

# 1. LAND USE

## **Board of Supervisors Environmental Vision:**

*“The county will continue to refine and implement land use policies and regulations that accommodate anticipated growth and change in an economically, socially, and environmentally sustainable and equitable manner while revitalizing older commercial centers, protecting existing stable neighborhoods, supporting sustainability and supporting a high quality of life. The development priority will be mixed use, pedestrian and bicycle-friendly transit-oriented development in activity centers. Policies and regulations will result, throughout the county, in the development and enhancement of vibrant and vital pedestrian and bicycle-friendly places where people want to live, work, shop, play, learn and thrive in a healthy environment, ensuring the protection, enhancement and restoration of natural resources, and the provision, in building and site designs, for the efficient use of resources.”<sup>1</sup>*

## **INTRODUCTION**

Fairfax County covers approximately 395 square miles with over 1.172 million residents and 418,800 households<sup>2</sup>. As the population has grown and the county has transitioned toward a more urban environment, the Fairfax County Comprehensive Plan and the decision-making processes for how land is used have also evolved. When the first environmental vision was adopted in 2004, the county was fast approaching “build-out,” whereby little vacant or undeveloped land was available. To continue growing after build-out, the focus of land use across the county shifted from new development to revitalization and redevelopment. The county is now well into that transformation and significant development continues to provide new jobs and housing. These changes allow the county to continue to grow and prosper within a finite environmental footprint and have the potential to improve negative environmental impacts from older projects.

### Historical Perspective

Fairfax has gone thru several generations of planning, from the original farmland into the complex county in which we live. The 2019 EQAC Annual Report on the Environment (ARE) documents the major steps starting with the 1970’s decision to “thwart the negative effects of rapid urbanization by spending eighteen months and \$1.5 million on a planning program to control the rate and direction of future growth.” The legacy continued into the 1980s when the Board took action to protect the Occoquan watershed. More than 38,500 acres of property were down-zoned from one-acre to five-acre development, “citing a study that predicted the Occoquan reservoir could turn into a smelly swamp if some action is not taken.” Through the 1990s and 2000s, the focus was the Chesapeake Bay Preservation Act and Ordinance that

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<sup>1</sup> 2017 Fairfax County Environmental Vision, Section 2 A, pg. 6,

[www.fairfaxcounty.gov/environment/sites/environment/files/assets/documents/pdf/environmental-vision-2017.pdf](http://www.fairfaxcounty.gov/environment/sites/environment/files/assets/documents/pdf/environmental-vision-2017.pdf)

<sup>2</sup> Demographic Reports 20222, County of Fairfax, Virginia

codified resource protection areas (RPAs) and defined them using perennial streams as the ecological basis for protecting land from development.

With build-out, it has become more challenging to protect large parts of the county's ecosystem. The challenge necessary for planning is most evident with the Tysons transformation that reimagined a primarily single use shopping and work district into a 24x7 livable community. The Tysons plan is supporting future live and work growth, as well as better environmental performance for streams and storms, along with equities such as access to natural spaces for parks and recreation. The key to creating a vibrant, desirable, and healthy future community is applying a holistic lens that equally values business, social, cultural, and environmental priorities.

### **CURRENT CONCERNS**

The most pressing land use challenges in 2023 are global climate change and dealing with multiple divergent priorities on land including equity, resilience, and tax revenue diversity. The county signed the Carbon Neutral Counties Declaration to become carbon neutral in its energy use for government operations by 2040<sup>3</sup> and accepted the Community-wide Energy and Climate Action Plan (CECAP) to reduce greenhouse gas emissions by half by 2030 and achieve carbon-neutrality by 2050<sup>4</sup>. Resilient Fairfax was adopted in 2022. The county is also focusing on equity through One Fairfax and recommendations from the Chairman's Taskforce on Equity & Opportunity: Strategic Plan & Economic Recovery<sup>5</sup>. These topics were not central to prior generational considerations, yet are critical to today's holistic considerations for using land.

