# 8. ENRICH

## Meeting Sustainability and Environmental Objectives



# IN THIS CHAPTER:

- Challenges and Opportunities
- Policy Direction
- How We Will Achieve Our Vision
- Related Policy Direction in Other Chapters

Cary is a leader in preserving and protecting our finite natural resources by ensuring our land, water, and air are responsibly managed. We strive to serve as a model for other cities in North Carolina and throughout the United States. Cary will implement long-term sustainable practices and solutions that minimize negative impacts on the environment and our community to ensure a high quality of life for future generations.

# **CARY VALUES:**

#### **Respecting Nature and the Environment**

Cary will preserve and protect our environment by being good stewards of our finite natural resources. Paramount to our future is the conservation of water, land, and air resources, including protecting watersheds and our water supply; enriching our protected lands and natural land assets; and mitigating the community impact on air quality, including emissions reduction efforts.

# Providing Sustainable Facilities and Infrastructure

Cary will use sustainable and environmentally conscious approaches in the development and renovation of municipal properties, facilities, and public utilities. Cary will incorporate environmentally sound practices while also serving as a trusted steward of community resources.

**CARY COMMUNITY PLAN** > 2040

# 8. ENRICH

# **Challenges and Opportunities**

Acknowledging that our increasing population is an outcome of being part of an economically thriving region, Cary has a responsibility to balance and mitigate, to the greatest extent possible, the environmental impacts of our growing residential and commercial communities. To reduce these impacts, we can pursue incentives and make changes to our development regulations to support the community. One example is allowing denser development in key areas to help to mitigate the impacts of sprawl. As the community continues to evolve, we must meet the needs of today without compromising our ability to meet future needs.

#### Threats and Vulnerabilities

More people wanting to move to Cary, combined with fewer children wanting to leave Cary when they become adults, creates the need for more housing, retail, and workplaces. This increased development can impact our natural systems. Higher population is typically expected to lead to more energy consumption, solid waste, traffic, air pollution, and impervious surfaces, as well as the potential fragmentation of existing open space important to wildlife. However, Cary seeks to balance the effects of a growing population with efforts to reduce consumption and manage, conserve, and innovate on behalf of environmental quality and health.

# Climate Change

Climate change is an urgent challenge facing our community. Shifting temperature and rainfall patterns have led to more frequent occurrences of heat waves, heavy rain, and drought, each impacting Cary's residents in various ways. These changes in climate are primarily attributed to the increasing levels of greenhouse gas emissions that trap heat in Earth's atmosphere. To effectively address climate change and its consequences, our community must reduce emissions associated with burning fossil fuels for heating and cooling buildings and powering vehicles, prevent improper waste disposal, and protect and enhance open space.

Cary will play a pivotal role in climate adaptation efforts by leading the transition to cleaner, more efficient systems of energy, transportation, and infrastructure; this will ensure that we are prepared for growth and changes in the years ahead.



North Cary Water Reclamation Facility outfall into Crabtree Creek. After treatment and disinfection, the water is discharged into Crabtree Creek, a tributary of the Neuse River, in a manner that protects the receiving streams from pollutants and contamination.

# Rainfall Intensity and Drought

In the last 50 years, Cary and the surrounding region have experienced a significant increase in days with over 100-degree temperatures. On a global scale, the last 10 years have been the warmest period on record. This rising temperature trend is a major catalyst for extreme weather events that have various local impacts. As the world warms, the additional heat accelerates evaporation. At higher temperatures, clouds have the capacity to retain more moisture, increasing the likelihood of intense, heavy downpours when they reach their holding limit. This shift can result in an overall increase in rainfall, characterized by less frequent but more substantial rain events. Simultaneously, heightened evaporation draws more moisture from the soil, causing deeper and longer droughts. The frequency of drought periods is projected to escalate due to rising temperatures and less frequent rainfall. Combined, these trends impact our environment's ability to absorb the moisture, emphasizing the continued need to prepare for weather-related events. Cary is looking to mitigate these effects through our approach to adaptive stormwater, balancing impervious surfaces with reclaimed open space, and providing shade to reduce heat islands.

