

SUSTAINABLE GROWTH AND RESILIENCY



Balance growth impacts with the needs of the environment to ensure sustainability and resiliency.



OUR ENVIRONMENT

North Charleston has an abundance of natural resources throughout the City. As the City grows, the demand for housing and employment centers challenge the preservation of these resources. There are opportunities for the City to further promote the conservation of larger tracts in partnership with various organizations while establishing or maintaining a balance between the natural and built environments within neighborhoods - a critical quality of life component. Green spaces provide a space for socialization and passive recreation within each neighborhood, particularly those where smaller lots mean more households with smaller yards. Brownfields can be re-used to generate additional open spaces in and around neighborhoods, in addition to revitalizing neighborhood commercial areas. Most importantly, City decisions on future development patterns and proposals can greatly influence having an appropriate balance between the natural and built environment throughout the city in the future.



Noisette Creek

SG-GOAL I:

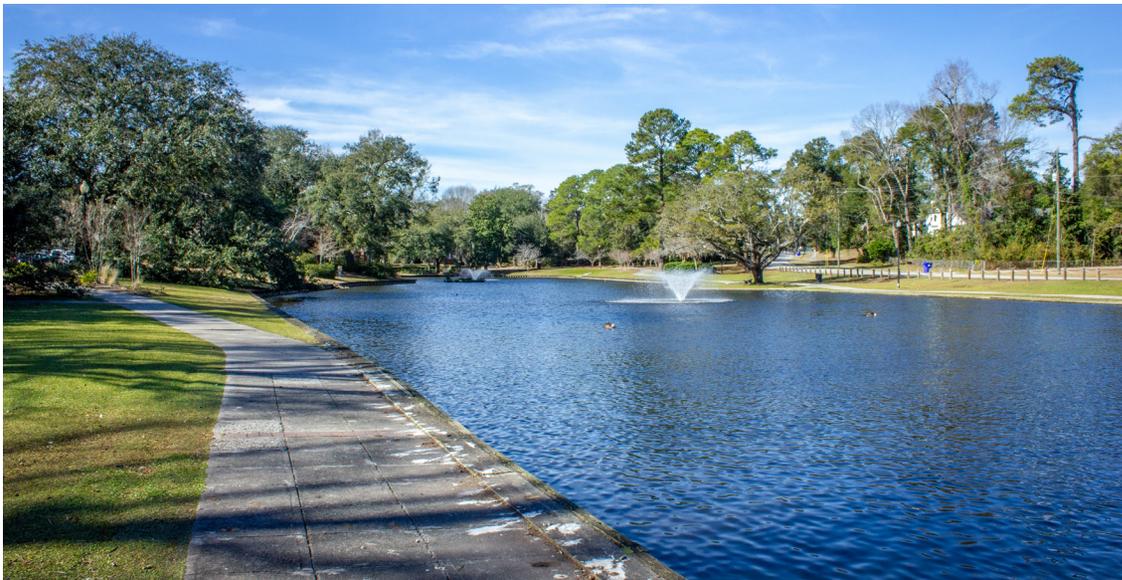
Maintain a balance between the natural and built environments to alleviate the effects of growth on the natural environment and quality of life

SG-1A	Study and revise residential zoning districts to accommodate growth where there are existing resources and infrastructure, especially along transportation corridors, including development of vacant lots, assessing nonconforming provisions to encourage reuse and redevelopment, and incentivizing opportunities for redevelopment
SG-1B	Continue collaborative efforts to identify and plan for redevelopment of brownfields, including grant funding to mitigate costs that potentially impede redevelopment of brownfields/grayfields
SG-1C	Revise Zoning Regulations to include incentives for greater conservation of green spaces, increase requirements for accessible open spaces within new developments, and reduce permitted impervious lot coverage in certain districts
SG-1D	Update development regulations to strengthen stormwater management (SWM) requirements, limit fill in flood zones, provide consistent riparian buffers, mitigate impacts of flooding, re-evaluate tree canopy and preservation requirements and develop standards to allow previous sidewalks and roadways and other methodologies to better utilize infrastructure in multi-faceted ways
SG-1E	Re-evaluate Disaster Plan to ensure streamlined permitting requirements for post-disaster construction and incorporate regulations to accommodate temporary housing post-disaster

Green spaces are sometimes overlooked as an important piece of community infrastructure. Not only is green space an asset to communities within the City, but it can also play an integral part in stormwater management and mitigating increased demands on aging drainage systems. As the City grows, there is less pervious surface to absorb stormwater. Without functioning storm drainage systems to accommodate increased impervious surfaces, coupled with increased storm activity, the City is at a greater risk of flooding.

Natural areas are the most cost-efficient stormwater management system to mitigate the impacts of development and assist with the absorption of rainfall and reduce rainwater runoff within neighborhoods. Continual updates to the City’s stormwater plans to stay abreast of best management practices (BMPs) for stormwater management can be integrated into future developments to ensure low-impact designs and patterns that are ecologically friendly. Floodable green spaces can serve dual purposes for recreation and stormwater retention. Likewise, these provide an opportunity for residents to connect with nature and to offset potential impacts from an ever-changing climate.

