and bicycles are added to the system. It will also take additional capital funding to add those stations and bicycles.

Land Use and Transportation #4 Continued

A “Bike Fairfax” program that focused on education and outreach would also have ongoing, annual funding commitments to ensure success.

The Safe Routes to School program will continue to be an important program, and will need funding to be successful in creating safe pedestrian routes for students walking to and from school.

Response to 2015 EQAC Recommendation

Water Resources # 1

(Page 52 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

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. EQAC realizes the funding for the stormwater program will come entirely from funds generated through the Service District rates. EQAC also realizes that there is a need for increasing capacity within the Department of Public Works and Environmental Services to provide these services.

EQAC recommends that the Stormwater Service District rate be increased in FY 2017 by at least one-quarter penny, from a rate of 2.50 cents per \$100 assessed real estate value to 2.75 cents per \$100. EQAC understands that this increase would not fully meet stormwater management needs and therefore suggests that additional increases be continued each fiscal year until adequate funding to support the program is achieved. 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 be a need for additional increases in funding for water quality projects to meet future permit conditions, and for infrastructure reinvestment, as the system is continually growing and aging.

LEAD AGENCY: Stormwater Planning Division, DPWES

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Craig Carinci

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

The rates will be addressed during the FY 2017 budget process.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The FY 2017 Advertised Budget Plan includes a one-quarter penny increase in the Stormwater Service District rate.

In FY 2010, the Board of Supervisors (BOS) established a Stormwater Service District to provide a dedicated funding source for stormwater management. A service district levy of \$0.010 (one

Water Resources #1 Continued

cent) per \$100 of assessed real estate value was implemented. In the FY 2011 and FY 2013, the BOS approved increases of the levy to \$0.015 (one and a half cents) per \$100 of assessed real estate value and \$0.02 (two cents) per \$100 of assessed real estate value respectively. In FY 2015, the BOS approved increase from a rate of 2.0 cents per \$100 assessed real estate value to 2.25 cents per \$100. In FY 2016, the BOS approved increase from a rate of 2.25 cents per \$100 assessed real estate value to 2.50 cents per \$100. The increased rates have supported the re-establishment of a capital program for stormwater management providing for infrastructure reinvestment of existing failing facilities and implementation of critical capital projects to address other health and safety issues, improve stormwater quality and mitigate the impacts of stormwater flooding. Moreover, the County is responsible for the maintenance of storm sewers and stormwater management facilities, valued at roughly \$1 billion and \$550 million respectively, as well as 20 state-regulated dams. The increased funding through FY 2016 was needed to continue to demonstrate to state and federal regulatory agencies the County's commitment to maintaining previous levels of effort to comply with our Municipal Separate Storm Sewer System (MS4) permit as well as to address dam safety regulatory compliance requirements. Federal and state regulations associated with the Chesapeake Bay Total Maximum Daily Load (TMDL) and the MS4 permit are placing unprecedented implementation requirements on the County. It has been estimated that County costs to comply with the Chesapeake Bay TMDL could be as much as \$70 million to \$90 million per year for capital and some operations and maintenance

What, if any, actions should be taken pursuant to EQAC's recommendation?

As noted above, the FY 2017 Advertised Budget Plan includes a one-quarter penny increase in the Stormwater Service District rate. Per EQAC's recommendation, continued increases in this rate should be considered in future budgets.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

The recommendation would require that the BOS increase the Stormwater Service District Tax rate from \$0.0250 to \$0.0275 during the FY 2017 budget process. The FY 2017 Advertised Budget Plan includes this proposed increase.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

Performing routine maintenance and infrastructure reinvestment and implementing water quality, flood mitigation and dam safety projects will result in extended infrastructure life expectancy, reduced expenses and liability attributable to public safety, flooding and MS4 permit violations. In addition, an adequately funded stormwater program will result in long term economic benefits to the county. It is anticipated that continued increases in the Stormwater Service District rate will be needed in future budgets to support these investments.

Response to 2015 EQAC Recommendation

Solid Waste # 1

(Page 63 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Increase Recycling - Additional means of increasing recycling should be investigated and implemented. In particular:

- a. Recycling requirements for commercial properties should be enforced and additional specific numeric recycling goals requirements should be considered.*
- b. Move forward with a food waste recycling program.*

LEAD AGENCY: DPWES-Solid Waste

COORDINATING AGENCIES: None

Please identify a lead agency contact person: Charlie Forbes

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

DPWES-Solid Waste has actively encouraged compliance with the statutory recycling requirements for commercial properties, working closely with building owners, operators, and tenants/residents to come into compliance with Chapter 109.1 (the County's solid waste management ordinance). Through an established process that emphasizes outreach and education, with administrative enforcement and litigation as a last resort, the agency has been able to bring facilities into compliance by non-adversarial means. To illustrate this point, only a handful of violations have required legal action, from hundreds of inspections conducted over the past decade, i.e., almost all compliance issues are resolved through informal agreements and follow-up/monitoring by compliance or outreach staff.

The following is a summary of recycling enforcement investigations and complaints resolution activity for the past year:

<u>Compliance Inspections</u>	<u>Total</u>	<u>Initial Compliance Rate</u>
- Waste Collectors:	461	80%
- Other (incl. commercial, apartments)	64	86%

All complaints were investigated, and all violations found were resolved.

Solid Waste #1

Continued

Breakdown of Violations Type

Collecting Before 06:00 AM	27%
Mixing Yard Waste or Recyclables With Refuse	15%
No Recycling System	9%
Other	49%

The County's ability to compile and mine compliance data is a work in progress; a more detailed report will be produced for future EQAC reports. As the education and outreach program matures, it is anticipated that more frequent formal enforcement may become necessary, but the track record for DPWES' work to date has been that a "compliance assistance" emphasis generates good results with substantially less labor and more positive good will.

With respect to the EQAC recommendation that the County consider establishing specific numeric recycling goals or reporting requirements on commercial properties, the overwhelming majority of County businesses recycle through single-stream collection, typically in the form of two containers outside (e.g., dumpsters). Often, multiple businesses share common dumpsters for refuse and recycling. Collecting useful quantity and composition data (to report to the County) would impose a burden on individual businesses. Staff further believes that the value and defensibility of collected data would be limited.

The focus of our work with the business community is to determine if the business and its employees and customers have access to recycling (a simple "yes/no" question, if you will), and where recycling is not present, to provide a sufficient level of progressive education, encouragement, support, follow-up, and enforcement action as necessary to bring the business into compliance. As noted above, there have been very few instances where that approach has not worked.

