



ANNUAL REPORT ON THE ENVIRONMENT SCORECARD

Progress Report on 2019 Recommendations

ENVIRONMENTAL QUALITY ADVISORY COUNCIL | Published December 2020

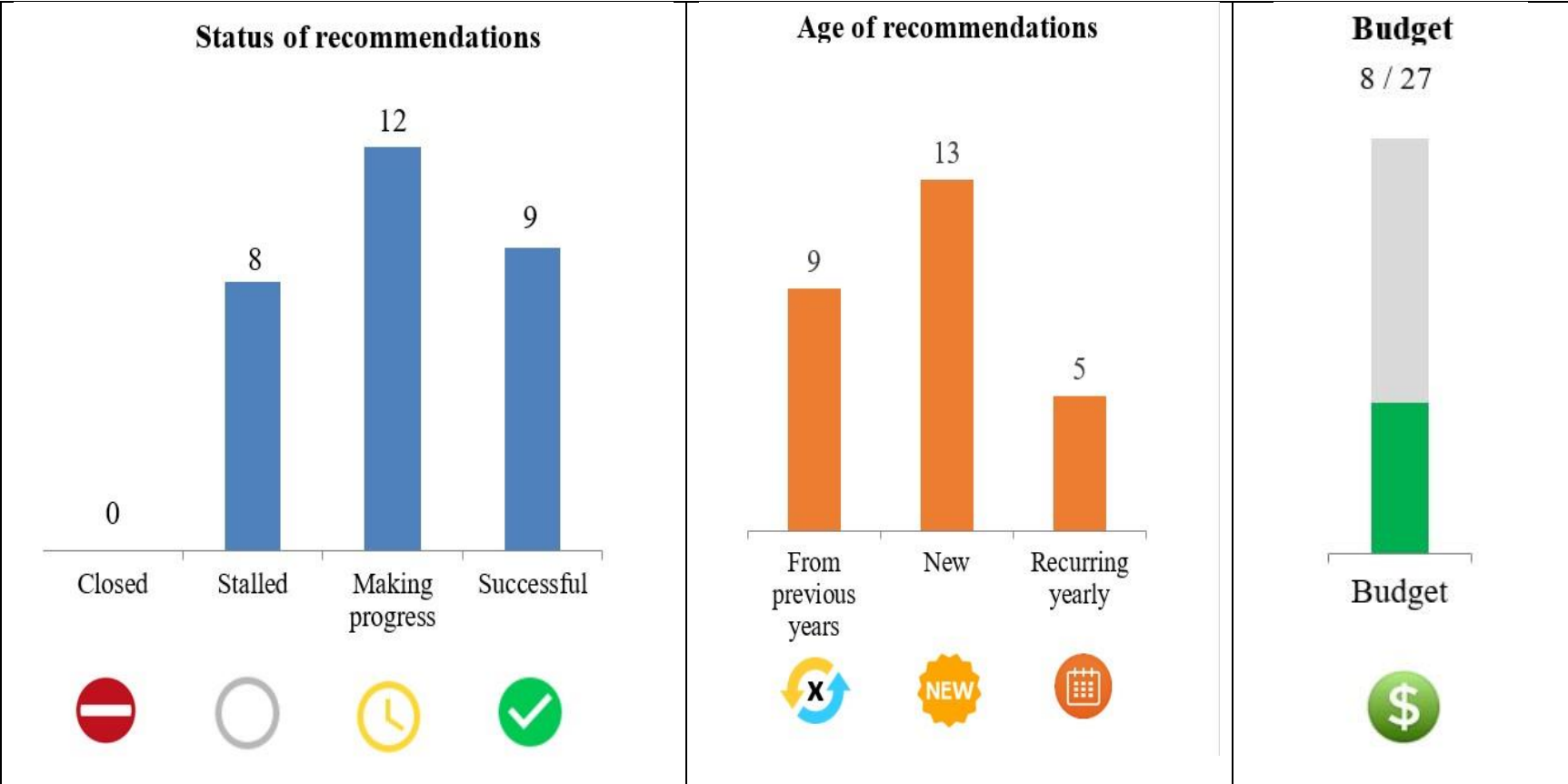


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Overview



Glossary of Terms



Budget: Ratio of issues which would most easily be addressed via a line item in the budget.



Closed: The recommendation will not be implemented.



From Previous Years: Recommendation has been previously included; Each icon indicates the number of total years it has been included.



Making Progress: Substantial progress was made toward implementing this recommendation.



New: New, long term recommendation.



Recurring Yearly: Short term, yearly recurring recommendation.



Stalled: Little or no progress was made toward implementation.



Successful: The recommendation was implemented.

I. Land Use

Land Use: Five Recommendations

1. Update the State of the Plan and Concept for Future Development Map

(1) EQAC recommends that the Board of Supervisors authorize an update to the State of the Plan document. The last State of the Plan covered 2000-2010. Since then the county has seen significant growth and changes in process and technology. The plan transitioned from APR to Fairfax Forward with holistic and in-depth reviews, and now to SSPA. A review of the plan and the effects of the processes is timely.