The County is also making decisions to diversify tax revenue of land. One example is allowing development in the Dulles Airport Noise Impact Overlay District. This district allows development that were deemed inappropriate in the past due to concerns with the loud airplane landing<sup>6</sup> noise. Another example is encouraging data centers to be built which consume large amounts of space and energy and generate significant revenue without traditional employment increases. These energy intensive industrial uses were not a consideration of prior comprehensive plans.

EQAC is also following One Fairfax and supports recommendations from the Strategic Plan & Economic Recovery Framework Alignment Matrix<sup>7</sup>. In particular

Recommendation 16: Develop, pilot, and institute Fairfax County equity-based decision-making tools for planning, projects, decision making and resource allocation.

Strategic element EEG 12: Implement a workplace culture change effort to actively promote equity and inclusion, collaboration, excellence, innovation, customer service, transparency, accountability, and trustworthiness.

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<sup>3</sup> <https://www.fairfaxcounty.gov/news/fairfax-county-commits-carbon-neutral-energy-use-2040>

<sup>4</sup> <https://www.fairfaxcounty.gov/environment-energy-coordination/climate-planning-action>

<sup>5</sup> <https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/meeting-materials/2021/sept21-budget-chairman-task-force-recommendations-and-actions.pdf>

<sup>6</sup> <https://www.fairfaxcounty.gov/planning-development/plan-amendments/airport-noise-policy>

<sup>7</sup> <https://www.fairfaxcounty.gov/topics/sites/topics/files/assets/documents/pdf/july%2029.%2021%20memo%20to%20bos.pdf>

EQAC is concerned that the tools used to make land use decisions, namely the Comprehensive Plan, especially the Policy Plans do not fully incorporate these new concerns. We are encouraged that the County adopted Plan Amendment 2022-CW-2CP to update the Countywide Policy Plan. These policies encode the values used for making decisions across divergent priorities. The Policy Plan Chapters need a comprehensive review incorporating new priorities along with a rubric that appropriately expresses Fairfax land use values.

#### Holistic Development Process.

EQAC has been a steady advocate for holistic planning processes that bring together all county and private concerns together as changes to the Comprehensive Plan and new developments are considered. This approach is more effective than opportunistic plans based on single parcels that were effective before the county was fully built out. The current Site-Specific Plan Amendment (SSPA) Process combines holistic planning with opportunistic development proposals. EQAC recommends a 10-year review of the State of the Plan to assess the prior and current processes to make sure the planning process is delivering the vision for development across the county. This report is currently underway and will be the first step in reviewing how the Comprehensive Plan and Policy plans have been meeting their intended goals. The report has been delayed until 2024 to include analysis of development thru 2021.

The holistic approach that evolved as the county approached build-out must now consider additional dimensions for conserving energy and align with an equitable and sustainable future. One of the first Comprehensive Plan updates to face this additional complexity is the Reston Comprehensive Plan update<sup>8</sup> which should be approved in 2023. The Reston task force had to consider new business and lifestyle models necessitated by Covid 19 along with climate change and rapid technological changes. Proposed sections highlight environmental stewardship, equity, affordable housing, health, heritage, and art.

#### Development Pressures

The 2019 EQAC ARE included a discussion of development pressures that were having a negative effect on the environment. EQAC supports development as part of a holistic process that balances growth with environmental protection and other elements of a healthy community. EQAC specifically called out the need for a development policy that calls for a **net-environmental benefit** across all new projects. Currently, net-benefit is defined for environmental corridors and the RPA, but the concept can be generalized to apply to all new development. This is quite appropriate for redevelopment where prior development had minimal protections and redevelopment can fix prior issues.

The 2019 EQAC ARE also listed several cases where negative environmental effects occurred on fragile land that was approved for development. This is caused by land values increasing past the point where unsuitable land that is slated for development is engineered so that it meets the bare minimum of the Comprehensive Plan and Zoning regulations. However, this ignores the ecological significance of these fragile lands. When looked at holistically, there is no justification for allowing inappropriate development. However, staff has told EQAC the criteria for such cases is minimum compliance.

