

Urban Environmental Sustainability Chapter

Vision

Charlottesville will be a “Green City,” with clean and healthy air and water, sustainable neighborhoods, ample open space and natural areas that balance increased development and density in residential and economic centers, and walkable, bikeable, and transit supportive land use patterns that encourage healthy lifestyles.

Urban Landscape & Habitat Enhancement

Goal 1: Pursue a healthy ecosystem, including a robust urban forest, that delivers valuable ecosystem services.

1.1: Use green infrastructure to improve stormwater management, flood mitigation, air quality, habitat, and aesthetics.

1.2: Improve stream and vegetated buffer conditions to increase wildlife and aquatic habitat, groundwater recharge and stream base flow, decrease stream temperature, provide a food source for aquatic organisms, improve water quality by decreasing sedimentation, and improve environmental aesthetics.

1.3: Promote and participate in programs to establish conservation or open space easements of forested stream-side lands to ensure permanent protection.

1.4: Continue to implement the Urban Forest Management Plan to protect quality of air, water and lands, manage stormwater, provide shading and absorb CO₂ with an emphasis on addressing invasive species, diversity, and distribution.

1.5: Continue to monitor and track changes in urban tree canopy cover to inform planning and management.

1.6: Include trees, as practicable, in all city priority streetscape plans (e.g., framework streets, safe routes to school, Strategic Investment Areas).

1.7: Use the 2017 Green Infrastructure Possible Planting Areas analysis as a guide to tree planting efforts.

1.8: Continue public stewardship of city lands and associated habitats through showcase conservation and improvement projects and education.

1.9: Plant and promote use of regionally-adapted, native, and drought tolerant plants, including as part of turf-to-forest conversions and pollinator gardens.*

Water Resources Protection

Goal 2: Protect, enhance, and restore the integrity of the City’s water resources.

2.1: Continue to implement the Water Resources Protection Program (WRPP) to meet a range of water resources goals and challenges; including regulatory compliance, stormwater conveyance infrastructure rehabilitation, drainage issues, and water quality stewardship.

2.2: Implement the Water Resources Master Plan capital improvement programs (CIPs) to make drainage and water quality improvements and comply with federal and state-mandated pollutant reductions required as part of the Chesapeake Bay Total Maximum Daily Load (TMDL).

2.3: Repair, enhance, and maintain the City's stormwater management and conveyance infrastructure, utilizing green stormwater infrastructure (GSI) where practicable.

2.4: Develop a strategy to improve maintenance of City owned structural stormwater management facilities.

2.5: Implement stormwater conveyance infrastructure improvements in a manner that minimizes, as practicable, the impacts on receiving water resources.

2.6: Explore watershed scale compliance strategies to meet project and site specific stormwater management regulatory requirements.

2.7: Discouraging additional underground piping of city streams.

2.8: Encourage property owners to implement water resources stewardship practices through incentives, stormwater utility fee credits, and other programs.

2.9: Provide technical assistance and educational outreach regarding water resources stewardship for private property owners.

2.10: Value the Rivanna River as a major asset in the life of our city and region and restore it to a healthy condition within our ecosystem in order to improve habitat, watershed health and water quality, and recreation.

2.11: Develop a Rivanna River Corridor Plan in conjunction with Albemarle County and other watershed localities.*

In Jan 2017, the joint City/ County Planning Commissions recommended proceeding with Phase I of the plan development (develop an MOU establishing a permanent advisory committee to offer guidance for the future use of the river and surrounding land).

Consider moving this item to another section of the Comp Plan (Land Use, Goal 3?)

2.12: Continue collaboration and cooperation with Rivanna Watershed stakeholders, including Albemarle County, University of Virginia, residents, businesses, developers and community groups focusing on watershed and stormwater management, including education and outreach efforts.

2.13: Ensure that planning for future land and recreational uses along the Rivanna River adequately protects water quality.

2.15 Continue public acquisition of natural areas along waterways to enable management strategies that protect water and habitat quality.

Sustainable Development

Goal 3: Encourage high performance, green building standards and practices and the use of the U.S. Green Building Council's (USGBC) LEED certification program, Earthcraft, Energy Star, or other similar systems.

3.1: As appropriate, create policy and financial incentives to encourage increased building and site performance.

Resource Efficiency

Goal 4: Promote effective and innovative energy and fuel management in both City and community buildings and operations.

4.1: Reduce energy demand and increase energy efficiency community-wide by an average of 30% by 2050 (using a baseline year of 2000); support and collaborate with local energy efficiency partners and stakeholders.

4.2: Pursue and promote cleaner sources of electrical energy (e.g., renewable energy strategies).

4.3: Reduce vehicle-related emissions through increased fuel efficiency, reduced vehicle miles traveled, fleet downsizing, anti-idling efforts and use of alternative fuels (e.g., compressed natural gas, biodiesel, or electric vehicle technology).

4.4: Track greenhouse gas emissions in City operations and the community and strategically explore and implement initiatives to achieve emissions reductions.

Water Conservation

Goal 5: Promote and implement citywide water efficiency.

5.1: Continue evaluating water use in city buildings and other operations to identify conservation opportunities.

5.2: Maintain an extensive community focused outreach campaign through education and incentive programs to maintain or further decrease average consumption.

5.3. Explore opportunities with community partners to accomplish water efficiency.

Materials Recovery and Waste Management

Goal 6: Promote and implement strategies for sustainable materials management to decrease environmental impacts, including greenhouse gas emissions.

6.1: Continue to explore opportunities to expand public and private recycling, composting, source reduction, other waste stream diversion, and other waste management innovations.

6.2: Maintain lines of communication with neighborhood and business associations, major employers and representatives of high density housing districts so that solid waste management services are adaptably delivered to promote economic development, enhanced walkability, public health and safety, and compliance with all federal and local requirements.