(2) EQAC recommends that the Board of Supervisors authorize the development of a Concept for Future Transportation, Development, and Green Infrastructure. The 1992 Concept for Future Development map has evolved into the Comprehensive Plan -Special Planning Areas and is used within the Countywide Transit Network Study to design the proposed High Quality Transit Network. These reflect the reality that the 1990 Future has largely been realized and that a new future map that looks out 20 to 50 years is needed.

2. Land Development Applications and Information

EQAC supports the new PLUS system being developed to create a single system of record for land development. We recognize the complexity of developing a system crossing multiple agencies and support the process to make sure all requirements are considered. In particular, we recommend that PLUS be able to track the quantity of development (gross floor area and number of residential units) along with use type (residential and nonresidential) at each stage of development activity from Plan amendment through zoning approval, site plan approval and building permit issuance.

EQAC commends the work being done in Tysons to track development activity at the building level and to provide details in the Tysons Annual Report. We recommend that the other mixed-use centers also be tracked, similar to the Tysons model. At any given point of time there should be accurate information about the existing development as well as the development that can be expected in the next five to 20 years, based on the development pipeline from the PLUS system.

3. Development Pressure

EQAC recommends that the County continue the legacy of strong environmental protections and adopt a policy that all future development provides a net environmental benefit to the County. This includes new development in mixed-use centers with dense growth potential, as well as infill development where fragile lands that are unsuitable for development are under development pressure.

4. Green Buildings

EQAC supports a review of the green building standards. EQAC recommends that the Board of Supervisors encourage standards that incorporate neighborhood certifications/designations, including LEED-ND and Biophilic Cities, the International Green Construction Code, and Net Zero energy standards, as developed by the Department of Energy and the National Renewable Energy Laboratory.

5. Light Pollution

Outdoor Lighting Ordinance EQAC recommends that the Board update the performance standards in the Zoning Ordinance to include a maximum color temperature standard in 2020.

Action Taken By Agency or Department

1. Update the State of the Plan and Concept for Future Development Map

(1) The Department of Planning and Development supports EQAC's recommendation to update the State of the Plan (SOTP) Report. Work on the 2020 SOTP aims to assess changes in growth and development in the county over the last decade (2010 –2019). This project has been delayed due to the other priorities this year but is still planned.

(2) Staff appreciates EQAC support of the Concept for Future Development and its evolution as it continues to serve as a framework for future land use in the county. As Plan policies continue to advance, the results of county planning studies are incorporated into the Concept for Future Development and the corresponding Concept Map. Staff continues to work closely with partner agencies to ensure that the concept vision, coupled with countywide polices, reflect the change in priorities over time and offer relevant guidance into the future.

2. Land Development Applications and Information

The project to design, configure and implement the Planning Land Use System (PLUS) is underway. EQAC commends the County for continuing to prioritize PLUS through this year.

We recently confirmed that the PLUS Team has started building the most complex records, which have many dependencies, cross-agency reviews and integration with other systems. These record types will be the foundation to track and quantify development and development pipeline projections. The more complex record types include Rezoning, Special Exceptions, Variances, New Commercial and Residential Building Permits, Trade Permits, Fire Installation and Operation Permits, Major Site Plans, Studies, Waivers, Bonds & Agreements, etc.

3. Development Pressure

This recommendation is being largely addressed through Comprehensive Plan policies, which address the identification, preservation, protection and enhancement of plant and animal life and the creation of an integrated network of ecologically valuable land and surface waters. The county seeks to balance the protection/ enhancement of these resources while planning for the orderly development and redevelopment of the county. The intent is to conserve or restore appropriate examples of the county's rapidly disappearing natural landscape, to protect and manage its ecological resources and to provide visual relief in the form of natural vegetation between adjacent and sometimes incompatible land uses.

Future amendments to the Comprehensive Plan could consider and define net environmental benefits across all areas of the county and various development scenarios, to include infill, redevelopment and new development. The concept of net environmental benefit could also clearly define the ecosystem services, such as the creation of habitat, heat reduction and erosion and flood control, that a site can protect or regenerate.

4. Green Buildings

Staff has been working to update the Green Building policy and the Board approved Sustainable Development Policy for Capital Projects, Revised September 15, 2020

5. Light Pollution

A Zoning Ordinance amendment for outdoor lighting was authorized by the Board of Supervisors on November 19, 2019 and approved on February 11, 2020. The amendment establishes a maximum correlated color temperature (CCT) of 3,000K for all light sources unless otherwise approved by the Director of LDS. However, sports fields or courts that are subject to a sports illumination plan may have a maximum CCT of up to 5,700K.

Status/EQAC Comments

1. Update the State of the Plan and Concept for Future Development Map

Status: Making Progress



(1) The Comprehensive plan is a living document that projects where and how future development should occur. Every 10-15 years it is important to checkpoint the results of that plan, especially now that the County has undergone significant changes in the process by which the plan is modified.