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<sup>8</sup> <https://www.reston.org/reston-comprehensive-plan>

These development pressures apply to all open space, not just fragile ecological lands. In 2021, a complicated case arose at Justice High School in Mason District. Justice High School is in desperate need of an expansion, and the county approved bond funding for the project. The proposal builds a new structure on an existing school parking lot. However, the school needs to replace the lost parking spaces. The neighboring Justice Park was proposed to transfer several acres from the Fairfax County Park Authority (FCPA) to Fairfax County Public Schools (FCPS) replacing a public field with a parking lot. This proposal was made with token public outreach and after much conflict and public opposition replaced with a parking waiver to be reviewed in 5 years. The plan ignored the value of urban open space serving the community in the zip code of highest socio-economic need<sup>9</sup>. It also highlighted the lack of investment in community parks that are frequently overridden by invasive plants and do not function effectively. Such environmental and equity issues will become more common as open space becomes scarcer and land values continue to increase.

Another example of development pressures and the inability to manage lands inappropriate for development occurred in the Accotink stream valley. Seven undeveloped properties that border the RPA and Cross County Trail were assumed by the county for back taxes. These properties are clearly unsuitable for development but could not be protected and had to be auctioned to the highest bidder. The Northern Virginia Conservation Trust tried to acquire them for transfer to the FCPA but bidding by developers was too high.

### **FIGURE 1. Accotink Creek properties auctioned in 2022**

From the perspective of a net-environmental benefit, these good, forested lands have the highest potential environmental benefit. The county needs the tools and resources to make decisions that protect these fragile land as well as those that provide equitable benefit to all county residents and meet the future commitments made to address global climate change.

### Climate Change, Green Buildings, & Heat Islands

The county has made important commitments to address climate change and resiliency, many of which depend on changing the way land is developed, redeveloped, and used. In 2020, the county updated the Green Building Policy setting a path for county building to be net-zero energy by 2031 and an aggressive plan to reach that goal.<sup>10</sup> The county is on track to meet the public sector commitment of the Carbon Neutral Declaration, as shown in Figure 2, with future construction being delivered meeting net zero standards. Net Zero means the total energy used by the building is equal to the amount of renewable energy generated on site.

### **FIGURE 2. County Sustainable Development policy delivering Net Zero for all future building designs and some currently under construction.**

The County commitment to net zero construction demonstrates the feasibility of high building standards across the public and private sector. The private sector goal is much broader and more

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<sup>9</sup> Zip code 22041 surrounds Justice Park and ranks #1 in socioeconomic need in Fairfax County:

<http://www.livehealthyfairfax.org/index.php?module=indicators&controller=index&action=socioneeds>

<sup>10</sup> <https://www.fairfaxcounty.gov/environment-energy-coordination/green-building>

impactful. The county cannot delay on establishing specific policies and guidance that weave climate priorities and ecological protection into private sector developments and redevelopments. EQAC is also concerned with the heat island effect caused by urban development. Research has shown that tree covered surfaces and paved surfaces can differ by 40 degrees Fahrenheit. New buildings should include landscaping standards to minimize the heat island effect<sup>11</sup>.

EQAC is including a recommendation to accelerate the creation of private development planning guidance and zoning regulations that will align with the Community-wide and Energy Climate Action Plan (CECAP) report.

#### Resource Protection Areas (RPAs) and Tidal Wetlands Outreach

RPAs are regulated shorelines of streams, rivers and other waterways associated environmentally sensitive land that lie alongside or near the which drain into the Chesapeake Bay and are a key component of resiliency<sup>12</sup>. RPAs protect water quality, filter pollutants from stormwater runoff, reduce the volume of stormwater runoff, prevent erosion, and perform other important biological and ecological functions. Development is generally not permitted when there is sufficient buildable area. Accessory structures like sheds, gazebos, pools, etc. require approval via a public hearing and fees. Neither clear-cutting nor lawns are permitted. LDS has engaged in outreach to RPA property owners by providing an annual mailer, dedicated webpage, and Channel 16 videos to help inform landowners of their responsibilities to protect the RPA land.

