City of Alexandria

Open Space Master Plan 2017 Updated Implementation Strategy A Plan for Action 2017-2026

Executive Summary













City of Alexandria, Virginia Recreation, Parks, and Cultural Activities Park Planning, Design & Capital Development

Jefferson Houston Synthetic Turf Field, with playground in the background

Shared Use Open Space Typology

Montgomery Park Pavilion

Neighborhood Park Open Space Typology

Pork Barrel BBQ, Shops at Del Ray Easement

Private with Public Access Open Space Typology

Dora Kelley Nature Park and Ford, Holmes Run

Natural Area Open Space Typology

Freedman's Cemetery

Historical/Destination Open Space Typology

Cover photo locations and Park Typology

OPEN SPACE MASTER PLAN 2017 UPDATED IMPLEMENTATION STRATEGY

Table of Contents	<u>Figures</u>	
Forewardi	Figure 1. City of Alexandria Open Space Typologies	2
Acknowledgments	Figure 2. 2017 City of Alexandria	4
Executive Summary1	Protected Open Space Plan, highlighting Areas Protected Since 2002	g
This Summary identifies the key recommendations and findings of the Alexandria Open Space Master Plan 2017 Updated Implementation Strategy and provides a framework for continued success in meeting the goals established in the 2002 plan. The reader is introduced to the proposed work effort through the articulation of strategies and actions, tied to the original fifteen	Figure 3. City of Alexandria Population Projections	8
goal statements.	Figure 4. Acres Required to Maintain 7.3 Ratio	8
Introduction	Figure 5. Proportion of Open Space Acres Promised in Small Area Plans	11
Establishing Park and Open Space Types2		12
Moving Forward - The Alexandria Open Space Master Plan 2017 Updated Implementation Strategy2	Map Compilation (since 2001)	12
Successes Since 2002	Figure 7. 2017 2017 Open Space by Typology	14
Clear Commitment to Expanding the City's Publicly Available Open Space	Figure 8. Active/Passive Use Mix	15
Partnerships - Expanding and Improving Public Open Space	and Pervious/Impervious Surfaces (SAF	
Proactive Planning Efforts with Other City Departments	acreage excluded in each)	
Resource Assessment, Master Plans, and Implementation Strategies	Figure 9. City Owned Protected 15 Op Space by 2017 Typology	en
Challenges8		16
A Growing Community with a Fixed Geographic Boundary 8	Space Acreage Calculation	
Maintaining the Ratio: A Growing Population with a Fixed Geographic Boundary8	Figure 11. 2017 City of Alexandria Protected Open Space Plan	17
Retaining Existing Protected Open Space9	· ·	10
Gaining Protected Open Space through the Development Process10	Figure 12. Implementation Table	19

Limited Open Space, Multi-generational Needs......11

2017 City of Alexandria Protected Open Space Plan	14
Status Today	14
Active/Passive Use Mix - The Next Decade	14
Pervious Surfaces/Impervious Surfaces - The Next Decade	14
2017 City of Alexandria Protected Open Space	15
Implementation Table	15
Caution	18
Appendices	18
Definitions	32

Technical Appendices Under Separate Cover

Appendix 1. Updated Mapping and Total Acreage Calculations

The City of Alexandria's existing Open Space GIS data layers were updated and annotated based on the research conducted during the 2017 Update.

Appendix 2. Confirmation of Recordation of Public Access Easements

A list of approved public access easements through 2015 was verified through a search of court records. Where recorded, copies were made of the plats and that information was transferred to the City's GIS mapping system and incorporated into the updated acreage figure of protected open space in the City.

Appendix 3. Open Space Approved Since 2001

Documentation of recent Small Area Plans (SAP) open space proposals.

Appendix 4. Projected Population

Population review for benchmarking purposes, population density, geographic size and ratio of open space or parkland acreage to 1,000 residents.

Appendix 5. Active/Passive and Pervious/Impervious Acres

Identification of the amount of active/passive and pervious/impervious open space within the City's protected open space system and recommendations for the overall percentage to work towards in the next ten years.

Appendix 6. SWOT Analysis

An analysis of the internal strengths and weaknesses and the external opportunities and threats affecting the City's ability to protect, enhance and expand its open space system was performed. These assessments were then incorporated into the Ten-Year Recommendations for a decade of Actions.

OPEN SPACE MASTER PLAN 2017 UPDATED IMPLEMENTATION STRATEGY

Foreward

The City of Alexandria's Open Space Master Plan 2017 Updated Implementation Strategy addresses the ongoing pressure to provide protected open space in a growing community. This update recognizes the City's successes to date and the challenges inherent in continuing such successes. Working from the 2002 Open Space Master Plan recommendations, this implementation strategy makes recommendations for the next ten years with actions in support of the City's desire to maintain appropriate acres of protected open space for its residents.



Pendleton Park, Pocket Park Open Space Typology

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OPEN SPACE MASTER PLAN 2017 UPDATED IMPLEMENTATION STRATEGY

ACKNOWLEDGMENTS

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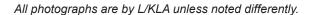
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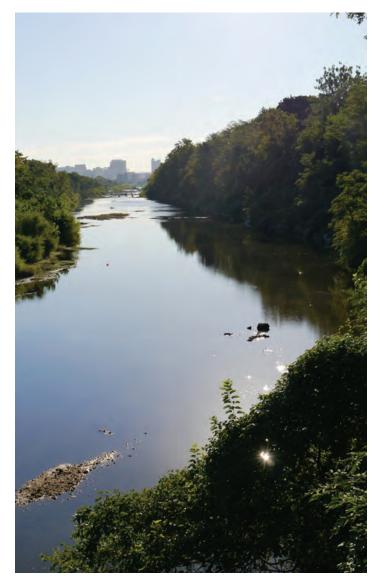
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Cameron Run

Introduction

The City of Alexandria is a vibrant place that offers a variety of recreation opportunities and protected open space for its residents and visitors. These resources contribute to the high quality of life Alexandria residents enjoy. Protected open space is also valued for its environmental, educational, and economic benefits. These resources are worth retaining, enhancing, and expanding; yet, providing additional resources in a City with a growing population and fixed geographic boundaries is challenging.

The City of Alexandria Open Space 2017 Updated Implementation Strategy identifies priority actions for the next ten years for new investments, activities, and projects in support of protecting additional and enhancing existing public open space. These actions include a focus on data collection and analysis, policy, and opportunities to form and support innovative partnerships between public and private sectors. The recommended strategies and actions in this Update support the fifteen goals established in the 2002 City of Alexandria Open Space Master Plan.

Establishment of an Open Space Plan - 2002

In 2002 the City of Alexandria produced the *City of Alexandria Open Space Plan Master Plan*, establishing fifteen ambitious goals for protecting, enhancing and expanding open space. The plan established a framework to address Alexandria's short and longer term open space needs by acknowledging and protecting the City's existing open spaces and identifying additional open space opportunities for the future.

Alexandria's Open Space plan traced the history of the City's open space evolution from its earliest public square, Market Square, to today's rich combination of natural and active play areas, trails, and streetscapes. The planning also recognized that open spaces often protect archaeological resources and provide opportunities for interpretation. The plan included recommendations for policy and tools for implementation to create a connected open space system that maximizes the accessibility of the City's open spaces for all residents. It addressed enhancements and protections for the City's significant existing open space assets, such as its waterfront, its stream valleys, and its institutional lands.

One of the 2002 Plan's recommendations was the establishment of a desired ratio for the acquisition and protection of public open space in the City of 7.3¹ acres per 1,000 residents. The ratio was based on 932² acres of public open space and a population of 128,283 persons divided by 1,000.³



King Street Streetscape, with tree plantings

¹ Modified from an earlier ratio (7.5) established in the City's Strategic Plan, the 7.5 acre figure was based on 840 acres of public land that the City currently maintained.

² Includes 107 acres for Daingerfield Island Park, owned and operated by the NPS, and several smaller public open spaces not included in an earlier 1998 study.

³ Alexandria Open Space Plan, 2002, page 39.



Judy Lowe Park, Pocket Park Open Space Typology

	City of Alexandria Open			
Classification	Description	Size	Service	Estimated Planning Process Timetable
Citywide	Contains multiple uses within park boundary including: attracts visitors from all over the City Example: Chinquapin Park	15-20 acres	0-25 miles from users	2013-2014 Complete
Neighborhood	May include multiple uses within park boundary; attracts nearby residents Example: Beverley Park	20,000 sq. ft. to 5 acres	0-5 miles from users	2014-2015 Complete
Pocket Park	Small open space; mainly single use attracting nearby residents Example: Sunset Mini Park	Under 20,000 sq. ft.	.25-0.5 mile or less from users	2017 Underway
Natural Resource Areas	Includes open spaces that are primarily passive-use or preservation areas Example: Clermont Natural Park	No Minimum or Maximum	Citywide	2017 Underway
Shared Use	Includes parks that share facilities with schools and recreation centers Example: Patrick Henry Field	5-20 acres (average)	0-25 miles from users	Included as part of the 2013-2014 Long-Range Educational Facilities Plan
Destination/ Historical	Attracts users from beyond the region, typically because of particularly unique features Example: Fort Ward Park, Waterfront Park System	Varies	0-100 or more miles	Park Plans completed individually for these sites because of their unique character
Regional	Includes lands or facilities administered by other regional entities Example: Cameron Run Regional Park	50-75 acres	0-100 miles from users	Planned by external jurisdictions
Corridors/ Linear Parks/ Trailways	Includes trailways, corridors and linear parks that serve primarily as linear bikeway corridors, may include ROWs Example: Metro Linear Park	No Minimum or Maximum	0-100 miles from users	Bicycle/ Pedestrian Master Plan Complete

Fifteen goals were defined in the 2002 Open Space Plan and supported by specific recommendations and implementation strategies. Ambitious and far ranging, each goal supports the provision of an outstanding protected open space system.