(2) When the Concept Map was first published it set the stage for 30 years of public and private infrastructure and transportation investments. Such a forward-looking vision is still necessary. EQAC continues to advocate for a vision that includes Land Use and Transportation, but also incorporates One Fairfax and CECAP priorities, green infrastructure, wildlife, parks and ecological systems.

2. Land Development Applications and Information

Status: Making Progress



EQAC continues to support this effort and will continue this recommendation until the system is fully implemented.

3. Development Pressure

Status: Stalled



EQAC respects the balance between development and environmental protection. As pressures for development increase EQAC is concerned that the balance is being skewed. The 2019 report documents examples of projects that should have been given closer scrutiny. Efforts by the development community to streamline the process have been largely successful. EQAC questions whether minimum compliance is sufficient for development. EQAC continues to advocate that net environmental benefit be expanded as a standard for development both in the EQC and holistically across the county.

4. Green Buildings

Status: Successful



EQAC supports the continued strengthening of our building policy to LEED Gold now and NetZero by 2031. The policy demonstrates a commitment to lead on Climate Change for County projects and the Board should be commended.

5. Light Pollution

Status: Successful



II. Transportation

Transportation: Four Recommendations

1. Transportation Technology

EQAC recommends that the county undertake a comprehensive study to evaluate the impacts that all of the expected advances in transportation technology (electric vehicles, autonomous vehicles, etc.) may have on transportation modes and patterns in the County in the medium and long-term, so that this information can inform future planning decisions.

2. Bicycle Master Plan

EQAC recommends that a program be put in place to assess the impacts of past and future implementation of the Bicycle Master Plan, including the establishment of performance measures that can be tracked over time.

The results of such an assessment will provide valuable information on the efficacy of the plan in reducing SOV trips in favor of increased cycling and will allow county staff to identify needed changes to the Master Plan. Activities that should be considered as part of this effort include: begin updating and integrating the Bicycle Master Plan and countywide trails plan; track the rate of Master Plan implementation and inform the public about plan progress toward established metrics; and conduct targeted implementation of a bike counting program to allow quantification of cycling in the county.

3. Transportation Projects on GIS Mapping Applications

EQAC believes that it is important for the public to see proposed capital transportation projects (funded and unfunded) on GIS mapping applications. Such a display could be offered via the new Jade application or a similar online tool. This could help improve transportation efficiency and reduce dependence on Single Occupancy Vehicle (SOV) trips.

4. Alternatives to SOV Travel

EQAC recommends that the County Executive direct FCDOT to evaluate all options, beyond traditional fixed-route bus services, to limit the number of individuals travelling to and from the new Silver Line Metrorail stations in single-occupancy vehicles (SOVs). FCDOT indicated in comments to EQAC that a route optimization study is being completed that will improve the effectiveness of fixed-route bus service “within existing funding constraints.” Given the potential negative impacts that increased SOV travel to the new Metro stations might have on traffic in neighborhoods surrounding the stations, EQAC believes that it is important to consider options that might require additional funding. This includes the use of alternative and emerging options such as the use of smaller circulator buses, on-demand shuttles, shared electric scooter programs, shared e-bike programs, etc.

Action Taken By Agency or Department

1. Transportation Technology

FCDOT staff has not planned or begun a comprehensive study to evaluate the impacts of emerging transportation technology on mode choice and transportation patterns. However, staff has engaged in several activities related to emerging technology including applying transportation technology assumptions to individual transportation studies; an alternative service feasibility study that is expected to be completed in 2020; connected and autonomous vehicle technology demonstration project (Dunn Loring-Merrifield Metrorail Station to Mosaic District); and involvement with Smart Cities community.

2. Bicycle Master Plan

FCDOT has secured funding and is in the process of developing a consultant scope of work for the Bicycle Master Plan and Countywide Trails Plan update, to be called the Active Fairfax Transportation Plan. This effort is anticipated to be completed by Fall 2020. In addition, FCDOT continues to implement the Bicycle Master Plan and Trails Plan infrastructure. The striping and construction of this infrastructure (as well as bicycle parking) are tracked by county staff using GIS, an effort started in 2018. The GIS data is currently available to Fairfax County staff, but not the public. It has been used to track the rate of bicycle facility creation and can be used to track and describe the state of progress toward implementation of the Plan, though this has not been done yet. FCDOT also is actively working to collect data on cycling behavior in the county including manual counts of pedestrians and cyclists at 25 locations, automated counts of active transportation users in limited locations, and traffic study bicycle counts. FCDOT notes, however, that there are serious limitations to this data and as a result it is not appropriate for use as a performance metric. Alternative methods for gathering higher quality data are being explored.

3. Transportation Projects on GIS Mapping Applications

FCDOT reports that active/funded capital projects are available for viewing within JADE (can be enabled from under the 'Infrastructure & Environment' > 'Transportation Planning & Management' group). FCDOT also publishes a [biannual Transportation Status Report](#) and includes an interactive map of capital projects.

