



Work Session

Environmental Regulations and Policy Review Project

November 17, 2025



Agenda

- Project Objectives
- Project Background
- Related City plans and programs
- Overview of each project topic
 - Stormwater management
 - Floodplain management
 - Tree canopy
 - Stream buffers
 - Critical slopes
 - Energy efficiency
- Feedback on draft project phasing and topics
- Next steps



Project Objectives

- Objectives
 - Balance community and Comprehensive Plan priorities of housing/by-right density with protecting the natural and built environments
 - Increase community resilience, including to increased flooding and extreme heat risks
 - Ensure alignment between regulations across topics (e.g., stormwater management and floodplain management)
 - Use an equitable framework for prioritization and implementation
- Potential project outcomes
 - City Code updates, including the Development Code
 - Updated policies for the 5-year Comprehensive Plan review
 - Updates to City programs and policies
 - Coordination on related projects and plans



Project Background

- Comprehensive Plan implementation priorities include:
 - Implement zoning changes to support housing choice and affordability throughout the city, protect the natural environment, mitigate the effects of climate change, increase walkability
 - Implement the Climate Action Plan
 - Preserve and enhance the natural environment
 - Prioritize locations for green infrastructure
 - Increase and protect urban tree canopy cover
- New Development Code adopted in 2023 to implement the updated Comprehensive Plan
 - Challenges with implementation of by-right development, especially on smaller infill sites with less room for grey/green infrastructure
- Other identified challenges and opportunities include:
 - Mitigate and prepare for the impacts of climate change
 - Plan for relevant infrastructure replacement and upgrades needed in the next 5-10 years
 - Implement and coordinate on related City plans and policies



Project Background

NDS Work Plan Priority	Status and Anticipated Completion	Strategic Outcome Areas
<u>Environmental Policy Review and Ordinance Revisions</u> : Develop a new policy framework, implementation recommendations, and regulatory revisions to align the City’s regulations for natural resources with the Comprehensive Plan	Complete scoping effort in Summer 2025; Anticipated 2 years	Climate & Sustainability Housing Economic Prosperity

- Departments collaborating on this project include:
 - Neighborhood Development Services
 - Office of Sustainability
 - Public Works / Engineering
 - Utilities / Stormwater Management
 - Parks and Recreation
 - Additional departments involved at key points



Adopted and Ongoing Related Plans and Programs

Water Resources Protection Program (WRPP)

- Includes Stormwater Utilities/fee, addressing the aging stormwater infrastructure system, using Green Stormwater Infrastructure, water quality/quantity management, and resource stewardship

Stormwater Management Program / MS4 permit compliance

- 6 key elements for MS4 permit: education on stormwater pollution prevention, community involvement in pollution prevention programs, programs for detecting and eliminating illicit discharge, stormwater runoff control requirements, post-construction stormwater management program, and pollution prevention program for local government operations

CityGreen initiative (launched 2016) / GreenPrint 1.0 (published 2020)

- Highlights watershed protection and increased tree canopy as key tools for managing runoff and improving urban resilience; shows opportunities for tree planting locations

Climate Action Plan (adopted 2023)

- Framework to reach carbon neutrality by 2050: buildings + energy, transportation, waste, nature-based solutions
- Actions include code updates and coordination on land use/transportation planning

Flood Resilience Plan (adopted 2023)

- Including DCR grant to support an updated floodplain management program
- Stormwater modeling: Moore's Creek watershed complete, Meadow Creek and Rivanna River in progress



Concurrent Related Plans and Programs

Resilient Together Initiative (in progress, anticipated adoption in 2026)

- Actionable and equitable strategies to strengthen community adaptation resilience, adapt to the effects of climate change, improve public health/ecosystems/economic vitality, & reduce greenhouse gas emissions

Community Flood Preparedness Fund Grant (awarded fall 2025)

- Conduct a program review of the City's current Floodplain Management Program, assist in program administration, and update the Flood Resilience Plan with the goal of building a more robust, future-forward, climate-informed program

Urban Forest Management Plan (in progress)

- Existing conditions analysis and recommendations to increase tree canopy (on both public and private land), remove and prevent invasive species, and find ways to fit street trees into constrained right of ways

5-Year Comprehensive Plan Review (scoping underway, with review in 2026)

- This project will inform updated Comp Plan policies

Code Amendments (in progress/ongoing)

- Coordination on ongoing Development Code Tier 1-3 updates
- This project will likely inform updates to portions of the Development Code and other sections of City code



Stormwater Management: Recommended Areas of Study

Review and consider updates to the City's stormwater management requirements

- For by-right infill development, the smaller lots requiring stormwater management (ones that have a land disturbance of 6,000 sq ft or more) may not be large enough to add additional housing units and lot coverage allowed by the Development Code and fit required on-site stormwater management infrastructure
- Developers can buy offsite nutrient credits to meet water quality requirements. This benefits large watersheds overall, but not necessarily the city's waterways/water quality