# Impacts of Flooding

Flooding remains the country's number one disaster and can affect everyone. Cary has taken considerable measures to provide relief from flooding. These measures include ordinances to protect stream buffers and control runoff, as well as the practice of incorporating citizen requests to reduce flooding and improve drainage. An additional mechanism to implement these initiatives would be to incorporate green street concepts into new development and redevelopment projects. Floodplains are important for the natural storage and conveyance of floodwaters. They protect water quality, recharge groundwater reserves, and preserve our local ecosystem. Natural floodplains reduce the severity and frequency of floods. Through Cary's adaptive approach to stormwater management, the role of open space in restoring our natural floodplains and reducing flooding impacts has been identified as our most valuable tool for flood mitigation. Historic changes to Cary's development regulations have narrowed the allowable development activities within the floodplain. Identifying our community's flood hazards and then acting to reduce those risks by preserving open space and the natural floodplain, as well as holding new development to a higher standard, will result in a more flood-resilient community. A flood-resilient community can expect faster recovery from flooding events, reduced impacts on property, a reduction in the financial and physical effects on property owners, and preservation of the natural beneficial functions of the floodplain.

#### Sustainable Utilities

Resource recovery, conservation, and nutrient recycling are important features of environmental protection provided by Cary's utility programs. This is exhibited through processes and programs that convert waste to usable resources, reduce emissions through greater efficiencies and alternative energy sources, and use natural and biological agents instead of chemicals whenever possible. Cary's utility services are nationally recognized as examples of both planning for the future and achieving exceptional performance to provide highly treated, clean water back to our natural environment.

The North Cary Water Reclamation Facility is designed to remove Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), total nitrogen and phosphorous from its discharge. As a result of treating wastewater, biosolids, a recyclable byproduct is produced.

### Waste

As the population of Cary increases and development transitions to a more urban-style community, undertaking innovative approaches, implementing new technologies, and conducting strategic planning will be key to maintaining successful and sustainable waste management. Cary continues to assess the future impacts of growth on services, operations, economics and the landfill while engaging in pilots and partnerships to provide opportunities and insight to evolve waste management tactics. Cary provides solid waste, yard waste, and recycling pickup services to all single-unit residential properties within municipal limits, while also serving some mixed-use properties. Food waste drop-off sites for composting are also provided as a service to citizens.

Waste reduction, composting, and recycling are important for reducing demands on waste collection operations, landfill capacity, and environmental impact. Coupling education efforts with services helps provide awareness and support for participation in proper disposal and diversionary strategies. In a typical year, Cary's residential recycling and yard waste collections divert nearly half of all its waste from the landfill. Through waste characterization and feasibility studies, Cary can focus its efforts on key opportunities for additional waste diversion. The latest food waste drop-off sites are prime examples of Cary's approach to creating such a municipal service model. Innovative and sustainable approaches to reducing landfill-bound waste and converting other waste to usable resources are important for Cary and the region. Through partnerships, Cary is supporting regional efforts to help address the current realities of ever-changing waste streams, viable material markets, and projected landfill capacity.



## **Energy and Alternative Vehicle Technologies**

There is a great need for dedicated innovation and investment in diverse, efficient energy sources to improve Cary's energy resiliency. Cary has begun its energy efficiency efforts by becoming the leading municipality in North Carolina at converting traffic lighting to 100% light emitting diodes, or LEDs, while also coordinating with Duke Energy Progress to convert streetlights to LED fixtures townwide. Cary's energy-efficient LED light conversions also extend to Cary-owned facilities, parking decks, and sports and entertainment venues. Cary's LED light conversions and installations support community safety while considering the impacts of light pollution on the natural environment. Diversification of energy sources, combined with storage and backup generation, builds resiliency. As such, Cary has been increasing the number of solar generation facilities, both public and privately owned. Cary owns and operates a 2.1-megawatt solar photovoltaic, or PV, array at the South Cary Water Reclamation Facility, providing enough electricity to power 174 homes every year. Cary also has solar PV installations at the USA Baseball National

Training Complex, as well as several buildings, bus stops, and stormwater sensors. In winter 2023, Cary completed a solar feasibility study that identified 71 municipal facilities to be solar-ready. This is a first step in expanding solar energy production across town-owned facilities. Cary has streamlined the permitting process for private residential PV installations, resulting in a significant increase in solar production.