FCDOT has also created an interactive map of the [Transportation Priorities Plan](#) (TPP), which shows unfunded capital projects in addition to the ones selected for funding in the 2017 TPP cycle. There is currently no estimate to update it for 2020.

4. Alternatives to SOV Travel

FCDOT continues to implement the Transit Development Plan (TDP) through service changes and transit planning studies. In January 2019, the Transit Services Division (TSD) of FCDOT initiated an Alternative Service Feasibility Study which it intends to complete in 2020. Among other objectives, the study will identify innovative service options using emerging technologies, identify potential modes that could be implemented (such as autonomous vehicles) and propose a program to pilot or test these new services and service partnerships. FCDOT also will be submitting two Commuter Choice grant applications to the Northern Virginia Transportation Commission (NVTC) about point-to-point service. FCDOT staff have undertaken a route optimization study of the Reston-Herndon area in anticipation of the planned opening of the Metrorail Silver Line Phase II that will be used in the next five-year update of the TDP.

Status/EQAC Comments

1. Transportation Technology

Status: Stalled



EQAC appreciates that the county is taking these several actions, but believes they are somewhat ad hoc and would like to see a broader comprehensive study of emerging technologies. Such a study should be looking at a wide array of emerging technologies and planning for actions relevant to both county and non-county operations over a multi-year period. EQAC believes that it is important to consider in a comprehensive manner the joint impacts all of the expected advances in transportation technology may have on transportation modes and patterns in the County in the medium- and long-term, so that this information can inform future planning decisions. EQAC is particularly concerned about the apparent lack of planning for a likely significant increase in electric vehicle use in the coming decade (while there is uncertainty about the rate of adoption of electric vehicles, there is broad agreement that it will increase significantly in the coming 10-20 years, especially in affluent areas such as Fairfax County) and especially in non-county facilities such as multifamily residential properties.

2. Bicycle Master Plan

Status: Making Progress



EQAC appreciates that the county has secured funding and is pursuing development of the Active Fairfax Transportation Plan and that it is continuing to implement the Bicycle Master Plan and Trails Plan. As has been widely observed during the COVID-19 pandemic, there has been a substantial increase in the use of bicycling as a mode of transportation over the past half-year, which presents a unique opportunity to convert this short-term increase into a permanent change. EQAC would like to see additional progress toward the establishment and public reporting about relevant performance measures for these plans that can be tracked over time and supports FCDOT's efforts to secure higher quality data through alternative approaches.

3. Transportation Projects on GIS Mapping Applications

Status: Successful



EQAC appreciates that these tools are available and encourages the county to maintain updated versions for use by members of the public.

4. Alternatives to SOV Travel

Status: Making Progress



EQAC appreciates that the county has initiated an Alternative Service Feasibility Study and a route optimization study of the Reston-Herndon area, as well as apply for NVTC Commuter Choice grants. EQAC encourages the county to consider the implications of the COVID-19 pandemic and its effects on commuting patterns (in particular, potential reductions in the use of mass transit in favor of increased travel by private vehicle) as it pursues these studies.

III. Water

Water: Two Recommendations

1. Stormwater Funding Increase

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 that 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 funding for the stormwater Program be increased either by an increase in the Stormwater Service District rate in FY 2021 by at least one-quarter penny, from a rate of 3.25 cents per \$100 assessed real estate value to 3.50 cents per \$100, or that the increase occur through a change in the tax rate. EQAC understands that this increase will 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.

2. Policies and Ordinances

The county has evolved a series of policies and ordinances to protect stream valley lands and other environmental assets (i.e., the Floodplain Regulations of the Zoning Ordinance, the Environmental Quality Corridor policy of the Comprehensive Plan, and the Chesapeake Bay Preservation Ordinance). EQAC recommends that those policies and ordinances should remain unchanged or enhanced when possible.

[Action Taken By Agency or Department](#)

1. Stormwater Funding Increase

For FY 2021, no increase in the Stormwater Service District rate is being proposed; however, actual revenue collected in recent years has been higher than projected and it is anticipated that this amount will continue to increase as property values rise throughout the county. Therefore, while the FY 2021 rate will not increase, revenues for this fund are projected to increase. In light of continuing program demands (e.g., state and federal permit requirements as noted below), it is anticipated that increases in the service district rate will be sought in the future.

EQAC recognizes that Stormwater continues to have funding needs that address the issues of 1) dredging of ponds and lakes, including the enormous project of dredging Lake Accotink 2) increase in maintenance and inspection of stormwater facilities throughout the county (the county adds on average 100 county facilities and 300 private facilities annually) 3) the on-going needs of replacing old infrastructure such as aging pipes and 4) the challenges of increase flooding management demand.

2. Policies and Ordinances

No negative changes were made to existing policies that protect local waters and water quality.