Establishing Park and Open Space Types

The City of Alexandria and its residents are innovative. Alexandria existed for 200 years prior to the establishment of a park system. Today the park system provides over 1,241 acres of protected open space for its residents, ranging to historic sites, neighborhood parks, natural areas, pocket parks, public plazas to large citywide parks. Sites are protected via public access, scenic, or conservation easements and shared use agreements with the Alexandria Public Schools and other private property owners. An additional 193 plus acres of open space have been identified in the City's Small Area Plans since 2002.

Since the development of the City's Open Space Plan in 2002, the City's Department of Recreation, Parks and Cultural Activities (RPCA) staff has developed a typology list of protected open space types. Categorized into eight different classifications in 2012 and updated in 2014, the intent of the typology structure is to ensure a system of open space that equitably responds to the City's recreational and natural resource needs while efficiently utilizing available resources. Figure 1 is updated from the City's Citywide Parks Improvement Plan 2014 and delineates the definition of and description of the various park and open space types found within the City. In 2012, the Natural Resources Division initiated a program to raise public awareness and appreciation for Alexandria's natural areas by installing signage to designate areas in Alexandria that comprise notable remnants of natural heritage and floral biodiversity ("Native Plant Conservation Zone").

Moving Forward - The Alexandria Open Space Master Plan 2017 Updated Implementation Strategy

This document provides a snapshot of the progress that has been made since adoption of the 2002 City of Alexandria Open Space Master Plan. Celebrating the successes to date in the plan's implementation, this document also points to ongoing and new challenges facing the City in further implementation of the 2002 Plan's goals and recommendations.

Work to update the strategy plan in 2016 included verifying easement recordations, updating GIS mapping and acreage counts, defining active and passive open space uses, defining and mapping impervious surfaces found in the City's protected open space, performing a Strengths, Weakness, Opportunities and Threat (SWOT) analysis, and combining these efforts into a set of recommendations for implementation over the next decade.

- 2 - FEBRUARY 2017

⁴ Citywide Parks Improvement Plan 2014. City of Alexandria, Virginia

This document includes a high level summary of the work accomplished in the form of an Executive Summary supported by six appendices that provide additional details, mapping, and background information.

Successes Since 2002

Over the past thirteen years, the City has accomplished many of the recommendations presented in the 2002 Open Space Plan. A summary of each, outlined by goal, is provided in the sidebar to the right and on the following pages.

Clear Commitment to Expanding the City's Publicly Available Open Space

The City of Alexandria, with a relatively small footprint at 15 square miles, has made a clear commitment to provide publicly available open space for its residents and visitors. Between 1990 and 2000, the ratio of open space compared to population remained constant at 7.3 acres per 1,000 residents because the City was successful in adding an additional 125 acres of open space. Another 100 acres were added in the following decade. The additional acres were obtained through the use of innovative tools and techniques ranging from active participation in the Small Area Plan process to acquiring public access easements in private commercial developments and from conservation or scenic easement donations on institutional lands or other private properties to parcel acquisition or re purposing of vacant lands. Obtained sometimes in increments as small as a tenth of an acre, the City has kept current with its goal of providing 7.3 acres of protected open space for every 1,000 residents, as shown in Figure 2—2017 City of Alexandria Protected Open Space Plan, highlighted Areas Protected Since 2002 on page 2.

Partnerships - Expanding and Improving Public Open Space

The City of Alexandria has implemented an array of partnership programs, addressing needs such as land conservation to park maintenance and operations. The City has successfully worked in partnership with the Northern Virginia Conservation Trust (NVCT) in the acquisition and management of easements and tracks easements such as historic easements that protect open space while protecting the targeted resource. Other partnerships under the PARKnership program include monetary or in-kind donations directed towards support of a favorite park, field, program, or recreation center, or a cooperative venture between two or more partners in support of a specific program or activity. Examples of the cooperative venture include the Simpson Dog Park Improvements and activation of the Braddock Interim Park.

Goal 1: Protect and Enrich Existing Parks • Completed site/furnishings/amenities inventory

- Completed site/furnishings/amenities inventory of existing parks; prioritizing park needs for additional investment
- Established responsive ten-year Capital Improvement Program (CIP)
- Acquisition and improvement of additional open space adjacent to existing parks
- Completed Citywide and Neighborhood Parks Master Plans, incorporated recommendations into CIP
- Expanded public/private partnerships (Adopt-a-Park, Adopt-a-Garden) and additional private maintenance agreements to improve appearance and maintenance of existing parks
- Used regional and national benchmarks to establish open space acreage goals for active and passive recreation as well as hardscape and green space
- Completed the Natural Resource Management Plan (2017, pending City Council approval)

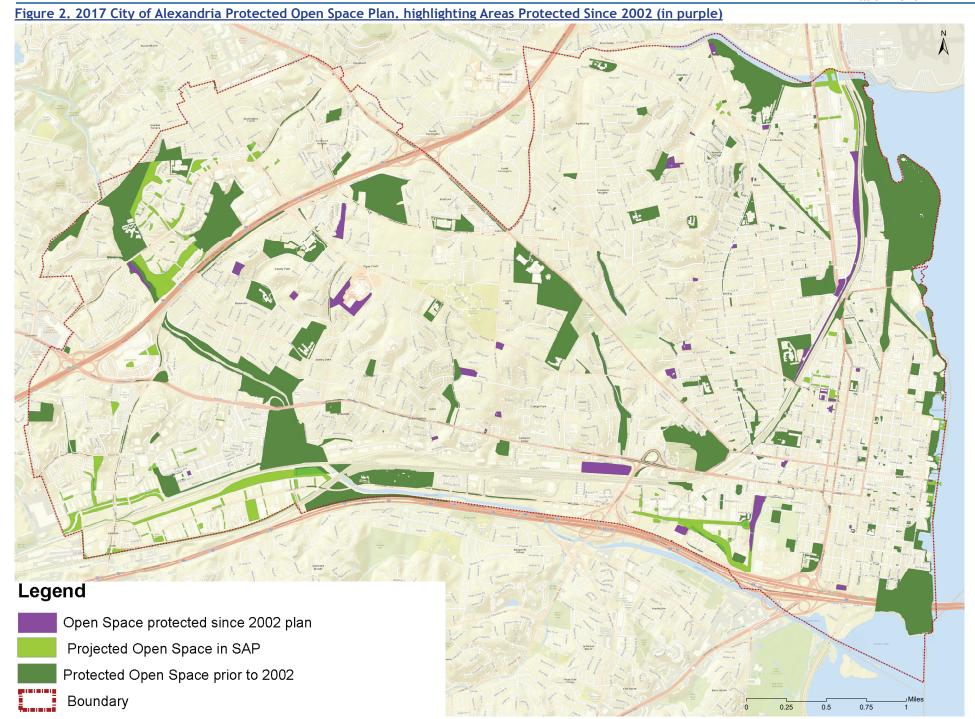
Goal 2: Develop Innovative Opportunities for Creating Additional Public Open Space

- Acquisition of and creation of additional open space
- Innovative insertion of new artificial turf on roof top of Alexandria ReNew
- Increased amount of open space acreage through development process
- Partnership with Northern Virginia Conservation Trust (NVCT); easements and education for private landowners

FEBRUARY 2017

⁵ Alexandria Open Space Plan, page 4.

⁶ Ihid



- 4 - February 2017

Goal 3: Complete Implementation of the Potomac River Waterfront Plan

- Acquisition of five waterfront parcels
- Completed land swap with Old Dominion Boat Club
- City Council adoption and implementation of the Waterfront Small Area Plan
- Completed the Natural Resource Management Plan (2017, pending City council approval) which identifies Best Management Practices for protection and conservation of stream valleys and environmentally sensitive areas.

Goal 4: Protect and Expand Stream Valleys and other Environmentally Sensitive Areas

- Approval and implementation of the Four Mile Run Restoration Master Plan
- Office of Environmental Quality provides outreach and education on Watershed Management
- Compliance with State regulations regarding Resource Protection Areas
- Acquisition of parcels along Resource Protection Areas (Four Mile Run, South Early Street)
- Acquisition of wooded, steeply sloped parcel (Polk Avenue)
- Completion of the Urban Forestry Master Plan
- Receipt of Commonwealth of Virginia DCR Land and Water Conservation Fund Grant for park renovation
- Completed the Natural Resource Management Plan (2017, pending City council approval) which identifies Best Management Practices for protection and conservation of stream valleys and environmentally sensitive areas.

Goal 5: Create an Open Space Network in New Development Areas

- All Small Area Plans adopted in the last decade include a network of public open space and connections with existing City parks
- Increased connectivity between open spaces and existing park and trail improvements, including Potomac Yard Park
- Expansion of scenic easements on developed sites

Goal 6: Protect and Preserve Institutional Open Space

- Limited protection through existing zoning
- Ongoing outreach through NVCT

Goal 7: Protect and Maximize the Use of Public School Open Space

- Artificial turf added to ACPS fields
- Exploration of shared ACPS/community gardens
- Identified and protected natural resources throughout the City

Goal 8: Preserve and Protect Cemeteries

- Approved Management Plan for Fort Ward Park addresses storm water concerns at Oakland Baptist Cemetery
- Completed Freedman's Cemetery Memorial
- Continued RPCA maintenance of Ivy Hill and Lebanon Cemeteries



Fort Ward Park, Historical/Destination Open Space Typology

FEBRUARY 2017



Dora Kelley Nature Park and Ford, Natural Area Typology

Goal 9: Create Public Open Space from Vacant Land

- Acquisition of vacant and unused land VEPCO substation, South Early, East Del Ray, Polk Avenue
- Dedication of privately held land to the City for use as public space Jack Taylor, Winkler properties

Goal 10: Link and Expand Pedestrian, Bicycle and Trail System

- Established TES staff position to coordinate the City's Complete Streets program, including expanding the City's trail network
- Approval of City's Transportation Master Plan which included a significant trail network
- Pedestrian and Bicycle Plan (2016)
- Recently adopted Small Area Plans include new and extended trails and on-street bicycle facilities
- Safe Routes to School program underway
- Built Potomac Yard Park

Goal 11: Enhance Streetscape and Gateways

- Recently adopted Small Area Plans call for enhanced streetscapes
- Approval of updated (2007) City Landscape Guidelines (Review and update planned for 2017)
- Implementation of the Public Art Master Plan
- Design guidelines for parkways in the Complete Street Design Guidelines (2016)

Goal 12: Expand Citywide Street Tree Program and Protect Existing Trees and Woodland Areas

- Annual Alexandria native tree sale promotes tree planting on private property
- Updated Landscape Guidelines establish enhanced tree protection requirements
- Urban Forestry Master Plan approved in 2009

Goal 13: Encourage the Creation of Civic Parks at and Adjacent to Metro Stations

- Eisenhower, King Street, and Potomac Yard Metro Stations have approved plans that call for significant improvements to the civic space
- Braddock Small Area Plan calls for enhanced civic space at the Braddock Metro Station
- Developed Braddock Interim Park

Goal 14: Beautify Interchanges and Highway Corridors

- New and updated Small Area Plans call for beautification and greening measures for highways Eisenhower East, Potomac Yard, Landmark/Van Dorn and Beauregard
- Completed streetscape improvements in the George Washington Parkway/Washington Street
- Installed Wayfinding Signs
- Natural Resources Division provided management and enhancements to the Quaker Lane and Beatley Library

Goal 15: Protect Privately Owned Open Space

Active partnership with NVCT for private conservation easements and other preservation tools

- 6 - February 2017

The City is actively involved with other open space managers and owners such as the Northern Virginia Conservation Trust (NVCT), the National Park Service (NPS), and the Northern Virginia Regional Park Authority (NOVA Parks).

Proactive Planning Efforts with Other City Departments

RPCA has been actively involved in the City's Small Area Plans (SAP). The City has adopted policy and regulations in support of obtaining additional open space acreage, including via future development guided by the City's Small Area Plans, dedicated land, and recordation of public access easements. This effort has provided opportunities to identify and coordinate opportunities for expanding and enhancing the City's system of protected open space. Small Area Plans call for improvements to Metro Stations, streetscapes and gateways, expanded networks for open space, and new connections with the existing open space network and City parks. Through this planning coordination, over 193⁷ acres of new and additional protected open space have been identified in the written and mapped Small Area Plans.

Similarly, RPCA staff have coordinated with the City's Transportation and Environmental Services staff (TES) to improve the City's trail system and on-street bicycle facilities.

Resource Assessment, Master Plans, and Implementation Strategies

In the past decade, the City has made a concerted effort to document and update its Geographic Information System (GIS) data set and mapping of the City's protected open space and natural and cultural resources. This tool has enhanced the City's ability to review and manipulate complex data, evaluating the strengths and weaknesses inherent in the City's Protected Open Space system.

The enhanced GIS mapping supported the development of a series of master plans for the City's parks. In addition to these, the Urban Forestry Master Plan (2009), Landscape Guideline (2007) related to plant selection and installation, and Natural Resource Management Plan (2017 pending approval) were developed, each document addressing numerous goals within the *City of Alexandria's Open Space Plan*.

⁷ This acreage amount is drawn from the GIS mapping layer. Although some of the Small Area Plans (SAPs) provide specific acreage figures, a number of the SAPs provide illustrations only and do not include specific figures. The acreage figure cited is an approximate figure to be used for planning purposes only.



Lynhaven Playground, Pocket Park Open Space Typology

FEBRUARY 2017 - 7 -

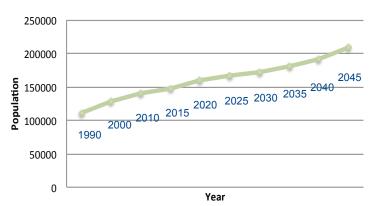
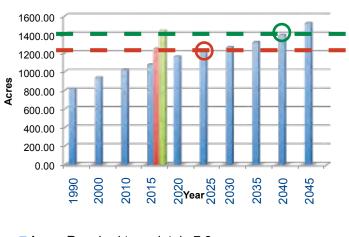


Figure 3. City of Alexandria Population Projections



Acres Required to maintain 7.3 acres/1,000 residents

2017 Acres w/o SAP

2017 Acres w/SAP

Figure 4. Acres Required to Maintain 7.3 Ratio

Challenges

There are many challenges facing the City in its efforts to both protect its existing open space and to increase its amount of protected open space in conjunction with the City's population growth.

A Growing Community with a Fixed Geographic Boundary

Current projections suggest the City of Alexandria will continue to increase in population while remaining locked into its fixed footprint of 15 square miles. Forecasts project an increase in population of 12% in the next decade, similar to the pattern of past growth trajectories. The 2002 City of Alexandria Open Space Plan compared the City to other jurisdictions, arguing that a city's density is a better determinant of the stress on open space than raw population or geographic size. Based on the 2010 U.S. Census data, Alexandria's density was a ratio of 14.58 persons per acre. This density exceeded Arlington County's at 12.48, Baltimore's at 11.99 and was similar to Washington D.C.'s at 15.41 persons per acre. However, these ratios can be deceiving. There are few jurisdictions in the United States with a population figure similar to Alexandria's housed in an area of less than 15 square miles. Looking at the figures this way, Alexandria's size and population density is more similar to Berkeley, CA and Sunnyvale, CA. These communities may serve as a better benchmark for comparison than other jurisdictions with a similar density ratio, but a far greater amount of land available for open space. As the City grows, recreation and open space needs and priorities may also shift as the City's demographics change, making provision of appropriate protected open space even more challenging.

Maintaining the Ratio: A Growing Population with a Fixed Geographic Boundary

Population projections⁸ add another 20,000 residents to Alexandria by 2025, bringing the total to 167,515. The 2002 Open Space Plan established a target of providing a ratio of protected open space acres per 1,000 residents of 7.3. While no set national benchmark or best practice exists, the sidebar on this page notes that a ratio of 7.4 acres per 1,000 residents is common in jurisdictions with populations between 100,000 and 250,000 people. A key difference between Alexandria and its similarly populated jurisdictions is the City's relatively small geographic size. Arlington County, VA maintains a ratio of 4.05 acres per 1,000 residents. Bellevue, WA, similarly sized in population but geographically twice as large as Alexandria maintains a ratio of 20.31 acres per 1,000 residents. Other ratios and population densities for comparison purposes are found in Appendix 4.

Much to the credit of the City and its staff, the City managed to maintain the 7.3 ratio over the past two decades, adding over 225 acres to the City's total protected open space acreage figure.

- 8 - February 2017

Metropolitan Washington Council of Government 2016 9.0 version projections.

⁹ NRPA ProRAGIS (Park Metrics) data set 12.21.16; self-defined and self-reported statistics by jurisdiction

Adding several hundred acres of new protected open space every decade is not sustainable. At some point, and likely sooner than later, the City's growing population and the City's fixed geographic boundaries will collide, making it impossible to continue to meet this singular metric. In anticipation of that time, the City must consider a different metric to measure its success in protecting and enhancing its open space resources. As the City's population grows, it is worth revisiting the use of a straight ratio to measure success in the provision of protected open space. Other jurisdictions break out types of use, some using the term 'maintained' for areas that accommodate more active uses such as athletic facilities or playgrounds versus more natural areas that include trails and undeveloped open space. Other jurisdictions are moving away from the use of a single ratio of acres of land per 1,000 residents. Instead, they are using tools such as GIS to measure metrics such as proximity of open space to residents throughout the jurisdiction, or identifying barriers that might prevent easy access to open space such as major highways or rail tracks. Other ways to evaluate include tracking the amount of active protected open space acres and the amount of passive protected open space or the amount of impervious surfaces. Some communities track and incorporate privately managed open space in their calculations, such as Homeowner Associations or large institutions such as hospitals and private schools.

Retaining Existing Protected Open Space

As the City's density increases through redevelopment, pressure is placed on the City's ability to preserve and protect its existing open space. Institutional properties expanding their facilities, garden apartments, or other low density uses being replaced with higher density complexes, vacant lands undergoing development—all of these scenarios present a risk to retaining the City's open space acreage currently not protected through any City agreement or ownership.

As the City's public and private schools, from the elementary to the community college level, expand to accommodate a growing student population, existing open space may redeveloped for buildings and parking. One to two story low slung school buildings with extensive athletic fields and play areas may no longer be a viable model. Fairfax County recently built its first 'vertical school,' located in a five-story brick structure converted from an former office complex. At its grand opening, there was no outdoor play area, although there are plans for such a facility in the future. How the City can embrace the results of a growing economy while accommodating an increasing need for physical space and retaining existing open space is a big challenge moving forward.

The City of Alexandria is currently very dependent on the public open space planned for and committed in its Small Area Plans—approximately 193 acres—if the 7.3 acres per 1,000 residents is to be maintained. Even with these additional acres, there will soon be a time where the goal of 7.3 acres is unattainable. With the inclusion and development of the committed acreages from the Small Area Plans, that is shortly following 2040. If the City lets the promised acreage slip, the year that the ratio becomes unattainable could be as soon as 2025 (Fig. 4.).

2016 NRPA Field Report Findings

"The *typical park and recreation agency has 9.5 acres of park land for every thousand residents* in the jurisdiction. So, which agencies offer the most park land acreage per 1.000 residents?

The smallest and largest agencies: those serving fewer than 20,000 residents typically have 10.6 acres per 1,000 residents compared to 12.5 acres per 1,000 residents at jurisdictions serving more than 250,000 people. At the same time, agencies serving jurisdictions between 100,000 and 250,000 people have 7.4 acres of park land per 1,000 residents."

Key Findings Park Facilities, page 5 NRPA – National Recreation and Park Association. 22377 Belmont Ridge Road, Ashburn, VA 20148



Hennage, 500 Henry Street, Private with Public Access Open Space Typology

February 2017

City of Alexandria Small Area Plans

Highlighted listings in blue indicate Small Area Plans as listed on the City's web page that are included in this study. (Plans date back to 2001)

- Alexandria West Small Area Plan
- Beauregard Small Area Plan
- Braddock Road Metro Station Small Area Plan
- Eisenhower East Small Area Plan
- Eisenhower West Small Area Plan
- Fairlington/Bradlee Small Area Plan
- King Street Metro/Eisenhower Avenue Small Area Plan
- Landmark/Van Dorn Small Area Plan
- Northeast Small Area Plan
- North Potomac Yard Small Area Plan
- Northridge/Rosemont Small Area Plan
- Old Town Small Area Plan
- Old Town North Small Area Plan
- Potomac West Small Area Plan
- Potomac Yard/Potomac Greens Small Area Plan
- Seminary Hill/Strawberry Hill Small Area Plan
- Southwest Quadrant Small Area Plan
- Taylor Run/Duke Street Small Area Plan
- Waterfront Plan

Overlays within Potomac West Small Area Plan, also mapped

- Oakville Triangle Small Area Plan
- Arlandria
- Upper Potomac West

Additions and Updates to SAPs

• Landmark/Van Dorn Corridor Plan (Overlay)

Gaining Protected Open Space through the Development Process

Small Area Plans are the tool used by the City to plan for its future growth and development. Open space is a key component within the framework for each Small Area Plan (SAP). Although planning for open space is addressed differently in various Small Area Plans, with some SAPs identifying specific location and required acreage while other SAPs provide more general guidance, each of the plans articulate a vision for the incorporation of open space within its geographic footprint.

Overseen by the Neighborhood Planning and Community Development (NPCD) Division in the City of Alexandria's Department of Planning and Zoning (P&Z), the City works with the community to create Small Area Plans for geographic areas within the City. These plans articulate the community's vision, goals and expectations for each area's future. These plans, along with other elements of the City's Master Plan 'serve as the fundamental framework to guide development review and establish the quality, public benefits, and economic value with new development'. PRPCA staff is actively involved in the SAP planning process to ensure public open space is well defined and provided in the plans. Committed open space such as plazas, trails, and enhanced and new parks are documented and diagrammed. Required open space has been incorporated in the City's protected open space acreage totals upon plan adoption and prior to actual dedication or construction.

Development proposals must be carefully evaluated during the review process to ensure that the open space goals of Small Area Plans are met. As shown in Figure 5, recent plans have provided the City with over 193 acres of additional protected open space as mapped in GIS.

Monitoring and Measuring Success

The City of Alexandria has the benefits of a highly talented staff and sophisticated GIS mapping tools. However, the sophistication of the tool is easily misjudged in terms of accuracy. The GIS data layers can be captured with a degree of accuracy which is encouraging—four points to the right of decimal point in terms of acreage. But, that fine grained measurement is only as good as the drawing from which it is measured. The GIS data set is in a continual state of updating, with some source information drawn from property survey data that is accurate, while other parcel information is updated by tracing the shape from an aerial map. Comparisons between parcel measurements using real estate record numbers and GIS shape files varied considerably, for the entries related to this plan update from 1% to 248%. As more survey data is incorporated into the data set, measurements and their degree of accuracy will improve. Until then, a strong caveat should be issued with any accounting for acreage and the level of precision in which the measurement is shared.

- 10 - February 2017

¹⁰ City of Alexandria Department of Planning and Zoning website, https://www.alexandriava.gov/planning/info/default. aspx?id=296

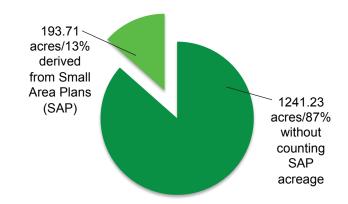
Along with ensuring that caution is used when extracting acreage figures from the GIS data, comparing the City's statistics with other communities is also challenging. Several sites compare jurisdictions and their park and open space facilities, but all depend upon self reporting by each jurisdiction and often self definition of what components are included in the reported figures. The National Recreation and Park Association (NRPA) maintains an interactive database where jurisdictions can self-report their information. Although useful, it is difficult to parse and drill down as the data is presented without definition. For example, a community may say that it has 500 acres of parks, but it is not clear if that includes public access easements or only agency-owned land. Similarly, The Trust for Public Land's (TPL) ParkScore rankings rely on a jurisdiction's self reporting data to TPL. Jurisdictions receive points based on their acreage (limited to acreage derived from park-owning agencies within each jurisdiction), their investment and amenities provided (limited to four amenity types—basketball hoops, dog parks, playgrounds and recreation and senior centers) and access (percentage of population living within a ten-minute walk [half-mile] of a public park). Arlington County, at 26 square miles, is ranked fourth in the country using TPL's metrics. TPL and other entities only credit publicly owned acres in their metrics. Given the City of Alexandria's relatively small geographic footprint and intent to provide as much publicly accessible open space as possible to its residents, alternative mechanisms to fee simple ownership have been explored to provide accessible and public open space. In addition to acres owned by the City, more publicly accessible open space is made available through easement agreements and shared use activities, increasing the City's total acreage of publicly accessible open space.

Documentation of land transactions has been a challenge. The City has actively worked to obtain public access easements through the development planning process but did not have a way to confirm the easement's recordation and then to transfer that data from a plat to the GIS data layer. This tracking is key for multiple reasons, but most importantly to ensure that the land records reflect the development agreement.

Limited Open Space, Multi-generational Needs

A challenge facing all urban communities is the multiple use demands for the limited supply of land, and open space land in particular. Given Alexandria's geographic size, it is not surprising that proposals for use or reuse of protected open space lands are often contentious. As stated in the Citywide Parks Plan, '...we must take full advantage of the parks we have and ensure that they offer the variety of recreational needs that a dense city requires. This includes opportunities for passive relaxation, organized sports, early childhood development, family fun, and individual athletic activities.'¹¹

Figure 5. Proportion of Open Space Acres Promised in Small Area Plans Since 2001

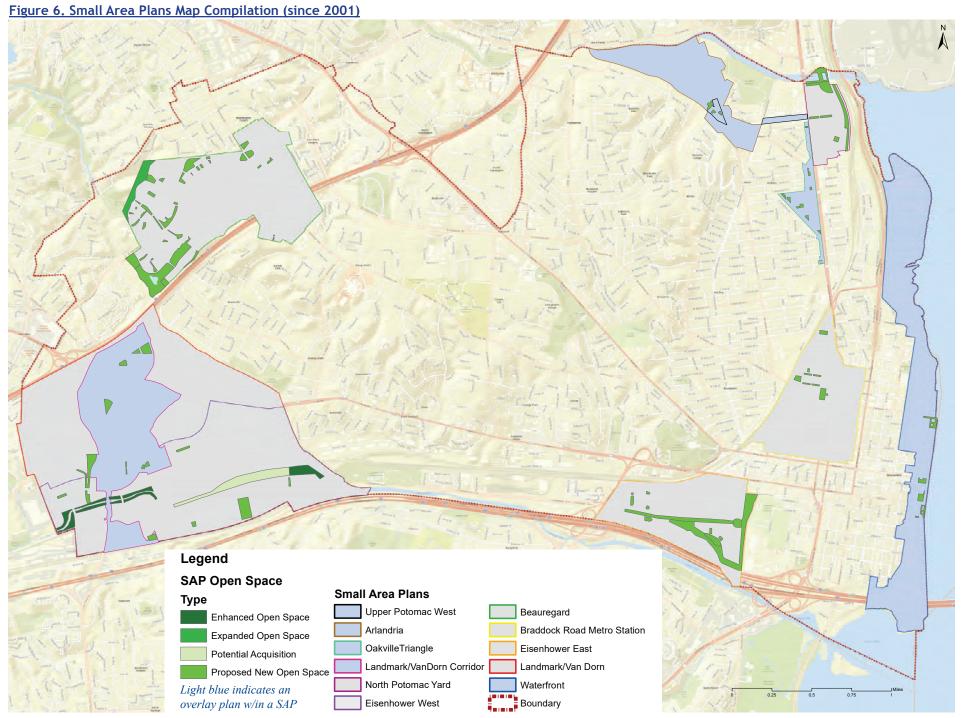


Public Open Space Committed via Small Area Plans (SAP)

- More than 13% of the City's protected open space is provided or promised through SAPs
- If the ratio of 7.3 acres of open space for every 1,000 residents is to be maintained, it is critical that the promised acreage is delivered in total
- Figure 6 on the following page is a map illustrating the City's Small Area Plans reviewed and source of acreage included in this document
- Figure 6 indicates the extent of areas proposed and promised for expanded publicly accessible open space, enhanced open space, and new open space

FEBRUARY 2017 - 11 -

Citywide Parks Improvement Plan, page 11



- 12 - February 2017

Achieving this multi-purpose and multi-generational use requires innovative thinking and practice. The Alexandria ReNew Services synthetic turf field on the rooftop of the facility offers one viable option to address the competing demands for limited space. Shared uses with recreation facilities placed on top of parking garages or other buildings opens an entire new level of real estate for the provision of open space activities. Co-location with infrastructure projects offer another option. As the City addresses the combined sewer and stormwater management challenges, incorporating solutions that also provide enhanced or new protected open space are worth pursuing.

Funding: Foundations, Partnerships

As public funding becomes more scarce, it becomes necessary to turn to other means of support for the City's open space. The *2002 City of Alexandria Open Space Plan* called for multiple means to consider including the establishment of an Alexandria Open Space Conservancy and the formation of a Foundation. Local examples of the later include the Fairfax County Park Authority Land Trust and the Fairfax City Open Space Conservation Fund. In conjunction with these recommendations, the 2002 Plan called for hiring a full-time, professional grants writer to pursue public and private sector funding. ¹² It also called for the establishment of a dedicated open space fund that protects incoming funds and ensures that monies go for the specified use(s) such as land acquisition, open space recreation, natural resource protection, cultural/historic open space resource protection, or other identified uses. ¹³ Although the fund was established, the dedicated source of funds ended in 2009.

The 2002 City of Alexandria Open Space Plan called for the City to actively pursue easements. The City has moved forward with a working partnership with the Northern Virginia Conservation Trust to acquire and hold conservation and scenic easements. Most if not all of the acquired easements require that the subject property be publicly available for at least one day per year.



Braddock Interim Open Space

FEBRUARY 2017

¹² Alexandria Open Space Plan, page 5

¹³ Ibid, page 85



Stone marker at Freedman's Cemetery, Historical/Destination Open Space Typology

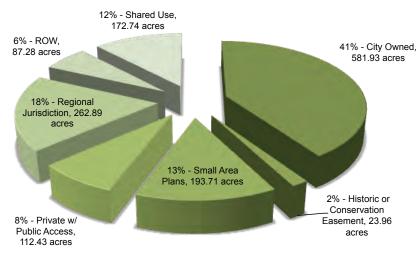


Figure 7. 2017 Open Space by 2017 Typology

2017 City of Alexandria Protected Open Space

Status Today

Research and updates to the GIS data led to an updated compilation of total acreage and a Protected Open Space Map reflecting data compiled through 2015. This map and associated table establishes the baseline for measuring the City's success in protecting existing open space acreage and providing additional acres through acquisition and the use of innovative tools and partnerships.

Figure 6 illustrates and reinforces the importance of monitoring the implementation of the Small Area Plans as the total acreage of protected open space yet to be realized is more than 13% of the City's total protected open space. Information included in Figure 7 indicates the degree of the City's success in using innovative tools to protect open space through easements and shared use agreements; these equal more than 22% of the City's total protected acres.

Active/Passive Use Mix - The Next Decade

Today, the City's protected open space system is classified as being 8% active use and 92% passive use, as shown in Figure 8. Highly dependent upon the definition used for the term 'active use,' it is unwise to compare this percent with other jurisdiction's percentage of open

space unless a comparison is also made of the definitions for active use. The 2017 Updated Implementation Strategy has taken a particularly conservative stance in defining active space. It is limited to identified recreation features in the City's GIS data layers and observations from aerial photographs as defined in this document. Appendix 5 provides a more robust discussion on the challenges of finding a consistent definition of active use. The updated strategy plan recommends a target mix of active to passive use within the overall protected open space system of 15% active use and 85% passive use. This ratio recognizes the large number of easements and future opportunities for shared use access in the City, most of which will fall within a passive use category.

Pervious Surfaces/Impervious Surfaces - The Next Decade

The City's protected open space system currently breaks out at 27% impervious and 73% pervious surfacing, as shown in Figure 8. Discussed in more detail in Appendix 5, the updated strategy plan recommends reducing the impervious percentage to 25% while complying with other City regulations for Resource Protection Areas and Resource Management Areas which may have more stringent requirements.

- 14 - February 2017

2017 City of Alexandria Protected Open Space Plan

Figure 11, The City of Alexandria Protected Open Space Plan, is an illustration of the compilation of multiple layers of data documenting the array of open space located within the City of Alexandria as documented in the table shown in Figure 10 and illustrated in Figures 7 and 9. The map makes use of two shades of green to highlight the importance of the open space as promised in the City's SAP plans. The lighter green indicates the extensive acreage promised by these plans. The darker green indicates open space acreage that is owned or controlled by the City in some manner such as through an easement, or shared use agreement, or open space provided by a regional or national agency such as NOVA Parks and the National Park Service.

Implementation Table

The core of *The City of Alexandria's Open Space Master Plan 2017 Updated Implementation Strategy* is found in the Implementation Table beginning on page 19. The table outlines the Strategies and Actions necessary to build upon the City's successes to date in meeting the fifteen goals established in the *2002 City of Alexandria Open Space Master Plan*.

The Implementation Table is organized by the 2002 Open Space Plan's original fifteen goals. New strategies and actions have been developed for the 2017 Updated Implementation Strategy.

Strategies

The strategies are an addition to the structure of the 2002 plan and its interim internal updates. They attempt to better organize and cluster the specific actions recommended to achieve each goal, clustering mapping exercises with other mapping exercises, tracking and monitoring recommendations, and establishing and making use of tools such as easements and other land conservation techniques necessary to successfully implement the 2017 Updated Implementation Strategy.

Actions

Each action aligns with a recommended year for implementation unless it requires constant monitoring. If so, it is noted in the column entitled 'Ongoing'. Actions tied to a specific time frame, with a check mark in one of the columns ranging from Year 1 through Years 9-10, should be viewed as an ordering of priorities. Accomplishing all the actions within each column will require additional resources in most if not all years.

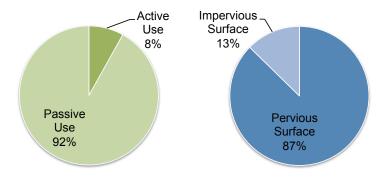


Figure 8. Active/Passive Use mix and Pervious/
Impervious Surfaces (SAP acreage excluded in each)

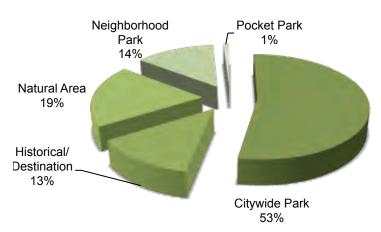


Figure 9. City Owned Protected Open Space by 2017
Typology

FEBRUARY 2017 - 15 -



Commonwealth Avenue median, Right-of-Way Open Space Typology

Typology	Acres*	Notes
City Owned Protected Open Space	581.93	Citywide Park @ 308.51; Historical/Destination @ 75.62; Natural Area @ 112.69; Neighborhood Park @ 79.36; Pocket Park @ 5.75
Historic or Conservation Easement	23.96	Includes INOVA Scenic Easement and 1500 King Historic Easement moved from prior inclusion in Private with Public Access Type (most if not all easements require a minimum one day of public access)
Small Area Plans (planned/ committed/not yet built: Beauregard; Braddock Metro; Eisenhower East; Eisenhower West; Landmark/Van Dorn; North Potomac Yard; Oakville Triangle; Waterfront; Arlandria; Upper Potomac West)	193.71	Total represents acreage count drawn from GIS mapping for the Small Area Plan (SAP) Open Space per SAP plans—GIS mapping includes 66.94 acres promised explicitly in SAPs and approximate acreage as derived from illustrations contained in each SAP; 3.25 additional acres to be contributed at Four Mile Run outside of SAP boundary
Private w/Public Access	112.43	2017 Typology figure removes Bishop Ireton, St. Agnes and unbuilt SAP parcels included in 2014 Park Typology total acreage
Regional Jurisdiction	262.89	National Park Service; Northern Virginia Regional Park Authority
Right-of-way that RPCA maintains	87.28	2017 figure uses the City's 2014 Park Typology acreage figure; all right-of-ways are not mapped in 2016 GIS data due to missing information (2017 mapping includes 71.77 acres)
Shared Use	172.74	Total includes updated Jefferson Houston School boundary, Barrett Library, Burke Library and Alex ReNew rooftop turf field
Total Acres	1434.94	Total includes: All listed Types, including promised acreage from Small Area Plans
Total Acres	1241.23	
SAP acreage excluded		
Total Acres owned by the City	581.93	Total is the same as City-Owned Parks
Total Acres of Publicly Owned Protected Open Space	1017.56	Total includes City-Owned Protected Open Space, Regional Jurisdiction and Shared Use; total does not include Historic or Conservation Easement, SAPs, Private w/Public Access, ROWs
Impervious Surfaces	157.92	Impervious Surfaces are defined by the City of Alexandria's Zoning
SAP acreage excluded		Code
Active Use SAP acreage excluded	101.02	Active recreational uses of open space land includes primarily programmed activities. Athletic Fields (baseball, football, soccer, softball, multi-use); Court Sports (basketball, multi-use, tennis, volleyball); Facilities that support such activities (batting cages, press box, spectator seating); Fenced Dog Park, Swimming Pools (kiddie, full size); Performance Space; Playgrounds (sandbox, tot lot, playground); and Skateboard Park.

^{*} All acreage counts drawn from 2016 GIS mapping (with exception of Right-of-way); some amounts differ from 2014 Park Typology figures

- 16 - February 2017

Figure 11, 2017 City of Alexandria Protected Open Space Plan



FEBRUARY 2017 - 17 -



Joseph Hensley Park, Citywide Park Open Space Typology

Following the recommended year for implementation, the last column notes what other City of Alexandria agencies or offices that RPCA must collaborate with to best implement each action; Transportation & Environmental Services (TES); Planning and Zoning (P&Z); Office of Historic Alexandria (OHA); Information Technology Services (ITS); Communications & Public Information (C&P); Project Implementation (PI), and Alexandria Public Schools (ACPS).

Caution

It is critical that the City of Alexandria hold to the promises made in the various Small Area Plans for additional publicly accessible open space, while also expanding its efforts to work with local institutions, the Alexandria Public School System, religious organizations, private cemeteries, and other owners of privately held open space which contributes much to the livability of the community.

Appendices

Six Technical Appendices support the findings in this document.

- 18 - February 2017

Figure 12. Implementation Table	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Goal 1: Protect and Enrich Existing Parks								
Advocate, Monitor, Protect and Pursue Public and Private Funding	Sources							
Action: Maintain and increase annual allocation of open space acquisition and improvements funding in the Ten-Year Capital Improvement Plan	~							RPCA
Action: Pursue alternative funding streams, including grant opportunities and development contributions focused on specific projects or funding sources	~							RPCA/P&Z
Action: Establish standardized contribution formulas for private developments that are not able to meet open space requirements on site for open space acquisition or for the improvement and maintenance of nearby parks: such contributions should be based on identified needs and area specific (i.e., within the Small Area Plan where development occurs); consider structure similar to Traffic Management Plans		>	~					RPCA/P&Z
Action: Evaluate in five year intervals the effectiveness of proactive approaches to the City's Living Landscape Fund and the Community Matching Fund in support of the City's protected open space					~		Y	RPCA
Keep the Data Set Current						^		
Action: Continue to update GIS and related data to improve the mapping accuracy with new information and identifying and correcting errors	•							RPCA/ITS/ OHA
Develop Master Plans for the City's Parks								
Action: Complete City's Pocket Park Master Planning effort		V						RPCA
Action: Update Citywide Park Plan						~		RPCA
Action: Update Neighborhood Park Plan							V	RPCA

FEBRUARY 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Develop Cultural and Natural Resource Management Plans for the	e City's Pa	arks and	l Public	Open S	pace Resc	ources		
Action: Complete inventory of cultural and natural resources within City parks and develop management plans for these resources	~			~				RPCA/ OHA
Action: Develop and implement stormwater management strategies and design guidelines that protect natural resources, comply with all applicable stormwater and environmental quality regulations (current and future), and enhance the aesthetics and use of the public open space where the management strategies are located	~							RPCA/ TES/DPI/ OHA
Action: Approve Natural Resources Management Plan		V						RPCA
Action: Map known archaeological sites that are currently protected open space		~						RPCA/ OHA
Continue Public Outreach and Coalition Building								
Action: Publicize sites that are privately owned that have protected open space that is open to the public with web notices, welcoming signs, historical interpretation, and maps	•							RPCA/ C&P/OHA
Action: Establish a Roundtable with adjacent jurisdictions to work to develop common metrics for open space and typology definitions				~				RPCA
Expand the City's Volunteer and Public/Private Partnership Prog	rams			•		•		
Action: Expand "PARKnerships" to help with ongoing maintenance and improvements of open space	~							RPCA
Action: Develop framework for the establishment of a Foundation			~					RPCA
Metrics and Conformance				•	•			
Action: Continue consideration of alternative metrics to the current standard of 7.3 acres of Public Open Space per 1,000 residents as the proper tool used to assess the successful provision of protected open space to City of Alexandria residents		•						RPCA/P&Z
Action: Rezone recently acquired properties to Public Open Space (POS) zone				~				RPCA/P&Z

- 20 - FEBRUARY 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Goal 2: Develop Innovative Opportunities for Creating Action Action Expand Opportunities to Add Publicly Accessible Open Space	dditiona	l Public	Open :	Space				
Action: Create/integrate parkland and recreational amenities on top or in coordination with other public infrastructure (including new underground and aboveground parking structures, stormwater facilities and buildings)	•							RPCA/TES P&Z
Action: Develop and adopt formal public/private partnership guidelines for public use opportunities of private and institutional open space and/or vacant land		~						RPCA/P&Z
Action: Formalize policy/guidelines and agreements for roof top open space available/usable by the public that may count toward the City's public open space goals			~					RPCA/TES
Action: Create and establish outreach program, alerting the public to the availability of privately owned, but publicly accessible open spaces throughout the City		~						RPCA/C&
Action: Continue annual outreach to private and institutional landowners regarding benefits of conservation easements	~							RPCA
Action: Identify tools and techniques to maintain and enhance the City's waterfront viewsheds and public access points						~		RPCA/P&Z
Action: Continue to evaluate the Warwick Property for its open space value and potential	~							RPCA/P&Z
Action: Establish formal procedure for documentation of recordation and require proof of recordation of easements prior to approval and release of site plan; develop a method or checklist to track progress of plans with commitments to public open space through the DSUP approval process		~						RPCA/P&Z
Action: Participate in all Small Area Planning processes; use the process to strategically expand and connect the open space network	~							RPCA/P&Z OHA
Jse Mapping Tools to Track and Monitor Potential Opportunitie	S							
Action: Identify parcels suitable for open space acquisition or protection through other means within large-scaled commercial development	~							RPCA/P&Z

FEBRUARY 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Action: Identify private and institutional landowners whose properties in full or partially present opportunities conservation or scenic easements, with or without public access, for overall open space protection	~							RPCA/P&Z
Action: Identify and map opportunities to re purpose public right-of-ways to more active or protected open space					~			RPCA/ITS
Action: Map viewsheds and water access points for City's waterfronts					~			RPCA/ITS
Action: Map location and ownership of utility corridors to identify potential locations for a mutually beneficial shared use agreement						~		RPCA/ITS
Goal 3: Complete Implementation of the Potomac River	Waterfro	ont Plar	7		,			
Implement the Waterfront Plan				,				
Action: Complete and implement Waterfront Park/Open Space Design	~							RPCA/ DPI/P&Z /OHA
Participate in Small Area Plan Updates								
Action: Identify opportunities for public open space with future redevelopment in the Old Town North Small Area Plan, including the GenOn site		•						RPCA/P&Z/ OHA
Goal 4: Protect and Expand Stream Valleys and other En	vironme	ntally S	Sensitiv	ve Area	S			
Encourage stream restoration in protected open space								
Action: Continue to curtail encroachments into stream valleys and other RPAs	~							RPCA/TES/ P&Z
Action: Approve Natural Resources Management Plan, identifying areas for additional protection and significant restoration and/or reforestation and link to developer contributions where possible		•						RPCA/TES/ P&Z
Action: Integrate additional mapping of sensitive natural resources (public and private) and develop appropriate protective measures according to each resource (Natural Resource Management Plan)	-	•						RPCA/ITS

- 22 - February 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Action: Implement natural stream restoration techniques in areas where naturalization is feasible, including the daylighting of streams	~							RPCA/TES
Protect the Resource Protection Area and Its Buffers								
Action: Do not allow variations to RPA buffers	~							RPCA/DPI/ TES/P&Z
Action: Through redevelopment, require the removal of impervious surfaces in RPAs	~							RPCA/DPI/ TES/P&Z
Action: Partner with community groups to monitor RPA's	V							RPCA
Goal 5: Create an Open Space Network in New Developm	ent Area	ıs						
Participate Small Area Plan Planning								
Action: Continue to ensure that all new redevelopment areas and updates to Small Area Plans include connected open space areas, including local and regional open space networks	~							RPCA/P&Z
Action: Protect existing open space in new development areas	V							RPCA/P&Z
Action: Encourage the provision of open space for new large scale commercial development	~							RPCA/P&Z
Craft a Green Infrastructure Plan								
Action: Develop and regularly update green infrastructure maps for each planning area to identify areas for open space protection projects and/or creation, using approved open space criteria		~						RPCA/TES
Create Linked Corridors								
Action: Coordinate with Arlington and Fairfax Counties to provide open space linkages in new development and redevelopment areas	~							RPCA/P&Z
Action: Identify potential opportunities to link public infrastructure improvements with future co-location of protected open space	V							RPCA/P&Z/ TES/DPI

FEBRUARY 2017 - 23 -

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Goal 6: Protect and Preserve Institutional Open Space								
Use Mapping Tools to Track and Monitor Potential Opportunities								
Action: Continue to update GIS data and identify potential opportunities where open space protection is mutually beneficial	~							RPCA/ITS
Action: Map private schools (pre-school, elementary) and daycare facilities open space and recreation resources located within the City of Alexandria			~					RPCA/ITS
Action: Pursue easements for trails and/or ecosystem corridors through institutional space to connect with public open space				~				RPCA/ TES/P&Z
Encourage the Use of Easements and Other Alternative Preservat	ion Tools							
Action: Continue outreach through the Northern Virginia Conservation Trust to promote conservation easements on institutional land	•							RPCA
Action: Identify private and institutional landowners whose properties in full or partially present opportunities for conservation, historic, or scenic easements, with or without providing public access	~							RPCA
Action: Formalize the process for a public/private partnership to maintain and enhance natural areas located on institutional lands		~						RPCA
Action: Explore right of first refusal options with large land holders in advance of any such land becoming available on the market		~						RPCA/P&Z
Action: Meet with owners of large institutional properties within the City to explore opportunities for protected open space			•					RPCA
Action: Formalize process for public/private partnerships that maintain and enhance natural areas on institutional land				~				RPCA
Goal 7: Protect and Maximize the Use of Public School Ope	n Space		,					
Monitor ACPS Development Proposals	-							
Action: Increase the permitted height for schools in residential zones to encourage new/redeveloped schools to "build up" to protect and provide open space	~							RPCA/ ACPS/P&Z

- 24 - February 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Action: Consider practices such as the provision of rooftop athletic/recreational fields, or the construction of parking structures with rooftop open space/recreational/athletic facilities in the redevelopment or construction of new schools to protect and provide open space	~							RPCA/ ACPS/P&Z
Action: Identify the location of and reduce as applicable impervious paved surfaces during the development process by converting to pervious surfaces				~				RPCA/ ACPS/TES
Action: Establish policies on zoning with regard to open space on school sites, including a goal of no net loss of usable open space (source: Long Range Educational Facilities Plan, June 2015 ACPS)			>					RPCA/ ACPS/P&Z
Encourage School Sites to Meet or Exceed Outdoor Play Space Re	equireme	nts						
Action: Ensure that all (existing and new) public school sites meet or exceed State Department of Education Guidelines for Outdoor Play Space	-							RPCA / ACPS
Action: Continue to provide and enhance bicycle and pedestrian access to schools through the Safe Routes to Schools Program (or similar)	~							RPCA / ACPS
Action: Provide additional bicycle racks and accommodations to decrease the demand for expanded parking lots and convert parking lots to pervious paving where feasible	~							RPCA / ACPS
Action: Meet the Guidelines for School Facilities in Virginia's Public Schools (2010) standards for school sites, including the acreage of outdoor play area space per pupil (source: Long Range Educational Facilities Plan, June 2015 ACPS)	~							RPCA / ACPS
Action: Continue to develop educational programs related to open and natural spaces	~							RPCA
Endorse and Encourage Multi-use of Public Facilities								
Action: Co-locate community and school indoor/outdoor recreation facilities where feasible, including lit athletic fields, playgrounds, special event/performing space, and community gardens	~							RPCA / ACPS/P&Z

FEBRUARY 2017 - 25 -

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies
Goal 8: Preserve and Protect Cemeteries								
Assess and Address Impacts								
Action: Reduce/control effects of stormwater run-off in and adjacent to cemeteries					~			RPCA / OHA/TES
Action: Map cemeteries and create a guide to their resources				~				RPCA/ OHA/ITS
Action: Assess, survey, and inventory natural resources in public cemeteries, with a particular focus on stormwater run-off and erosion adversely impacting the cemetery			~					RPCA/ OHA/TES
Action: Formalize policy and procedures for care of cemeteries, improving awareness and ability to maintain them				~				RPCA/ OHA
Action: Assess and inventory cultural resources in public cemeteries					>			RPCA/ OHA/ITS
Provide Guidance for Visitors	•		•	•				
Action: Increase public awareness that public behavior in cemeteries should be different than that which is appropriate in other public open spaces			~					RPCA/ OHA
Action: Develop standards for signage and/or markings and fencing for unmarked burial sites				~				RPCA/ OHA
Action: Develop educational material with maps, interpretive information, and expected behavior when visiting public and private cemetery sites				•				RPCA/ OHA
Protect Existing Open Space		•						
Action: Explore historic and scenic easements for sites with environmental and cultural resources			~					RPCA/ OHA
Goal 9: Create Public Open Space from Vacant Land								
Use Mapping Tools to Track and Monitor Potential Opportunities								
Action: Identify and map underutilized paved areas that can be converted to temporary or permanent public gathering space CA - Recreation, Parks & Cultural Activities; ACPS - Alexandria Public Schools; C&P - Communications & Public Information			~					RPCA/IT

- 26 - February 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Action: Identify and map vacant lands			~					RPCA/ITS OHA
Seize Opportunities to Transform into Public Open Space								
Action: Maintain annual open space funding in the ten-year CIP and pursue alternative funding streams (including developer contributions, foundation/nonprofit partnerships) to provide the ability to acquire priority open space sites if/when they become available	~							RPCA
Action: Identify and map vacant land for open space acquisition (or other mechanisms) in areas currently underserved by parks/open space (1/4 mile radius)					~			RPCA/ITS
Action: Convert under/unutilized paved areas to public gathering spaces though partnership opportunities based on biennial Needs Assessment findings for type of use	~							RPCA
Action: Evaluate criteria for acquisition of vacant lands and rank identified sites in terms of acquisition priority		V						RPCA
Monitor Implementation of the City's Pedestrian and Bicycle Mass Action: Ensure ongoing RPCA and TES collaboration to oversee		Jpdate						
implementation and maintenance of approved existing and new trail network	~							RPCA/TES
Action: Continue and expand the City's Safe Routes to School program	~							RPCA/ ACPS/TES
Action: Continue to work on implementing the Bicycle/Pedestrian Master Plan that addresses the need for new and improved trails to connect parks/open space (based on the Biennial Needs Assessment findings)	•							RPCA/TE

FEBRUARY 2017 - 27 -

								•
Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Develop Standards								
Action: Develop design and maintenance standards for hard and soft trails, including ADA trail markers, surfacing and other trail amenities				~				RPCA/TES
Map Resources								
Action: Further evaluate the City's network of public alleys and define those most appropriate for use as trail and open space connectors					~			RPCA/ TES
Pursue Alternative Funding								
Action: Consider the use of development contributions and pursue grant opportunities for appropriate and nearby trails and bicycle facilities	•							RPCA/DPI/ P&Z/TES
Goal 11: Enhance Streetscape and Gateways								
Implement a Gateway Improvement Plan								
Action: Complete and implement comprehensive gateway enhancement program at sites listed in the Open Space Master Plan, and in conjunction with the Complete Streets Program							~	RPCA/ TES/P&Z
Implement the Public Art Plan								
Action: Continue to implement the Public Art Plan, in coordination with other public investments	~							RPCA
Complete the City Wayfinding Program								
Action: Complete implementation of the approved City Wayfinding Program in parks and gateways RPCA - Recreation. Parks & Cultural Activities: ACPS - Alexandria Public Schools: C&P - Communications & Public Information:						~		TES/RPCA/ OHA

- 28 - February 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Goal 12: Expand Citywide Street Tree Program and Protect	Existing	Trees	and W	oodlaı'	nd Areas			
Implement the City's Urban Forestry Plan								
Action: Continue implementation of Urban Forestry Master Plan, including enhanced street tree program (based on available funding for maintaining new trees)	~							RPCA
Action: Establish guidelines for improved growing conditions for all new trees				~				RPCA
Map Resources								
Action: Identify and map large tracts of urban forest on private and institutional lands		~						RPCA/ITS
Promote Easements								
Action: Approve and implement Natural Resource Management Plan, identifying tree receiving areas for larger stands of urban canopy and a standardized preventative tree care program for existing canopy		~					~	RPCA
Action: Use developer contributions and canopy requirements to plant (and maintain through warranty) trees in identified receiving areas shown in the NRMP	~							RPCA/ TES/P&Z
Action: Explore and promote forest conservation easements on large tracts of urban forest on private and institutional lands			~					RPCA
Goal 13: Encourage the Creation of Civic Parks at and Adjac	cent to M	letro S	tation	S				
Enhance City Metro Stations								
Action: For future redevelopment of Metro Stations, support partnerships among involved parties in their design and future maintenance	•							RPCA/ TES/P&Z
Action: Consider above ground stormwater features with new projects at Metro Stations	-							RPCA/TES

FEBRUARY 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Action: Partner with WMATA to provide enhanced planting and seating/gathering areas and public art at Metro station - consider private sponsorship					~			RPCA/ TES/P&Z
Action: Partner with WMATA to enliven Metro Stations with active public uses					~			RPCA
Provide Linkages to City Metro Stations								
Action: Provide bike/pedestrian trail linkages to City Metro Stations and enhance linear open space to connect stations (e.g., Braddock and King Street Metro) in coordination with Bicycle/Pedestrian Master Plan			•					RPCA/ TES/P&Z
Goal 14: Beautify Interchanges and Highway Corridors								
Identify and Map Opportunities								
Action: Consider medians as a defining feature of roadways and develop appropriate maintenance standards					~			RPCA/TES
Action: Map and identify medians throughout the City that can serve as place making elements, large enough to accommodate significant planting and public art		~						RPCA/ITS
Action: Establish criteria for selection of medians to enhance for place making purposes and standards for their design and maintenance			~					RPCA
Action: Continue to protect and ecologically manage the Telegraph and Duke meadow and similar natural areas	~							RCPA
Require Conformance with Standards and Culture Requirements for	r Plantin	gs						
Action: Require minimum dimensions for healthy tree growth	~							RPCA
Action: Collect stormwater for irrigation of plantings	~							RPCA/TES
Monitor VDOT Properties								
Action: Continue to monitor all highway expansion programs by VDOT to ensure protection of existing landscape plans and to identify areas for forestation and reforestation RPCA - Recreation, Parks & Cultural Activities; ACPS - Alexandria Public Schools; C&P - Communications & Public Information; I	~							RPCA/TES