EQAC's recommendation regarding a food waste recycling program is addressed in the response to Climate Change and Energy recommendation #4.

In addition to DPWES' efforts in the areas recommended by EQAC, it is worth noting that services have been expanded at both Resident Disposal Centers to offer recycling of household hazardous waste (HHW) every day of operation, still at no cost to County residents.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

Proposed actions by DPWES-Solid Waste are summarized above.

Solid Waste #1
Continued

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Budget implications for FY2017 related to enforcement are anticipated to be minimal (unless numerical business recycling goals are to be established and enforced). Budget implications for FY2017 related to a food waste recycling program are addressed in the response to Climate Change and Energy recommendation #4 (also expected to be minimal).

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

The level of necessary activity in enforcement is anticipated to remain steady over the long term. With respect to food waste composting, to the greatest degree possible, DPWES-Solid Waste works to develop disposal alternatives that are cost-competitive with disposal. It is anticipated that longer-range fiscal impacts from such a program would be positive, i.e., the new facilities would reduce waste management costs over the long run, particularly when considering the avoided cost of long-term monitoring and post-closure care of landfilled waste and ash.

Response to 2015 EQAC Recommendation

Solid Waste # 2

(Page 63 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Minimize Redundant Trash Truck Traffic – In 2004, the Board of Supervisors rejected the franchising approach to reducing trash truck traffic. However, it remains a safety and environmental issue that needs to be addressed. EQAC recommends that opportunities to minimize redundant trash truck collection trips in the same neighborhoods be examined for implementation while not increasing cost.

LEAD AGENCY: DPWES-Solid Waste

COORDINATING AGENCIES: None

Please identify a lead agency contact person: Charlie Forbes

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Very similar recommendations have been considered by the county almost every year since the development of its 20-Year Solid Waste Management Plan in 2004. The concept of expanded county control over refuse collections (principally, through the establishment of competitive, licensed regional collection franchises) raised significant community and industry objections, causing the Board of Supervisors to direct staff away from the concept.

In considering this recommendation, it will be important for the Board to understand that Virginia law includes some stipulated, statutory processes that would have to be used to implement the recommendation, including:

- At least one public hearing seeking comment on the advisability of such ordinance, to be held with at least forty-five days' written notice of the hearing to all private companies which provide the service in the locality.
- Should the governing body determine that collection franchising is in the best interest of the community, it must either provide 5-years of notice to the companies that they will be displaced or a governing body may pay a company an amount equal to the company's preceding twelve months' gross receipts for the displaced service in the displacement area.

Solid Waste #2

Continued

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

This action was recommended in the 2004 update to the Fairfax County 20-Year Solid Waste Management Plan. Based on input from participants in various community engagement events, the concept appeared to be unacceptable to most residents, who expressed a desire to maintain the “right to choose” which company collects their waste.

What, if any, actions should be taken pursuant to EQAC’s recommendation?

No action is recommended due to the previous strong negative reactions from the public and affected businesses to previous, similar proposals, and the complications associated with implementing the requirements of Section 15.2-930 of the Code of Virginia.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

There are no budget implications for FY2017.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

No long-range implications are anticipated.

Response to 2015 EQAC Recommendation

Solid Waste # 3

(Page 64 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

***Make Recycling More Cost Effective** - The county has moved to single stream recycling through which all recyclable material is collected in a single bin. This has reduced the quality and value of collected recyclable materials. Changes to the recycling market have also reduced revenue and actual materials recycled. These are long term problems that will get worse if not addressed. It will take careful study, time and potentially changes in regulation and law to resolve. EQAC recommends the initial step of collecting data on the cost of recycling specific materials. With these data in hand, evaluate if changes should be made to what is recycled. Finally, consider alternatives to single-stream recycling. To implement these steps, consider also the following:*

- a. Develop estimates of the actual quantity, quality and cost of recycling specific materials. Estimate the true recycling rate and determine what materials should be recycled due to either being cost-effective, or because recycling of that material provides an important environmental benefit for a reasonable cost.*
- b. Revise the list of materials that are recycled from homes to remove glass and other materials that degrade the cost effectiveness of recycling. Conduct a public information campaign to inform residents on how best to recycle.*
- c. Support a statewide container redemption fee to reduce litter and increase the recovery of containers in a form that can be recycled.*
- d. Investigate the potential for increased county participation in recycling of materials. In particular, programs for glass recycling should be initiated.*
- e. Consider alternatives to single-stream recycling that preserve the quality of recycled materials and increase the true quantity of recycling.*

LEAD AGENCY: DPWES-Solid Waste

COORDINATING AGENCIES: None

Please identify a lead agency contact person: Charlie Forbes

Solid Waste #3

Continued

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

The recommendation is a complex one, and includes many components, most of which have either already been addressed or are in the process of being addressed. Further discussion is provided under separate headings below. Analysis of recycling costs and corresponding adjustments to DPWES-Solid Waste operations to reduce costs are ongoing. It is important to note that 90 percent of the county's residences are collected by private sector firms.

Quantity, Quality and Cost of Recycling Specific Materials.

Quantity--

There may have been some confusion over the use of terms such as "actual" or "reported" in discussions of the county's recycling rate. In 2014 (the latest year of verifiable data available), the residents and businesses of Fairfax County recycled 484,783 tons of waste, from a total waste stream of 1,080,078 tons, i.e., 45% recycling. Using the calculation and reporting process required by the Virginia Department of Environmental Quality (DEQ), that "base recycling rate" was adjusted by two percent for having a source reduction program. The county also received additional credit for non-municipal solid waste that is recycled, bringing the Adjusted Recycling Rate (sometimes referred to as the "reported rate") to 48 percent. The same adjustment process is used by every municipality reporting in Virginia, so the Fairfax County rate can be compared to other Virginia jurisdictions, "apples-to-apples".

Quality—

As a first general principle, source-separation of recyclable generates materials of higher quality (and thus, higher market value). Municipalities that have maintained source-separated systems (like the dual-stream system once operated by the county) exhibit higher quality/value in their recovered recyclables. However, that additional resale value is offset by the cost of separate/additional collection (typically, costs are double or more, on a per-ton basis). It is widely accepted that collecting recyclables single-stream is the most cost-efficient way to operate, hence the almost nationwide adoption of this practice. Staff believes that the current single-stream collection system is the most cost-effective way to deliver recycling service, acknowledging some loss in overall sustainability and additional costs associated with increased residue.