Evaluate stormwater management infrastructure needs

- The 2023 Flood Resilience Plan identified potential stormwater management infrastructure needs, including drainage, erosion, and water quality improvements. Stormwater utility fee funds alone may not be sufficient to meet needs
- Nuisance flooding and drainage complaints already occur, and could increase with projected increases in rainfall volumes due to climate change



Floodplain Management: Recommended Areas of Study

Evaluate the City's floodplain management program

- Opportunity for cross-departmental coordination on the DCR Community Flood Preparedness Fund Grant to build a more robust floodplain management program

Review and consider updates to the City's floodplain development regulations

- City requirements comply with FEMA minimum requirements for the National Flood Insurance Program (NFIP). The City cannot go below these standards without risking compliance with NFIP
- The City can adopt higher standards, which would need to consider other City policies and goals.
 - Currently, no new construction is allowed in the 100-year floodplain unless it is demonstrated that the cumulative effect of the proposed development will not increase the Base Flood Elevation (BFE) by more than 1 foot anywhere in the city
- Mapped flood zones impact less than 7% of City parcels. However, there are areas outside of mapped flood zones that flood, due to topography, inadequate drainage infrastructure, and other factors
 - FEMA floodplains do not account for 'urban' or pluvial flooding when stormwater infrastructure is overwhelmed; they are focused on riverine flooding



Tree Canopy: Recommended Areas of Study

Review and consider updates to the City's requirements for tree canopy, street trees, and tree preservation with development

- Development community concerns with fitting required trees (to meet tree canopy requirements) into smaller infill sites. Canopy cover percentages are regulated by zoning district (e.g. 10% in Corridor Mixed Use district) and maximum percentages are set by State Code.
- Improved guidance is needed for tree protection/preservation including during construction
- Current tree preservation incentives (1.5x canopy % bonus) do not seem sufficient to the development community to choose tree preservation over planting new trees

Use data, findings, and recommendations from the Urban Forest Management Plan

- Cross-departmental coordination on updated Urban Forest Management Plan
- Tree canopy and urban heat island effect vary significantly by neighborhood
 - Energy cost burdens also vary by neighborhood, which can be mitigated by shade from trees
- Analysis so far indicates significant spatial constraints for planting more street trees in the public right of way; updated Plan will provide recommendations for street tree opportunities and tree preservation



Stream Buffers: Recommended Areas of Study

Review and consider updates to Water Protection Ordinance (WPO) regulations for stream buffers

- WPO stream buffers for three waterways: Rivanna River, Meadow Creek, and Moore's Creek
 - WPO buffers must be at least 100 feet wide on each side of the stream and must be maintained and incorporated into land development design
- Potential updates to WPO buffers would need data-driven rationale (e.g., U.S. Geological Survey or other reliable data source) and need to consider administration, enforcement, and property/development impacts

Evaluate if additional incentives and voluntary measures are needed to protect stream buffers

- Many other waterways have existing buffers (i.e., existing vegetation and trees), though they are not regulated by the WPO
 - Based on GreenPrint 1.0, about half of all 100-foot stream buffers in the city are protected in some form: WPO buffer, located in a City park or conservation easement, or critical slopes
- Voluntary measures/incentives are especially useful for the many streams and stream buffers within private property, which may not develop/redevelop and therefore would not activate WPO buffer requirements, or which are not within designated WPO buffers and therefore have no requirements



Critical Slopes: Recommended Areas of Study

Review and consider updates to the City's critical slopes regulations

- Critical slopes definition includes 25% grade or greater, an area of 6,000+ square feet, and within 200 feet of a waterway/shown on critical slopes map
- Standards for development
 - No buildings, structures, improvements, or land disturbance within critical slopes
 - All lots must have a buildable area outside of slopes/floodplain/WPO stream buffers
 - Some exemptions where no reasonable alternative exists, e.g., for driveways and utilities
 - Can request a special exception
- Special exception process: review criteria should be updated to be more objective and clear

Review and consider updates to Comprehensive Plan guidance

- Only one Comprehensive Plan recommendation related to critical slopes and the value of slopes is not clearly defined
 - For example, there is no distinction between human-made and natural slopes



Energy Efficiency: Recommended Areas of Study

Update energy efficiency standards for public/local government buildings

- City is working on establishing High Performance Building Standards for public buildings
 - Will include updates to the energy and water management policy and the 2008 Green Building Policy

Evaluate potential updates to energy efficiency tax credits and guidance for private development

- City has existing local tax incentives for certain energy efficient buildings and solar
 - Changes to tax incentives at the federal level may limit or slow the uptake of energy efficiency projects and products, especially solar
- Virginia localities cannot require energy efficiency requirements more stringent than the Building Code, though they can have higher standards for projects that require legislative approval

Use the forthcoming Community EV Charging Plan to inform potential regulatory or policy changes

- City is working with a consultant on an EV charging plan in anticipation of continued increasing demand for EV charging
- EV charging cables crossing public right of way (PROW) can pose a safety hazard when not properly covered. Other localities have been adopting PROW cord policies, as dwelling units without driveways often do not have another option for EV charging at home



