



DOCKET ITEM #5
***Environmental Action Plan Phase 1 Updates to the
 Green Building and Land Use and Open Space Chapters***

Application	General Data	
Public hearing and consideration of the Phase 1 updates to the Green Building and Land Use and Open Space chapters of the City's Environmental Action Plan.	Planning Commission Hearing:	October 2, 2018
	City Council Hearing:	October 13, 2015
Applicant: City of Alexandria Staff: Departments of Planning & Zoning, Transportation & Environmental Services, General Services, and Recreation, Parks, and Cultural Activities.		

Staff Recommendation: APPROVAL
Staff Reviewers: <u>Planning and Zoning</u> Karl Moritz, Director, karl.moritz@alexandriava.gov Carrie Beach, Division Chief, Neighborhood Planning, carrie.beach@alexandriava.gov Robert Kerns, Division Chief, Development, robert.kerns@alexandriava.gov Ann Horowitz, Principal Planner, Land Use Regulatory Services, ann.horowitz@alexandriava.gov Stephanie Free, Urban Planner III, Development, stephanie.free@alexandriava.gov <u>Recreation, Parks and Cultural Activities</u> James Spengler, Director, james.spengler@alexandriava.gov Bob Williams, Division Chief, Natural Resources, bob.williams@alexandriava.gov Jack Browand, Division Chief, Park Planning, Design, Capital Development, jack.browand@alexandriava.gov Dana Wedeles, Principal Planner, Park Planning, Design, Capital Development dana.wedeles@alexandriava.gov <u>General Services</u> Jeremy McPike, Director, jeremy.mcpike@alexandriava.gov Donna Poillucci, Deputy Director, Planning, Construction, and Facilities, donna.polucci@alexandriava.gov William Miner, Division Chief, Planning and Design, william.miner@alexandriava.gov Bill Eger, Energy Manager, Office of Energy Manager, bill.eger@alexandriava.gov <u>Transportation and Environmental Services</u> Yon Lambert, Director, yon.lambert@alexandriava.gov William Skrabak, Deputy Director, Infrastructure and Environmental, william.skrabak@alexandriava.gov Ellen Eggerton, Sustainability Coordinator, Office of Environmental Quality, ellen.eggerton@alexandriava.gov

PLANNING COMMISSION ACTION, OCTOBER 4, 2018: On a motion made by Vice Chairman Macek and seconded by Commissioner McMahon, the Planning Commission voted to recommend approval of the Green Building and Land Use and Open Space chapters with amendments. The motion carried on a vote of 4-1, with Commissioners Koenig and Wasowski absent.

The commissioners discussed proposed amendments that the Commission representatives developed since October 2 with staff and Jim Kapsis, chairman of the Environmental Policy Commission. Commissioner McMahon, Chairwoman Lyman, and Vice Chairman Macek expressed support for the proposed EPC target language for Green Building. Commissioner Lyle found the EPC amendments to be overly prescriptive for the work of the Green Building Task Force and preliminarily established City policy. Planning Director Karl Moritz added that the intention of the staff-proposed Green Building target language was to provide latitude for the Green Building Task Force to weigh all green building options and tools, including net zero, in the policy update. Ellen Eggerton, Sustainability Manager, informed the commissioners that the mid and long-term EAP actions would include the updated Green Building Policy goals to enhance sustainability and would be reviewed by the commission and City Council in June 2019.

Amendments to the Green Building chapter short term actions 1(c) and 1(e), relating to the topics included in the Green Building Task Force study were also discussed. Mr. Moritz pointed out that the City may not have the legal authority to enforce mandatory green building practices as proposed in 1(e), although the proposed language was reasonable.

Amendments to the Open Space goal of the Land Use and Open Space chapter, included adding a reference to improving the management of open space, were also discussed. Reestablishing the open space steering committee in 2020 was recommended. Vice Chairman Macek expanded the cost breakdown of short term action #1 to include City, developer, and private philanthropic cost considerations. Regarding short-term action #3, Macek believed the study goals should review all types of open space in addition to the need for meaningful ground level that is publicly accessible. Mr. Moritz offered that the Commission's role in reviewing open space elements of proposals not only includes environmental considerations but also good urban design goals and smart growth principles. Commissioner Lyle and Vice Chairman Macek agreed that ground level open space, around transit-oriented areas where dense development should occur, may not be possible at the same percentages as in more suburban areas of the City. Mr. Kapsis replied that EPC prioritizes ground level, vegetated open space throughout the City, adding that they support density bonuses for green building features.