More specifically, Fairfax County also has extensive tidal wetlands, which are also in the RPA, that provide important ecosystem services, such as protection against flooding and erosion and serving as nursery and feeding grounds for waterfowl, fish, and shellfish. However, engagement with owners of tidal wetlands is not sufficient, particularly given a change in state law in 2020.

Since 1972, Commonwealth Law and later County Code have long called for tidal wetlands to be protected. The County Wetlands Ordinance was updated to coincide with the 2020 Commonwealth update to the Law including a requirement that living shorelines be used for shoreline erosion protection wherever suitable. Living shoreline methods use natural elements to create effective buffers for absorbing wave energy and protect against shoreline erosion.

In 2022 the Fairfax County Wetlands Board developed specific County guidelines at the request of the Board of Supervisors to preserve and protect tidal wetlands. Concerns have been raised by the Mount Vernon Community Council and others about the impact of the new law, ordinance, and guidelines. It has been difficult for County Staff and the Fairfax County Wetlands Board to communicate the actual impact of the new County wetlands Ordinance property owners. Landowners of tidal wetlands would significantly benefit from additional clarity and targeted outreach on this topic.

### **RECOMMENDATIONS**

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

<sup>11</sup> <https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect>

<sup>12</sup> <https://www.fairfaxcounty.gov/landdevelopment/chesapeake-bay-preservation-ordinance>

*Recommendation: 1LU-2018.1 | Age: 4 years | Status: Restarting post COVID-19*

**2. Improve Processes to Minimize Ecological Degradation from Development Pressure**

*Recommendation: 1LU-2019.3 | Age: 3 years | Status: Included in 2022 Comp Plan Review*

**3. Private Sector Green Building Standards**

*Recommendation: 1LU-2021.4 | Age: 2 years | Status: Making progress*

**4. Tidal Wetlands Outreach**

*Recommendation: 1LU-2023.1 | Age: New | Status: New this year*

*Conduct outreach to RPA and Tidal Wetlands Property Owners to convey the responsibility to protect these resources and obtain permits for modifications where required.*

**COMMENTS AND/OR CONCERNS**

**1. Affordable Housing**

EQAC commends the continued focus on affordable housing in the Communitywide Housing Strategic Plan and the Strategic Plan to Facilitate the Economic Success of Fairfax County. There are many development efforts under way that allow people to live and work nearby, reducing commuting pollution and development sprawl and decreasing pressure on natural areas.

**2. Holistic Comprehensive Planning Process**

EQAC is an advocate for holistic planning processes and supports the Site-Specific Plan Amendment (SSPA) Process. Holistic approaches align with the vision to consider economic, social, and environmental factors resulting in vibrant, healthy, and desirable places. Prior reports elevated this topic to a recommendation. EQAC will continue tracking the process to ensure that SSPA continues to:

- a. Prioritize large study areas that encompass multiple projects.
- b. Include a robust screening process to ensure that the most appropriate projects are considered at a site-specific level.
- c. Develop Policy Plan amendments that improve environmental outcomes across all projects.

**3. Advance Land Development Applications and Information**

EQAC commends the county for completing phase 4 of the PLUS system to create a single system of record for land development. This provides a centralized platform for analyzing the Comprehensive Plan potential both during review and when amendments are approved.

**4. County Green Buildings Standards**

EQAC commends the county for adopting strong green building standards for public facilities that target net-zero over time and create aspirational examples for the private sector. EQAC urges the county to consistently hold private sector development to the highest building standards, both current standards and future ones that address climate change, and adapt a policy of net-benefit to the environment when considering exceptions.