Status/EQAC Comments

1. Stormwater Funding Increase

Status: Successful



2. Policies and Ordinances

Status: Successful



Additional 2020 comment regarding wastewater

In apparent deference to the COVID impacts on the county budget last year the County did not raise its wastewater rates. Wastewater is managed as an Enterprise fund which means the fees charged cover the costs of managing and maintaining the system. This system has aging infrastructure ---old pipes and equipment which need to be replaced in a timely fashion. It is therefore important the County continue to reinvest in this system in a timely fashion and adopt its proposed rate increase FY 2022 to achieve that.

IV. Waste Management

Waste Management: Five Recommendations

1. Environmentally Preferable Purchasing Policies (EPPP)

County Procedural Memorandum PM 12-21 EPPP should be updated and implemented by the Board to assure that it will encourage all county contractors, as well as other trash disposal and recyclables processing facilities, to manage materials according to their best environmental use in an economical way. Consideration should be given to making this document public and included it in all aspects of procurement. This will require changes to future procurement and contracts.

2. Disposable Bag & Bottle Bills

EQAC continues to recommend that the Board support changes to Virginia law to provide for a local option Disposable Bag Litter Abatement program and a Statewide container redemption fee (bottle bill) to reduce litter and increase recycling.

3. Tracking of Waste-Related Complaints

DCC should track all complaints relating to waste and dumping. Some complaints will need to be referred to other agencies, but DCC should track all complaints and their status as resolved or not. A central point of contact and responsibility is key to trust.

4. Recycling Outreach

An aggressive outreach program should be implemented by the county and private collectors regarding what should and should not be placed in curbside recycling bins, with a special emphasis on the use of purple bins for the collection of glass. Statistics should be collected on the success of reducing contamination and increasing recycling as a result of the outreach.

5. Recycling Study

Use the on-going SWMP Environmental Impact Study to assess and obtain recommendations for the following:

- The net environmental benefit of the current single stream, curbside recycling program
- Options to increase or produce a net environmental benefit from recycling
- The adoption of a disposal bag litter abatement program and a bottle bill to increase recycling and reduce litter and plastic environmental impacts

Action Taken By Agency or Department

1. Environmentally Preferable Purchasing Policies (EPPP)

DPMM responded to this request by recommending it be forwarded to another County Department. This would seem odd as DPMM also indicates that it has added a sustainable procurement team. While DPMM indicates studies have been conducted, it is unclear that actual progress is being made. DPMM also indicates it does not have the ability to call for other departments to procure in an environmentally positive way. The EQAC recommendation is to publicize the County preference for environmentally positive procurement. DPMM appears to conclude it cannot do this.

2. Disposable Bag & Bottle Bills

The 2020 General Assembly provides the option to Fairfax County to adopt a fee on disposable bags. It is now up to the county to decide if and how it will do this. No bottle bills moved out of the General Assembly in 2020.

3. Tracking of Waste-Related Complaints

DCC is tracking waste-related complaints.

4. Recycling Outreach

This recommendation is making progress including:

- Social Media campaign to increase contamination awareness
- 2019 Go Recycle Campaign
- Glass Drop off containers
- Community events
- Plan to ban plastic bags

5. Recycling Study

The county recycling studies are on-going and have made the following progress:

- Established that curbside recycling has a substantial environmental benefit relative to single stream collection.
- Options for more environmental benefit including:
 1. Grocery Bag drop off locations
 2. Food waste recycling
 3. Construction debris processing at I-66 transfer station to separate recyclable material

Status/EQAC Comments

1. Environmentally Preferable Purchasing Policies (EPPP)

Status: Stalled



2. Disposable Bag & Bottle Bills

Status: Making Progress



3. Tracking of Waste-Related Complaints

Status: Successful



4. Recycling Outreach

Status: Making Progress



5. Recycling Study

Status: Making Progress



V. Parks and Ecological Resources

Parks and Ecological Resources: Four Recommendations

1. Increase Capacity for Environmental Review of Development Plans

EQAC recommends that the Board of Supervisors direct the County Executive to increase the capability of Land Development Services (LDS) to adequately evaluate environmental impacts during the review of development plans by hiring additional staff or contracting to fill this need.

Requests for assistance from the Forest Conservation Branch (FCB) of Urban Forestry, via LDS, increased more than 42 percent in FY 2018 following a nearly 19 percent increase in FY 2017, with that number expected to increase now that the FCB, at the request of LDS, has expanded its review of all infill plans in the County (where it previously only reviewed Dranesville, Mount Vernon, and Providence Districts). With staff and time constraints (i.e. three weeks to review plans) being static, quality is unfortunately at risk of being negatively impacted. Additional capacity is required to ensure that environmental protections of the county's ecological resources are sufficiently applied.

