

ENVIRONMENT FOR EVERYONE

*Environmental Sustainability
and Resilience: the Natural
Resources Chapter of the City's
Comprehensive Plan*

*Adopted
Month xx, 2019*

Introduction: Context and Vision

Environmental Leadership

The City of Falls Church has long been a leader in environmental sustainability, and the 2040 Vision affirms that the City will continue to lead. In many ways the City has matched or exceeded the accomplishments of jurisdictions many times its size, including: first Tree City USA in Virginia, first Green Power Community in Virginia, often lead the state in recycling, recognized as a Community Wildlife Habitat, achieved Platinum certification in the VML Green Community Challenge. These accomplishments are supported by hundreds of volunteers who contribute their time and energy to making the City a better place to live. These accomplishments illustrate the City's community's longstanding commitment to environmental protection and improvement.



Figure 1: Tree canopy cover on commercial streets increases consumer traffic, commercial profitability and property values. It also provides shade, cooling, air pollution control, stormwater management and a host of other environmental benefits.

As the City continues to develop and grow, its environmental goals must encompass not only the protection and improvement of its natural resources, but also ensure that the community reaps the maximum benefit from incorporating natural resources in urban planning and development. Integrating green and grey infrastructure will allow the City to maintain a vibrant and healthy urban ecosystem.

Environmental leadership enhances the appeal of the City. The City is very highly rated nationally as a great place to live. Increasing environmental sustainability and resilience will increase the attractiveness of the City to businesses and residents and strengthen economic development.

Environment is Everywhere – Scope of the Chapter

This chapter of the comprehensive plan addresses:

- Geography: topography, geology and soils
- Water: water resources, watershed, floodplains and stormwater management, sewers
- Waste management
- Green infrastructure: urban forest, open space, streamside plantings and rain gardens, green roofs, habitat and wildlife
- Community involvement and education
- Climate change mitigation and adaptation: air quality, greenhouse gas emissions, energy, green buildings, sustainability and resilience

It also incorporates goals related to other chapters of the Comprehensive Plan such as Transportation (Mobility for all Modes) and Parks and Open Spaces (Parks for the People) explicitly or by reference. Although it does not explicitly address economic and social sustainability and resilience, these are inevitably affected by environmental goals and plans.

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Adapting to Change – Population Change

Falls Church is a small community with a rapidly growing population and significant land redevelopment. Between now and 2040, our population is expected to increase by 44% (Weldon Cooper Center for Public Service). Increased population can mean increased transportation needs and associated increases in noise, air, and water pollution. Managing increased waste generation is also a significant challenge. Sewer capacity cannot easily be increased, especially since the City’s outflows are directed through other growing communities to be processed at their facilities. Solid waste (trash) management brings heavy truck traffic into the city for both residential and commercial waste pick-up, so it is important to reduce waste generation.

As the population grows, it will become increasingly important to work hard to maintain the cohesion, neighborliness and environmental awareness and activism that characterize Falls Church.



Figure 2: Community involvement and education are essential to the city’s environmental protection and enhancement.

Adapting to Change - Redevelopment

Between 2000 and 2015, commercial area redevelopment and retrofits affected a total of 34 acres, about 2.3 acres per year¹. For the 5 year period of 2013 to 2017, 129 single family homes were constructed, affecting an estimated 5.5 acres of land per year². Although dense, smart growth can have less detrimental environmental impacts than urban sprawl, impacts and effects still have to be managed.

Redevelopment of land affects soils, vegetation, and water management. Failure to plan for the preservation and integration of green space in redeveloped areas can result in the loss of tree canopy and its many environmental benefits; increased stormwater runoff and associated waterway pollution, and loss of wildlife habitat and native plants.



Figure 3 The use of green infrastructure for stormwater management in development can make the area more attractive and commercially valuable.

¹ Memo “Pace of redevelopment” January 17, 2017 from Paul Stoddard and Shelley Mastran to Chair Wodiska and Members of the Planning Commission.

² Assuming a conforming lot size larger than R-1B (7,500 sq ft) and smaller R-1A (11,250 sq ft),

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Adapting to Change - Climate

In addition to the changes within the city, there are ongoing changes outside the City.

It is important to plan for and protect against the negative impacts of these changes, especially climate change. Gradually increasing average temperatures, higher temperature extremes and more frequent and severe storm events are anticipated. The City must plan to do what it can to mitigate its impacts on climate through reduced greenhouse gas emissions and increase resiliency by constructing more energy efficient, environmentally integrated and sustainable buildings and developing alternative energy infrastructure.



Figure 4: Planning for climate change means doing our best to prepare for the worst.

Sphere of Influence

The actions of city government and of community members individually and collectively are of great importance in influencing the quality of the environment within the city boundaries. As a small community in a major metropolitan area, the City is part of a complex network of interconnected regional activities. In many cases, external influences in the region (such as, for example, transit changes) may have greater impacts on our environment than our own actions. Similarly, state and national policy changes can affect our environment, and support or limit our ability to act. And, of course, when addressing environmental issues, we must also accept our share of humanity's collective responsibility to protect our planet's natural resources.



Figure 5: We all share responsibility for our future.

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Vision Statement – Environmental Leadership

The City of Falls Church takes a leadership role in protecting and enhancing natural resources. Natural elements are integrated through functional restoration in existing locations and the application of best practices in new development to provide aesthetic and economic benefits in addition to environmental health. Community members are passionate about the environment and are committed to preparing for a sustainable and resilient future in a changing climate.

The above vision statement is composed of the following component goals:

- **Water:** Protect the Chesapeake Bay and water resources of the City from the adverse effects of pollution, and improve water quality currently adversely affected by pollution.
- **Urban Forest & Green Space:** Protect and enhance our urban forest and our network of green spaces and naturalized land to provide the environmental benefits of tree canopy, buffer streams, decrease stormwater runoff, enhance air quality, and provide habitat for native plants and wildlife.
- **Green Infrastructure:** Integrate green infrastructure in commercial and residential development to enhance aesthetic and economic value while effectively managing environmental challenges such as air, soil and water pollution and climate change.
- **Solid Waste:** Aim to reduce solid waste to zero.
- **Light and Noise:** Reduce light, noise and air pollution to make the City a healthier and more pleasant place to live, work and visit.

- **Outreach:** Reinforce and broaden our community commitment to environmental action through education, outreach and network-building.
- **Resilience:** Mitigate our impact on climate change and adapt to make our community more resilient to its effects.

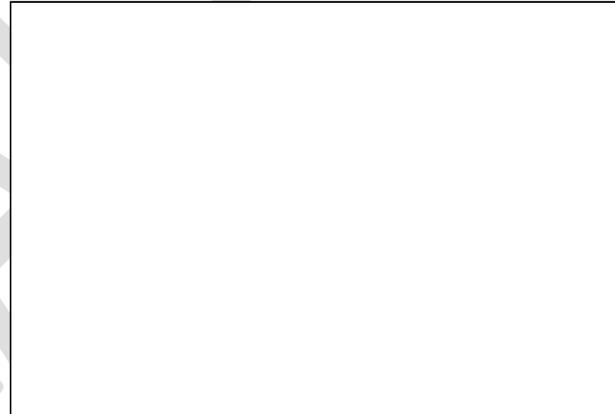


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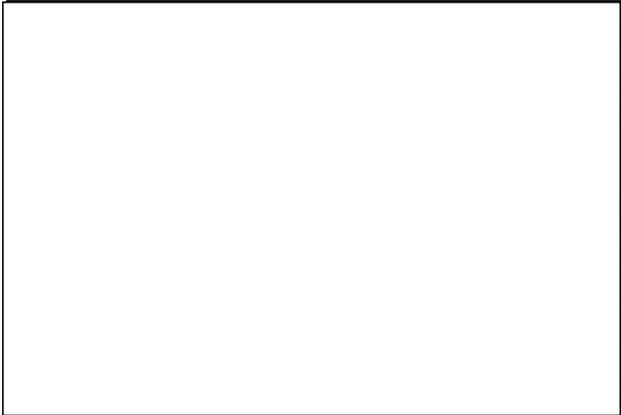


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Chapter Organization

The remainder of this chapter describes the existing conditions, needs, and planned changes for the City’s environmental sustainability and resilience, and its natural resources.

How to Use This Plan

The Comprehensive Plan serves as the City’s official policy guide for shaping the future of the City. It establishes priorities for environmental sustainability and resilience, and its natural resources in planning efforts and projects. This chapter also recognizes that implementation must remain flexible to changing conditions and that priorities will change. Therefore, this chapter should be used as a “living document”.

This chapter should be used as a framework for scheduling projects and documenting completed projects. The project locations and elements described in this chapter are conceptual. Specific location

and design decisions are intended to be worked out on a project-by-project basis during implementation.

Specific tasks in the Plan are scheduled in one of three timeframes: short term, medium term, and long term. Those terms refer to the following ranges:

Timeframe	Expected Completion
Short Term	2019 to 2021
Medium Term	2022 to 2024
Long Term	2025 or later

In addition to implementation timeframes, specific tasks also include cost estimates in both staff costs and dollar costs.

Development Review

During development review, developers, staff, and boards and commissions should refer to the vision, goals, and strategies enumerated in this chapter as well as specific policies and projects. Additionally, implementation plans that are adopted pursuant to this chapter as well as any implementation plans that are included in the chapter by reference should also be considered. All of these referenced plans are part of the City’s Comprehensive Plan and should be used to guide development of the City. A list of these plans is included in Appendix A.

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Existing Conditions [~4 pages, reference related plans and studies]

Topography, Geology and Soils

Water Quality

Urban forest and open space

Green infrastructure in development

Waste Management

Light, noise and air pollution

Community outreach, education and networking

Climate Change Mitigation, Adaptation & Resilience

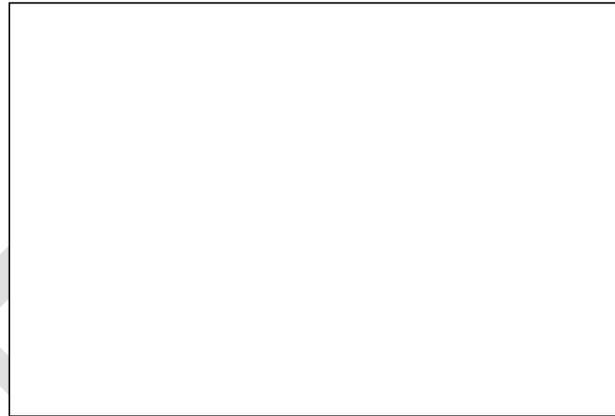


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Evaluation of needs [~5-8 pages, what needs to be done to achieve goals]

Topography, Geology and Soils

Water Quality

Urban forest and open space

Green infrastructure in development

Waste Management

Light, noise and air pollution

Community outreach, education and networking

Climate Change Mitigation, Adaptation & Resilience

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**Implementation [~2 pages for each goal,
listing and prioritizing strategies, policy
actions and projects to fulfill needs]**

Strategies - the overarching approaches to fulfilling needs Policy

Actions – policy changes needed to fulfill needs

Projects – projects needed to fulfill needs

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Policy Action and Infrastructure Project Priorities

Plan is a Guide, Not a Budget

As noted in the previous paragraphs, the City needs to remain flexible and respond to opportunities. Also, current funding levels are insufficient to accomplish all of the projects identified in this plan. Therefore, this plan provides guidance on which policies and projects to pursue. It is not a budget document that commits the City to funding these efforts.

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Appendix B: Benefits of Environmental Sustainability, Resilience and Natural Resources

Economic Benefits

Business Attraction

Labor Attraction

Sales Taxes

Property Values

Other Benefits

Social and Health Benefits

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Bibliography

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Appendix D: Funding Opportunities

Environmental projects can be funded in a number of ways. Listed below are sources of revenues used by communities throughout Northern Virginia, the Commonwealth of Virginia, and the U.S. [Draft note: this list is not complete]

Grant Programs

- Land and Water Conservation Fund
- Virginia Land Conservation Trust
- Virginia Environmental Endowment
- Federal Transportation Alternatives Program

Local Revenue

- Local bonds
- Developer contributions
- Corporate sponsorship
- General fund revenue
- Dedicated revenue (a fixed amount of the property tax rate)

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Appendix G: Planning Process and Public Engagement

This chapter was developed with significant public input and collaboration. Regular announcements regarding the planning effort were posted to the City's eFocus tool, on the City's website, and in The Falls Church News-Press. The plan was developed and refined with community input during the public meetings listed in table to the right.

Information outreach was conducted using the following tools:

- Announcements about community meetings using
 - eFocus , the City's electronic newsletter
 - City website homepage
 - City's Facebook account
 - City's Twitter account
 - Falls Church News-Press
- Regular updates of project status and materials on the project webpage

Date	Groups	Event
May 7, 2018	Planning Commission (PC)	Project Launch
May 16, 2108	Tree Commission (TC)	Regular meeting
May 17, 2018	Environmental Sustainability Council (ESC)	Regular meeting
June 18, 2018	City Council (CC)	Work session
June/July 2018	CC, PC, TC, ESC	Draft distribution
July x, 2018	General Public	Community Meeting
August/September 2018	Other events & survey	
September/October 2018	Boards & Commissions	
October 2018	General Public	Community Meeting
January 2019	Final review with PC, ESC & TC	
February 2019	PC action	
	CC action	

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