Cost--

As part of its ongoing mission to provide sustainable solid waste management services in a cost-efficient manner, and in response to recent changes in the secondary materials market (where recyclables are sold), the DPWES-Solid Waste recycling system operations were modified to reduce recycling costs. Using a more flexible approach with our collections and transfer operation, and tapping into more distant (but also more lucrative) materials markets, DPWES-Solid Waste was able to turn the cost of processing collected recyclables into a revenue stream (i.e., whereas recyclables were being processed at an average cost of approximately \$25.00/ton,

Solid Waste #3 Continued

the county was being paid \$10/ton for receipt of the recovered material.) In the latter part of 2015, market prices for recyclable materials have declined such that DPWES-Solid Waste has recently returned to paying for recyclables processing. However, those costs are substantially reduced from conditions being experienced prior to the fall of 2015, and remain a fraction of the costs for disposing of these materials as waste.

The Challenge Of Glass Recycling, And Alternatives Being Explored

Post-consumer markets pay less for paper originating from single-stream, due to contamination from the various other materials collected in the single recycling container (e.g., broken glass, small pieces of plastic, plastic bags, incidental food and free liquids). Plastic and metals are not as strongly impacted by contamination from other single-stream fractions. There is no market in the DC metro area for post-consumer glass at this time. The principle reason for this lack of market is the high-level of contamination found in post-consumer glass recovered in states that do not have a deposit/redemption law (a.k.a., a bottle bill); the glass industry, including those that operate in Virginia, buy their glass from communities in bottle-bill states. In single-stream systems, where glass is not being targeted for recovery, the mechanical sorting process of materials recovery facilities reduces collected glass to almost gravel, and mixes it with other detritus from the sorting process (tiny pieces of paper, plastic, and food), rendering it a mixed material of no practical value or immediate use.

However, DPWES-Solid Waste is actively pursuing the development of alternative means to recycle glass, both for county operations but also for the industry at large. The primary alternative being considered is the reuse of glass as a pulverized, clean aggregate substitute. With the correct choice of crushing technology, the aggregate produced is clean and has no sharp edges (sometimes called "friendly glass"). Glass aggregate can be (and is routinely) used as landscape material, driveway filler, and as other construction material supplements, such as drainage sand or gravel. Uses for these friendly glass products include:

- The manufacture of "glassphalt" in paving applications: aggregate base course, asphalt base course, asphalt surface course, parking lots and driveways;
- Aggregate for general construction use, such as backfill, embankments, hydroponics, as landfill cover, for oil spill cleanup, as road sand, termite barriers, for utility trench bedding and backfill, and to fill weighted bags used to hold down membranes/covers in construction;
- Filtration media, in municipal wastewater filter systems, and as filter sand for septic tank systems;
- Drainage media in selected construction applications, such as using for choker grit, drain pipe bedding, septic fields, underdrains, and French drains; and
- Decorative cover and similar landscaping applications where mulch is used for aesthetic purposes, weed control, or rainwater filtration.

Solid Waste #3 Continued

Initial plans are to establish a small pilot program, processing glass near the I-66 Resident's Disposal Center for use on various grounds and maintenance projects around the facility. It is anticipated that this modest initial project will lead to a more substantial glass processing facility at the I-95 Landfill Complex, or through a public-private partnership with one of the recyclables processing vendors. Staff is currently evaluating proposals for recyclables processing.

Better Inform Residents On How Best To Recycle

The Fairfax County Solid Waste Management Program maintains an active program to communicate with residents about trash and recycling issues. Traditional methods such as print and website announcements will continue to be used to provide information about recycling to residents, with an emerging and effective practice being the use of social media. The schedule for providing updates and tips on recycling practices to both residents and businesses in the County can be increased to become more frequent.

As changes to the recycling program are made (e.g., new glass recycling and food waste composting programs are initiated), this information will be distributed to target audiences. For example, glass recycling information may first be directed towards the large generators of glass, which would be bars and restaurants. The same would be true for composting of food waste. Food waste recycling information would be directed to industrial kitchens, such as those located at colleges or hospitals, grocery stores and restaurants and bars. This outreach information will provide details on best practices and techniques to enable easy implementation for the recycling of these materials.

Support A Virginia Bottle Bill

Staff recommends that the Board support bottle bill legislation, as a means to promote and sustain better market conditions for all municipal recycling programs in the state.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A.

What, if any, actions should be taken pursuant to EQAC's recommendation?

Proposed actions by DPWES-Solid Waste are summarized above.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Budget implications for FY2017 related to the actions proposed above are anticipated to be minimal, although there may be additional costs for preparing the anticipated program and facility design submittals required for approval by the Virginia Department of Environmental Quality of the added processing equipment, and the procurement (purchase or rental) of the same. DPWES-Solid Waste believes that these costs will

Solid Waste #3
Continued

be largely off-set by the avoided cost of disposal for the glass being handled through the new program facility. With DEQ consent to proceed, the necessary budget adjustments will be made to accommodate any minor additional costs associated with project start-up.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

No long-range implications are anticipated.

Response to 2015 EQAC Recommendation

Solid Waste #4

(Page 64 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Solid Waste Enforcement Coordination for Illegal Dump Sites – The County has initiated evaluation of coordination procedures to improve the process. EQAC supports this effort and recommends that written inter-departmental coordination enforcement procedures be developed.

LEAD AGENCY: County Executive's Office

COORDINATING AGENCY/IES: Department of Code Compliance; Department of Planning and Zoning; Fire and Rescue Department; DPWES-Solid Waste; Health Department; Sheriff's Office; DPWES-Stormwater; Office of the County Attorney

Please identify a lead agency contact person: Department of Code Compliance

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

This recommendation is in the process of being addressed.

The Office of the County Executive has assigned the Department of Code Compliance to be the intake center for all complaints of this nature. Subsequently, the Department of Code Compliance will develop a standard operating procedure for internal coordination, detailing the actions each agency should take when assigned a case and expectations of service. The goal of the Department of Code Compliance's written operating procedure will provide clarity of communication, a shared understanding, and agreement on how to report, process, and remedy identified sites.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Not applicable

What, if any, actions should be taken pursuant to EQAC's recommendation?

In addition to the Department of Code Compliance (DCC) creating a procedure for internal coordination, DCC will serve as the single point of contact for residents wishing to report illegal dumping sites and will ensure that those concerns are appropriately coordinated to promote a

Solid Waste #4
Continued

unified response. This should also include coordination with the Virginia Department of Environmental Quality (DEQ).