2. Develop a Countywide Natural Resources Map and Plan

EQAC recommends that the Board of Supervisors direct the County Executive to develop a comprehensive natural resources digital map and plan for the county. As the county continues to grow at a rapid pace, the combination of this map and plan would be an instrumental resource to inform decision making about our ecological resources. The Comprehensive Plan, for example, prioritizes the identification and protection of EQCs. This natural resources map and plan would complement the details of the county's Comprehensive Plan and help the board to more effectively achieve its Environmental Vision. With private land accounting for over 80% of the county, it is important that this map and plan include the ecological resources on all of the land within the county, including both park and non-park land.

3. Support the Park Bond

EQAC recommends that the Board of Supervisors support the \$100M park bond during their Spring 2021 budget review. This bond would fund projects for natural resource stewardship, such as ecological restoration (Helping Our Land Heal projects), bamboo removal, funding for natural resource inventory and management planning, and funding for the establishment of additional state nature preserves, if eligible. This bond would continue to support the Board's Environmental Vision on points such as aiming to *"Create more community parks for active and passive recreation"* and providing opportunities for environmental stewardship.

4. Staff FCPA's Final Natural Resource Management Plan Program Area

EQAC recommends that the Board of Supervisors increase the full-time staff capacity (e.g. one merit Ecologist III) for the Fairfax County Park Authority in direct support of its Citizen Science Program (to staff the fourth and final program area of the Natural Resource Management Plan, Fostering Stewardship and Expanding Natural Capital). Doing so would also support the Board's Environmental Vision to *"Provide adequate resources to maintain and manage healthy native forests and ecosystems"* and *"provide opportunities for citizen science."*

FCPA can use bonds to fund initial ecological restorations. However, ongoing *maintenance* of the restorations is not permitted using bond dollars. FCPA would potentially develop the capacity for volunteers to do this and the role of this additional staff member is critical to doing so, helping to save money and preserving the county's ecological investments, particularly as this would supplement a potential 2020 park bond. This new position would be able to provide, over the long-term, recruitment and management of well-trained volunteer citizen scientists to assist in maintaining the county's actively managed parkland (restored through bond funding, for example).

Other benefits include developing and maintaining strategic partnerships to manage natural areas, furthering natural resource-based education within the agency, creating programs that inform county decision-making, and meeting county residents' desire for additional citizen science and stewardship opportunities.

Action Taken By Agency or Department

1. Increase Capacity for Environmental Review of Development Plans

The EQAC staff response from LDS indicated that the recommendation is being addressed. While the FCB includes 3.0 positions dedicated to land development and a portion of seven additional positions that are billed based on levels of effort, as of September 2020, resource issues remain. If UFMD isn't able to hire when they have a vacancy, or if foresters retire or otherwise depart, resources will be further challenged.

In future budget years, LDS has proposed some additional plan review fees to cover the increasing time and effort taken by UFMD to keep up with demand, which, if approved by the Board of Supervisors, will give greater flexibility to expand resources as necessary.

2. Develop a Countywide Natural Resources Map and Plan

Response to this recommendation was done by FCPA and indicates that it's being partially addressed through both Comprehensive Plan policies and through natural resources planning efforts within the county.

It is exciting to hear that DPD is in the process of digitizing Environmental Quality Corridors (EQCs), with the objective of creating a publicly accessible map of all EQCs (since first designated in 1975) and the county's Jade application holds much of this information as well.

Staff underscores the importance of clearly identifying specific goals and benefits for such a map and plan and that contributing datasets are assessed for their compatibility and relevancy to those goals.

The synthesis of available natural resources information could be a valuable tool to inform landowners and decision makers about natural resources on a site-by-site basis. However, the development of a countywide map and plan would require a great deal of staff time and resources.

3. Support the Park Bond

The Park Board reviewed and approved categorical expenditures of the bond program. The Park Bond was approved by the Board of Supervisors and went to the voters in November 2020.

Beyond the funding proposed in this response, additional funding may be required for the maintenance and upkeep of any additional facilities, restoration efforts, etc. undertaken as part of this effort.

4. Staff FCPA's Final Natural Resource Management Plan Program Area

FCPA continues to work on options to secure an Ecologist III to support the Citizen Science Program and the Board's Environmental Vision and hopes to successfully create and hire for this position in FY 2021.

If this recommendation was accepted by the Board of Supervisors, one additional merit position and \$93,000 per year would be required to maintain the program.

Status/EQAC Comments

1. Increase Capacity for Environmental Review of Development Plans

Status: Stalled



While LDS indicated progress is being made, after speaking with UFMD, EQAC has decided to mark this as stalled. Due to COVID, many things are up in the air. There has been an increase in residential permits and a decrease in commercial permits, though commercial towers are still moving forward.

EQAC appreciates that an MOU between LDS and UFMD is updated each year to ensure that the workload and demands of plan review are in sync and we look forward to staffing keeping up with demand.

2. Develop a Countywide Natural Resources Map and Plan

Status: Stalled



EQAC appreciates the thoughtful comments from staff on this new idea. Of particular challenge is the stock of natural resources on private land. As staff indicated, while broad summaries of land use data exist for private property, any efforts requiring property access permission such as onsite monitoring, ground truthing, etc. would be challenging.