On the electric vehicle, or EV, front, Cary is leading by increasing the number of EVs in its municipal fleet as well as providing public EV charging stations around town. In addition to EVs, Cary is piloting alternative fuels, like propane, to reduce emissions and diversify fleet options. In addition to adding electric vehicles to our municipal fleet and supporting citizens' choice to purchase electric vehicles, Cary continues to explore how to expand its bicycle and pedestrian networks. Making these networks safer and more connected allows citizens the easy choice of reducing vehicle trips and experiencing Cary through a different mode of travel.



Reclaimed water is a valuable resource produced from wastewater that is highly treated using not only a biological nutrient removal and filtration process, but disinfection with ultra-violet light and Sodium Hypochlorite. The State of North Carolina permits Cary to divert a total of about five million gallons per day from our two treatment plants water reclamation facilities for reuse rather than discharging into creeks.





## **Green Buildings**

Green building standards such as LEED, WELL, and the Living Building Challenge prioritize energy efficiency, water innovations, and waste reduction. As a leader in sustainability and climate action, Cary intends to incorporate green building standards into municipal projects while identifying opportunities for initiatives and incentives that align with private development. Infill and redevelopment will continue to evolve the built environment of Cary, especially in locations identified for higher-density. By incorporating green building standards, the community will benefit from developments that focus on health and wellness while reducing waste and the need for new resources. Promoting green buildings provides benefits for the local economy as well by creating green jobs and attracting sustainable industries. Leading by example, Cary can demonstrate these standards in new municipal construction as well as look for public-private development opportunities. Providing education, incentives, and review of development regulations will help facilitate larger adoption of green building standards as Cary continues to evolve and redevelop.



As part of our on-going commitment to the environment, the Town of Cary participates in solar projects where it makes operational and fiscal sense. Renewable energy is a great option for reducing the environmental impact of operations. The Town currently has a 1.89 megawatt solar energy farm, funded by a public-private partnership, located at the Town's South Cary Water Reclamation Facility. The solar farm generates electricity that is sent back to the grid.

# Open Space and Watershed Management

Opportunities exist in Cary to protect and connect existing environmentally sensitive areas. Intact and connected natural systems perform critical ecosystem services that have economic and environmental value. Protection of these areas helps to maintain their ecological value, serving the community as it evolves. Cary is home to the headwaters of Swift Creek and Walnut Creek and is made up of nine sub-watersheds. Watershed stormwater management is a cost-effective supplemental approach to keeping drinking water clean in concert with water treatment technology. Water sources can become polluted when sediment, fertilizers, pesticides, oil, and other chemicals wash into them from streets, parking lots, and lawns. Capturing runoff within the built environment higher in the watershed and providing natural vegetated buffers along the sides of drainage ways, streams, creeks, and lakes, including drinking water sources, can be critical in reducing the amounts of such pollutants. While vegetated buffers act as natural filters, they also help mitigate the impact of floods by absorbing excess water during heavy rainfall, which reduces runoff and the risk of destructive flooding downstream. Moreover, intact watersheds play a role in recharging groundwater aquifers for long-term water access. These areas also enhance quality of life and provide economic opportunities by serving as recreational and educational spaces. Through regional watershed partnerships Cary is supporting various efforts to improve water quality, protect drinking water, and balance the demand for development while also reducing stormwater runoff and protecting wildlife habitat.