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No, additional workload could likely be accommodated within existing staff.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Potentially, as more sites may be identified or more complex cases are identified, additional resources may be required. Longer range technology replacements, including new reporting interface, databases, and an enhanced web presence, will stimulate a better customer experience, but will require an investment of County resources.

Response to 2015 EQAC Recommendation

Ecological Resources #1

(Page 91, Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The Fairfax County Park Authority has an approved merit Ecologist position. However, this position is vacant and will remain vacant until funding is provided. EQAC recommends that the Board of Supervisors provide sufficient funding so that this position can be filled.

LEAD AGENCY: DMB

COORDINATING AGENCY/IES: Park Authority

Please identify a lead agency contact person: Martha Reed/Janet Burns

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

The Park Authority has already identified this position as critical and is currently working to fill this Ecologist III position. Funding of approximately \$87,000 to support the position will be charged to the appropriate bond funded capital projects and will have no net impact to the General Fund.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

None.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No. The funding for this position can be managed within existing resources.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

No.

Response to 2015 EQAC Recommendation

Ecological Resources #2

(Page 91 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The Fairfax County Park Authority approved a Natural Resource Management Plan in 2004. This partially fulfilled a long-standing EQAC recommendation to develop and implement a countywide Natural Resource Management Plan. In 2014, the Park Authority adopted a revised Natural Resource Management Plan that more closely focused on adaptive management of natural resources. However, full funding to implement the plan is not yet in the Park Authority budget. The Park Authority has managed to secure some funding from several sources but lacks most of the amount to implement fully the plan. FCPA staff estimates that full implementation would require approximately \$8 million per year and dozens of staff positions. This includes 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 allow 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 require \$705,000 and five positions. EQAC strongly feels that the Natural Resource Management Plan needs to be fully 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 further recommends that, over time, the full plan be funded.

LEAD AGENCY: FCPA

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Cindy Walsh, Director, Resource Management Division

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

The Park Authority has not received recurring funding to fully implement Phase 1 of the Natural Resource Management Plan. It has, however, chosen to fund a previously vacant merit Ecologist position, see response to Ecological Resources #1; continues to seek efficiencies through administrative changes; and continues to pursue alternative funding strategies to implement the newly adopted plan.

The Park Authority is actively recruiting for a previously vacant Ecologist III to manage its ecological restoration program titled Helping Our Land Heal. It is also seeking to re-structure the Natural Resource Management and Protection Branch by aligning its administrative structure with the Fairfax County Park Authority Natural Resource Management Plan (Plan), which will result

Ecological Resources #2 Continued

in administrative efficiencies that will be re-invested in Plan implementation. Finally, the agency continues to pursue project specific funding for resource management. It has secured and continues to seek funding from the Environmental Improvement Program (EIP), bond funding, and dedicated telecommunication fee funds. However, project specific funding are auxiliary resources that are not adequate to fully implement the plan.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The Park Authority concurs with the recommendation to fund and implement Phase 1 of the Natural Resource Management Plan. The required available funding to fully implement Phase 1 is not in place, given the current budget challenges the County is facing.

What, if any, actions should be taken pursuant to EQAC's recommendation?

The Park Authority will continue to make necessary administrative adjustments aimed at meeting the goals of the recommendation in preparation for future dedicated recurring funding. The Park Authority will also continue to pursue alternative funding sources until dedicated recurring funding is obtained.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Yes, five additional merit positions and \$705,000 would be required to fund Phase 1 of the newly adopted Natural Resource Management Plan.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Yes, it is estimated that the Natural Resource Management Plan will require approximately \$8 million and dozens of staff position annually to fully implement. This includes approximately \$3.5 million to focus on general natural resource management and \$4.5 million for a non-native invasive plant control program.

Response to 2015 EQAC Recommendation

Wildlife Management--Deer #1

(Page 94 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Managed hunts should be continued as they have become both cost-effective and efficient in reducing excesses in the deer herd.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: FCPA

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Yes, this recommendation has already been addressed. The Fairfax County Deer Management Program will continue to utilize all available deer management tools for population control.

In FY 2016, managed shotgun hunts were coordinated by the Fairfax County Wildlife Management Specialist, Animal Control (FCPD), and the Fairfax County Park Authority at the Sully Woodlands area including Elklick Preserve, Mountain Road District Park, Rock Hill District Park, and Richard W. Jones Park (Pleasant Valley Golf Course). Additional public hunts were held by federal and state agencies at Mason Neck National Wildlife Refuge and Mason Neck State Park (this program has been in place since 1993).

Managed hunts are safe and often highly efficient for deer population control at select sites. Since FY 2010, managed hunts have contributed to approximately 11% of the total deer harvest even though this method is only implemented on a small proportion of total hunt acreage included in the Deer Management Program. Public managed hunts will continue to be used at selected parks to implement sustainable hunting pressures.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

No additional actions are necessary pursuant to EQAC's recommendation.

Wildlife Management—Deer #1 Continued

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

It is assumed the FY 2017 budget for the Fairfax County Deer Management Program will remain the same as the FY 2016 allocated budget, approximately \$16,000. However, it is important to note that these funds do not represent the full costs associated with the Deer Management Program. Total annual program costs are estimated at >\$150,000 including operational costs such as staff salaries, overtime pay for Animal Control Officers, supplies and equipment, and services for deer processing. These additional costs are not allocated specifically for the Deer Management Program budget but have been successfully absorbed by the Fairfax County Police Department and Fairfax County Park Authority in previous years through cost-sharing. We recommend that a specific line item for the county Deer Management Program be included in the budget.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding for the Fairfax County Wildlife Management Specialist Office in general and the Fairfax County Deer Management Program specifically in order to meet the stated program objectives addressing:

- Public safety concerns related to deer-vehicle collisions
- Human health concerns related to disease transmission
- Environmental concerns to lower deer herd numbers to ecologically sustainable levels and ensure forest health

Additional resources are also needed to enable FCPD and FCPA to expand survey efforts to collect data and monitor the deer density and browse impacts to vegetation in parks undergoing deer management. Residents have recently advocated for more detailed survey and monitoring protocols of deer herds in specific parks. In order to continue to meet or expand this standard of service, additional resources will need to be allocated to the existing program. These types of field surveys are necessary to allow comparison of data over years and establish trends to determine when impacts have been sufficiently mitigated and management efforts for white-tailed deer can be scaled back in specific parks.