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**SCORECARD ELEMENTS**

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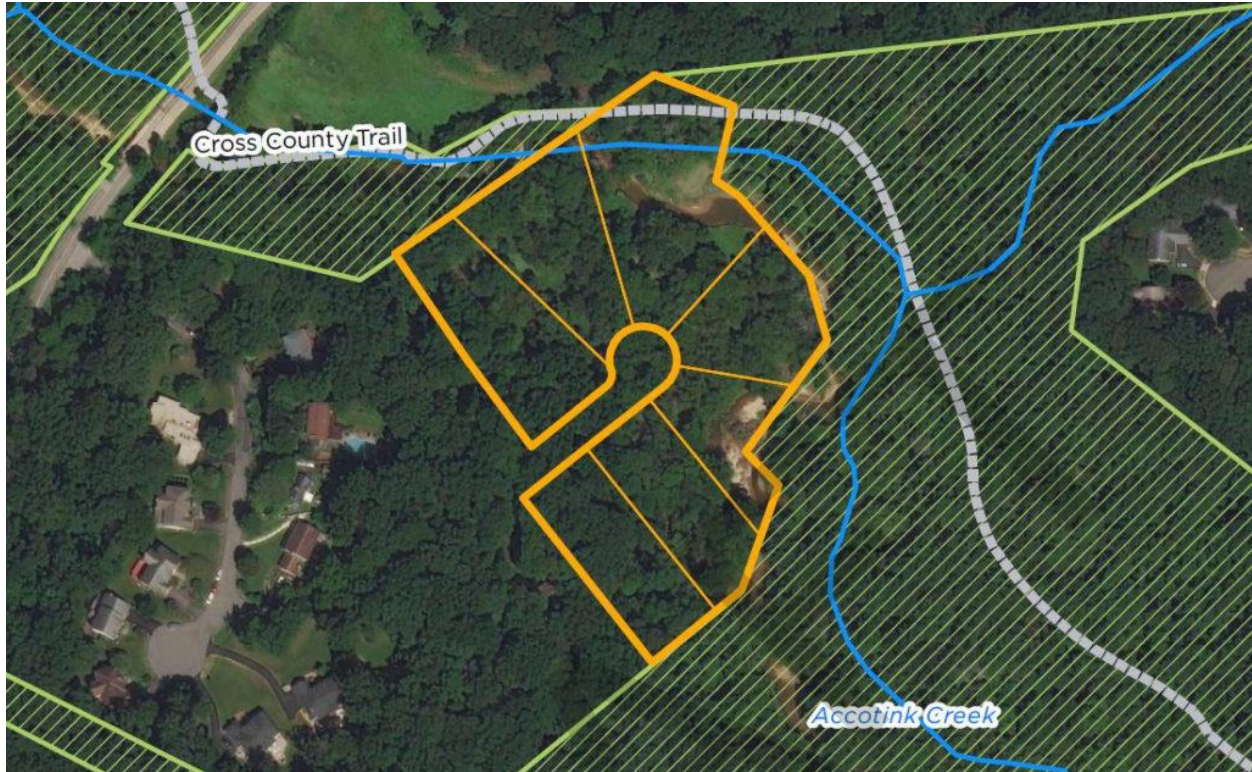
	<p><b>Land Use</b> <i>Four Recommendations in 2021</i></p>	<p><b>Status / EQAC Comments</b></p>
<p>1</p>	<p><i>Recommendation: ILU-2018.1</i></p> <p><b>Update the State of the Plan and Concept for Future Development Map</b> EQAC recommends that the Board authorize an update to the State of the Plan document. The last State of the Plan covered 2000 to 2010. Since then, the county has seen significant growth and changes in process and technology. A review of the plan and the effects of the processes is timely.</p> <p>EQAC also recommends that the Board authorize the development of a Concept for Future Transportation, Development, and Green Infrastructure. The 1992 Concept for Future Development map has largely been realized and a future map that looks out 20 to 50 years is needed.</p> <p><b>Summary of Action Taken by Agency or Department</b> This recommendation is being addressed. Work on the State of the Plan document is ongoing. The document was set to be published in 2022, but is delayed to include analysis of 2020-2022 and should be done in early 2024.</p> <p>The county is moving towards greater use of interactive mapping applications, rather than static maps, including the JADE mapping tool that allows users to display multiple layers of data and dynamically turn on and off information and data.</p>	<p>Making Progress / Recommended since 2019</p>  <p>Recent discussions have noted the publication is being delayed to include analysis of 2020-2022 and is on track for 2024 completion.</p> <p>The Concept for Future Transportation, Development, and Green Infrastructure will provide a long-term vision for large investment projects and holistic rejuvenation of the County environmental infrastructure.</p>
<p>2</p>	<p><i>Recommendation: ILU-2019.3</i></p> <p><b>Improve Processes to Minimize Ecological Degradation from Development Pressure</b> As the county addresses build-out, it is important to prioritize environmental protection of increasingly valuable open space. EQAC recommends that the County adopt a policy that all development provides a <b>net environmental benefit</b> to the County. EQAC also recommends that</p>	<p>Making Progress / Recommended since 2020</p> 

	<p><b>Land Use</b> <i>Four Recommendations in 2021</i></p>	<p><b>Status / EQAC Comments</b></p>
	<p>the ecological function of existing land be a consideration when new development is proposed on open space. This establishes the value of land that can be applied consistently across all projects and fits into the multi-dimensional rubric that needs to be considered for future planning,</p> <p>This recommendation applies to 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.</p> <p><b>Summary of Action Taken by Agency or Department</b> This recommendation is discussed 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 and enhancement of these resources while planning for the orderly development and redevelopment of the county.</p> <p>These efforts have focused primarily on Environmental Quality Corridors (EQCs), Resource Protection Areas (RPAs), floodplains, and steep slopes and tree preservation and tree cover. These areas contain valuable ecological resources and help create an ecological network. Resources within these areas are considered on a site-by-site basis as land use applications are reviewed by staff and evaluated by the Planning Commission and Board of Supervisors.</p>	<p>With the intense development pressure on natural space, this recommendation is increasingly important.</p> <p>On December 6, 2022, the Board of Supervisors authorized consideration of a Comprehensive Plan amendment to update the Countywide Policy Plan.</p> <p>The environmental plan is the section to include these recommendations. The update needs to establish appropriate expectations for improved natural resource protection.</p> <p>There are many examples of inappropriate development, low environmental priority on land use decisions, and missed preservation opportunities of scarce natural lands.</p> <p>Examples: Auctioned Land along Accotink Creek near RPA and adjacent to the Cross County Trail, Road expansion along Route 7 in Great Falls.</p>
<p>3</p>	<p><i>Recommendation: 1LU-2021.4</i></p> <p><b>Private Sector Green Building Standards</b> EQAC commends the county for adopting strong green building standards for public facilities. With the recently accepted CECAP goal of net-zero energy by 2050, it is necessary to begin</p>	<p>Making Progress / Recommended since 2021</p> 

	<b>Land Use</b> <i>Four Recommendations in 2021</i>	<b>Status / EQAC Comments</b>
	<p>adopting Comprehensive Plan language and zoning regulations to encourage private sector land use to achieve the net-zero goals.</p> <p><b>Summary of Action Taken by Agency or Department</b>  This recommendation is in the process of being addressed. Actions are currently underway to review existing policies and identify areas for CECAP implementation. As part of a future Plan or Zoning Ordinance Amendment, research and study will be required to determine anticipated growth, estimated energy consumption, and what measures should be recommended to attain net-zero energy. All actions necessary to address EQAC’s recommendation would be conducted during a future Plan or Zoning Ordinance Amendment.</p>	<p>EQAC continues to encourage rapid adoption of policies to achieve the CECAP goals. The County has adopted exemplary public sector green building standards. Private sector standards need to follow.</p>
4	<p><i>Recommendation: ILU-2023.1</i></p> <p><b>Tidal Wetlands Outreach</b>  Conduct outreach to RPA and Tidal Wetlands Property Owners to convey the responsibility to protect these resources and obtain permits for modifications where required.</p>	

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## **FIGURES**



**Figure I-1:** Accotink Creek properties auctioned in 2022

*Source: Annandale today, May 24, 2022: Environmental group hopes to prevent developers from buying Annandale land*

*<https://annandaletoday.com/environmental-group-hopes-to-prevent-developer-from-buying-annandale-land/>*

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Figure I-1. Map of the location of Accotink properties auctioned and purchased by developers with outlines showing overlap and proximity to the RPA, Accotink Creek, and the Cross County Trail.



**FAIRFAX COUNTY**  
VIRGINIA

## County Sustainable Development Policy

1: Concept    2: Design    3: Permit    4: Construction    5: Complete

- TOTAL Green County Buildings: **41** completed, **30** in progress

#	Site	LEED	Solar Ready	Net Zero	EV Ready	Post OES?	Status	#	Site	LEED	Solar Ready	Net Zero	EV Ready	Post OES?	Status
1	Police Heliport	Silver	No	No	Yes	No	5	16	Patrick Henry Shelter	Silver	Yes	No	Yes	No	3
2	Innovation Garage	n/a	Yes	No	Yes	No	5	17	Original Mt. Vernon HS	Gold	Yes	No	Yes	No	3
3	Reston Fire Station	Silver	Yes	No	No	No	5	18	Fairview Fire Station	Gold	Yes	Yes	Yes	Yes	3
4	Sully Community Center	Gold	Yes	No	Yes	No	5	19	Judicial Complex Building One	Gold	Yes	Yes	Yes	Yes	2
5	Woodlawn Fire Station	Platinum	Yes	No	No	No	5	20	Mason Police Station	Gold	Yes	Yes	Yes	Yes	2
6	Lorton Community Ctr & Library	Gold	Yes	No	Yes	No	5	21	Gunston Fire Station	Gold	Yes	Yes	Yes	Yes	2
7	Edsall Road Fire Station	Silver	Yes	No	No	No	5	22	West Annandale Fire Station	Gold	Yes	Yes	Yes	Yes	2
8	South County PS & Animal Shelter	Silver	Yes	No	Yes	No	4	23	Tysons Fire Station #29	Gold	Yes	Yes	Yes	Yes	2
9	Springfield CBC Commuter	n/a	Yes	No	Yes	No	4	24	Patrick Henry Library Garage	Gold	Yes	Yes	Yes	Yes	2
10	Stormwater Wastewater Facility	Gold	Yes	Yes	Yes	No	4	25	Willard Health Center	Gold	Yes	Yes	Yes	Yes	1
11	Operational Support Bureau	Gold	Yes	Yes	Yes	No	4	26	Audrey Moore Rec Center	Gold	Yes	Yes	Yes	Yes	1
12	Monument Garage **820 spaces	Parksmart	Yes	No	Yes	No	4	27	Penn Daw Fire Station	Gold	Yes	Yes	Yes	Yes	1
13	Seven Corners Fire Station	Gold	Yes	No	Yes	No	4	28	Eleanor Kennedy Shelter	Gold	Yes	Yes	Yes	Yes	1
14	Kingstowne Library/Franconia PS	Gold	Yes	No	Yes	No	4	29	Crossroads	Gold	Yes	Yes	Yes	Yes	1
15	Mount Vernon Rec Center	Silver	Yes	No	Yes	No	4	30	George Mason Library	Gold	Yes	Yes	Yes	Yes	1

Figure I-2: New Fairfax County Facilities and Renovations being built to revised Sustainable Development

Source: Staff Report on Climate Action Implementation

[https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/agenda%20item%205b\\_staff%20report%20on%20climate%20action%20implementation%20\\_a-1a.pdf](https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/assets/agenda%20item%205b_staff%20report%20on%20climate%20action%20implementation%20_a-1a.pdf)

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Figure I-2. Tables showing all new planned county building projects are being designed for LEED Gold, with Solar and EV ready, and most important, as Net Zero.