From an environmental perspective, connected and well-functioning watersheds and streams enhance the environmental system locally and even nationally. In the context of climate change, wetlands and forests within watersheds serve as significant carbon sinks, storing carbon dioxide and thus helping to reduce greenhouse gas levels. These areas also serve as crucial corridors for a multitude of plants and animals, naturally guiding them as they travel within their habitats or serving as stopover points and breeding grounds for migratory birds. In addition to typical travel patterns, biologists are discovering climate migration occurring in North Carolina and across the eastern United States. As plants and animals follow waterways from east to west and south to north in search of cooler temperatures that align with their adapted habitat, protecting these corridors becomes increasingly critical locally, regionally, and nationally for the survival of many species.

# Green Stormwater Infrastructure

Increased stormwater runoff combined with more urban development trends in Cary introduces new opportunities to address drainage and water quality concerns as well as expand biodiversity through green stormwater infrastructure, or GSI, techniques. The cumulative impacts of expanding and maintaining GSI practices improve environmental resiliency and facilitate the more natural movement of rainwater within the built environment. These measures improve stormwater quality as well as mitigate runoff by providing infiltration and reducing the flow and volume of water entering the drainage system. The use of GSI with redevelopment projects will also benefit areas built prior to existing stormwater regulations.



Cary owns and maintains a number of lakes and dams. These bodies of water serve multiple functions: flood protection, water quality improvement, recreation, wildlife habitat, and aesthetics.

# Trees and the Urban Canopy

In shaping the future of Cary, there are many opportunities to embrace a multifaceted approach to urban forestry that harmonizes human needs with environmental considerations. Cary is committed to preserving mature trees through best practices in tree care while planting the next generation, ensuring a well-maintained and adaptive urban tree canopy that offers a myriad of benefits. Cary has worked to ensure tree preservation and planting is integrated into development projects as Cary continues to densify. A comprehensive, stringent set of policies and codes regulate the planting, maintenance, and protection of public and private trees. Environmentally, trees serve as natural air filters by capturing pollutants and releasing oxygen. They play a vital role in stormwater management and erosion control, as canopies intercept rainfall to reduce the impact on the ground, while roots help to absorb excess rainwater and stabilize the soil, maintaining the integrity of landscapes. Trees also increase biodiversity in urban and suburban areas by providing habitats for wildlife. Having a diverse range of tree species promotes ecological balance and allows for natural interdependencies that contribute to a healthier environment and predator/prey relationships that can serve as natural pest control. The economic benefits of green infrastructure include temperature regulation, as the cooling effect reduces the urban heat island effect and makes buildings and neighborhoods more comfortable, thus reducing the burden on electricity. A well-maintained urban tree canopy also enhances property values, attracts businesses and tourism, and adds to the beauty and aesthetic appeal of Cary promoting physical and mental well-being. Finally, trees absorb and store carbon dioxide, contributing to carbon sequestration and helping to mitigate climate change through the reduction of greenhouse gas emissions.



# Native Plants, Soil Regeneration, Wildlife, and Pollinators

Greening Cary extends to native plants, soil regeneration, and support of pollinators and wildlife. By incorporating native plants and reducing the presence of invasive plants in regional landscaping, open space management, and development projects, Cary not only enhances the resiliency of local ecosystems but also creates biodiverse oases that elevate the quality of life for its human and wildlife residents. Native species are adapted to local conditions, making them more resistant to environmental stressors and fluctuations. These plants, well-suited to local weather and rainfall patterns, reduce the need for irrigation and support, generally requiring less maintenance, fertilization, and pest control, thus reducing the cost and effort associated with upkeep. Because they are adapted to local systems, North Carolina's Piedmont-native plants often have deeper roots and are able to capture and store carbon below the soil, mitigating climate change. Native plants also have stormwater and erosion control benefits similar to trees. Flowers, grasses, pollen, seeds, and dormant and decaying materials from native plants support, enhance, and replenish biodiversity in Cary both above- and belowground by providing food, shelter, and habitat support. Similarly, Cary recognizes the indispensable role of pollinators, such as bees and butterflies, in supporting local agriculture and maintaining healthy ecosystems. As pollination is vital for the reproduction of many plants, including crops, pollinators provide food web support as both humans and wildlife benefit from the produce of pollinated plants. They also contribute to genetic diversity via cross-pollination, which makes plants more adaptable to changing environmental conditions. Some pollinators even act as natural predators of insect pests, reducing the reliance on pesticide chemicals.