Response to 2015 EQAC Recommendation

Wildlife Management--Deer #2

(Page 94 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The sharpshooter events should be continued because they are both humane and cost-effective.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: FCPA; NVRPA

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Yes, this recommendation has already been addressed. The Fairfax County Deer Management Program will continue to utilize all available deer management tools for population control.

Sharpshooting is a safe and highly efficient method for deer population control at select sites. Since FY 2010, sharpshooting operations have contributed to approximately 21% of the total deer harvest even though this method is only implemented on a small proportion of total hunt acreage included in the Deer Management Program.

Sharpshooting is especially important for deer population control on public lands where other methods, such as archery and managed shotgun hunting, are not determined to be appropriate due to park operations and/or environmental features that make implementation difficult (i.e., open fields, recreational complexes, botanical gardens). Sharpshooting allows for a targeted harvesting effort when parks are closed to minimize disruption to park operations and use by park patrons.

Although sharpshooting is efficient, it does contribute to higher operational costs than other control methods because additional personnel are needed on sharpshooting nights for park security, harvesting and processing of deer. Improvements were made for the sharpshooting tactical operations in FY 2015 to increase the efficiency and humaneness of harvest methods.

Sharpshooting operations will continue to be used at selected parks to implement sustainable hunting pressures when other methods are not determined to be appropriate. Prudent consideration will be used when selecting park locations for sharpshooting; other methods will be used whenever feasible to reduce Deer Management Program costs.

**Wildlife Management—Deer #2
Continued**

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

No additional actions are necessary pursuant to EQAC's recommendation.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

It is assumed the FY 2017 budget for the Fairfax County Deer Management Program will remain the same as the FY 2016 allocated budget, approximately \$16,000. However, it is important to note that these funds do not represent the full costs associated with the Deer Management Program. Total annual program costs are estimated at >\$150,000 including operational costs such as staff salaries, overtime pay for Animal Control Officers, supplies and equipment, and services for deer processing. These additional costs are not allocated specifically for the Deer Management Program budget but have been successfully absorbed by the Fairfax County Police Department and Fairfax County Park Authority in previous years through cost-sharing. We recommend that a specific line item for the county Deer Management Program be included in the budget.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding for the Fairfax County Wildlife Management Specialist Office in general and the Fairfax County Deer Management Program specifically in order to meet the stated program objectives addressing:

- Public safety concerns related to deer-vehicle collisions
- Human health concerns related to disease transmission
- Environmental concerns to lower deer herd numbers to ecologically sustainable levels and ensure forest health

Additional resources are also needed to enable FCPD and FCPA to expand survey efforts to collect data and monitor the deer density and browse impacts to vegetation in parks undergoing deer management. Residents have recently advocated for more detailed survey and monitoring protocols of deer herds in specific parks. In order to continue to meet or expand this standard of service, additional resources will need to be allocated to the existing program. These types of field surveys are necessary to allow comparison of data over years and establish trends to determine when impacts have been sufficiently mitigated and management efforts for white-tailed deer can be scaled back in specific parks.

Response to 2015 EQAC Recommendation

Wildlife Management--Deer #3

(Page 94 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The archery program should be continued as a means of controlling deer depredation of vegetation on residential properties where firearms cannot be used. Archery is also particularly cost-effective, relying on hundreds of qualified volunteers contributing thousands of hunt hours to the program at no cost.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: FCPA

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Yes, this recommendation has already been addressed in significant capacity. The Fairfax County Deer Management Program will continue to utilize all available deer management tools for population control.

Archery is a safe, cost-effective, and highly efficient method for deer population control at select sites. Since the archery program was initiated in FY 2010, it has contributed to approximately 68% of the total deer harvest. In FY 2015, archery contributed to 82% of the annual harvest. By FY 2016, the archery program has been expanded to include 22 qualified volunteer archer groups assigned to approximately 80 parks countywide. The archery program continues to increase the number of hunt sites available in the county where possible for participation by ethical, qualified archers with superior skill. All parks where the archery program is implemented remain open to the public due to the continued excellent record ensuring public safety and participant safety.

Currently, the Fairfax County Deer Management Program only implements archery as a management tool on public parklands, which represent <20% of total county acreage. The county program does not currently coordinate hunting on private property which also provides refuge and food that sustain overabundant deer. However, private citizens do hunt in these areas. Reduction of deer densities to more sustainable, healthy levels is likely to require coordination of hunting on both public and private lands within Fairfax County.

Archery on private lands in Fairfax County is permitted by the Virginia Department of Game and Inland Fisheries and has been conducted safely on private lands for decades. Archery on private

Wildlife Management—Deer #3 Continued

lands can be conducted by landowners or through archery groups, clubs, and associations. The urban archery season permits legal hunting on private property the first Saturday in September to the last Saturday in April. The Fairfax County Wildlife Management Specialist Office currently provides information to residents who are interested in conducting archery on their private property but does not endorse the use or services of any individual bowhunter, archery organization, or group.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC's recommendation?

No additional actions are necessary pursuant to EQAC's recommendation.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

It is assumed the FY 2017 budget for the Fairfax County Deer Management Program will remain the same as the FY 2016 allocated budget, approximately \$16,000. However, it is important to note that these funds do not represent the full costs associated with the Deer Management Program. Total annual program costs are estimated at >\$150,000 including operational costs such as staff salaries, overtime pay for Animal Control Officers, supplies and equipment, and services for deer processing. These additional costs are not allocated specifically for the Deer Management Program budget but have been successfully absorbed by the Fairfax County Police Department and Fairfax County Park Authority in previous years through cost-sharing. We recommend that a specific line item for the county Deer Management Program be included in the budget.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding for the Fairfax County Wildlife Management Specialist Office in general and the Fairfax County Deer Management Program specifically in order to meet the stated program objectives addressing:

- Public safety concerns related to deer-vehicle collisions
- Human health concerns related to disease transmission
- Environmental concerns to lower deer herd numbers to ecologically sustainable levels and ensure forest health

Additional resources are also needed to enable FCPD and FCPA to expand survey efforts to collect data and monitor the deer density and browse impacts to vegetation in parks undergoing deer management. Residents have recently advocated for more detailed survey and monitoring protocols of deer herds in specific parks. In order to continue to meet or expand this standard of

Wildlife Management—Deer #3
Continued

service, additional resources will need to be allocated to the existing program. These types of field surveys are necessary to allow comparison of data over years and establish trends to determine when impacts have been sufficiently mitigated and management efforts for white-tailed deer can be scaled back in specific parks.

Response to 2015 EQAC Recommendation

Wildlife Management--Deer #4

(Page 94 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The previously authorized Assistant Wildlife Management Specialist position should be filled as soon as possible.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: DMB

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Police Department personnel are currently in the process of determining with the Department of Management and Budget whether sufficient funding exists to support a full-time Assistant Wildlife Management Specialist position.

Seventy-five percent of the county Wildlife Management Specialist's time is currently spent on the Deer Management Program alone, with little time available to dedicate to other wildlife issues in the county without additional staff support.

A non-merit, part-time Deer Management Program Assistant position has been allocated through the Fairfax County Park Authority to assist with managed hunts and sharpshooting operations. This position is seasonal in nature with employment limited to October – March.

A limited-term part-time Assistant Wildlife Specialist has been made available through the Fairfax County Police Department through the end of 2016. This position was initially authorized for the 4 Poster Treatment Study and has expanded to assisting with the Deer Management Program. Retention of qualified wildlife staff in this position has been difficult given the part-time nature of the position and limited benefits available. Since FY 2015, 3 assistant biologists have left this position to accept full-time employment with other county and federal agencies.

**Wildlife Management—Deer #4
Continued**

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with the recommendation that the previously authorized Assistant Wildlife Management Specialist position should be filled as soon as possible to increase the effectiveness of the Wildlife Program including management, monitoring efforts, and public outreach associated with the Deer Management Program, Canada Geese Management Program and other wildlife-related issues (i.e., beaver, coyote, raccoon, and fox).

What, if any, actions should be taken pursuant to EQAC's recommendation?

Staff is currently in communication with the Department of Management and Budget to determine whether the Assistant Wildlife Management Specialist position will be authorized but a determination has not been made at this time.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Re-authorization and filling of the Assistant Wildlife Management Specialist would require additional funds to support the position. The amount of funding required would be dependent on the position grade (e.g., Naturalist I-II).

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding and staffing for the Fairfax County Wildlife Management Specialist Office in general and the Fairfax County Deer Management Program specifically in order to meet the stated program objectives addressing:

- Public safety concerns related to deer-vehicle collisions
- Human health concerns related to disease transmission
- Environmental concerns to lower deer herd numbers to ecologically sustainable levels and ensure forest health

Response to 2015 EQAC Recommendation

Wildlife Management--Geese #1

(Page 96 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

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.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: FCPA

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Yes, this recommendation has already been addressed. 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 goose population at selected sites.

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.

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 good populations.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

N/A

What, if any, actions should be taken pursuant to EQAC’s recommendation?

No additional actions are necessary pursuant to EQAC’s recommendation.

**Wildlife Management—Geese #1
Continued**

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Geese management activity is not currently allocated a budget. Geese management activity relies on trained volunteers and Park Authority staff to manage local resident geese populations at select sites. Costs associated with the Geese Management Program have been successfully absorbed by the Fairfax County Police Department and Fairfax County Park Authority in previous years. We recommend allocating a modest budget for general wildlife expenses, including geese management, to cover incidental training and supply expenses for volunteer groups to assist with egg-oiling efforts.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding and staffing for the Fairfax County Wildlife Management Specialist Office to support current Wildlife Program efforts.

Response to 2015 EQAC Recommendation

Wildlife Management--Geese #2

(Page 97 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The shotgun for geese hunt pilot test conducted by the Fairfax County Park Authority should be expanded into an established program for those parks that can comply with Appendix J of the Fairfax County Code, and consideration should be given to limited amendment of Appendix J so additional parks could be included.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: FCPA

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

This recommendation has not been previously addressed. To clarify information on the hunt, the FCPA previously gave consent, as the landowner, to the tenant of a county-owned privately-managed golf course to hunt geese on the property. The goose hunt was conducted by the tenant of the property and it was the responsibility of the tenant to ensure compliance with state, federal and county regulations regarding hunting and the discharge of firearms. FCPA did not conduct the goose hunt nor do they maintain oversight over the hunt on this property.

The EQAC recommendation to expand the shotgun hunt for geese into an established county program will need to be further discussed to (1) determine if a hunt could be safely and effectively implemented on county properties, (2) identify park properties within Appendix J that hunts could be conducted, (3) determine appropriate permits needed to conduct a hunt as the Canada goose is a federally-protected species, and (4) determine the level of support for this management method by the Fairfax County Board of Supervisors, county personnel and the public.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Additional information will need to be collected and discussed pursuant to any determination.

**Wildlife Management—Geese #2
Continued**

What, if any, actions should be taken pursuant to EQAC's recommendation?

County staff will discuss the feasibility and implications of conducting a hunt for geese on county properties.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No budget implications are anticipated for FY 2017 based on this recommendation.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding and staffing for the Fairfax County Wildlife Management Specialist Office to support current Wildlife Program efforts.

Response to 2015 EQAC Recommendation

Wildlife Management--Geese #3

(Page 97 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Due to the current scarcity of staff resources, the Geese Management Program is below an acceptable level of activity. Staff allocation to the program should be increased.

LEAD AGENCY: Police—Animal Services

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Police Department personnel are currently in the process of determining with the Department of Management and Budget whether sufficient funding exists to support a full-time Assistant Wildlife Management Specialist position. If this position were allocated, the Assistant Wildlife Management Specialist would serve a primary role in expanding the Geese Management Program through identification of additional county properties for egg oiling and training of volunteers.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with the recommendation that staff allocation be increased to support the Wildlife Program including geese management.

What, if any, actions should be taken pursuant to EQAC's recommendation?

Staff is currently in communication with the Department of Management and Budget to determine whether the Assistant Wildlife Management Specialist position will be authorized but a determination has not been made at this time.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Yes, additional funds would be required to support new staff allocated for the Wildlife Program. The amount of funding would be dependent on the position grade.

Wildlife Management—Geese #3
Continued

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding and staffing for the Fairfax County Wildlife Management Specialist Office to support current Wildlife Program efforts.

Response to 2015 EQAC Recommendation

Wildlife Management--Geese #4

(Page 97 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The previously authorized Assistant Wildlife Management Specialist position should be filled as soon as possible, in order to alleviate the current staffing inadequacy in the Geese Management Program.

LEAD AGENCY: Police—Animal Services
COORDINATING AGENCY/IES: DMB

Please identify a lead agency contact person: Katherine Edwards, Wildlife Management Specialist

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Police Department personnel are currently in the process of determining with the Department of Management and Budget whether sufficient funding exists to support a full-time Assistant Wildlife Management Specialist position.

Seventy-five percent of the county Wildlife Management Specialist's time is currently spent on the Deer Management Program alone, with little time available to dedicate to other wildlife issues in the county without additional staff support.

A limited-term, part-time assistant wildlife specialist has been made available through the Fairfax County Police Department through the end of 2016. This position was initially authorized for the 4 Poster Treatment Study and has expanded to assisting with the Deer Management Program and Geese Management Program if scheduling permits. Retention of qualified wildlife staff in this position has been difficult given the part-time nature of the position and limited benefits available. Since FY 2015, 3 assistant biologists have left this position to accept full-time employment with other county and federal agencies.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Staff concurs with the recommendation that the previously authorized Assistant Wildlife Management Specialist position should be filled as soon as possible to increase the effectiveness of the Wildlife Program including management, monitoring efforts, and public outreach associated

**Wildlife Management—Geese #4
Continued**

with the Deer Management Program, Canada Geese Management Program and other wildlife-related issues (i.e., beaver, coyote, raccoon, and fox).

What, if any, actions should be taken pursuant to EQAC's recommendation?

Staff is currently in communication with the Department of Management and Budget to determine whether the Assistant Wildlife Management Specialist position will be authorized but a determination has not been made at this time.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

Yes, re-authorization and filling of the Assistant Wildlife Management Specialist would require additional funds to support the position. The amount of funding required would be dependent on the position grade (e.g., Naturalist I-II).

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

There is an ongoing need for increased and sustained funding and staffing for the Fairfax County Wildlife Management Specialist Office to support current Wildlife Program efforts.

Response to 2015 EQAC Recommendation

Noise #1

(Page 104 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

EQAC recommends that the Board of Supervisors request to MWWA that quarterly summaries from MWWA's WebTrak system be displayed in three formats (Total DNL, Aircraft DNL and Community DNL), together with the interactive data, on the MWWA website. The quarterly summaries should be provided as promptly as possible, ideally within a month of the quarter's end (e.g., by the end of April, July, October and January).

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Noel Kaplan

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

As noted in EQAC's report, the Metropolitan Washington Airport Authority (MWWA) maintains aircraft noise-related information on its website. For each airport, noise information can be accessed by clicking on the link to the airport and then clicking the link to "Aircraft Noise Information" in the drop-down menu under "About the Airport." A variety of helpful noise-related links are available from each of these websites, including a link to each airport's WebTrak site, through which flight track and noise information can be viewed. Near real-time information on aircraft flights and noise levels (one hour old) can be accessed, as can be noise reports and data summarizing conditions over longer time periods.

The near-real time flight and noise information provides graphical information about each airplane flying within the region (typically the flight number, origin, destination, aircraft type, altitude and speed of the aircraft) and the status of each plane with respect to the airport (i.e., arriving, departing or flying over). Instantaneous noise levels (as measured using the dBA L_{eq} noise metric) are provided for each of the noise monitoring stations in MWWA's network.

The noise reports and data link on each airport's WebTrak site provides links to MWWA's annual aircraft noise report, which presents a range of summary information about flight operations as well as monthly average noise statistics (using the DNL dBA noise metric) for each monitoring station in MWWA's network. Included is a breakdown of noise levels relating to aircraft operations, noise levels related to other community noise sources, and total noise levels. Noise complaint data associated with each airport is also provided for the reporting year. MWWA does not report these data on a quarterly basis, as recommended by EQAC.

Noise #1
Continued

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The posting of noise data on a quarterly basis could offer the public more rapid access to the summary noise information than is currently available. It is noteworthy that, at the time of preparation of this response (January 2016), the most recent summary noise information available from the MWAA website was from calendar year 2014, meaning that the most current summary noise data were more than 12 months old. It should be recognized that it takes time and resources for MWAA to compile its annual reports and that it would be unreasonable to expect an annual report for the preceding year to be available in January; however, the provision of quarterly reporting would appear to enable MWAA to reduce the gap in the amount of time needed to post summary data on the website. We also note that, in the past, MWAA published quarterly written reports summarizing noise monitoring information. EQAC's recommendation would, therefore, seem to merit further consideration.

What, if any, actions should be taken pursuant to EQAC's recommendation?

MWAA should be contacted for guidance on EQAC's recommendation. Absent a compelling reason as to why EQAC's recommended quarterly monitoring would be inappropriate, staff would support EQAC's recommendation for the Board to recommend to MWAA that quarterly noise summaries be made available on MWAA's website. Further, consideration should be given as to whether MWAA's website can be made more intuitive in regard to accessing noise information. It is not clear from MWAA's home page where the user would need to go to access noise information, and the search function on the home page is not helpful in this regard.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

This recommendation would not affect the county's budget, but it may have resource implications to MWAA.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

This recommendation would not affect the county's budget, but it may have resource implications to MWAA.

Response to 2015 EQAC Recommendation

Light Pollution #1

(Page 108 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The number and spacing of lighting fixtures, either as long lines or grids, may create unacceptable illumination. The county's lighting ordinance should therefore be amended where such unacceptable levels of illumination would constitute violations under the ordinance. Examples would be a string of lights along a driveway or walkway, an array of drop lens lights, or excessive lights in a parking lot.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Lorrie Kirst

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Glare is the principal cause of outdoor lighting complaints and in most circumstances, outdoor lighting is required to be full cut-off in order to reduce the adverse glare impacts. The current outdoor lighting provisions permit the use of non-full cut-off lighting fixtures on lots developed with single family dwellings when the initial light outputs from such fixtures is no more than 2,000 lumens. This exemption was designed to allow for relatively low wattage light sources to be used for such purposes as porch and walkway lighting as they are considered to be a low impact source of glare. However, cases have been observed of fixtures being placed in clustered arrangements or in a series configuration along driveways that produce a cumulative effect that is much greater than what would be observed from a single fixture. An item on the 2015 Priority 1 Zoning Ordinance Amendment Work Program would address the single family exemption and other outdoor lighting issues. Specifically, the exemption for single family dwellings would be reviewed and additional requirements for minimum spacing of fixtures and possible limitations on cumulative allowable initial light outputs are being considered. It is anticipated that the proposed Outdoor Lighting Amendment will be scheduled for public hearings in the spring/summer of 2016.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

The recommendation is being addressed

What, if any, actions should be taken pursuant to EQAC's recommendation?