Reason: The Planning Commission agreed with the amendments as proposed during the hearing.

PLANNING COMMISSION ACTION, OCTOBER 2, 2018: On a motion made by Vice Chairman Macek and seconded by Commissioner Brown, the Planning Commission voted to table the Phase 1 updates to the Green Building and Land Use and Open Space chapters of the City's Environmental Action Plan. The motion carried on a vote of 7-0.

Reason: Chairwoman Lyman appointed Vice Chairman Macek and Commissioner McMahon to develop amendments to the Green Building and Land Use and Open Space chapters of the EAP for Commission review at the continuation of the October public hearing on October 4, 2018.

Commissioner Koenig supported the work of staff and the EPC on the Environmental Action Plan update and the EPC's proposed amendments to the proposed Green Building and Land Use and Open Space chapters. He stressed that the Green Building chapter target should reference goals for reducing greenhouse gas emissions and for City buildings to aim to achieve a net zero status by 2020.

Vice Chairman Macek stated that he was not inclined to support the EPC's proposed amendments. In particular, he believed that the Green Building Task Force and the consultants should first conduct their analyses to update the Green Building Policy before setting specific EAP targets for green building goals. The Vice Chairman submitted EAP chapter amendments for Commission review.

Commissioner Lyle expressed that she did not support the EPC amendment to the Green Building target as the Green Building Task Force should be allowed to develop priorities for the policy study as opposed to having these pre-determined by the target. She didn't believe that achieving net zero was realistic for City buildings and that requiring third-party certification is costly. These requirements would discourage good development proposals in the future and tax City finances. She added that the Open Space goal should provide the option to increase open space quantity or quality.

Commissioner McMahon recommended that the EPC members' research be included in the Green Building Policy and Open Space studies. She stated that the EAP is a visionary document which should clearly identify City priorities. The clarification of open space types and requirements resulting from the open space study with public input would assist in commission review of development projects. She believed the net zero reference should be included in the target and suggested several amendments to the proposed chapter language.

Commissioner Wasowski stated that the EPC's net zero target was admirable, however, she expressed some concern about requiring it for City buildings. She did not agree with the EPC's recommended amendments to the Open Space chapter. Chairwoman Lyman believed the EAP to be an aspirational document which should include ambitious goals. She supported the EPC's proposed amendments. Commissioner Brown concurred with many of his fellow commissioners' statements. Given the interest in amending the proposed chapter language, Vice Chairman Macek recommended that two commissioners, appointed by the chairwoman, should draft amendment language which would be reviewed at the continuation of the public hearing on October 4.

Speakers:

Scott Barstow, Environmental Policy Commission member, spoke in support of the Environmental Action Plan update and requested that the Planning Commission adopt the

Environmental Action Plan Phase 1
Green Building and Land Use and Open Space Chapters

Environmental Planning Commission proposed amendments to the Green Building chapter, specifically the net zero requirement for public buildings by 2020.

Brendan Owens, Environmental Policy Commission member, stated his support for the Environmental Action Plan Phase 1 update and asked the Planning Commission to include measurable outcomes in the Green Building chapter, as proposed by the Environmental Planning Commission.

Steve Milone, Environmental Policy Commission member, spoke in favor of Phase 1 of the Environmental Action Plan. He requested that the Planning Commission support the EPC's amendment to the Open Space portion of the Land Use and Open Space chapter as ground level open space, vegetated with trees, represents high quality open space.

I. DISCUSSION

The Planning Commission plays a central role in advancing the environmental principles of the Environmental Action Plan (EAP) through its review of policy initiatives and development proposals that apply, particularly, to the EAP Green Building and Land Use and Open Space chapters. Consequently, the Commission's review and recommendations to City Council regarding the staff proposed Phase 1 updates to the two EAP chapter goals, targets and short-term actions is critical to the balance of social, economic and environmental factors in building a sustainable Alexandria.

BACKGROUND

EAP 2009

City Council adopted the Environmental Action Plan 2030 in June 2009, following the guiding principles of the Eco-City Charter. The EAP consists of 10 chapters: Transportation, Green Building, Air Quality, Water Resources, Environment and Health, Energy, Land Use and Open Space, Solid Waste, Global Climate Change and Other Emerging Threats, and Implementation, Outreach, and Education.

EAP 2009 Accomplishments

Since adoption, the City accomplished over 70% of the 353 short-term actions across all chapters of the EAP. This is significant as the City balanced economic growth and environmental goals as it simultaneously faced fiscally constrained budgets and a growing population.