The health of Cary's soil is paramount to the community's environmental and economic well-being and is the foundation for healthy ecosystems and the mitigation of climate change. Healthy soils go beyond traditional environmental considerations as they are reliant on organic content. Cary recognizes that optimally healthy soils, which contain an average of 3% to 6% of organic materials, have the potential to solve many issues, including soil structure (water infiltration and retention, stormwater mitigation, erosion, compaction), biodiversity, nutritional deficiencies, and carbon sequestration. As infill and redevelopment continue, protecting soil, limiting soil disturbance, and requiring soil rebuilding/remediation will be needed to maintain heathy soils.

# **Related Planning Efforts**

Many related planning efforts are underway that are acknowledged as part of this document. The Urban Forest Master Plan, Open Space Master Plan, and Stormwater Master Plan are policy documents that provide additional detailed strategies. The Sustainability and Climate Action Strategy is a community action-oriented approach to integrating sustainable strategies that reduce emissions in our community. The Municipal Pathways Analysis is a municipality action-oriented approach to integrating sustainable strategies that reduce emissions in municipal operations. Many supporting studies, such as an Organics Study, and management plans, such as the White Oak Creek Management Plan, further advance this work.



Pollinator garden at South Cary Water Reclamation Facility. Cary is the 101st community in the nation that has earned the designation of Certified Wildlife Habitat through the National Wildlife Federation. To achieve and maintain this honor we work with our citizens, businesses, and organizations to certify their outdoor spaces as Certified Wildlife Habitats.



Volunteers maintaining the community garden at the Cary Senior Center. Cary offers hands-on experiences and unique facilities dedicated to growing vibrant gardens, healthy soil, and engaged communities.

# **Policy Direction**

In order to protect the environment, mitigate the impacts of climate change, and provide sustainable facilities and infrastructure, Cary's sustainability and environmental policies are:

# **Policy**

# **Policy Intent**

#### Policy 1: Involve the Community in Environmental Stewardship Strategies for a Sustainable Future

Make the Cary community a better place by inspiring and charting a path for collective action to build a sustainable, resilient future. The intent of this policy is to educate on incentives for private development, homeowners associations (HOAs), multifamily development, and homeowners to implement climate actions. Develop new initiatives and programs to empower the community to be active stewards of the environment. Identify partnerships at all levels to achieve the goals of the Sustainability and Climate Action Strategy to broaden participation and implementation. Best practices to date include My Tree, Our Tree; Neighborhood Improvement Grant Program; and Green Stormwater Infrastructure Grant Program. Further action can be taken by educating the community on incentive or rebate programs for implementing green building practices included in the International Green Building Code and NC Energy Code and certifications such as LEED, NGBS, Energy Star, and the Living Building Challenge. Further action can be evaluated through potential changes in development regulations.

#### Policy 2: Encourage Environmentally Responsible Stormwater Management, Protect Water Quality

Support initiatives that encourage or incentivize environmentally responsible stormwater management by addressing floodplain management, watershed protection, and control of illegal discharges and sediment erosion. Support projects, programs, regulations, and initiatives that protect water quality. Ensure regional efforts focus on the protection of Jordan Lake and other water supply sources.

