

# 7 - Environmental Sustainability

The concept of “sustainability” involves the ability of a community and society to meet the needs of the present population while ensuring that future generations have the same or better opportunities. There are increasing concerns that as a culture we are using resources at a faster rate than we are replenishing them and are creating communities that are not sustainable in the long run. The Village of Clemmons seeks to move into its future in a manner that conserves natural resources and minimizes degradation of the natural environment.

One of the challenges in addressing sustainability in a community comprehensive plan is that many of the issues are global in nature – air quality, biodiversity, ozone depletion and climate change, food production, and others – and it is often difficult to identify how local planning policies can address these issues. Large and small communities all across the nation are finding effective ways to do this.

Like its neighbors, the Village of Clemmons believes it is important to act responsibly and do its part to address these issues. The Village desires to work to determine how best to “think globally and act locally,” while also recognizing that these efforts must be balanced with other local demands on government time and resources.

## SUSTAINABILITY IN CLEMMONS

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Clemmons has begun to embrace many sustainable growth themes without using that terminology. For example, the ending of urban sprawl through managed growth is a fundamental principle of sustainability, as is the encouragement of pedestrian facilities and transportation. In today’s world, the concept of a sustainable community has evolved, but this comprehensive plan recognizes the importance of the Village doing its part to contribute to a larger sense of sustainable culture.

For the purposes of this plan, the following themes are embraced as desired sustainable growth policies for the future. Many of these are addressed in the appropriate places in previous individual chapters. The purpose of this chapter is, in part, to recognize sustainability as a guiding principle and to create a framework for thinking about the idea, and planning for it as a community. It is intended to provide a summary of the issues in order to integrate them under the sustainability umbrella and guide implementation of future initiatives.



## SUSTAINABILITY POLICIES AND OBJECTIVES

### Promoting Mobility and Access for Pedestrians and Bicyclists

The support, design, and development of pedestrian facilities promotes sustainability on several levels. First, it promotes a healthier community by encouraging walking as a form of exercise. Second, it promotes more personal interaction which can reinforce a stronger sense of community. Finally, it can provide opportunities for movements that can avoid automotive uses, saving fuel and avoiding additional air pollution. Example policies include:

- Development of a multi-modal transportation system as set out by the Village Transportation Plan recommendations
- Development of a trail and greenway system that links neighborhoods to local and regional parks and destinations
- Requirement of pedestrian and bicycle amenities and facilities in all new developments and redevelopments
- Focused development in activity centers distributed through the community to promote pedestrian and bicycle access from neighboring areas
- Development of a bicycle system that accommodates all levels of riders

#### ***Objective #58: Implement the Village Transportation Plan***

Implement the action strategies of the Village Transportation Plan to create a more sustainable transportation system for Clemmons.

### Protecting the Community's Water Resources

Water quality and quantity are two important issues related to sustainability. The Clemmons community will promote the protection of both through the development of a formal sustainability policy for the Village related to water resources. Adopting formal policies and resolutions in support of sustainability measures sends a signal to the community and the larger region that Clemmons is becoming a leader in water resource planning and protection in the Triad. Possible sources for information related to developing a water protection policy include:

- The Piedmont Triad Regional Council (PTRC) - Planning
- The North Carolina Department of Environmental Quality – Water Resources
- Clean Water Management Trust Fund
- Yadkin River Keeper

#### ***Objective #59: Work with Concerned Citizens on Community Water Issues***

Protect water as a natural resource by working with concerned citizens in an effort to address water issues related to quality, quantity, stormwater runoff, watershed planning, etc.



*The Village has several stormwater retention ponds with varying degrees of age, siltation, dam condition and other factors.*

***Objective #60: Develop Framework for Citizens and Community Organizations to Partner with the Village of Clemmons on Water Resource Issues.***

Develop a framework from which concerned citizens and community organizations can collaborate with the Village on issues related to water resources. This process may include the development of a new water resources task force, engagement with homeowner's associations responsible for the management/maintenance of area dams and/or involvement with the Storm Water Advisory Board.

***Objective #61: Assist Citizens and Community Organizations in Obtaining External Grant Funding for Local Water-Related Projects***

Provide technical assistance, as possible, to concerned citizens and community organizations that seek external grant funding for the maintenance and/or management of water resources with the planning jurisdiction of the Village

## **Encouraging Sustainable Development Practices**

The technology for the design of environmentally-friendly buildings has continued to improve, making it more feasible and affordable to design "green" buildings. The Village will work to identify feasible practices to promote the use of environmentally sensitive guidelines, such as those published by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) rating system. The Village will also explore opportunities to use these building techniques in future municipal developments, such as the Village Center. Policy initiatives include:

- Promoting green building design in commercial and residential developments through new development incentives
- Using green development techniques when developing new municipal facilities

## **Conserving Energy and Saving Money**

Energy conservation is another fundamental tenet of sustainability, and is interrelated to many of the other issues discussed here. For example, a more walkable community that reduces automobile traffic can save on fuel, and "green" buildings can save on heating and air conditioning. The Village will continue to explore means of saving energy, particularly involving municipal government operations.

- Reduction in automobile use through development of multi-modal transportation system resulting in a decrease in non-renewable fuel use
- Promoting energy efficient houses and private commercial developments
- Consideration to develop an energy audit program for the Village

***Objective #62: Incentivize LED and Sustainable Lighting***

Provide helpful community resource guides and tangible incentives to provide LED and other future sustainable lighting products in new development or when retrofitting existing development.

## Waste Management: Reducing Waste and Promoting Recycling

Recycling involves the reprocessing of materials into new products, and is a fundamental practice that promotes sustainability. Another component of recycling is encouraging the use of products made from recycled materials. The Village will continue to promote recycling and will work to explore new and better opportunities to spread the practice. Example policy action areas can include:

- Expanding residential weekly recycling services to include cardboard pickup
- Providing interior recycling bins at all municipal facilities that are available and easily accessible to visitors as well as employees
- Providing incentives to developers that use recycled or reused materials in new construction and redevelopment projects
- Providing incentives to developers that implement construction site waste management programs

### *Objective #63: Hold Additional Community Events to Increase Recycling and Reduce Waste Production*

Explore new ways to reduce waste production and increase recycling in Clemmons. Ideas include providing recycling bins and trash cans at strategic public locations, educating residents about the benefits of waste reduction and recycling, and providing incentives to developers that reduce waste production and increase recycling on construction sites.

## Protecting Natural Resources

The protection of the natural environment is both a long-standing policy priority for the Village as well as a fundamental principle of sustainability. This is an example of where current Village policy aligns very well with the sustainable growth theme. Policies include:

- Focused development that protects rural areas, environmentally sensitive lands, efficiently uses infrastructure, and clusters development in a more compact form. This includes interjurisdictional efforts to ensure this compact form is reaffirmed with other regional plans
- Maintaining the viability of older, existing neighborhoods to reduce demand for new housing and expanded development
- Initiation of a tree canopy study to identify ways to maintain trees in the Village
- Establishment of new community gardens
- Reduction in water and wastewater use in new developments
- Limiting development to areas that have existing infrastructure and capacity to handle new growth.



***Objective #64: Encourage the Expanded Protection of Natural Resources***

This could be used in cluster developments, protection of existing tree canopy beyond the current requirements, reduction in impervious surfaces, establishing community gardens, and reducing water and wastewater use associated with development within the Village.

***Objective #65: Protection of Open Space/Rural Areas***

The Village Staff will actively research options for the effective protection of open space/rural areas within Clemmons' planning jurisdiction.



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