- 30 - FEBRUARY 2017

Figure 12. Implementation Table, continued	Ongoing	Year 1	Year 2	Year 3	Years 4-5	Years 6-8	Years 9-10	Responsible Agency(ies)
Goal 15: Protect Privately Owned Open Space								
Identify and Map Opportunities								
Action: Identify and map contributing privately owned open space			-					RPCA/ITS
Action: Identify underserved areas of the City with significant natural resources		~						RPCA/ITS
Develop criteria for privately owned open space worth protecting potential to connect neighborhoods	g - inform	al path	networ	k, long	-term cas	ual use by	neighbors	, access
Action: Develop criteria for what constitutes contributing privately owned open space that is worth protecting—informal path network, long-term casual use by neighbors, access potential to connect neighborhood residents with resources, presence of significant cultural resources, etc.		~						RPCA/OHA
Action: Develop policy and programs to provide additional public open space on privately held property, especially in congested, underserved areas and areas with significant natural resources. Ensure the uses are matched with identified needs (e.g. community gardens, playgrounds, etc.)							•	RPCA
Action: Continue partnership with the NVCT with a focus on education and on achieving conservation easements or other measures of protection on large institutional open space tracts and properties adjacent to existing parks and other valuable open space—focusing on identified priorities	~							RPCA
Action: Consider, and pursue where feasible, right of first refusal options for identified priority sites	~							RPCA
Action: Continue to provide annual or biannual seminars on open space easements that area available to residents and property owners in the City	~							RPCA
Action: Continue Natural Resource Division's advisory capacity to private landowners	~							RPCA

- 31 -

OPEN SPACE MASTER PLAN 2017 UPDATED IMPLEMENTATION STRATEGY

Definitions

Active Use. Active recreational uses of open space land include primarily programmed activities. The mapping was drawn from identified recreation features in the City's GIS data layers and observations from aerial photographs. Designated Active Use includes: Athletic Fields (baseball, football, soccer, softball, multiuse); Court Sports (basketball, multi-use, tennis, volleyball); Facilities that support such activities (batting cages, press box, spectator seating); Fenced Dog Park, Swimming Pools (kiddie, full size); Performance Space; Playgrounds (sandbox, tot lot, playground); and Skateboard Park.

City-Owned vs. Alexandria City Public Schools (ACPS). Occasionally, the public is understandably confused regarding ownership, control and authority over public lands within the City. Many ACPS sites provide publicly accessible recreation uses such as playgrounds and athletic fields. Although publicly funded with tax dollars, ACPS's School Board holds the ownership of ACPS property and has authority over its use and disposition.

Cultural Resources. Historic structures, archaeological sites, landscapes, or features.

Easements. The Open Space Master Plan incorporates properties controlled by four easement types: Conservation, Scenic, Historic and Public Access. Focused on different resources to protect, each employs a legal structure to transfer land rights from one body to another. The legal title to the underlying land is retained by the original owner for all other purposes than those called out in the easement language. Two examples of easements and their definitions follow.

Historic Preservation Easement—As defined by the City of Alexandria on its website, A [historic] preservation easement is a means by which the owner of historic property can be assured of continued preservation after the property passes from his or her stewardship. Preservation easements also enable owners to realize significant federal, state, and local tax savings. An historic preservation easement is a voluntary transfer of some rights associated with property ownership. It is an agreement, set forth in a legal document recorded in the city's land records, which allows the donor to retain ownership and possession of an historic site or structure while granting to a trusted preservation organization the authority to protect its historic features. Such easements contain provisions that obligate the owner and all subsequent owners to refrain from actions that are incompatible with the property's preservation. This means that the easement "runs with the land" and legally binds all subsequent owners. Some easements only protect the open spaces surrounding an historic resource, while others protect exterior facades of historic structures or their significant interior architectural elements. Some easements combine all of these features. Under the Alexandria's Historic Preservation Easement Program, easements are granted to the Alexandria Historical Restoration and Preservation Commission (the Commission) and are administered by it through the city's Office of Historic Alexandria.* The Commission will accept historic preservation easements if the structures or objects on the property are at least 50 years old, the property is significant in city, state, or national history or culture, and the easement protects the open space or other elements of the property that contribute significantly to the cultural heritage and visual beauty of the City of Alexandria. Alexandria's easement program has been successful, due in large part to the sense of stewardship shared by owners of easement properties and to the careful administration of the program. * Most of the city's thirty existing historic easements are held by the Alexandria Historical Restoration and Preservation Commission, but the Commonwealth of Virginia's Board of Historic Resources and certain private non-profit preservation organizations also accept historic preservation easements.¹

Conservation Easement—As defined by the Northern Virginia Conservation Trust (NVCT) on its website, conservation easements are voluntary legal agreements that landowners enter to permanently restrict the uses of their land. A conservation easement is a private, voluntary, permanent agreement. In this way, it's different from turning land into public parks, and from efforts such as overlay districts or zoning that could be reversed in the future. An interested landowner works with a conservation group such as NVCT to craft a deed of conservation easement that lays out what's special about the land and the restrictions that will protect it. With a conservation easement, the landowner retains the typical rights of property ownership, such as whether and what to

- 32 - February 2017

¹ City of Alexandria ,Office of Historic Preservation website, https://www.alexandriava.gov/historic/info/default.aspx?id=29690#WhatisaHistoricPreservationEasement

farm, selling the land, and passing it on to heirs. The Trust, as the "holder" of the conservation easement, carefully documents the special aspects of the land. To maintain the conservation values, the landowner and the Trust determine the easement limitations such as division of the land and future construction, and what can take place in high-resource areas such as stream corridors, historic sites, or scenic parts of a property. Each conservation easement's restrictions and purposes are laid out in a deed that's recorded at the courthouse. After the deed is recorded, Trust staff members visit the property annually and work with the current and future landowners to help them uphold the conservation easement.²

Impervious Surfaces. Impervious Surfaces are defined by the City of Alexandria's Zoning Code. The passage reads: Impervious cover. A surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to: roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.³

Passive Use. Passive recreation uses of open space include primarily unprogrammed uses and activities. The mapping identifies any area NOT designated as Active Use as Passive Use. Passive Use amenities include gardens or garden plots, picnic shelters, natural areas, trails, and unfenced dog parks.

Protected Open Space. Land that the City of Alexandria has some form of ownership or control of its use. Examples include fee ownership, easements and shared-use agreements. Replaces terms parks, parklands in earlier documents.

Public Access. Public access signals open use by anyone member of the public. Public access can be granted in private properties through a public access easement, which is signaled in the property's plat. Historic, or conservation easements most commonly as found in the City of Alexandria require public access at least one day out of the year. All other open space controlled by the City is considered to be publicly accessible for all residents and visitors to use.

Resource Protection Area (RPA). RPAs are defined by the City of Alexandria's Zoning Code. This definition is drawn from that source: Resource protection areas (RPAs) consist of sensitive land that has either an intrinsic water quality value due to the ecological and biological processes such land performs or that is sensitive to uses or activities such that the use results in significant degradation to the quality of state waters. In their natural condition, these lands provide for the removal, reduction, or assimilation of nonpoint source pollution entering the bay and its tributaries. An area of land that includes any one of the following land types shall be considered to be within the RPA:

- (1) Tidal wetlands;
- (2) Tidal shores;
- (3) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;
- (4) A buffer area of 100 feet (measured from top of bank) located adjacent to and landward of the components listed in subsections (1) through (3) above and along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the RPA notwithstanding the presence of permitted uses, encroachments, and vegetation clearing in compliance with this Article XIII.⁴

Small Area Plan. Small Area Plans (SAP) together make up the City's Master Plan. Each SAP identifies development strategies for the particular 'Small Area' or neighborhood. There are also supplemental overlay plans within SAPs that are considered amendments to the original Small Area Plan. Properties within the overlay area are subject to that plan's requirements and regulations. Where the overlay plan does not describe development strategy, the underlying Small Area Plan applies.

² Northern Virginia Conservation Trust website, http://nvct.org/what-we-do/conserving-land/what-is-a-conservation-easement/

³ Definition of Impervious Surfaces, From Municode 090716 ARTICLE XIII. - ENVIRONMENTAL MANAGEMENT [Editor's note—Ord. No. 4865, § 1, adopted March 15, 2014, repealed Art. XIII and enacted a new article as set out herein. The former Art. XIII, §§ 13-100—13-120, pertained to similar subject matter and derived from Ord. No. 4443, § 1, adopted April 22, 2006.]

⁴ Definition of Resource Protection Area, From Municode 113016 ARTICLE XIII. ENVIRONMENTAL MANAGEMENT 13-105 - Designation of Chesapeake Bay Preservation Area Overlay District.

- **34** - February 2017