The intent of this policy is to address storm events and water quality using educational and regulatory initiatives, public infrastructure, and incentives that enhance the community. This policy highlights the importance of water quality through the continued emphasis on initiatives that naturally filter runoff before it enters waterways. These methods will manage nitrogen and phosphorous loads and other runoff pollutants in Cary's streams and protect the water quality of Jordan Lake. In order to protect Jordan Lake and other water sources, Cary will continue to foster collaboration between regional partners. Cary will also continue to meet or exceed N.C. Division of Water Resources rules for controlling nitrogen runoff in the Neuse River Basin and the Cape Fear River Basin and meet Federal Clean Water Act stormwater regulations. To protect properties from the threat of flooding and erosion, Cary will continue to provide guidance to citizens with drainage issues on private property. Cary will continue to protect water quality and flooding risk through development regulations, including watershed protection overlays, nutrient control, erosion and sediment control, floodplain management, urban transition buffers, and other tools. Additionally, use of decentralized green stormwater infrastructure, or GSI, as part of new development, redevelopment, streets, and other public infrastructure will be implemented where effective.

#### Policy 3: Supporting Environmentally Responsible Waste Disposal and Circularity in the Waste Cycle

Support environmentally responsible disposal of waste.

The intent of this policy is to support Cary businesses and citizens in efforts to divert waste from the landfill and create a circular waste cycle. This may include promoting reuse, preventing unlawful disposal, and expanding sustainable waste management practices through policies and public education.

# **Policy**

# **Policy Intent**

#### Policy 4: Protect and Restore Open Space and the Natural Environment

Protect and restore environmentally significant areas and either preserve or create open space throughout Cary and within the built environment.

The intent of this policy is to manage and protect the natural environment, particularly areas of environmental significance, such as wildlife habitat and corridors, wetlands, stream buffers, contiguous forests, meadows, native grasslands, and other important natural features. Cary will look for opportunities, including working with neighborhoods, HOAs, and management companies, to protect or create interconnected ecosystems. A complementary intent of this policy is to incorporate natural features into the built environment for aesthetic, economic, quality of life, biodiversity, and sustainability purposes, in part using and preserving native trees and plants and reducing the presence of non-native invasive species within protected open spaces, including buffers. This policy also supports the use of green stormwater techniques that enhance or add to the open space and green infrastructure network.

#### Policy 5: Improve Air Quality and Reduce Emissions

Promote strategies that create a healthy community by improving air quality and reducing air pollution from development, buildings, transportation, and industry.

The intent of this policy is to improve the health of residents by decreasing air pollutants and reducing greenhouse gas emissions by encouraging innovations in the built environment, transportation systems, business practices, and household habits while enhancing and maintaining Cary's natural resources. This policy will enable initiatives that address the causes and effects of climate change. Improved air quality can be achieved through a comprehensive set of strategies that encourage and optimize conservation, energy efficiency, advanced building technologies, alternative fuel sources, forest protection, and urban development that makes walking, biking, and public transportation viable modes of transportation.

#### Policy 6: Improve Energy Efficiencies and Sustainable Energy Practices

Support sustainable energy practices by promoting energy conservation and alternative energy use and production. The intent of this policy is to lower utility bills, decrease reliance on traditional energy sources, promote a green economy, and increase resiliency through energy efficiency, diversified energy sources, electrification, and increased energy storage capacity and generation with the goal of reducing greenhouse gas emissions contributing to climate change.

#### Policy 7: Implement and Promote Green Building Principles

Implement and promote green building principles for new construction, major renovations, and significant retrofits of buildings, as well as incentivize the use of these principles in private developments.

The intent of this policy is to support the use of green building principles, especially where higher-density development occurs. Cary will lead by example by incorporating these principles within new facility construction and major renovations. Incorporating these standards will lead to developments that focus on health and wellness while reducing greenhouse gas emissions, waste, and the need for new resources. Green buildings will benefit the local economy by creating green jobs and attracting sustainable industries. Leading by example, Cary can demonstrate these standards in new municipal construction and in public-private development opportunities. Providing education, incentives, review of development regulations, and recognition will help facilitate larger adoption of green building standards as Cary continues to evolve and redevelop.

# **Policy**

# **Policy Intent**

#### Policy 8: Preserve and Protect the Urban Tree Canopy

Promote the retention of, addition to, and quality of the tree canopy within Cary's planning area.

The urban tree canopy is the layer of trunks, branches, and leaves that cover the ground when viewed from above (i.e., Cary's tree cover). The objectives of this policy, based on the Urban Forest Master Plan, include:

#### **Steward and Grow Cary's Tree Canopy**

Nurture existing trees and forests while planning to maintain and expand tree canopy coverage. Particular care will be given to the growth and expansion of tree canopy where it is needed most (e.g., connecting fragmented forests, rebuilding canopy after losses, improving walkability with shade cover) and where it reflects the character and needs of individual neighborhoods. Additionally, Cary will continue to evaluate and improve tree protection policies.

#### Improve the Quality of Cary's Trees and Forests

Along with increasing the quantity of tree coverage, increasing the quality of tree canopy is critical for ensuring that it is resilient in the face of climate change, sustainable, long-lasting, and will serve the functional and aesthetic needs of both the community and the environment.

#### Promote a Community-Wide, Shared Commitment to a Healthy Urban Forest

This work will require residents, businesses, institutions, and Cary to each do their part on their own properties and in their neighborhoods. Thoughtful and measurable partnerships and engagement will be key to making real and long-lasting progress.

#### Policy 9: Support Expansion of and Access to Local Food Systems

Support locally grown and produced foods in Cary.

The intent of this policy is to support a healthy community by providing opportunities for people to grow their own food and to purchase locally grown food at farmers markets. Implementation includes education and recreational opportunities that connect citizens with Cary's agricultural heritage and ways to support present-day local farmers, basic gardening and cultivation methods, home composting and soil protection, sustainable gardening methods in the face of climate change, reduced reliance on chemical pesticides and herbicides with integrated pest management, and expansion of native honeybee support and native pollinator education.

# Policy

# **Policy Intent**

Policy 10: Support soil regeneration, use of native plants, and increased biodiversity for pollinators and wildlife.

Support the use of native plants, soil regeneration, and the reduction of impacts to pollinators and wildlife.

The intent of this policy is to recognize the importance of supporting the use of native plants and reducing the presence of invasive plants. Changes have been made to the recommended planting list for development that have been incorporated into regulatory reviews to strengthen the required use of native plants and prohibit invasive plants. Cary recognizes the indispensable role of pollinators, such as bees and butterflies, in supporting local agriculture and maintaining healthy ecosystems. Continuing to promote the Cary Garden for Wildlife Program provides an opportunity for anyone in the community to get involved to support healthy habitats. For native plants and wildlife gardens to grow, healthy soil is necessary. The health of Cary's soil is paramount to the community's environmental and economic well-being and is the foundation for healthy ecosystems and the mitigation of climate change. Continuing to provide education to the community and identifying opportunities for incentives will help to continue to enhance the resiliency of Cary's natural ecosystem.

# How We Will Achieve our Vision

- Promote Practices
  That Will Leave an
  Environmentally
  Safe and Desirable
  Community
  for Future Generations
- 2 Implement Actions
  Identified in the Urban
  Forest Master Plan —
  Approved by Council
  May 23, 2024.

#### Major Actions:

Cary's Urban Forest Master Plan outlines our commitment to the health and resiliency of Cary's tree canopy and urban forests. Through programs and projects, Cary aims to use innovative environmental strategies to continue our commitment to advancing sustainable practices to maintain a high quality of life. The goals of the plan are to grow Cary's tree canopy, improve the quality of the canopy, and promote community-wide commitments to a healthier urban forest. To achieve these goals, Cary has outlined 10 strategies, including strengthening policies and codes, enhancing data, and improving urban forestry oversight. The planning process involved engaging stakeholders, retaining experts for support, and analyzing data and regulatory systems. The plan was created to help inform the future of Cary's urban forest and to equip Cary so that we may continue to be a healthy and resilient community. This plan is an example of how Cary is acting for a sustainable, resilient future while facilitating the Sustainability and Climate Action Strategy.

Implement Actions
Identified in the
Sustainability
and Climate Action
Strategy — Anticipated
completion 2025.