A system of designated green spaces and buffer areas, along with undevelopable natural areas can function as “green infrastructure” that improves the City’s resiliency to storms and other natural events, while mitigating potential flooding and protecting water quality. Creation of a green infrastructure plan will identify those areas to be conserved as development proposals are reviewed.



Quarterman Park near Park Circle

SG GOAL 2

Enhance natural resources as green infrastructure to build resiliency and protect water quality by minimizing impacts of stormwater and nuisance flooding

SG-2A	Develop and adopt a Green Infrastructure Plan for the City that addresses SWM requirements, encourages Low-Impact Development standards, limits fill in flood zones, and expands buffers to mitigate impacts of flooding
SG-2B	Work with various partners to identify, maintain, and conserve larger tracts of natural resources while requiring accessible open spaces within new developments
SG-2C	Continue protecting scenic corridors and natural viewsheds along the Ashley and Cooper Rivers, through use of a 50-foot citywide wetland/riparian buffer, while allowing for stormwater facility and utility penetrations where appropriate
SG-2D	Revise parking requirements and provide for reductions as an incentive to encourage larger open spaces, less impervious surface, and higher densities of development
SG-2E	Encourage eco-friendly and neo-traditional development design to promote low-impact design, energy efficiency, and reduce sprawl

As the City becomes more urbanized, mixed-use and higher density development in designated locations and/or contexts can assist in mitigating the impacts on adjacent natural resources. Overlay standards and/or use of performance or form-based codes will provide the needed flexibility to accommodate higher densities, while ensuring compatibility and cohesiveness of design and placement that mitigate impacts such that new developments contribute to the City’s sustainability. Many of the City’s current land use and development regulations could benefit from updates to more performance and/or form-based codes to assist in balancing growth demands and encouraging environmental resiliency.



Mixson and The Factory at Garco as examples of mixed-use neighborhoods

SG-GOAL 3:

Use the Future Land Use Map to serve as the framework for sustainable land uses and development patterns, including mixed use, dense development

SG-3A Reduce use of Planned Development zoning by establishing multi-layered, mixed-use zoning districts to implement land use designations on the Future Land Use Map

SG-3B Evaluate areas to accommodate mixed-use nodes/corridors and mixed-use pedestrian-oriented communities through use of overlay zoning that incorporate transit-oriented development guidelines and use of performance or form-based codes, conditional uses, and/or special exceptions

SG-3C Refine policies and land development regulations to consider requirements for pedestrian accessibility and connectivity within new developments in accordance with Complete Street design principles

SG-3D Adopt an “Official Map” that displays potential future roads, parks and public facilities in line with S.C. Code Section 6-29-340(B)(2)(c)

Residents, property owners, and businesses look to a jurisdiction for adequate public facilities and supportive infrastructure. However, the provision of these comes at a price. Newer subdivisions are required to include supporting infrastructure as they are developed, but many established neighborhoods lack sidewalks and/or adequate drainage systems. In addition to these obvious infrastructure deficiencies, there are aged water, sewer and utility lines. Planning and coordination are critical elements of ensuring the cost-efficient provision of adequate facilities and infrastructure. Each component of infrastructure is the responsibility of a unique agency or department, each with independent strategic plans. Increased coordination and collaboration to construct facilities and/or make necessary upgrades to infrastructure concurrently can mitigate costs and minimize the inconvenience to residents and businesses.

A tool used to frame coordination and collaboration on the provision of facilities and infrastructure improvements is a Capital Improvement Plan (CIP). A CIP sets forth projects required to implement plans which have been prepared and adopted, with an annual listing of priority project for consideration by governmental bodies responsible for implementation. The City can greatly benefit from the development of a CIP that is used as a blueprint for prioritization and budgeting of future public facilities and infrastructure.



N. Charleston Public Works Bldg. (top photo) and the new Athletic Center

SG-GOAL 4:

Enable the provision of facilities and infrastructure to meet the needs of the existing and future population through coordination of land use planning with the availability of related infrastructure

SG-4A	Create and adopt a Facilities Master Plan/Capital Improvements Plan that addresses both the existing inventory of publicly-owned assets and future needed capital improvements
SG-4B	Continue to work with neighboring jurisdictions and applicable agencies to coordinate land development approvals with availability of infrastructure and reduce duplication of services
SG-4C	Develop an Annexation Policy for evaluation of potential annexations, associated impacts of concern and reasonable geographic connectivity as well as planning for provision of services and infrastructure
SG-4D	Continue to seek grants and consider alternative revenue sources to fund infrastructure improvements
SG-4E	Continue utilizing existing revenue sources, such as the City's sidewalk bank or tree mitigation bank, to fund infrastructure improvements, such as pedestrian connectivity between communities and park areas and streetscaping
SG-4F	Continue use of TIFs and other public funding to spur private capital investment