The proposed Zoning Ordinance discussed above should be processed through the public hearing process with anticipated hearing dates in the spring/summer of 2016.

Light Pollution #1
Continued

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No, can be accommodated with existing staff and resources.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

No

Response to 2015 EQAC Recommendation

Light Pollution #2

(Pages 108 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

The commonly used work lights placed in buildings under construction, especially before exterior walls are in place, are a serious annoyance to nearby local residents and a definite safety hazard to motorists on nearby roadways. It is EQAC's view that ordinance amendments are urgently needed to correct this problem.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Lorrie Kirst

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Current regulations require full cut-off or directionally shielded lighting to be used for outdoor construction site lighting. Lighting that is used in the outer 10 foot perimeter of the interior of buildings under construction that are 5 stories or taller are required to use frosted light bulbs. Experience has shown that these provisions still result in large amounts of glare from buildings under construction. An item on the 2015 Priority 1 Zoning Ordinance Amendment Work Program would address construction lighting and other outdoor lighting issues. Specifically, revisions to the required placement of frosted light bulbs and a reduction of the building height that requires the use of frosted light bulbs during construction are being considered. It is anticipated that the proposed Outdoor Lighting Amendment will be scheduled for public hearings in the spring/summer of 2016.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Recommendation is being addressed.

What, if any, actions should be taken pursuant to EQAC's recommendation?

The proposed Zoning Ordinance discussed above should be processed through the public hearing process with anticipated hearing dates in the spring/summer of 2016.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No, can be accommodated with existing staff and resources.

Light Pollution #2
Continued

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

No.

Response to 2015 EQAC Recommendation

Light Pollution #3

(Pages 109 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Security lighting utilizing motion detectors needs to be provided with an automatic cutoff following a brief period after motion has ceased. An amendment to the county's lighting ordinance should be pursued to address this problem.

LEAD AGENCY: DPZ

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Lorrie Kirst

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Currently, motion activated lighting that is used on lots with single family dwellings is exempt from full cut-off requirements when such lighting contains fixtures that emit 6,000 lumens or less and have timing devices that extinguish light no more than 5 minutes after motion has stopped. In addition, the lamps in such fixtures shall not be visible from a point that is 5 feet above an abutting property line.

Current regulations also provide an exemption for motion activated lighting on lots other than those developed with single family dwellings as long as such fixtures are aimed such that the light bulb portion of the fixture is not directly visible 5 feet above the property boundary. For such properties, there is currently no initial lumen output limitation.

These provisions have proven to be difficult to enforce due to reasons that include topographic changes between properties. The visibility of a light bulb from 5 feet above a property line is not always a reliable measure of whether a lighting fixture is suitably positioned to reduce glare. Furthermore, staff believes that the current standard for maximum permitted initial light output on lots developed with single family dwellings may be too high.

An item on the 2015 Priority 1 Zoning Ordinance Amendment Work Program would address outdoor security lighting and other outdoor lighting issues. Specifically, the reintroduction of a maximum illumination standard at the property boundary and a possible reduction of the maximum 6,000 lumens exemption for security lighting on single family dwelling lots are being considered. It is anticipated that the proposed Outdoor Lighting Amendment will be scheduled for public hearings in the spring/summer of 2016.

Light Pollution #3
Continued

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

Recommendation is being addressed.

What, if any, actions should be taken pursuant to EQAC's recommendation?

The proposed Zoning Ordinance discussed above should be processed through the public hearing process with anticipated hearing dates in the spring/summer of 2016.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No, can be accommodated with existing staff and resources.

Do the actions recommended above have any longer-range fiscal implications? If so, please explain

No.

Response to 2015 EQAC Recommendation

Light Pollution #4

(Pages 109 of the Annual Report on the Environment, Summary Report)

EQAC Recommendation:

Security lighting at schools needs to be carefully re-evaluated since it is often excessive, is usually operating from dusk to dawn and constitutes a serious impairment for the quality of life for the adjacent neighborhood. EQAC recommends that the Board of Supervisors request that the School Board address this concern.

LEAD AGENCY: FCPS—Dept. of Facilities and Transportation Services

COORDINATING AGENCY/IES: None

Please identify a lead agency contact person: Jim McLain FCPS Security Coordinator

Has this recommendation already been addressed, or is it in the process of being addressed? If so, please provide details.

Addressed; Exterior Security Lighting is a proven effective and in fact fundamental safety and security program. Lighting deters and prevents damage and loss due to theft, vandalism and break-ins. Lighting also deters gang and other unwanted activity on school grounds after hours. The absolute necessity for adequate lighting at schools equipped with surveillance cameras should also be noted. Security lighting prevents staff, student and visitor injury due to otherwise unseen trip and fall hazards. Victimization associated with crimes occurring in secluded or dark parking lots is reduced as well as car break-ins.

FCPS strictly adheres to Fairfax County Outdoor Lighting Standards contained in Part 9 of Article 14 of the Fairfax County Zoning Ordinance.

If this recommendation has not been (or is not being) addressed, do you concur with the recommendation? Why or why not?

FCPS does not concur with the recommendation. There are rarely any complaints received regarding this matter. When complaints are received specialists in lighting design and construction comprehensively evaluate the concerns and make adjustments to lighting aim and location to the extent possible. FCPS greatly values being good stewards of the school communities.

Light Pollution #4
Continued

What, if any, actions should be taken pursuant to EQAC's recommendation?

FCPS is already working with their contracted energy firm, Cenergistics, on exterior lighting efficiencies that would represent cost savings without compromising safety and security.

No other actions should be taken. To demonstrate the importance of security lighting at schools; 18 years ago FCPS had a program to reduce school visibility and costs by turning off exterior lights at night. There was a dramatic rise in crime, to include crimes of violence, break-ins and trespass, on school property. The significant costs associated with loss and property damage negated any cost savings and taxed security and police resources due to increased responses. FCPS experienced a rise in crimes against and injuries to staff and visitors after hours. The lack of lighting presented FCPS with risks and danger that could be easily mitigated by turning the lights back on.

The program was terminated resulting in an immediate and lasting reduction of the aforementioned incidents.

Do the actions recommended above have any budget implications for FY 2017? If so, please explain.

No

Do the actions recommended above have any longer-range fiscal implications? If so, please explain.

Long term costs savings by improved energy efficiency programs.