#### Major Actions:

Cary embarked on a path toward collective action for a sustainable, resilient future with the initiation of a Sustainability and Climate Action Strategy in 2022. This strategy will include a section on Natural Resources that seeks to protect and enhance Cary's natural areas, ensuring open spaces and ecosystems are healthy, biodiverse, resilient, connected, and accessible to all now and in the future.



Cary's success at maintaining a healthy environment is based on a shared responsibility between our Town government and all who live and work in our community. Providing exceptional utilities services is at the heart of making Cary one of the best places in the nation to live, work, and raise a family.

4 Implement Actions Identified in the Open Space Plan — Anticipated completion 2025.

#### Major Actions:

Cary launched the Open Space Master Plan in 2022 in coordination with the Parks, Recreation, and Cultural Resources Master Plan. Through the efforts of strategic land acquisition, natural resource preservation, and development regulations, a large amount of open space in Cary has been conserved. The plan will develop an inventory of open space land, consider new open space policy, and provide recommendations for prioritization criteria and implementation tools for the management of open space.

# Implement Actions Identified in the Cary Bike Plan and incorporate the plan into the Move chapter — Anticipated completion 2025.

#### Major Actions:

The planning process for the Cary Bike Plan began in early 2023. The plan's goals are to create a comprehensive multimodal network, identify priority corridors, and fill gaps in Cary's existing bike system. The plan will guide strategic and effective investment in bicycle and micro-mobility infrastructure, ensuring it's safe and convenient for all users to move throughout the community.



Bond Lake, located within Cary's Fred G. Bond Metro Park, was constructed by Wake County and the U.S. Department of Agriculture in 1972 as a flood-control structure, and is maintained by Wake County.



Riparian buffers are vegetated areas adjacent to streams, lakes, or wetlands that are specially managed to help maintain the health of the land and water body. These buffers help to filter nutrients, including nitrogen and phosphorous, carried in stormwater runoff.

# Related Policy Direction in Other Chapters

This plan has been organized to address specific topics in specific chapters; however, the policies listed throughout this plan are very much interrelated. Listed here are the policies included in other plan chapters that relate to the Town's housing and neighborhood policies.

Live: Fostering Strong Neighborhoods	Policy 1: Maintain     Neighborhood Character	• Policy 2: Provide More Housing Choices for All Residents	Policy 5: Support Residential Development on Infill and Redevelopment Sites
Work: Assuring Continued Prosperity	<ul> <li>Policy 1: Grow A Sustainable and Diversifying Workforce</li> <li>Policy 4: Diversify Cary's Economy</li> <li>Policy 8: Support the Locational Needs of New and Expanding Firms</li> </ul>	Policy 10: Reserve and Provide Employment Sites in Selected Commercial Mixed Use and Destination Centers	Policy 12: Transform Selected Office Parks into Employment Mixed Use Campuses
Shop: Creating Vibrant Destinations	Policy 1: Facilitate     Redevelopment of Under- performing Commercial Centers	Policy 3: Support the     Development of a Limited Number     of Destination Centers and     Commercial Mixed Use Centers	
Engage: Experiencing the Cary Community	- Parks, Recreation & Cultural Resources Master Plan	- Historic Preservation Master Plan	
Shape: Guiding Community Growth	Policy 2: Focus the Most Intense     Types of Development in     Strategic Locations	Policy 6: Provide Appropriate     Transitions Between Land Uses	Policy 8: Preserve and Maintain Cary's Attractive Appearance and Quality of Development
Move: Providing Transportation Choices	• Policy 2: Apply Multimodal Street Designs	Policy 3: Design Transportation Infrastructure to Address Land Use Context	• Policy 5: Minimize Thoroughfare Widths
Serve: Meeting Community Needs	• Policy 2: Provide Safe, Reliable Water and Wastewater Service	Policy 3: Integrate Concepts of Resiliency and Adaptation into Planning Practices	Policy 4: Support Expansive and Cutting-Edge Information Technology Infrastructure