The Planning and Zoning Department contributed to accomplishing 100% of the Land Use and Open Space short-term actions and 88% of the short-term actions from the Green Building chapter of the original EAP. Many of these actions are now established staff practices in the development of Small Area Plans (SAPs) and in Development Special Use Permit (DSUP), Development Site Plan (DSP) and Special Use Permit (SUP) analyses. Small Area Plans identify open space and trail opportunities, promote land use and transportation that encourage walking and biking and incorporate additional recommendations for environmental sustainability consistent with the Eco City Charter and the EAP. Integrating policies related to Green Building, the EAP, Landscape Guidelines, Complete Streets and the Open Space Master Plan, as well as evaluating air pollution, noise impacts, and stormwater requirements are examples of the items routinely reviewed with DSUPs and DSPs and influence conditions of approval. Meeting open space requirements, preserving mature trees, and recommending tree canopy coverages exceeding the minimum requirement are achieved through SUPs for new residential development on substandard lots and for subdivision requests. Further, DSP, DSUP, SUP standard conditions encourage patron and employee use of alternative forms of transportation, support appropriate environmental safety practices, and ensure noise and odor control.

EAP 2018-2019

The City launched a two-phase update to the EAP in September 2017 as it recognized that creating new EAP goals, targets, and actions was essential as climate change impacts became more evident, environmental priorities in the City have evolved, and new short-term actions are needed to replace accomplished activities.

Phase 1 identifies goals and short-term action items (FY2019-FY2023) for Energy, Climate Change, Solid Waste, Green Building, and Land Use and Open Space. City Council will review Phase 1 at its October 15, 2018 public hearing. The second phase establishes goals and short, mid (FY2024-FY2029), and long-term (beyond FY2030) action items for the remaining five program areas -- Transportation, Air Quality, Water Resources, Environment & Health, and Implementation, Outreach and Education. At the same time, mid and long-term goals for the Energy, Climate Change, Solid Waste, Green Building, and Land Use and Open Space chapters will be drafted for City Council review in June 2019.

II. STAFF GOAL, TARGET, SHORT-TERM ACTION RECOMMENDATIONS – PHASE 1

The staff Phase 1 EAP update recommendations for the Green Building and Land Use and Open Space chapters, to be presented to the City Council in October 2018, are included in this report on pages 8 through 12. These are the result of a City inter-departmental endeavor, collaborating with Environmental Policy Commission (EPC) members and the public, to develop new goals, targets, and short-term actions that advance public well-being and City sustainability.

Green Building

The revised goal of the Green Building chapter is to optimize the economic, environmental, and social performance of new and existing buildings in the City of Alexandria as part of the city-wide effort to reduce GHG emissions and to improve air and water quality. The staff recommendation for short-term actions to be completed by 2023 build on the successes of the existing Green Building Policy which resulted in nearly 10 million square feet of green building development completed or under construction and the current standard development conditions that support EAP principles. The first short-term action calls for the update of the Green Building Policy which the Planning Commission and City Council will review at public hearings in June 2019. Planning and Zoning staff will lead the work of a Green Building Task Force, composed of 15 members with environmental, technical, and real estate development experience in building-related fields, including a Planning Commission member, an EPC member, and a representative from Alexandria City Public Schools (ACPS), to develop a revised Green Building policy that supports EAP goals. Staff from the Transportation and Environmental Services, Code Enforcement and General Services will also collaborate with the task force on the Green Building update.

The task force will first prioritize areas of study for consultant review of Green Building best practices and the financial costs of implementation. Items 1a-1g on page 8 identify eight broad subject areas that the EPC and staff have identified as possible areas of study. Policy updates will be based on the task force and staff evaluation of the consultants' analyses. The updated Green Building Policy will inform the mid-and long-term goals of the EAP Green Building chapter that the Planning Commission and City Council will review, also in June 2019.

The second short term action calls for staff to include sustainable features at the time of the annual standard conditions update. The standard development conditions that are applied today

for Development Site Plans (DSP) and Development Special Use Permits (DSUP) include requirements such as Energy Star labeled appliances, Electric Vehicle (EV) charging stations, and EPA-labeled WasterSense (or equivalent) low-flow fixtures. Per this action, the standard development conditions update will consider additional green building features such as water bottle refill stations and LED lighting, serving to advance the EAP goals across all subject areas.

Land Use and Open Space

Enhancing the City's tree canopy and open space are two focus areas comprising the Land Use and Open Space chapter of the EAP. Attention to these City amenities contributes to reducing greenhouse gas emissions, improving air and water quality, mitigating flood and stormwater runoff impacts, and fostering healthy residents and community well-being.