That said, as the county continues to make land use decisions, knowing what the county has to protect is a key part of that decision. EQAC looks forward to exploring options to achieve the goal of transparency for use in land use decision making.

3. Support the Park Bond

Status: Successful



The park bond was on the ballot this November and passed with over 70% of voters supporting the bond. EQAC wishes to highlight staff’s comment which highlights the continued funding needed to in the future due additional level of service and growth associated with this bond investment.

4. Staff FCPA’s Final Natural Resource Management Plan Program Area

Status: Stalled



As mentioned in the recommendation itself, board approval for this position would directly support the Environmental Vision by ensuring the fourth and final program area of the Natural Resource Management Plan, Fostering Stewardship and Expanding Natural Capital, is appropriately staffed.

VI. Climate and Energy

Climate and Energy: Three Recommendations

1. Community-Wide Energy and Climate Action Plan

EQAC recommends that Fairfax County continue its development of a Community-Wide Energy and Climate Action Plan to reduce GHG emissions in the private sector, which is the source of 97 percent of the county’s GHG emissions. Development of this plan would be in accordance with the goals established by the 2017 Environmental Vision and regional (MWCOG) climate goals.

2. Climate Adaptation/Resilience Plan

EQAC recommends that the Board of Supervisors direct the development and implementation of a climate adaptation/resilience plan, which would help to minimize the impacts of climate change. The objective of this adaptation/resilience plan would be to reduce the adverse impacts of climate change (e.g., flooding, power outages) on local residents, businesses, and critical infrastructure and to help reduce the long-term costs of extreme weather event and other climate change impacts.

3. Emissions Inventory

In order to help the public to evaluate the benefits of specific actions to reduce greenhouse gas emissions, EQAC recommends that the Board ask county staff to provide an emissions inventory for the entire county, county operations, and FCPS so that detailed GHG emissions reports can be prepared by year. Moreover, EQAC asks that the Board request that the MWCOG climate inventory provide information by jurisdiction along with steps that are being taken to reduce GHG emissions.

[Action Taken By Agency or Department](#)

1. Community-Wide Energy and Climate Action Plan

This recommendation is in the process of being addressed by the Office of Environmental and Energy Coordination (OEEC), which agrees with this EQAC recommendation.

2. Climate Adaptation/Resilience Plan

Staff agrees but wants to take steps.

3. Emissions Inventory

Staff continues to make great progress on County operations (including schools) but asserts that non-county operations are beyond the scope of the county and are included in COG's assessment of emissions.

Status/EQAC Comments

1. Community-Wide Energy and Climate Action Plan

Status: Making Progress



Great progress thus far.

2. Climate Adaptation/Resilience Plan

Status: Making Progress



3. Emissions Inventory

Status: Making Progress



Emissions from non-county operations represent about 95% of county emissions so it is important to get estimates of these emissions and the effectiveness of measures to reduce emissions.

VII. Air Quality

Air Quality: No Recommendations

Action Taken By Agency or Department

Not applicable

Status/EQAC Comments

Not applicable

VIII. Wildlife Management

Wildlife Management: One Recommendation

1. Hiring of Full-Time Wildlife Assistant

EQAC recommends that the Board of Supervisors direct the County Executive to assess the need and feasibility of funding or otherwise increasing staff capacity in the Fairfax County Police Department or other county agency for the hiring of a full-time wildlife assistant. At its current staffing and funding levels, the Fairfax County Deer Management Program is sustaining its impact year to year but is unable to grow in order to better address the needs of the county. The Canada Geese Management Program is operating at a low capacity due to limited staffing for outreach and the training of volunteers. Over the past several years, turnover of the part-time wildlife assistant position(s) have been extremely high, resulting in the training of new hires, which takes a significant amount of time away from growing the management programs. With a full-time position, additional data analysis (e.g. of VDOT deer-collision data) could be completed, additional education and outreach of the county wildlife programs could be implemented, and program services could be expanded to include inventory and population monitoring of additional wildlife taxa (i.e., bats, birds, reptiles, amphibians, coyotes).

Action Taken By Agency or Department

1. Hiring of Full-Time Wildlife Assistant

Staffing of a full-time wildlife assistant position for the Wildlife Management Specialist Office was initially requested internally for FY 2019. The Animal Services Division recommended that one of the part-time Naturalist positions be converted to a fulltime wildlife assistant position allowing for continuity and support toward the workload in the various supported programs and initiatives. In August 2020, two Assistant Wildlife Biologist positions within the Police Department were approved for conversion to merit positions. FCPD had requested these positions be converted to merit status at the full-time 2,080-hour level (40 hours/week) but after further discussion with DMB, they were converted to merit positions but kept at the current 1,560-hour level (30 hours/week). The Wildlife Management Specialist has stressed the need for the conversion of both Assistant Wildlife Biologist positions from 1,560-hour merit positions to 2,080-hour merit positions to assist with the increasing workload associated with the Deer Management Program, Geese Management Program, and other wildlife taxa.

Status/EQAC Comments

1. Hiring of Full-Time Wildlife Assistant

Status: Stalled



Increasing staff capacity within the FCPD or creating a wildlife assistant position in another county agency to work jointly with the FCPD Wildlife Management Specialist would serve to meet growing customer needs for the wildlife program if resources were available. EQAC recommends that the BOS, through its Environmental Committee, evaluate the feasibility of increasing funding for the FCPD to support a fulltime wildlife assistant position or creating a comparable position within another county natural resource department to work jointly with the FCPD Wildlife Management Office.

IX. Technology to Understand the County

Technology to Understand the County: Three Recommendations

1. Expanding GIS Data and Applications

EQAC recommends that the county pursue regular acquisition of both LIDAR and multi-spectral data based on their value to environmental stewardship.

EQAC also recommends the continued capture of orthographic and oblique imagery, as well as the continued funding for planimetric updates. Additionally, environmental agencies should continue to increase the utilization of field data collection through the use of mobile GIS tools.

2. Access to Data

EQAC recommends that the county continue its efforts to ensure convenient public access to GIS and other environmental data.

3. Supporting Infrastructure

In order to support the growing needs of agencies and the public for GIS capabilities, the county should ensure that a robust GIS architecture is put in place to support current business needs, public outreach with GIS, and future growth. As more geo-enabled systems are brought on, county business processes and environmental protection efforts will be increasingly reliant on a highly available GIS system.

Action Taken By Agency or Department

1. Expanding GIS Data and Applications

The county's most recent LiDAR data acquisition was flown in December 2018. This Quality Level 1 (8 points/m²) dataset [was published on a public facing website](#). The LiDAR dataset has already been incorporated into county operations. DIT's GIS Division and DPWES worked closely to produce derivatives such as surface models and terrain models. Terrain models have been hydro-conditioned to perform watershed delineation calculations and tools provided for this purpose.

DPWES-SWP and LDS currently use the LiDAR derivatives for watershed delineation on a daily basis. The surfaces are used for topographic examination and contours derived from the LiDAR are used and as survey quality material for mapping. The LiDAR is also proving useful in DPD where the data supports the Reston Planning Application developed by the GIS team at DPD.

DPWES-SWP has used the 2018 LiDAR as a way to measure erosion and stream bank subsidence across time. Leveraging the 2012 and 2014 LiDAR acquisition for comparison with 2018, they have been able to quantify subsidence at certain sites and for small watersheds entirely.

(See Recommendation 3 for information on field data collection devices.)

EQAC also recommends the continued capture of orthographic and oblique imagery, as well as the continued funding for planimetric updates. Additionally, environmental agencies should continue to increase the utilization of field data collection through the use of mobile GIS tools

2. Access to Data

Due the pandemic, a planned far-reaching and impactful upcoming database migration, and the entire GIS system re-architecture, no major plans are in place for JADE development in FY 21. During this time there will be some small improvements and staff will be maintaining a change request log, implementing what time will allow. The county will be adding additional digital historical imagery and looking to implement workflows that assist residents in navigating county resources in JADE to get answers that support their land development application interactions or inquiries to staff. The county is eager to hear suggestions or feedback from the committee, the public and staff.

3. Supporting Infrastructure

Since the county investment in the Enterprise License Agreement (ELA) with our primary vendor ESRI, licensed resources have become less of a concern, though in the future additional funds will be needed to ensure that Fairfax County will be able to pilot emerging new software that is not part of the ELA and acquire additional named user licenses as required. A request for some small funding of this nature will be included in the FY 22 Geospatial Initiatives submission.

Bringing the ELA investment to full fruition and benefit will depend on the continued investment in hardware to modernize the architecture with the goal to provide a business class system to support the Fairfax County IT eco-system of business systems. Initial funding was seeded in FY 21 and an additional amount of \$150,000 will be needed each year for FY 22 and FY 23 in order to reach the target architecture and full system maturity.

Lastly, additional investment is needed by agencies in devices that can be used remotely while connected to the FFX network to access GIS-centric applications in the future. In some cases, the only thing stopping wide-spread adoption of GIS based mobile work flows is this issue.

Status/EQAC Comments

1. Expanding GIS Data and Applications

Status: Successful



Understanding elevation is critical to many applications, so EQAC commends the County for making recent, high-quality LiDAR data available to County agencies and to the public.

2. Access to Data

Status: Successful



EQAC congratulates the County on the launch of JADE. This application has been greeted with appreciation, especially by those in the business community and residents who are engaged in land development or renovation. Reports from the Customer Information Center (CIC) are that applicants are pleased that a system like that which staff was using in the CIC to help them was now available on the web.

3. Supporting Infrastructure

Status: Successful



EQAC commends the County for bringing GIS software under an Enterprise Licensing Agreement and believes this provides a solid technical and cost-effective basis for moving into the future.