Summary of Potential Project Outcomes

Topic	Potential Outcomes
Stormwater Management	<ul style="list-style-type: none">• Updates to stormwater management regulations that improve the feasibility of infill development while also increasing the use of onsite measures for water quality (e.g. rain barrels, green roofs)• Data to support future infrastructure needs and a long-range Stormwater Capital Improvement Plan
Floodplain Management	<ul style="list-style-type: none">• Coordination on Community Flood Preparedness Fund grant for a more robust floodplain management program• Updated regulations and standards for development in the floodplain• Participation in the Community Rating System
Tree Canopy and Preservation	<ul style="list-style-type: none">• Updated landscaping requirements such as tree canopy, street trees, and tree preservation bonus• Updated guidance for tree planting, preservation, and health• Recommendations to increase the number of street trees in coordination with the Urban Forest Management Plan
Stream Buffers	<ul style="list-style-type: none">• Updates to the Water Protection Ordinance requirements• Additional or revised incentives and voluntary measures to protect existing trees and vegetation along waterways and to plant additional trees and vegetation
Critical Slopes	<ul style="list-style-type: none">• Updated review criteria for critical slopes special exceptions• More clear guidance in the Comprehensive Plan, which could inform updates to critical slopes regulations
Energy Efficiency	<ul style="list-style-type: none">• High Performance Building Standards / update to the 2008 Green Building Policy• Community Electric vehicle (EV) charging plan• Public right of way policy for EV charging

Project Phasing Considerations



All six Project Topics relate to the **Comprehensive Plan 5-Year Review and Implementation** as well as the **Climate Action Plan** and **Resilient Together**; additional plan and program overlaps for each topic are shown below.

Project Topic	Related In-Progress or Ongoing Plans and Programs	Comp Plan Implementation Impact	Regulatory Complexity	Timeline Considerations
Stormwater	<ul style="list-style-type: none"> Stormwater & other infrastructure modeling Community Flood Preparedness Fund (CFPF) grant 	 High	 High	<ul style="list-style-type: none"> Results from stormwater modeling and broader infrastructure study to inform infrastructure needs and utilities standards - likely available mid-2026 Incorporate relevant recommendations from CFPF - multi-year process State Water Resources Board must review and approve certain regulation changes
Floodplain Management	<ul style="list-style-type: none"> Stormwater Modeling CFPF grant 	 High	 High	<ul style="list-style-type: none"> CFPF recommendations may include changes to the City's Floodplain Management Program and floodplain regulations - multi-year process, with scoping currently underway
Tree Canopy	<ul style="list-style-type: none"> Urban Forest Management Plan (UFMP) 	 Moderate	 Moderate	<ul style="list-style-type: none"> UFMP (in progress) will provide updated data and recommendations for tree canopy and street trees. Certain regulation updates and tree preservation guidance could move forward prior to UFMP completion New Zoning Inspector will ensure tree preservation plans are followed
Stream Buffers	<ul style="list-style-type: none"> Regulations for critical slopes 	 Moderate	 Moderate	<ul style="list-style-type: none"> Coordinate review of regulations and policies with critical slopes and tree canopy topics
Critical Slopes	<ul style="list-style-type: none"> Regulations for stream buffers, stormwater management, and erosion and sediment control 	 Lower	 Moderate	<ul style="list-style-type: none"> Coordinate review of regulations and policies with stream buffers topic
Energy Efficiency	<ul style="list-style-type: none"> High Performance Building Standards EV Charging Study 	 Lower	 Moderate	<ul style="list-style-type: none"> EV Charging Infrastructure Study will provide updated data and implementation recommendations - anticipated completion in 2026 Updates to High Performance Building Standards for public buildings est. 2026



Summary of Planning Commission Feedback

- Additional topics to incorporate
 - Drought mitigation planning
 - Wildfire risks
 - Infrastructure + community resilience
- Regional coordination will be important for this project
 - Albemarle County, University of Virginia, Planning District Commission, Rivanna Water and Sewer Authority, and others
- Project topic grouping and phasing
 - Align project topics and their timing with the ongoing plans and studies mentioned (e.g. Community Flood Preparedness Fund grant and Urban Forest Management Plan)
 - Consider pairing critical slopes and stream buffers topics
 - Consider 'quick wins' earlier in the process



Council Discussion and Feedback

1. Do the 'recommended areas of study' in Attachment 1 capture the key areas of needed study for the six (6) topics identified for this project?
2. Are there additional topics or supporting information that should be included?



Next Steps

- Anticipated to be approximately 2-year process, moving parallel with related plans and programs
- Scope more detailed work plans by topic, based on topic grouping/phasing
- Establish staff internal stakeholder groups/technical committees
 - Technical expertise, data and best practices, develop and review draft recommendations
 - Participate in Planning Commission and City Council work sessions and community engagement
- Develop public engagement plan

Thank You!