The tree canopy goal establishes the priority to preserve and expand a healthy urban tree canopy. The target of a minimum overall 40 percent tree canopy coverage will be analyzed in 2019, providing an early update on the City's progress toward the goal, last identified in a 2016 study as 36%. The Recreation, Parks, and Cultural Activities (RPCA) department leads the tree canopy initiatives through two proposed short-term actions to be accomplished by 2023. By 2019, the RPCA staff will update three key policy documents: Urban Forestry Master Plan, Environmental Sustainability and Management System, and Landscape Guidelines. Policy initiatives support reaching a target goal of a 40% tree canopy coverage through tree preservation, expansion and maintenance. Second, RPCA will encourage the planting of native trees on private property through education and outreach programs and the support of community partnerships. Although not separately listed as a short-term action, the Planning and Zoning Department will join the RPCA in recommending that the City advocate the state legislature for local authority to expand tree protection and preservation and to increase the tree canopy requirements.

The amended goal to promote open space supports increasing open space quantity and improving the environmental quality and social benefits of open space. The City's Open Space Master Plan (updated in 2017) memorializes the target to maintain the ratio of 7.3 acres of publicly accessible open space per 1,000 residents, including future open spaces identified in Small Area Plans. Three short term actions to be achieved by 2023 reinforce the goal and target. Implementation of the Open Space Master Plan to protect, acquire, preserve, and conserve open space leads to achieving the Land Use and Open Space chapter goals. Phase 1 also recommends City Council reestablishment of the open space steering committee by 2023. Another short-term action accounts for increasing by 50% (450 acres) the public land acreage that is actively managed. This would include land restoration and invasive species removal. An annual report may be generated to publicize the increase in natural lands that have been managed toward the stated goal of 450 acres. The final proposed goal for open space is a Planning and Zoning staff-generated study to evaluate and update the open space zoning requirements for new private development across zones. Definitions for what constitutes open space and developer contributions to off-site open space will be reviewed. Staff will present the study results and recommendations to the Planning Commission in FY2019 and related zoning ordinance amendments would be established by the short-term action deadline of 2023. Additionally, findings from the open space study will inform the mid and long-term EAP action items which will be reviewed by City Council in June 2019.

Summary

Staff believes that the proposed goals, targets and short-term actions for the Green Building and Land Use and Open Space chapters of the EAP will contribute to the overall policy goal to reduce greenhouse gas emissions and to improve the social, economic, and environmental well-being in the City of Alexandria. The Departments of Planning & Zoning, Transportation & Environmental Services, General Services, and Recreation, Parks, and Cultural Activities staff recommend approval of the proposed Green Building and Land Use and Open Space chapters.

Chapter 3 - Green Building

Goal Optimize the economic, environmental, and social performance of new and existing buildings in the City of Alexandria.

Target By FY2023~~19~~, the Green Building Policy will ~~enhance sustainable practices set within~~ set expectations for how both new and existing buildings should contribute establishing the expectations for public and private buildings toward achieving the goals for GHG emissions, water use, and stormwater runoff reduction established in the EAP, and by FY2020 will set forth a path for new city-owned buildings to meet a net zero energy standard.

Short Term Actions

1. Review the effectiveness of the current Green Building Policy and update the Policy in FY2019 with a focus on sustainable strategies that have the greatest impact toward achieving targets across EAP principle areas. The Task Force deliberations will inform the medium and long-term EAP actions for Green Buildings. Through this process, with support of third-party consultant analysis, the update will consider topics such as:
 - a. Increasing LEED or equivalent third-party green building certification standards for private development;
 - b. Establishing a separate green building standard, which includes evaluating the feasibility of a net zero standard where applicable, for new public development, including schools in collaboration with ACPS;
 - ~~c. d. Incorporating~~ Establishing incentives for private development participation in to promote green building certifications, to achieve the quantifiable goals for GHG emissions and water use and stormwater runoff reduction established in the EAP;
 - ~~d. e.~~ Prioritizing specific green building elements;
 - e. Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review;
 - f. Instituting a building performance monitoring program;

- g. The City's ability to be more ambitious than the private sector in meeting green building goals to serve as a sustainability leader, and
- h. Establishing a Green Zone in the City.

As part of this process, a Green Building Policy Update Task Force will be established by City Council. The Task Force, with critical input from the EPC and the development community, will determine the actual topics to be analyzed by the consultant. (P&Z)

Cost Estimate: \$75,000

Cost Breakdown: The funds will be used for consultant studies on policy analysis on a cost analysis. (does not include staff time)

- 2. By FY2020, evaluate additional sustainable features to incorporate into the "Building Section" of the standard development conditions for the Development Site Plans (DSP) and Development Special Use Permits (DSUP) that will contribute toward achieving targets across EAP principle areas. (P&Z)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

Legislative Priorities

N/A

Justification

- 1. Climate change presents an existential threat to the future livability of Alexandria and the rest of the planet. Climate science has confirmed that GHG emissions must be rapidly eliminated to avoid a greater than 2°C increase in global average temperatures. Green building is an important instrument in reducing GHG emissions, potable water consumption, raw materials use, and waste output. Green Building also contributes to increased air quality, reduced storm water pollution, reduced energy demands, and economic sustainability.

Accountable Parties

Planning and Zoning (primary); Code Administration; General Services; Transportation and Environmental Services

Chapter 4 - Land Use and Open Space

A. Tree Canopy

Goal Preserve and expand a healthy urban tree canopy.

Target By FY2023, average overall tree canopy is a minimum of 40 percent.¹

Short Term Actions

1. Update and coordinate the Urban Forestry Master Plan, Environmental Sustainability and Management System, and Landscape Guidelines in FY2019 to support increased tree preservation, expansion, maintenance, native species, and a revised tree canopy coverage goal. (RPCA)

Cost Estimate: \$40,000 per year

Cost Breakdown: \$30,000 - \$40,000 per year. \$30,000 for the yearly tree inventory study plus \$10,000 for the tree canopy survey scheduled for every three years. Existing staff resources are accounted for in current budget.

2. Enlist City partnerships (community groups) to provide education and outreach that support technical assistance and opportunities to increase native tree canopy coverage on private property. (RPCA)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources are accounted for in current budget.

Legislative Priorities

1. Advocate for state legislation that would enable the City to expand tree protection and preservation and to increase tree canopy requirements.

Justification

1. A healthy and diverse urban forest canopy coverage in Alexandria provides a broad range of environmental and social benefits such as reduced GHG emissions, improved air quality, enhanced property values, stormwater and flood mitigation, public health benefits, and vibrant public spaces. The reduction of GHG emissions improves air quality and contributes to health and wellness.

Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning

¹ City of Alexandria Urban Forestry Master Plan, approved 2009 and currently under revision

Chapter 4 - Land Use and Open Space

B. Open Space

Goal	Increase open space quantity and improve the environmental quality, <u>management</u> , and social benefits of open space.
Target	Maintain the ratio of 7.3 acres of publicly accessible open space per 1,000 residents. ²

Short Term Actions

1. Protect and add open space through acquisition, preservation, and conservation as prescribed in the Open Space Master Plan (updated 2017) and by FY2023, evaluate increasing the target to 7.5 per 1000 residents. This includes, by 2023~~0~~, City Council will reestablish the open space steering committee to re-assess the methodology, evaluate, and prioritize potential open space sites. Tools to be considered for open space preservation or restoration will include purchase, easements, or repurposing land as funds can be made available, development occurs, or partnerships can facilitate. (RPCA)
Cost Estimate: N/A
Cost Breakdown: Existing staff resources. ~~No additional cost implications;~~
~~however, the~~ The action is dependent on the development envisioned in small area plans, including city investments, developer contributions, and private philanthropic contributions.
2. By FY2023, increase the percentage of acres of public natural lands that are actively managed, including restoration and invasive species removal, by 50 percent (450 acres). (RPCA)
Cost Estimate: N/A
Cost Breakdown: Existing staff resources
3. By FY2020, ~~E~~evaluate and update, using a public process, the requirements of open space on residential, commercial and mixed-use private development. Issues to be addressed include how to achieve meaningful and publicly accessible rooftop/ground floor open space, particularly at the ground level, framework for how to value developer contributions to off-site open space, how to minimize impervious surfaces, percentages how to align vegetation requirements with canopy and native species goals described in Chapter 4.A.1. above; and how to ensure consistency of open space requirements across similar zones. (P&Z)
Cost Estimate: N/A
Cost Breakdown: Existing staff resources

² City of Alexandria Open Space Master Plan, approved 2003 and updated 2017

Legislative Priorities

N/A

Justification

1. Open space, natural spaces and tree canopy provide physical, mental and community benefits, while offering opportunities for social interaction and the conservation of natural resources and biodiversity. Public open space equitably encourages healthy choices and active lifestyles for the City's diverse population.
2. Reduces GHG emissions and improves air quality by encouraging development density around mass transit centers as mandated in the City Master Plan.

Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning