

Georgia's Community Green Space Program



*A Report of the
Community Green Space
Advisory Committee*

December 15, 1999

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Executive Summary

In August 1999, Governor Roy Barnes shared his vision of Georgia's communities laced with connected green space. The Governor's goal is to set aside 20 percent of the land in neighborhoods as green space, available for people to use on a daily basis. It recognizes the link between our physical and mental health, the health of our environment, our economic stability, and the choices we make regarding the use of our land.

Community green space is only one part of an overall program of preserving lands throughout the State for public purposes. It is obviously important that the State continue to be concerned about protecting and managing larger, more distant tracts of land such as state parks and wildlife management areas. But it is also important for people to have green space near where they live, work and go to school. Less than ten percent of the state funds spent on green space related programs during the past two decades has been used for community green space acquisition. In addition, the efforts of local governments to provide community green spaces have often had to defer to competing demands on local government budgets.

The materials reviewed by the Committee, the presentations to the Committee, and the discussions by Committee members have thoroughly documented the high value of community green space. Fundamentally, community green space which is proximate to where people live is a local asset that increases the community's desirability as a place to live and work. It is clearly in the interest of local governments to use this asset to improve their residents' quality of life and to maintain their economic competitiveness. The State can assist local governments in many ways.

Based on its deliberations, the Committee recommends that the Governor work with the General Assembly to create the Community Green Space Program. To accomplish this, the Committee recommends three courses of action:

- legislation be enacted creating the Community Green Space Program;



- a Community Green Space Fund be established and supported at an appropriate level; and
- a number of existing laws and programs be improved to make them more usable by communities and others to protect community green space.

Legislation is necessary to create the Community Green Space Program. The legislation should establish that the policy of the State is to protect 20 percent of Georgia's land as green space. The focus of the program, however, should be on high growth counties, although other communities should be allowed to participate. The legislation should identify the Department of Natural Resources (DNR) as the responsible state agency and should require local governments to develop green space plans pursuant to rules and regulations promulgated by DNR. Once these plans are approved, local governments could apply for funds to execute their green space projects.

These funds would come from the Community Green Space Fund, to be established and supported at a level that will encourage real participation in the program by local governments across the State. The Fund would provide significant support to local governments that have an unusual and timely opportunity to preserve a high quality of life for all Georgians.

A variety of existing laws and programs relate to and can be used to support the Community Green Space Program. Some of these should be amended to make them more usable. The Committee's report reviews these tools, assesses their utility and makes specific recommendations about their use or amendment.



This report presents the findings and recommendations of the Committee. The first part of the report defines terms and presents information on the importance of community green space. Part II puts forth a proposal for a community green space program. Part III of the report discusses tools that can be used by local governments and others in planning and implementing community green space programs and provides recommendations to the Governor.

To create the Community Green Space Program, the Committee puts forth the following recommendation.

- **Creation of the Community Green Space Program and Fund:** The primary recommendation of the Committee is that the Governor work with the General Assembly to establish a new Community Green Space Program, to be administered by DNR and to be funded in part by a new Community Green Space Fund. The legislation should establish that it is the policy of the State to protect at least 20 percent of Georgia's land as green space. The focus of the program should be on high growth counties. The Community Green Space Fund should be used to provide financial support for local green space programs.

Due to local variability in natural conditions, demographics and other factors, decisions relating to community green space must be tied to the local planning and decision-making process. In addition to providing financial assistance, the State can assist local governments by removing unnecessary barriers that can hamper local efforts to provide community green space. The following recommendations are designed to provide technical assistance to local governments, remove impediments to program implementation, or improve existing green space tools.

- **Local Green Space Trust Funds:** The Committee recommends that Governor Barnes work with the General Assembly to enact legislation that will authorize local governments to create trust funds for green space protection, parks and greenways, pursuant to which the local governments could receive funds and other contributions within one budget year and carry them over for expenditure in another. The legislation should also clarify the provisions in law that allow local governments to receive and earmark gifts for specific purposes, and to establish segregated community trust fund accounts to reserve the proceeds of dedicated and non-dedicated funding sources which are received for land protection.
- **Special-Purpose Local Option Sales Taxes (SPLOST) Funds:** The Committee recommends that the Governor ask the Attorney General for a ruling that the acquisition of green space as defined in this report is authorized under the SPLOST statute. We further recommend, if a

substantial question remains, that the Governor work with the General Assembly to amend the statute to include protection of green space as an appropriate use of SPLOST funds.

- **Stormwater Utilities:** The Committee recommends that the Governor encourage local governments to develop stormwater management plans in conjunction with their green space plans and to create stormwater utilities to fund stormwater facilities. Where the protection of green space is a significant component of a stormwater management plan, it is appropriate to use a portion of the stormwater utility funds for the acquisition of that green space.
- **State Income Tax Credits:** The Committee recommends that the Governor work with the General Assembly to amend the state income tax code to provide a significant state income tax credit to landowners who donate land or interests in land in furtherance of the Community Green Space Program.
- **Valuation of Conservation Easements:** The Committee recommends that the Governor work with the Revenue Department and the General Assembly to amend the Revenue Code to require tax assessors to use a specific uniform method for the valuation of land protected by conservation easements. Appropriate methods for valuing green space protected by other ways should also be developed.
- **Conservation Easements:** The Committee recommends that the Governor work with the General Assembly to amend the Uniform Conservation Easement Act to provide the Attorney General the authority to enforce any conservation easement in the State. The amendment should also require the county clerk of court to send a copy of each easement, as it is recorded, to the State Properties Commission, and it should require the State Properties Commission to establish and maintain a comprehensive and current database of conservation easements.
- **Transfer of Development Rights (TDR):** The Committee recommends that the Governor work with the General Assembly to amend Georgia's TDR legislation to eliminate the requirement that a duplicative hearing be held prior to the transfer of each development right.

- **Model Ordinances:** The Committee recommends that the Governor encourage local governments to adopt modern, flexible land use ordinances for performance-based zoning, conservation subdivisions, transferable development rights and environmental overlay zoning, such as the model ordinances being developed by The University of Georgia.
- **Uniform Subdivision Guidelines:** The Committee recommends that the Governor convene state and local officials whose work pertains to public health and safety (fire marshals, road commissioners, sanitarians) as well as land use planners and developers to develop uniform subdivision guidelines that protect human health and safety and promote the preservation of green space.
- **Financial and Technical Support for the Community Green Space Program:** The Committee recommends that adequate resources be provided to DNR and the University System of Georgia to develop a coordinated and comprehensive program to provide technical assistance to local governments and their partners in evaluating, drafting and implementing tools for green space protection. This program should provide general information about tools, including case studies, model ordinances and funding sources by means of workshops, websites, and resource papers, as well as more detailed assistance to a community as it actually develops a particular tool or set of tools.

The Committee believes that all of these recommendations are sound and that, if carried out, they will support an effective community green space program. The Committee wishes to thank Governor Barnes for the opportunity to assist in the development of his Community Green Space Program.



Introduction

In August 1999, Governor Roy Barnes shared his vision of Georgia's communities laced with connected green space. The Governor's goal to set aside 20 percent of the land in neighborhoods as green space, available for people to use on a daily basis as they travel to parks, playgrounds and other local destinations, walk their pets, walk or jog for exercise, or bike to work or school, recognizes the link between our physical and mental health, the health of our environment, our economic stability, and the choices we make regarding the use of our land.

Community green space is only one part of an overall program of preserving lands throughout the State for public purposes. It is obviously important that the State continue to be concerned about protecting and managing larger, more distant tracts of land such as state parks and wildlife management areas. But it is also important for people to have green space near where they live, work, and go to school. Community green space is an area which, probably because of its inherently local nature, has received only modest state support over the years. In fact, less than ten percent of the state funds spent on green space related programs during the past two decades has been used for community green space acquisition. In addition, the efforts of local governments to provide neighborhood recreational facilities, local parks, and other community green spaces have often had to defer to competing demands on local government budgets. According to a recent study tabulating the perceived needs of 129 local park and recreation agencies, Georgia communities need to add more than 18,000 acres of park land, valued in excess of \$390 million.^{1*}

Community green space provides a multitude of benefits, is economically advantageous, and improves the quality of life for Georgia's citizens in a clearly tangible way. Governor Barnes has suggested that a major function of green space should be providing buffers to rivers, streams and lakes in our communities. To

*The study also concluded that more than \$1 billion is needed to build new park facilities such as ball fields, lighting, or senior centers. Another \$580 million is called for to renovate and restore existing park facilities.

utilize these lands as part of a network of green space will not only further the watershed protection and water quality goals of the state and local governments, but it will also provide recreational and alternative transportation opportunities for Georgians.

Community Green Space Advisory Committee

Rather than seek to dictate how each local government would increase its green space acreage, Governor Barnes enlisted the assistance of people representing a broad range of interests to provide him with recommendations on how best to achieve his green space goal. The Community Green Space Advisory Committee was appointed on October 22, 1999,* and has worked diligently and quickly to develop this report, and the recommendations it contains, for the Governor's consideration as he prepares his agenda for the 2000 session of the General Assembly.



Governor's Charge to the Committee

Governor Barnes directed this Committee to focus its attention on the preservation of local, accessible, neighborhood-type green space, as opposed to regionally significant green space such as state parks and wildlife management areas. During its discussions, the Committee raised many issues that relate to green space. Urban sprawl, growth management, the provision of affordable housing near workplaces, and septic tank use and alternative methods for sewage treatment all received significant discussion. These issues are of critical importance and interact significantly with the green space concern. Nevertheless, the Committee accepted that they could not all be addressed by a community green space program, which would be but one part of a larger effort to move Georgia toward quality growth. Accordingly, these broader growth-related issues are discussed in this report only as they relate to green space.

*See Appendix A for a list of Committee members and staff.

Work of the Committee

The Georgia Green Space Advisory Committee held its first meeting on October 26, 1999. The members shared their reactions to materials that they received from Chairman Clay Long and the state agency and university system personnel enlisted to provide support for the Committee. The Committee members recognized that, in order to be of any help to the Governor, it would have to complete its work by mid-December, well before the opening of the 2000 General Assembly. The Committee then set a seven-week schedule for developing the final report and recommendations. After receiving a report from staff members Ms. Gail Hankinson and Mr. Harvey Young, the Committee began working on the definition of “green space” and on what constitutes “permanent protection.”

At its next meeting, on November 2, the Committee received a presentation from Mr. Charles A. Flink, a national expert on green space preservation. Dr. Jim Kundell of The University of Georgia's Vinson Institute of Government and Institute of Ecology then made a presentation to the Committee identifying a dozen issues that would need to be considered in developing the green space program. The members discussed these and several other issues they wanted to consider as they prepared their recommendations. They also requested information about existing green space programs in other jurisdictions.

At Mr. Joel Cowan's invitation, the Committee held an all-day meeting at Peachtree City on November 9. The Committee received briefings from Mayor Robert Lenox, Director of Development Jim Williams, and Chief of Police James Murray (on safety issues relating to green space) and a tour of the system of paved paths and wetland reserves that Peachtree City established according to its original master plan. Ms. Laurie Fowler of The University of Georgia's Institute of Ecology and School of Law then provided an extensive presentation on various financial, regulatory, and informational methods that other jurisdictions have effectively used to protect green space.

On November 16, the Committee received a briefing by Mr. Steve Macauley on two “conservation communities” that he is developing in Cobb and Fulton counties. Each community has set aside considerable green space for trails and recreational use by the residents, and in some cases by the public. The Commit-

tee also received a presentation by Mr. Alan Hallum, Chief of the Water Protection Branch of the Department of Natural Resources' Environmental Protection Division, on existing federal and state regulation of riparian and wetland areas and about these regulatory programs' limited ability to protect water quality in developing areas. Following these presentations, the Committee reviewed a talking paper it had earlier received from Chairman Long. The members arrived at consensus on certain points; on others, they agreed that more discussion was necessary.

On December 7, the Committee received a presentation from Mr. John Dearing, Mr. Marc Cain and Mr. Tom Sinclair on alternative waste water treatment systems. Thereafter for the remainder of that meeting and for the entire period of its final meeting on December 14, the Committee reviewed, discussed, revised and finalized this report and its recommendations to Governor Barnes.

The Committee wishes to thank Governor Barnes for the opportunity to assist in the development of his community green space program.



What Is Green Space and How Does Community Green Space Relate to It?

In general terms, green space is land in natural or unbuilt condition that provides environmental, recreational and other benefits. Although recreation, conservation and historic preservation professionals have not agreed on formal definitions for many of the green space-related terms, the following definitions capture the way these terms are commonly used.

- *Open space*: land and water features, usually in urban or suburban settings, that are accessible to the public and usable for outdoor recreation.
- *Greenbelt*: a large open space area, often at the edge of, or passing through, an urban area.
- *Greenway*: a linear landscape feature that connects places that people or wildlife want to go, and allows them to travel between those places. Greenways are usually vegetated, and they usually do not permit motorized travel.

Definition of Green Space

Many states and local governments outside Georgia have open space or green space programs, and each program has defined the terms “open space” and “green space” to meet its own goals. So



too for Georgia. The Community Green Space Advisory Committee sought to define several terms as they would apply to Georgia's proposed program, to ensure that the purposes and effects of this program would be clearly understood. The Committee defines "green space" in the following manner.

Green space is permanently protected land, including agricultural and forestry land, that is in its undeveloped natural state or that has been developed only to the extent consistent with the following:

- water quality protection for streams and lakes;
- flood protection;
- wetlands protection;
- reduction of erosion through protection of steep slopes, areas with erodible soils, and stream banks;
- protection of riparian buffers and other areas that serve as natural habitat and corridors for native plant and animal species;
- scenic protection;
- protection of archaeological and historic resources; and/or
- provision of recreation in the form of hiking, camping, fishing, hunting and similar outdoor activities.

This general definition of green space includes diverse property types. Examples include the Chattahoochee River National Recreation Area, Okefenokee National Wildlife Refuge, Amicalola Falls State Park, Hofwyl-Broadfield State Historic Site, Big Hammock Natural Area, many recreational parks and sports facilities managed by local units of government, and nature preserves operated by charitable private organizations such as The Nature Conservancy.

Definition of Community Green Space

Because the focus of the Committee is on community green space, it is necessary to distinguish it from the broader category of green





space. Community green space will have all the attributes of green space in general but will be close to where people live and work. Community green space will not only provide recreation and transportation benefits and environmental protection; it will also enhance the sense of community and neighborhood in a more natural, green setting. The Committee defines community green space in the following manner:

Community green space is permanently protected green space in urban or suburban areas which, in addition to the attributes associated with green space in general, provides:

- park, school, playground and other sites for outdoor recreation and exercise;
- paths for walking, cycling, and other alternative transportation opportunities;
- usable buffers that contribute to connectivity; and/or
- neighborhood access.

Examples of community green space include Savannah's city squares; the riverfront parks in Albany, Athens, Augusta, Columbus, Macon, Rome, Roswell, and Savannah; Piedmont Park (Fulton County); Fernbank Forest (DeKalb County); and neighborhood pocket parks or school grounds connected by paths, sidewalks or trails to the neighborhoods or business districts that surround them.* This definition excludes, however, facilities that are not within a reasonable walking or bicycling distance from residential or business areas.

Definition of Permanent Protection

The Committee also defined "permanent protection." The Committee believes that a critical component of the green space initiative should be to secure the benefits of community green space for future generations as well as for the current citizens of the State. The Committee considered various forms of protection, from outright acquisition of land to using regulatory and other

*This statement assumes that these squares, parks, and other grounds are permanently protected.

measures to afford protection. After considerable discussion, the Committee proposes that “permanent protection” should be defined along the following lines.

Permanent Protection may be achieved in a variety of ways. Land is permanently protected when it is:

- owned and designated by the federal government for recreation, conservation or natural resource protection; or
- owned by the State of Georgia and dedicated as a Heritage Preserve; or
- owned by any state or local unit of government or authority, and (a) subject to a conservation easement in favor of a certified* land trust that ensures that the land will be maintained as green space, or (b) subject to other appropriate arrangements that ensure that, if the protected status is discontinued, such land will be replaced by other green space of equal monetary and resource protection value; or
- owned by any person or by any not-for-profit or for-profit entity, subject to a conservation easement in favor of a certified land trust that ensures that the land will be maintained as green space.

*Please see the discussion of land trust certification in the second footnote on page 33.

Why Protect Community Green Space?

Green space contributes to the livability of a community in many ways. First, keeping a significant portion of every watershed in a near-natural condition provides a multitude of natural resource benefits. Of primary importance are the services such vegetated lands provide on behalf of water quality and quantity. Green space is generally permeable land that allows rain water to seep into the soil, replenishing surface and ground water supplies, purifying the water, and reducing the impacts of flood and drought. These services are provided essentially without cost to the community as long as adequate land is maintained in a relatively unaltered condition. Second, green space provides recreational opportunities for a health conscious society. In the battle against chronic obesity, opportunities to walk or exercise on a daily basis are becoming increasingly important to all Georgians. This increase in exercise promotes good health and reduces health care costs. Third, green space that links schools, libraries, shopping centers and work sites can lessen the public's reliance on the automobile by providing alternative transportation opportunities. Increased pedestrian travel within a community builds a sense of place and belonging, and may reduce crime.² Green space is a valuable amenity that can increase property values, stimulate leisure-related economic opportunities, reduce the demand for public services, and improve the economic viability of a community.³ The Committee has not undertaken to document in detail all of the benefits of green space, and other considerations relating to the protection of green space, but it is completely satisfied that the benefits of green space far outweigh the costs.

Green Space Protects the Important Functions of Natural Systems

The community green space program should protect the viability of our working natural systems.* Land that remains in a natu-

*It is necessary to recognize that in various situations there may be conflicts between fully protecting working natural systems and providing trails, paths and other soft transportation and recreational areas. The Committee believes that with careful study and planning in most situations, these conflicts can be resolved in an appropriate manner that recognizes the diverse contributions that can be made by green space.

ral condition performs important services for our communities. Permeable land collects and holds rain water, recharging ground water, filtering water as it seeps towards streams or lakes, cooling the ground, sustaining plants and animals, minimizing flood damage, and mitigating drought conditions. Many of these services can be replaced by human engineered technology, but only at great financial cost. Green space provides these functions virtually for free, except for the cost of the land. Past evaluations of the costs and benefits of preserving green space placed little economic value on these naturally provided services. It is more accurate, however, to look at the cost of replacing these services if the natural systems are lost.

Water Quantity Benefits

Using geologically or environmentally sensitive areas for open space or recreation purposes can reduce potential property damage costs and loss of life. Hazards that can be mitigated through conservation of open space include flooding and slope instability.⁴ Many of the available examples focus on flood control. Leaders in Johnson County, Kansas, proposed that \$120 million be spent on stormwater control projects. Instead, voters passed a \$600,000 levy to develop a countywide streamway park system.⁵ Development of this green space network will address some of the county's flooding problems at a greatly reduced cost, and will also provide a valuable recreation resource along the streams.

The federal Flood Insurance Program subsidizes the cost of flood losses. Under the program, a structure repeatedly damaged by floods can receive damage payments for each flood event. It has been argued that it would be cheaper for the public to acquire repeatedly damaged structures than to continue providing funds to repair or rebuild structures in flood-prone locations.

Baltimore County, Maryland, acquired 100 homes in several 100-year flood plains and resold them to people willing to relocate the structures to higher ground. At the reported public cost of \$27 million,



the county will have cleared the 100-year flood plain in eight of its most critical watersheds, saving an estimated \$85 million in storm damage assistance costs over the next five years.⁶

In Boston, officials chose to protect, through purchase or easement, over 8,000 acres of wetlands along the Charles River that were capable of holding 50,000 acre-feet of flood water, because, according to a recent analysis, to provide the same flood protection by constructing dams and levees would have cost \$100 million.⁷

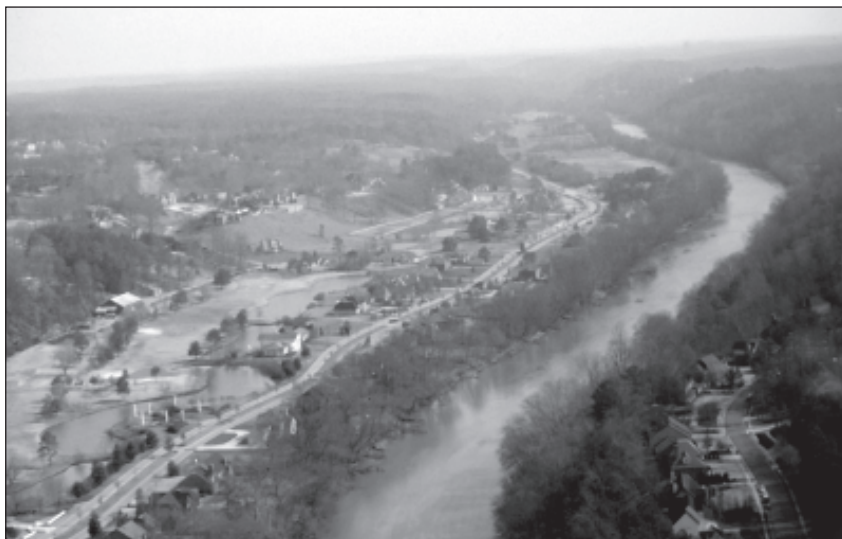
Water Quality Benefits

Maintaining green space along a river or stream helps protect water quality because riparian vegetation helps filter out pollutants. Riparian vegetation seems to serve as an effective buffer between a stream and an adjacent agricultural area. The retention capabilities of this vegetation appear to prevent many agricultural chemicals from polluting the stream. A study of an agricultural watershed and riparian forest in Maryland found that if the riparian forest were removed, there would have been twice as much nitrate nitrogen contaminating the stream.⁸ Thus, preserving vegetated buffers protects water quality, decreases treatment costs, and enhances the viability of aquatic-based recreational opportunities including swimming, skiing, boating and the multi-million dollar sport fishing industry.

When drinking water resources are impacted by increased sediment and pollutants washing into surface water reservoirs, there are substantial cost increases to the consumer for purifying the water. For example, officials of the City of Roswell, Georgia, report that the city had to increase its chemical costs by 60 percent in one year to deal with increased sediments in its water supply, and that this trend appears to be continuing. Additionally, that community has had to dredge out its intake structure every three years, rather than on the 10-year design schedule, due to increased sedimentation in the watershed.⁹ Water bills in Cincinnati, Ohio, reportedly were increased by 10 percent to pay for an activated carbon filtration system needed to remove pesticide contamination from the city's drinking water supply.¹⁰ It is estimated in a National Wildlife Federation article that wetlands along a three-mile section of Georgia's Alcovy River provide filtration that would cost \$3 million annually to reproduce through engineering.¹¹

Other Environmental Benefits

Maintaining a stable and vegetated stream corridor is important in other ways as well. Trees along streams keep water temperatures cool by shading the stream and thereby improve conditions for fish. Leaves and insects falling from trees along streams are also important food sources for aquatic organisms, supporting the fish population. Additionally, submerged and emergent vegetation within the stream helps stabilize the banks and bed, as well as provide food and refuge for animals in the system.¹² Stream corridors also provide critical migration corridors for birds and other animals, some of which are endangered or threatened species.



In addition to stream corridors, green space can provide many other environmental benefits. Trees and other plants help mitigate air and noise pollution. Green spaces that conserve such vegetation make a valuable contribution to pollution control. Air pollution, for example, can be decreased by establishing trails and green spaces that encourage people to walk, bicycle or even take an electric golf cart, rather than drive automobiles. There are approximately 8,000 registered golf carts in Peachtree City.

Green space also helps control air pollution because plants are natural air cleaners. Plants cleanse the air through the process of photosynthesis, which controls air pollution through oxygenation and dilution. The ability of plants to introduce excess oxygen into oxygen-deficient air serves to readjust the balance. Plants also absorb pollutants directly into their leaves and assimilate them. Vegetation can absorb ozone, sulfur dioxide, carbon monoxide, and airborne particles of heavy metals. In one study, reductions in particulate concentration of 19 percent were recorded in Ohio conifer stands.¹³ The value of the air quality benefits provided by Atlanta's tree coverage has been estimated at \$15 million annually. The study indicated that the additional annual economic benefit to air quality if Atlanta increased its tree coverage from 27 percent to 40 percent is estimated by American Forests to be \$7 million.¹⁴



Green space helps reduce the impact of noise in two ways. First, green space serves to maintain distance between the noise source and the receiver. Secondly, green space can include planting barriers, such as tree belts and grassy areas that have the natural ability to absorb, deflect, and refract sound.

Relationship between Green Space and Impervious Surface

It is important to recognize the relationship between green space and impervious surfaces. Impervious surfaces are hard, non-porous surfaces that seal over the soil. Examples are most roads, driveways, sidewalks, rooftops, tennis courts, and patios. Increasing the amount of impervious surface causes higher urban air temperatures and air pollution levels, water quality and quantity problems, and loss of wildlife habitat. Impervious surfaces are the antithesis of green space; they aggravate the problems that protecting green space is intended to remedy.

Impervious surfaces prevent rainwater from infiltrating soil to recharge groundwater. Instead, the water quickly flows to streams which receive a much greater volume of water at one time, compared to a more gradual flow of water from naturally vegetated areas. For example, the total runoff volume for a one-acre parking lot is about 16 times that of a one-acre meadow.¹⁵ Consequently, an increase in impervious surfaces can contribute to flooding problems within a community.

Streets and parking lots contribute the highest loads of non-point source water pollutants to Georgia streams and lakes (i.e., those pollutants that are carried to streams by water flowing over the surface of the land). Automobiles drop oil and metal particles onto parking lots and roads. Rain washes these pollutants off the pavement and into streams. Greater rates of runoff, combined with poor construction, agricultural, and forestry practices, can send large amounts of sediment into receiving streams, burying aquatic plants and fish eggs, filling in stream channels, and reducing the available oxygen in the water.*

*The 1998 assessment of Georgia's environment found that 57 percent of stream miles and 83 percent of lake acres either did not meet or only partially met their designated water quality standard. In 85 percent of the streams and 99 percent of the lakes found to need improvement, non-point sources of pollution were determined to be the cause of the problem. "Georgia's Environment 98", Georgia Department of Natural Resources, Environmental Protection Division, p. 6.

Since impervious surfaces result in higher pollution and sediment loads, water quality is closely linked to the amount of impervious surface in the watershed. A sharp drop in water quality occurs when approximately 10 to 15 percent of the watershed is covered by impervious surfaces.^{16*}

The Committee believes that local governments should address impervious surface issues in their green space programs. Communities need to gather data on the amount of impervious surface in their jurisdictions. Communities should also consider steps to reduce the extent of new impervious surface by constructing roads and parking lots of permeable materials, by promoting the location of housing near major work centers, and by promoting conservation subdivisions.

Green Space Provides Important Recreational and Educational Opportunities

Leisure is often considered to be discretionary, or free, time away from work and other responsibilities, where participants choose and control their activities. However, with busy and often conflicting schedules within families and with long commute times to and from work, it is more and more difficult for families to get away to a remote location for recreational activities. Children need places to play close to home that are accessible without having to ride in a car. Adults need convenient opportunities to exercise.

Community green space can provide neighborhood recreational space. Playgrounds located just down the street will be used by all the children in the neighborhood. Seniors will have

*The following generally seem to apply regarding the relationship between impervious surface and water quality and aquatic habitat:

- 1 to 10 percent impervious surface: The watershed can maintain a high-quality stream system that maintains stable banks and has high fish diversity and good water quality.
- 11 to 25 percent impervious surface: Pristine conditions of the sensitive stream cannot be maintained and streams begin to show unstable channels, declining water quality, and diminished biological communities.
- 26 to 100 percent impervious surface: Streams fed by the watershed are characterized as being highly unstable, having poor fish and aquatic insect diversity, and exhibiting very poor water quality.

“Georgia’s Environment 98”, Georgia Department of Natural Resources, Environmental Protection Division, p. 6.



places to walk to that are interesting and stimulating because they are full of neighborhood life. Ball fields and sports courts (tennis, basketball) provide opportunities for healthful and constructive activities for the people of the community. The availability of these facilities may even reduce crime. For example, one community experienced a significant reduction in its juvenile crime rate when the parks department allowed nighttime basketball until 1:00 a.m. during summer months.¹⁷

Local events, such as art or music festivals or events celebrating the local history, often take place in small neighborhood parks or town squares. Community awareness-raising efforts such as walks or runs in support of various social and health-related causes are ideally routed through communities on trails or pathways that are safely separated from vehicular traffic, yet are visible to the community. Trails weaving through neighborhoods allow for a multitude of spontaneous encounters among neighbors, such as watching children walk to and from neighborhood schools, holding conversations as people stroll in the evening, walking to neighborhood events such as 4th of July celebrations, or holiday caroling. Providing fully connected, interesting routes to many destinations within a community will encourage pedestrian and bicycle travel.

Opportunities for walking or jogging are important to many people. A recent survey of households in 212 metropolitan areas revealed overall participation rates for several activities related to green space: 40.4 percent of those surveyed walked for health, 32.8 percent pursued physical fitness/exercise, 14.9 percent bicycled and 12.4 percent ran or jogged. More than half the American public says it walks for pleasure and 47 million adult Americans identify themselves as bicyclists.¹⁸ The provision of safe paths to walk, jog or bicycle on is an important benefit that community green space can provide.

Locally accessible green space also provides opportunities for hands-on learning. Direct contact with Georgia's green space helps people of all ages understand the importance of properly functioning ecosystems, maintaining good water quality, preserv-

ing wildlife habitat, and blending human needs with those of the natural environment. Such learning occurs most effectively when teachers have convenient access to green space. Opportunities to see and appreciate the uniqueness of the local geology, biology or cultural history build a sense of understanding and pride in the community. Learning about green space helps people appreciate the importance of having unbuilt areas and helps develop the increasingly important ethic for protecting green space.

Green Space Can Provide Alternative Transportation Opportunities

A critical need for all communities is a safe place for children and adults to walk and play. In 1997, a total of 5,307 pedestrian fatalities occurred in the United States. Sadly, the Atlanta metropolitan statistical area was found to be the third most dangerous large metropolitan area in the country for walking.¹⁹ A study by the Centers for Disease Control and Prevention of four metropolitan Atlanta counties (Cobb, DeKalb, Fulton, and Gwinnett) found a total of 309 pedestrian fatalities during 1994–1998. The pedestrian fatality rate in that four county area increased from 2.54 deaths per 100,000 people in 1994 to 2.85 in 1998. In comparison the U.S. pedestrian fatality rate decreased from 2.19 in 1993 to 1.98 in 1997. The rate of pedestrian injuries (fatal and nonfatal) in these metro Atlanta counties increased from 50.6 to 61.2 per 100,000 people in the same time period.²⁰

Providing people with convenient access to off-road paths that allow them to walk or bike to local destinations, such as friends' homes, local shops, recreational fields and neighborhood schools, can decrease traffic congestion, improve community safety and reduce our dependency on the automobile. Critical to this vision of walkable communities is the concept of connection. Green space, parks, sports fields, schools, libraries, local shops, and work places all need to be accessible by foot throughout the community. As a local government designs its green space plan, it will be essential to identify where it can use green space to connect these areas.





Walking along paths to accomplish simple routine tasks, such as to return a library book or to rent a video, using trails for exercise by jogging or taking the dog for a walk, unwinding after a stressful day in the office with a long walk along a peaceful stream—these things will take place extensively only if the facilities are conveniently located directly in the areas where people live and work.

Local governments have countless opportunities to be creative and design alternative transportation routes throughout their communities to meet the needs of the local population. A green space program that plans for connectivity can build its connected system upon many other infrastructure investments. If a stream corridor is protected for water storage and purification purposes, the public receives a tremendous additional benefit if that corridor can be incorporated into a system of paths and trails for pedestrian traffic. When a local government purchases a linear easement to run water/sewer lines or other utilities, the benefit to the public is greatly increased at little additional cost if a trail is built upon the same easement.

Some communities have used public-private partnerships to increase the extent of pedestrian trails. Private utilities have been allowed to extend their facilities only if a surface easement was granted for the community trail system; cable lines have been allowed in public easement areas in return for constructing and maintaining a pedestrian trail along the easement.²¹

Green Space Provides Economic Benefits

Property Tax Implications of Providing Green Space

Local governments are sometimes concerned about the effect on the local tax revenue base of public ownership of green space or the application of conservation easements. The concern is that green space will eliminate property tax revenue, placing a heavy burden on the remaining taxpayers. However, various fiscal analyses indicate that this is not necessarily the case. In *The Economic Benefits of Open Space*, Stephen Miller conducted a modified fiscal impact analysis, comparing tax revenues with municipi-

pal costs for three categories of land—residential, commercial/industrial, and open space. Subtracting costs from revenues computed for each land use category, he determined that every municipality received more in benefits from open space than it had to give back in services. He found that open space *paid* an average of 3.5 times as much as it *cost* local government.²² In the City of Boulder, Colorado, the 1988 public cost for maintaining open space in the city was only \$75 per acre, or less than three percent of the cost of undeveloped space. During the same period, the public cost for maintaining non-open space, such as developed acres, was estimated to be more than \$2,500 per acre, and could be as high as \$3,200 per acre when utilities, flood control, transportation, and subsidiary governmental entities' costs are included.²³

Real Estate Values

Studies across the country have shown that many people are willing to pay higher prices for residential property located near green space. In Boulder, Colorado, the average value of property adjacent to a greenbelt was found to be 32 percent higher than a comparable home 3,200 feet away. Studies in Amherst and Concord, Massachusetts, found that clustered housing with permanently protected open space appreciated at a higher rate than conventionally designed subdivisions. In Dayton, Ohio, it was found that the proximity of a park accounted for five percent of the average residential selling price. A survey of realtors in Seattle, Washington, indicated that property near that city's Burke-Gilman bicycle and pedestrian trail sells for an average of six percent more than houses that have no trail amenity. Approximately 61 percent of the suburban residential landowners adjacent to the Luce-Line rail-to-trail facility in Minnesota noted an increase in their property values as a result of the trail.²⁴ The developers who made presentations before this Committee, and Committee members with development expertise, confirmed that in Georgia developments with green space can be very marketable and profitable.

Corporate Relocation and Retention

The importance of quality of life in an area is increasingly cited as a major factor in corporate and business location decisions. Quality of life for employees was found to be the third most

important factor in locating a business in an annual survey of chief executive officers conducted by Cushman and Wakefield in 1989.²⁵ The Joint Economic Committee of the U.S. Congress reported that a city's quality of life is more important than purely business-related factors when it comes to attracting new businesses, particularly in the rapidly growing high-tech and service industries.²⁶

Convenient access to natural settings, recreational and cultural opportunities, and open space is an important quality of life issue. For example, a survey of 71 economists rated factors for Arizona's attractiveness as a place to live, work, vacation, retire, and locate future plants and corporate headquarters. The strongest factors contributing to Arizona's positive image were climate, job opportunities, and open space, including abundant outdoor recreation opportunities.²⁷ Business locations near streams, trails and green space are likely to be more attractive than sites lacking such amenities. Similarly, the availability of housing appropriate for its entire workforce, within walking and biking distance, connected by green space, can also be a factor in a company's relocation decision.

Green Space May Expand the Local Economy

For certain types of green space, the recreational experience enjoyed on a daily basis by the local residents may draw visitors who also wish to use the facilities. Where this occurs, the recreational experience may be enhanced by the provision of additional services. For example, a store renting bicycles may locate near a particularly popular trail. Concessions for food or convenience items may develop.



tional services. For example, a store renting bicycles may locate near a particularly popular trail. Concessions for food or convenience items may develop.

Local parks provide locations for community fund raising events to support community needs. Schools often hold small fairs in play lots or sport fields near the school to raise funds for, or awareness of, school needs. Community parades and celebrations usually begin or end in local parks, often with food concessions

or other revenue generating opportunities. These local celebrations may bring visitors into a community. Visitors who purchase goods and services from local businesses can provide a boost to the local economy.

The managing agency, which provides maintenance, security or other services for a green space, will also contribute to the local economy. Materials and services purchased to develop, operate and maintain the green space and related improvements may be obtained locally, and local residents may be hired to develop or maintain the property or provide security at the facility.

How Much Community Green Space Should Be Protected?

The Community Green Space Advisory Committee grappled with the fundamental question of how much land should remain in green space to meet the needs of an urbanizing population. Currently, approximately eight percent of the State of Georgia is protected in some manner relating to green space, but not all of this land is protected in any lasting way. For example, this figure includes land at military reservations that is currently held for conservation purposes, but has no permanent legal protection.

Statewide Land Protection Levels

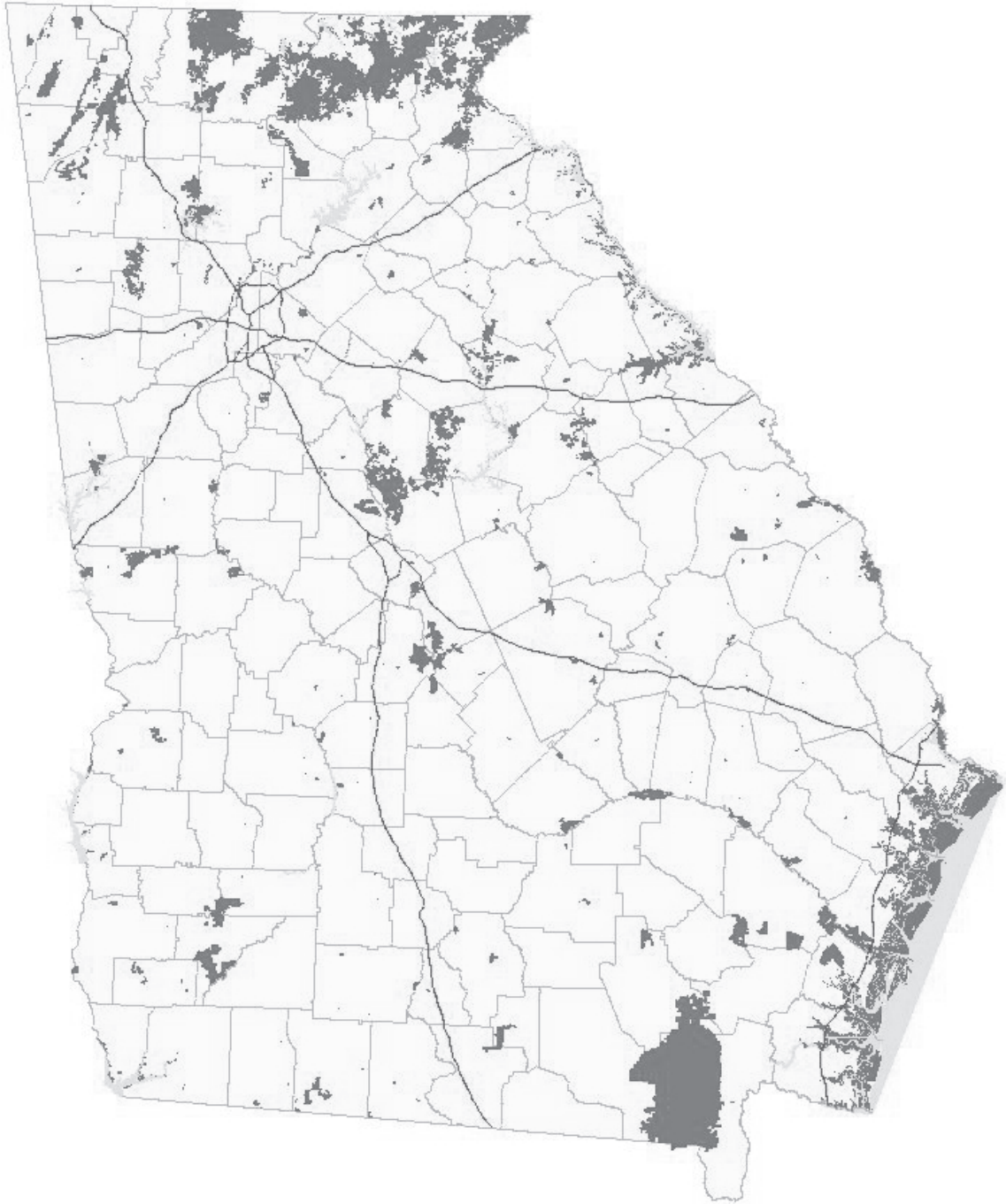
At this time it is not known how much land qualifies as green space or community green space according to the definitions adopted by the Committee. It is safe to say that it is well below the 20 percent figure that Governor Barnes stated as the level we should strive for and the amount for many years advocated by Dr. Eugene Odum, Director Emeritus of the Institute of Ecology at The University of Georgia. Professor Odum, known as the Father of Modern Ecology, has argued that at least 20 percent of the State should remain in natural conditions in order to provide a healthy environment.²⁸

It is interesting to note that this figure is consistent with what many other states have in public ownership. For example, while Georgia has about four percent of the State protected as natural areas by the four major federal land management agencies,* 11 states have more than 25 percent of their land in federal conservation programs. The federal government manages 45.1 percent of California's land, 52.4 percent of Oregon's land, 62.2 percent of Utah's land, and 83.0 percent of Nevada's land.²⁹

Many states have significant state conservation programs even though they already have considerable amounts of land protected under federal conservation programs. Besides Oregon

*U.S. Forest Service, U.S. Fish and Wildlife Service, National Park Service, and Bureau of Land Management (which manages no lands in Georgia).

Protected Green Space in Georgia



Source: Georgia Land Use Trends Project, Institute of Ecology and Vinson Institute of Government, The University of Georgia.

and California, which are recognized as leaders in land conservation efforts, Florida is a good example. Florida, which has approximately nine percent of its land under federal management, has set aside an additional 20 percent of its land area as green space. This percentage is expected to increase by another 10 percent through its current Florida Forever Program, bringing state and federal conservation lands to nearly 40 percent of the State.³⁰

New Jersey is another state that has devoted considerable resources to protecting green space. As of 1998, 934,000 acres in the State of New Jersey were protected by federal, state or local government or private entities for conservation purposes. This amount is approximately 18 percent of the State. A new initiative in New Jersey will bring an additional one million acres into permanent protection. This is to be accomplished by purchasing the development rights on 800,000 acres of active farm land, and acquiring an additional 200,000 acres for recreation lands, 100,000 acres for water resource protection and 200,000 for additional greenways. With the addition of this acreage, approximately 40 percent of New Jersey will be protected green space.³¹

In Vermont, approximately 19 percent of the land is conserved by public agencies or non-profit organizations as public open space. The federal government, the state government, and private non-profit land trusts each protect approximately six percent of the State.³² The municipalities own an additional one percent.³³ In July 1999, the State embarked on a ten year program to acquire additional land under its Land Conservation Plan.³⁴

Community Green Space Needs

The existence of a significant amount of federal or state owned conservation land does not tell us how much land should be provided within a community to meet the daily needs of the residents. These two types of lands (i.e., large, more remote natural areas and urban green space) provide different services. And no two communities are exactly the same in their needs for community green space, due to differences in the natural features of their land, the logical routes connecting residential, commercial, business and educational areas, and the demographics of the populations.

Recognizing the variability between communities, it is still useful to have a minimum standard that quantifies the least amount of green space required to meet the leisure, recreation, transportation, environmental, and quality of life needs of a typical residential population. The National Recreation and Park Association's standard for recreation and planning design for new towns, planned-unit developments and large subdivisions, is that 25 percent of the total area of a community be devoted to public recreation and open space.³⁵

Community Green Space Goal

Although the 20 percent figure seems both reasonable and realistic in light of national standards and actual green space acreage protected in other states, the Committee debated the question: "Twenty percent of what?" Should a program focus on protecting 20 percent of the land statewide; 20 percent of the land in selected, high-growth counties; or 20 percent of the remaining undeveloped land in selected counties? In light of the considerable benefits received from green space, the Committee believes that the goal of establishing 20 percent green space is appropriate for the entire State. The Committee also believes that it is critical to emphasize the need for large and rapidly growing counties to take immediate action to secure this land.

How Should a Community Green Space Program Be Created and Implemented?

Governor Barnes has recognized the significance of local, accessible, usable green space to the quality of the daily lives of all Georgians as well as to the continued economic vitality of the State. He has set the green space goal at 20 percent. To realize his vision, it will be necessary to mobilize the General Assembly, many of the state's agencies, the local governments, the real estate and business community and Georgia citizens in general.

Need for a Local Focus

In response to the Governor's emphasis on community green space, the Committee believes that the most effective approach will be to look to local governments as the primary source for planning and implementing any program for community green space preservation. This is important for at least three reasons:

- the diversity of local geographic, demographic, and ecological conditions in Georgia requires that any feasible plan emanate from local governments;
- local governments have the power and capacity to deal with many of the important issues relating to land use; and
- local participation, cooperation and support are prime prerequisites for success of any green space program.

Committee Recommends . . .

The primary recommendation of the Committee is that the Governor work with the General Assembly to establish a new Community Green Space Program, to be administered by the Department of Natural Resources (DNR) and to be funded in part by a new Community Green Space Fund. The legislation should establish that it is the policy of the State to protect at least 20 percent of Georgia's land as green space. The focus of the program should be on high growth counties. The Community Green Space Fund should be used to provide financial support for local green space programs.

The Process

Under the Committee's recommendation, counties with large populations or with high growth rates would be required to participate in the program. Other counties would be permitted to participate. Participants in the program would:

- develop and implement a green space protection plan;
- locate as many sources of funding as feasible for the protection of green space, so that any state funds

would be highly leveraged with federal, local and private funds;

- protect green space by using their powers and processes, which might include one or more of the following techniques:
 - comprehensive planning;
 - zoning and subdivision regulations;
 - wetlands and flood plain protection ordinances;
 - transfers of development rights;
 - impact fees or exactions;
 - limitations on impervious surfaces;
 - designation of green space priority areas; and/or
 - provision of incentives for private developers to promote creative design that would maximize green space within their projects;
- make a good-faith effort to implement its green space plan, measured and reported to the responsible state agency by:
 - how new developments are to contribute to meeting the community's green space goal,
 - what steps are taken to obtain funding for green space needs,
 - what measures are taken to explore new flexible land planning techniques and to strengthen regulatory authority to protect green space, and
 - the initial amounts and the annual gains or losses in total green space and impervious surface acreage.

The green space plan developed by local governments should include an assessment of the amount of green space already protected, the amount of impervious surface in the jurisdiction by watershed, the amount and location of developed areas, and the identification of priority lands for inclusion in the green space program. The plan should also identify how the local governments intend to meet the 20 percent goal. If, because of existing levels of development, a 20 percent level is not feasible, then the plan should explain why not. It should also identify how the local government will protect the maximum possible amount of green space, but in any event no less than 20 percent of the total remaining unprotected, undeveloped land in the county. The par-



ticipating local government should review its comprehensive plan, and amend that plan if necessary, to ensure that it is consistent with and furthers the implementation of the green space plan. The local government could, for example, ensure that new utility rights-of-way allow for the co-location of walking trails, or that road plans include pedestrian-friendly crossing structures in areas where the community trail system intersects the road network.

All governmental units within a county, including cities, school boards, water and sewer authorities, development authorities, fire marshals, and county sanitarians, should be required to participate in the development and implementation of the plan. A city should submit its own plan if it cannot reach agreement with the county. The Committee recognizes that it may be advantageous for local governments to adopt green space plans on a watershed level and encourages multi-jurisdictional cooperation to this effect.

Responsible State Agency

For the Community Green Space Program to be effective, one state agency must be assigned administrative responsibility. The chief purpose of the program is to create and maintain green space for outdoor recreation and other community activities, general neighborhood access, and the protection of natural resources. DNR is, consequently, the most appropriate state agency to serve as the program's responsible agency because of its focus on both natural resources and outdoor recreation and its responsibility for regionally significant green space. In administering the program, DNR should perform the following functions:

- develop rules and regulations to give guidance to local governments regarding the development of green space plans, including the type of information to be included in the inventory of resources related to green space;

- approve Community Green Space Programs in accordance with state criteria;
- develop criteria by which competitive proposals would be considered for grants from the Community Green Space Fund;
- coordinate the delivery of state technical assistance to local governments to prepare and implement Community Green Space Programs;
- provide (either directly or through contracts with qualified service providers) financial, technical and legal assistance to local land trusts and landowners in the areas of drafting and enforcing conservation easements, and related training to attorneys, tax appraisers, assessors, and other professionals;*
- establish minimum standards for land trusts, and use these standards to certify eligibility of land trusts to participate in the Program.**
- serve as a backup holder of selected easements, in the event a local land trust dissolves; hold selected easements in those parts of the State that are not currently served by local land trusts; or hold selected easements that further

*The North Carolina Conservation Grant Fund, created by the legislature in 1997, funds the reimbursement of conservation easement transaction costs in order to “improve the capability of private non-profit land trusts to successfully accomplish conservation projects...and to provide an opportunity to leverage private and other public monies for conservation easements.” The State of Maryland provides local land trusts with administrative grants and a revolving-loan program for acquisition projects. Its Rural Legacy Program provides funds to local land trusts as well as local governments to purchase real property interests, including easements, in order to avoid sprawl and protect important green space. Georgia should promote the use of conservation easements by providing strategic financial resources to local land trusts and easement donors.

**Land trusts are logical recipients for those conservation easements that are not appropriate for local or state ownership. However, some land trusts may be new, modestly funded, or otherwise of uncertain future. A landowner who would like to convey a permanent conservation easement on his or her property may want reassurance that the land trust will endure, to provide long term protection for the easement. Small, local land trusts may not, on their own, be able to provide that assurance. The Land Trust Alliance, a national association of land trusts, has issued standards that local land trusts may seek to meet. DNR should consider adopting standards of this type to evaluate the health and stability of land trusts before making grants or entering into contracts with them to support the Community Green Space Program.

the State's green space goals but that do not meet a local land trust's objectives; and

- operate, or make arrangements for the operation of, lands that the State acquires in fee simple or as conservation easements under the Community Green Space Program.

The Committee recognizes that green space planning needs to be coordinated with other planning requirements of local government, including, for example, comprehensive land use planning and watershed management planning. The proposed green space legislation should set up an appropriate mechanism for cooperation and coordination among state agencies, such as DNR (including the Environmental Protection Division), the Department of Community Affairs, and the Georgia Department of Transportation.

Community Green Space Fund

The State could provide a strong incentive to participating local governments by creating a Community Green Space Fund, supported by annual appropriations from the General Assembly and any other available monies. Ultimately, a more stable, long-term source of funding would be desirable. The State could use this fund to provide competitive green space grants to local units of government participating in the Community Green Space Program. These grants could be used for any project constituting a part of the local green space plan. Specific examples are the acquisition of land or conservation easements, developing green space

areas with trails, recreation facilities and other appropriate amenities, and funding redevelopment and resource enhancement projects that include green space. A particularly appropriate grant might be to purchase land that connects one neighborhood's green space with another's green space or with other desirable destinations. To be eligible to receive a grant from the Fund, a local government would have to be a participant in good standing in the green space program.

Ranking Funding Proposals

Once a local government has an approved green space plan, it can submit proposals to



DNR for a grant from the Community Green Space Fund. Since funds are limited, it will be necessary for the State to prioritize proposals to determine which programs should receive state financial support. Highest priority should be given to those proposals that best meet the goals of the Community Green Space Program and are cost effective. The principal factors to be used in selecting projects to be funded should be the following.

- The funds requested by the local government are to be used to create green space:
 - that is protective of water resources (flood plains, wetlands and other areas that protect streams, rivers, lakes and important surface water supply or ground water recharge areas should be given high priority);
 - that is proximate and easily accessible to residences, schools, and work places (additional consideration might be given to green space that is accessible both to work places and nearby residential areas);
 - that is legally and physically accessible to the public on a regular basis;
 - that serves as alternative transportation or recreational paths or trails for people or corridors for wildlife; and/or
 - that provides more than one of the benefits described above.
- The proposal is submitted by a priority county in cooperation with the other governmental units within its borders. Additional consideration should be given to proposals that are multi-county in nature, extending green space along waterways or connecting other important resources or areas that are regional in nature.
- The local government can provide with its own funds, committed federal funds, or private donations a meaningful match for the state funds, with additional consideration given to local governments that are able to provide the highest leverage of state funds.



- The local government has adopted and is effectively using tools to protect green space, for example, performance based zoning.
- The project proposed by the local government meets an especially urgent need or takes advantage of an exceptional opportunity.

Fast-Track Projects

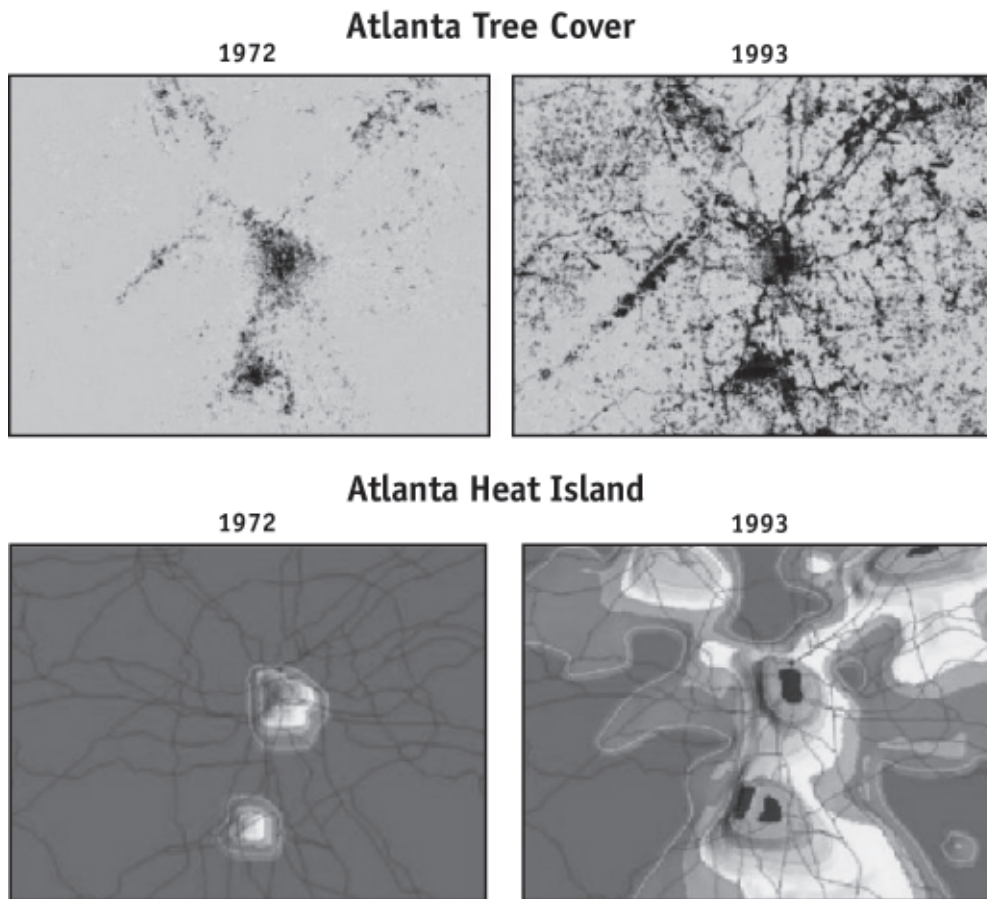
Communities that participate in the program may take as much as a year to develop their green space plans and obtain approval from DNR. The Committee believes that it would be desirable to make capital funds available for worthy projects during the first year of the program, before these final plans can be prepared. We recommend that the proposed legislation authorize DNR to develop a process by which competitive proposals that clearly further the purposes of the program could be evaluated and funds granted during the first year, so long as the applicant certifies that it is working on a green space plan, that it intends to complete it within the time allowed, and that the project will be part of the final plan.

Advisory Committee

The Committee recognizes that the establishment of a green space program is a major new venture for the State and that its success depends upon the cooperation of diverse governmental and private interests. We believe DNR would benefit from a broad base of expertise in developing and initiating the program. This function could be provided by the existing Board of Natural Resources, but we encourage the creation of a new advisory committee to work with DNR, particularly during the initial stages of program implementation.

Local Government Participation in the Community Green Space Program

It is clear that the need to preserve green space is not equally critical in all areas of the State. Some portions of Georgia are under incredible development pressure. The metropolitan Atlanta area has been found to be losing 50 acres of forested land per day. Since 1972, the urban forest in the Atlanta region has declined by 60 percent.³⁶



As shown in the photographs of Atlanta in 1972 and 1993, the loss of green space and increase in impervious surface levels contribute to higher temperatures that are 10 to 12 degrees warmer than the fields and forests that they replace. This results in an increase in atmospheric chemical reactions producing secondary pollutants such as ozone.

Source: American Forests, "The State of the Urban Forest Report: Assessing Tree Cover and Developing Goals," (Washington, D.C.: American Forests, September 1997).

Some other urban areas of the State are also experiencing similar growth pressures. Much of rural Georgia, however, has significant amounts of green space and is under little immediate development pressure. Consequently, the Community Green Space Advisory Committee believes that there is no need to impose planning and infrastructure requirements and costs on the State's less urbanized counties. On the other hand, counties that are included within a metropolitan statistical area, that have large populations, or that are developing rapidly have a critical need to act now to develop and implement a comprehensive green space plan and implement it. These priority counties would be the focus of the Program. Any county later meeting the criteria for priority counties should be automatically included as a priority county.

Any county or city not required to develop a green space plan should be permitted to do so and to participate in the program.

How Can the Tools Available to Local Governments to Protect Community Green Space Be Improved?

Local governments are in the best position to determine the most effective means for meeting the 20 percent green space goal, given their own particular demographics, financial resources, current development patterns, and natural resources. There are a variety of tools that local governments can use to implement their green space programs. In the course of its work, the Committee has reviewed many of these tools and believes that strategic amendment of existing state laws could increase their attractiveness. The importance of having a wide variety of existing tools can be illustrated by the following examples:

Example 1. One community might decide to pursue the acquisition of land to establish a river greenway and pedestrian/bike path, leveraging monies from its parks and recreation budget with those from a Special Purpose Local Option Sales Tax and the Community Green Space Fund. It might solicit funds from the federal Department of Transportation to build bike lanes linking the river greenway to residential neighborhoods, schools, and work places. It might establish a partnership with a local land trust to solicit conservation easements to provide a buffer along the major tributaries to the river. Some of these easements might be purchased with funds from the community's water and sewer budget.

Example 2. Another local government might rely on a combination of regulatory and incentive strategies. Perhaps its comprehensive plan cites the preservation of the remaining farmland in the county as a high priority. The government might designate this area as an agricultural preserve and zone it for larger lots. To compensate landowners for the loss of development potential, it might establish a program whereby development rights from these lots can be sold at fair market value and used to develop more densely in the parts of the county that are zoned residential and commercial and that have adequate infrastructure to support growth. Developers who site their subdivisions to link with

green space in other subdivisions may receive even greater incentives.

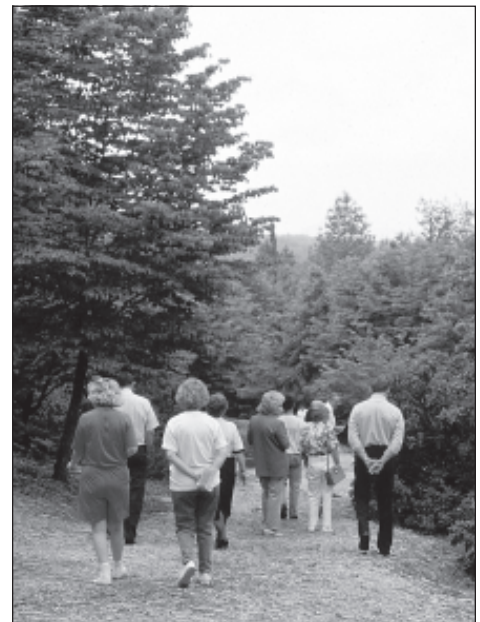
The following section describes these and other tools that local governments can use to implement their green space programs, as well as recommended additions and amendments.

Purchase of Land and Conservation Easements

Acquisition of land in fee simple is perhaps the most traditional means of preserving green space. Acquisition of fee title is advantageous when the local government needs to make full use of the property or to control it fully. A city or county park, which requires the development of facilities for a variety of public uses, is typically owned in fee simple. Less-than-fee interest may be adequate to preserve green space in other situations. Utility rights of way, protection of agricultural lands, and trail corridors usually require less-than-fee title. A landowner gives up one or more specific rights (such as to exclude public access, to subdivide, to develop) in a Deed of Conservation Easement. This deed is binding on future owners of the property. The landowner and his successors can engage in other uses of the property that do not infringe on the right he has transferred. It is the responsibility of the easement holder, either a government body or a private conservation organization called a land trust, to monitor the property routinely to ensure that the agreement is not violated and to pursue legal or other recourse to compel compliance if necessary. Easements and other less-than-fee interests are generally less costly to acquire than fee-simple title.

Georgia's Uniform Conservation Easement Act, O.C.G.A. §§44-10-1 et al., authorizes and promotes the use of conservation easements in Georgia "to retain or protect natural, scenic or open space values; assure availability for agricultural, forest, recreational, or open space use; protect natural resources; maintain or enhance air or water quality; and preserve the historic, architectural, archeological or cultural aspects of real property."

Several communities have developed purchase of development rights programs (PDRs) whereby the local government purchases and retires specific rights in land. For example, the State of Maryland purchases development rights along streams in order to provide a permanent veg-



etated buffer.³⁷ In rural areas PDR programs are generally known as PACE (purchase of agricultural conservation easements) programs. Here the government purchases and retires the right to subdivide a farm tract but the farmer retains ownership of the land and continues to engage in traditional farming uses.

Nationally, 15 state-level PDR programs are active; four additional states have passed PDR enabling legislation. Local PDR programs number in the hundreds. Over 491,000 acres of land have been preserved nationally under PDR programs at a cost of \$750 million. Funding comes from various sources, including annual appropriations and bonds, lottery proceeds, cigarette taxes, real estate transfer taxes, a state-sponsored credit card (Maine), and a cellular phone tax.³⁸ Howard County, Maryland, has purchased development rights on 15,844 acres of farmland, using proceeds from agricultural transfer taxes collected on land that is being removed from farm production; prices per acre range from \$1,200 to \$4,000. The county's obligation to make these payments is a general obligation that allows it to use the accumulated and future revenue from the agricultural transfer tax program.³⁹ Development rights can also be purchased to allow access along sewer line easements. The Committee suggests that local governments explore the option of negotiating public access when they secure sewer easements. Furthermore, the Environmental Protection Division should encourage the multiple use of sewer line rights of way in its permitting process.

Local Funding for Purchases of Land and Easements

Purchasing interests in land to implement the green space program will take much more money than the Community Green Space Fund alone can supply. Local governments will need to match state funds with their own funds and should be encouraged to match at a higher ratio than the minimum required. The specific sources and amounts of local funds available will depend on the individual local jurisdiction.

Local governments chiefly depend on tax monies to fund land acquisition, capital maintenance, operation of facilities, and other taxpayer services. The sources of these funds are general tax revenues, and special-purpose local option sales taxes which voters approve by referendum for purposes specified in the ballot initiative. Under current law, local governments are free to

budget general revenues for the acquisition of conservation and recreational lands. However, many worthy uses compete for scarce local revenues, and it can be difficult to find significant amounts of funds for land acquisition in the typical county or municipal budget. Many local governments spread the cost over a period of years by using bond funds for acquisition.

Local Governmental Trust Funds

The State could also encourage local governments to set aside their own funds for land acquisition, by enacting legislation that would allow them to create trust funds for green space protection, parks and greenways. The legislation would allow local governments to receive funds and other contributions within one budget year and to carry them over for expenditure in another, instead of having to obligate them within the year received, as current law requires. It would also clarify the law that allows local governments to receive and earmark gifts for specific purposes. The key element of the authorizing legislation would be the establishment of segregated community trust fund accounts to reserve the proceeds of dedicated and non-dedicated funding sources that are received for land protection.

Such legislation would allow trust-fund contributions from other governmental bodies and the private sector, encouraging public-private associations and garnering support from the business community. A coalition of local officials, environmental advocates, and members of the business community would be a significant ally for green space and other conservation programs. The legislation could help reduce potential legal or political challenges to green space protection at the local level.

Special-Purpose Local Option Sales Taxes (SPLOST)

At least one local government in Georgia, Athens–Clarke County, is allocating funds from a special-purpose local option sales tax for land acquisition and construction of a greenway trail along the Oconee

Committee Recommends . . .

that Governor Barnes work with the General Assembly to enact legislation that will authorize local governments to create trust funds for green space protection, parks and greenways, pursuant to which the local governments could receive funds and other contributions within one budget year and carry them over for expenditure in another. The legislation should also clarify the provisions in law that allow local governments to receive and earmark gifts for specific purposes, and to establish segregated community trust fund accounts to reserve the proceeds of dedicated and non-dedicated funding sources which are received for land protection.

Committee Recommends . . .

that the Governor ask the Attorney General for a ruling that the acquisition of green space as defined in this report is authorized under the SPLOST statute. We further recommend, if a substantial question remains, that the Governor work with the General Assembly to amend the statute to include protection of green space as an appropriate use of SPLOST funds.

River. SPLOST funding for the project will exceed \$5.4 million.⁴⁰ SPLOST is an appropriate vehicle for green space acquisition because it asks for a financial commitment from all citizens who benefit from the protection of green space. Georgia's SPLOST statute allows use of SPLOST funds for only those purposes that are specified in the act. Some local government attorneys have expressed concern that the SPLOST category "recreational facilities" is not broad enough to cover all green space projects.

Committee Recommends . . .

that the Governor encourage local governments to develop stormwater management plans in conjunction with their green space plans and to create stormwater utilities to fund stormwater facilities. Where the protection of green space is a significant component of a stormwater management plan, it is appropriate to use a portion of the stormwater utility funds for the acquisition of that green space.

Stormwater Utility Programs

Increases in impervious surfaces within the upper reaches of a watershed may have a substantial detrimental effect on flooding and water quality in downstream communities. As the community develops its stormwater plan, the plan should be coordinated with the community's green space plan, because the most cost-effective means of offsetting the effects of development may be to set aside significant green space to accommodate stormwater. A fair method for financing the purchase of this land or the development interest in the land may be through funds generated by a stormwater utility which levies a fee on the amount of impervious surface on a property. The City of Griffin, Georgia, adopted such a stormwater utility in 1998. The Committee recognizes that stormwater may be most effectively managed at a multi-county watershed level, and its recommendation would be equally effective in that context.

Tax Increment Financing

Tax Increment Financing (TIF) is a local governmental finance tool used to finance infrastructure for the redevelopment of depressed areas, and for certain new developments, specifically in cases where the local government appears justified in "speculating" on the probability of increased property tax revenues (the tax "increment") in a specific geographic area in the near future. When tax revenues in a discrete redeveloping or developing area can reasonably be expected to increase in the near future, a municipality, county, state, or other political subdivision may designate that particular geographic area as a tax increment district, and pledge a portion of, or all, future property tax increments above the base or starting level from that district to infrastruc-

ture development projects in that district. Money may be borrowed by issuing bonds to be repaid by these future tax increments. State TIF laws generally require the State to certify that the use of TIF is reasonable and justified based on the relevant figures and projections, and that no unfair burden of taxation is placed on any portion of the community.

The potential to use TIF for green space protection and development of what has come to be known as “green infrastructure” has not been explored in this State. The Committee considered recommending an amendment to the TIF statutes. However the Committee believes that TIF financing may currently be used by local governments, under the Redevelopment Powers Law, for many important green space purposes, namely the development of greenway corridors, local parks, and other green space associated with new or redeveloped residential and/or commercial subdivisions, or city neighborhoods, with no change to existing statutes.

State and Federal Funding

Several sources of state and federal funding exist to supplement local funds for green space projects. Local governments may find it useful to apply for such of these funds as are appropriate for the specific projects they have planned. Appendix B describes many of these sources in more detail. The federal funds may be used as a match for state funds from the Community Green Space Fund. Other state funds may not be used as match, but they may be used to support green space projects.

Donation of Fee Simple or Lesser Interests

The Committee recognizes that a significant amount of green space in the State can be protected through the donation of land and interests in land. Local land trusts, which are uniquely situated to recruit conservation easements to further a community green space plan, should be prominent players in the preservation of community green space.* Over 42,000 acres of land in

*Conservation easements are appropriate as a stand-alone incentive to recruit the donation of green space, they can be combined with zoning programs to protect in perpetuity green space in Transferable Development Right sending zones and in the green space portions of conservation subdivisions discussed more fully below, and they can be placed on land acquired by state or local government to assure the permanent protection required by this program.

Georgia are protected in perpetuity through conservation easements, and more than two million acres nationwide are under easement.⁴¹ Public/private partnerships between local governments, conservation organizations such as The Trust for Public Land and The Nature Conservancy, and local land trusts such as the Chattowah Open Land Trust, the Gwinnett Open Land Trust, the Southeast Land Preservation Trust, and the Oconee Rivers Land Trust have protected significant urban green space in the Chattahoochee and Oconee River corridors.

Committee Recommends . . .

that the Governor work with the General Assembly to amend the state income tax code to provide a significant state income tax credit to landowners who donate land or interests in land in furtherance of the Community Green Space Program.

Federal and State Income Taxes

Current federal and state law promotes the donation of land and conservation easements to charitable land trusts and governmental bodies. The Internal Revenue Code provides that donors may deduct from federal income tax any gifts of land to charitable organizations as well as the value of permanent easements that satisfy its definition of conservation purposes.* High estate taxes may be similarly decreased.**

A state income tax deduction linked to the federal deduction is currently available to Georgians for qualifying donations of land and interests in land but is fairly insignificant. More than 20 states, including North Carolina, Alabama, and Virginia, provide for more generous state income tax relief.⁴² North Carolina, for example, allows landowners to obtain a state income tax credit

*Section 170(h)(4)(A) of the Internal Revenue Code defines conservation purposes as the preservation of land areas for:

- outdoor recreation and education for the general public
- protection of relatively natural habitat
- preservation of open space for scenic enjoyment or pursuant to a governmental conservation policy
- preservation of historically important land or buildings.

The majority of easements fall within the open space category. State green space legislation and community green space plans that designate areas worthy of protection, as well as mechanisms for that protection, will provide the “governmental conservation policy” the IRS looks for in determining whether federal income tax relief is appropriate.

**In 1997 Congress amended the federal tax code to provide additional estate tax incentives for land conservation. The Taxpayer Relief Act allows heirs nine months after a landowner's death to place a conservation easement on a tract and thus become eligible for estate tax benefits and it provides for an increased reduction in estate taxes on land protected by a conservation easement.

of 25 percent of the fair market value of the donation, up to \$250,000 for individuals and \$500,000 for corporations so long as specific public purposes are served. These include public beach access and use, public access to trails and waters, and fish and wildlife habitat conservation. Approximately 33,000 acres of land have been protected under the program.⁴³ The total value of the land preserved is \$80 million and the treasury lost only \$3.5 million in state income tax revenue.⁴⁴

Property Taxes

Property taxes may also be decreased when a conservation easement is placed on property since restricting its development potential may diminish the fair market value of the land. Georgia's Uniform Conservation Easement Act entitles a landowner to a re-evaluation of his property tax to reflect the existence of the easement. Most tax assessors in the State are not yet familiar with the concept of perpetual conservation easements, however, and most counties have not adopted a policy or methodology for assessing them. The valuation process can be complex and local governments may lack the time and expertise to perform fair individual valuations. Nor has the State Revenue Department developed any particular methodology for the assessment of conservation easements. The lack of a clear policy that permits a potential donor to estimate his property tax savings discourages potential donors of conservation easements.

Committee Recommends . . .

that the Governor work with the Revenue Department and the General Assembly to amend the Revenue Code to require tax assessors to use a specific uniform method for the valuation of land protected by conservation easements. Appropriate methods for valuing green space protected by other ways should also be developed.

Enforcement of Conservation Easements

At least one local government in Georgia, the City of Alpharetta, holds a conservation easement (on wetlands in its Big Creek Watershed), but most easements in the State are held by agencies of the federal government or by private land trusts.⁴⁵ These range from well-established trusts such as The Nature Conservancy to local land trusts run by a volunteer board of directors that has the pulse and trust of the community. The burden of monitoring and enforcing conservation easements in perpetuity falls on these entities. Though the IRS requires that the articles of incorporation and bylaws of each land trust include a provision that the trust's assets, including conservation easements, are to be distributed to a like-minded conservation organization in

Committee Recommends . . .

that the Governor work with the General Assembly to amend the Uniform Conservation Easement Act to provide the Attorney General the authority to enforce any conservation easement in the State. The amendment should also require the county clerk of court to send a copy of each easement, as it is recorded, to the State Properties Commission, and it should require the State Properties Commission to establish and maintain a comprehensive and current database of conservation easements.

the event of dissolution, the potential exists that an easement might not be properly monitored and enforced. The State of Missouri has addressed this issue by providing the Attorney General and the Department of Wildlife Conservation (the equivalent of Georgia's DNR) the authority to enforce any conservation easement in the State.⁴⁶

Local Development Regulation and Performance Based Zoning

Regulation of the development process (including protection of green space) encompasses a host of laws, ordinances, and policies enacted at the federal, state and local level. The cornerstones of a local government's regulation of development are comprehensive plans, zoning ordinances, subdivision regulations and capital improvement programs. The traditional use of these elements has not necessarily furthered the protection of green space, and in some cases may have even contributed to its demise. Each of them, however, has the potential to be used in a green space program. Such a program should employ a variety of techniques, but these should be interlinked and coordinated.

Comprehensive Plans

The Georgia Planning Act of 1989 requires local governments to adopt comprehensive plans that describe how a community intends to develop over a 10 to 20 year time frame, in order to qualify for state funding and permits. The current plan must include environmental and land use elements. Supplemented by the green space protection plan proposed by this Committee, the comprehensive plan provides a guide for local officials in making decisions about quality, location and amount of development.

Zoning

The zoning ordinance is the major tool for implementing a comprehensive plan. Through the planning process the local government determines the type and location of various land uses, including those lands of value as green space. The zoning ordinance

then sets forth the criteria to be met for each zone, which can include green space protection measures. In addition, the zoning ordinance can identify transportation and other infrastructure requirements that might include alternative transportation paths and greenways.

Currently, most local governments chiefly use prescriptive zoning, which establishes inflexible standards for land development. Under prescriptive zoning, lot sizes, setbacks, side yards, buffer requirements and other aspects of development are set in advance regardless of the specific qualities of the land being developed. By contrast, performance based zoning allows the improvements to be located on-site as needed to avoid steep slopes, wetlands, and other natural features, without resulting in a net loss of residential lots. It protects property rights by allowing the developer to set aside green space while making full economic use of the property.

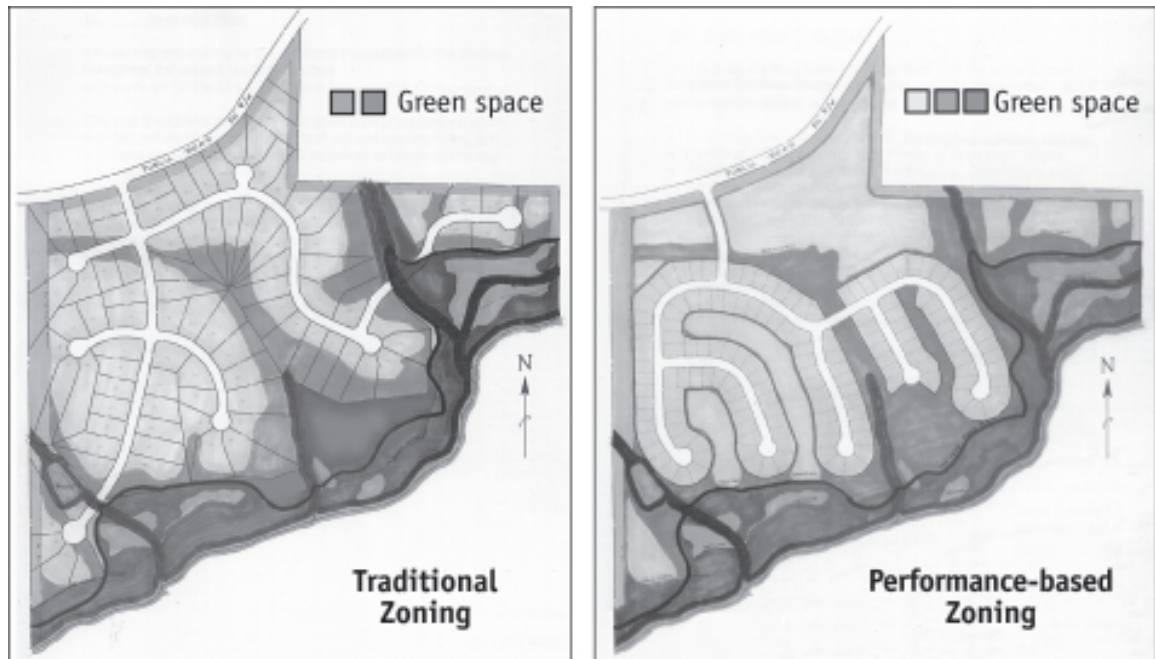
Conservation Zoning

A good example of performance based zoning is conservation zoning. Conservation or green space zoning promotes the location of development in one section of a site (generally high land desirable for home sites) in order to preserve green space on the remainder of the site (often stream corridors, wetlands, or other areas particularly suited for community use). Standard minimum lot and yard sizes are therefore reduced as is impervious surface. This type of subdivision design may reduce by 20-60 percent annual runoff from a site, with a corresponding increase in the amount of infiltration and ground water recharge. There may be savings in infrastructure costs as well. Conservation zoning may allow clustering throughout the community, it may allow clustering only in designated districts, or it may actually require clustering in specific districts.

The conservation subdivision design process examines and sets aside conservation areas *before* selecting locations for roads and houses. These conservation areas are usually owned and maintained by a homeowners' association and are protected in perpetuity by a conservation easement held by a land trust or governmental entity. Conservation subdivisions can be used as building blocks to link natural parkland and other protected areas into a network of open space.



Performance-based zoning provides greater flexibility to design developments to better fit the land than traditional zoning and to set aside more green space.



Among the obstacles subdivision developers face in Georgia are zoning that precludes the clustering of lots, segregates different uses of property and even prohibits different residential mixes, county health guidelines that require a minimum lot size for septic systems and disallow the use of proven alternative community waste water collection systems, and engineering and planning departments that continue to employ outdated design concepts such as unjustifiable street widths and setbacks. The Ridenour Project, located in Cobb County, will protect 25 acres of a 100-acre tract abutting Kennesaw Mountain as green space while clustering single family houses, town houses, condominiums and apartments as well as offices, shops, and day care and assisted living facilities. The project's developer informed the Committee that he had to apply for three separate time consuming and expensive variances—one to allow for smaller lots although overall density was kept consistent with the county land use plan, one to narrow street width by four to six feet, and another to plant trees along the street.

In many Georgia jurisdictions, despite the creation of additional green space and the absence of any increase in density, clustering is allowed only as a conditional use that requires a formal hearing, an additional step in the approval process. Some developers avoid conservation subdivisions because they fear the delay and cost associated with obtaining conditional approval and the risk of denial of the conditional use permit. To avoid this,

a few Georgia jurisdictions allow clustering as a permitted use.⁴⁷ A public hearing is not required for a development that results in the permanent protection of a specific percentage of the tract. Since one county enacted a conservation subdivision ordinance, 10 conservation subdivisions have been approved and seven of these are under construction. The average amount of open space preserved by these subdivisions is 53 percent per development, for a total of 1,200 acres.⁴⁸

Environmental Overlay Zoning

Environmental overlay zoning provides for a special zoning district for specific green space such as wetlands, aquifer recharge areas, riparian buffers, and steep slopes. It is commonly used in the New England states.⁴⁹ The environmental district overlays other districts such as residential and agricultural zoning and imposes additional obligations. These might include limiting land use types that are permitted in the district (such as prohibiting commercial development in a flood plain or prohibiting the filling of wetlands); imposing large minimum lot sizes or restrictions on the locations of buildings; imposing performance standards that express maximum acceptable levels of disturbance; or requiring the clustering of development in order to minimize environmental impact.⁵⁰

Transferable Development Rights

Transferable development rights (TDR) programs allow local governments to preserve a community's rural character and natural, historic and scenic resources, while protecting property values and accommodating growth. Under a TDR program, development rights are transferred from "sending zones," which are designated for protection to "receiving zones," which are designated for future growth. Conservation easements provide permanent protection from development in the sending zone by means of allowing the sale of development rights to developers in the receiving zones.

In 1998 the General Assembly passed legislation that authorizes local governments to implement TDR programs.⁵¹ These programs have been used successfully in other states to preserve important green space and to manage growth. Montgomery County, Maryland, has protected more than 38,000 acres of farmland

Committee Recommends . . .

that the Governor work with the General Assembly to amend Georgia's TDR legislation to eliminate the requirement that a duplicate hearing be held prior to the transfer of each development right.

through its TDR program.⁵² Seven counties and 52 municipalities in New Jersey have developed a TDR program to protect the recharge area for a critical aquifer in that state's Pine Barrens.⁵³ In California and Nevada, development rights are transferred from hillside second home lots to in-town commercial development to protect Lake Tahoe's watershed and view-shed.⁵⁴ These programs are most appropriate for areas with active real estate markets and growing populations.⁵⁵

Georgia's TDR legislation requires that a local government hold hearings prior to the designation of both sending and receiving areas, to assure the public an opportunity to fully participate in the development of the program. The legislation, however, also requires a hearing prior to each individual transfer. This requirement is redundant and furthers no public purpose. In fact, it delays the process at some cost to either the seller of the TDR or the developer who will use it. Experience around the country indicates that TDR programs are successful only where their use is made as easy and streamlined as possible. Unless the extra hearing provision is removed, it is unlikely that TDRs will be used in this State.

Committee Recommends . . .

that the Governor encourage local governments to adopt modern, flexible land use ordinances for performance based zoning, conservation subdivisions, transferable development rights and environmental overlay zoning, such as the model ordinances being developed by The University of Georgia.

Model Ordinances

The Committee had intended to try to assist local governments with their green space planning by providing for their consideration specific model ordinances for conservation subdivisions, transferable development rights and environmental overlay zoning. However, in the course of its work, the Committee learned that the Vinson Institute of Government and the School of Law at The University of Georgia were working on similar ordinances, with appropriate annotated comments that will facilitate

their use. Specific members of the Committee have agreed to work with the Institute and the School of Law on this project, which is expected to be completed in the Spring of 2000.

Subdivision Regulations

Subdivision regulations provide public control over the subdivision of land into lots for sale and development. Traditional subdivision regulations, which impose liberal setbacks, 30-36-foot minimum widths for streets, enormous cul-de-sacs, and ex-

tensive curbing have resulted in the consumption of green space and a surfeit of impervious surfaces. Standard minimum lot sizes and setback requirements prevent clustering of houses and more innovative design. These regulations fail to accommodate the fact that the housing preferences of significant sectors of the public have changed over the years. For example, some families would prefer a smaller private yard with access to a walking or biking trail rather than a large yard they have to maintain. The regulations also fail to reflect current thinking regarding safety and environmental issues. Transportation experts now agree that in many neighborhoods streets of 24-foot width are adequate for the safe passage of car traffic and emergency vehicles.⁵⁶ When curbing was first required in subdivisions, common wisdom was that it was desirable to transport stormwater quickly to a central collection system. Now engineers recognize that water quality is improved by allowing stormwater to run into adjacent vegetated lands.⁵⁷ Thus, curbing may actually be detrimental in some areas.

Instead, communities could specify the protection of certain green space amenities such as steep slopes, wetlands, or flood plains, in their subdivision regulations. The subdivision regulations might also encourage set asides of recreational green space in a neighborhood.

State Technical and Legal Assistance

Local governments could greatly improve their ability to protect green space if these tools received the improvements described in the preceding paragraphs. However, the development of legally defensible and effective policies and laws employing these tools is a deliberate and complex process. It is imperative that local governments receive technical and legal support from the state level to help them determine which tools are most appropriate, given local circumstances, and to develop the ordinances that advance these tools.

Committee Recommends . . .

that the Governor convene state and local officials whose work pertains to public health and safety (fire marshals, road commissioners, sanitarians) as well as land use planners and developers to develop uniform subdivision guidelines that protect human health and safety and promote the preservation of green space.

Committee Recommends . . .

that adequate resources be provided to DNR and the University System of Georgia to develop a coordinated and comprehensive program to provide technical assistance to local governments and their partners in evaluating, drafting and implementing tools for green space protection. This program should provide general information about tools, including case studies, model ordinances and funding sources by means of workshops, websites, and resource papers, as well as more detailed assistance to a community as it actually develops a particular tool or set of tools.

Conclusions

Governor Barnes' vision of a Georgia with communities laced with green space, available for people to use for recreation purposes and for travel between home, work and school, recognizes the link between physical and mental health, environmental quality, economic stability, quality of life, and the choices we make regarding the use of land. Governor Barnes asked that the Committee make recommendations about how the State can assist local governments to provide local green space for their citizens to use and enjoy in their daily lives.

The materials reviewed by the Committee, the presentations to the Committee, and the discussions by Committee members have thoroughly documented the high value of community green space. Fundamentally, community green space is a local asset that increases the community's desirability as a place to live and work. It is clearly in the interest of local governments to use this asset to improve their residents' quality of life and to maintain their economic competitiveness. The State can assist local governments by removing unnecessary barriers at the state level which may hamper local efforts to provide community green space. The State can further assist local governments by helping educate the public on the importance of community green space, by giving local governments technical assistance in program implementation, and by providing some financial support for community green space capital expenses.

Based on its deliberations, the Committee recommends that the Governor work with the General Assembly to create the Community Green Space Program. To accomplish this, the Committee recommends three courses of action:

- legislation be enacted creating the Community Green Space Program;
- a Community Green Space Fund be established and supported at an appropriate level; and
- a number of existing laws and programs be improved to make them more usable by communities and others to protect community green space.

Legislation is necessary to create the Community Green Space Program. The legislation should establish that the policy

of the State is to protect 20 percent of Georgia's land as green space. The focus of the program, however, should be on high growth counties, although other communities should be allowed to participate. The legislation should identify DNR as the responsible state agency because of its focus on both natural resources and outdoor recreation. The legislation should require local governments to develop green space plans pursuant to rules and regulations promulgated by DNR. Once these plans are approved, local governments could apply for funds to execute their green space projects.

These funds would come from the Community Green Space Fund, to be established and supported at a level that will encourage real participation in the Program by local governments across the State. To leverage state money to the maximum extent possible, local governments should be required to match state funds and be encouraged to seek additional funds from federal and private sources. The Fund would provide significant support to local governments that have an unusual and timely opportunity to preserve a high quality of life for all Georgians.

A variety of existing laws and programs relate to and can be used to support the Community Green Space Program. Some of these should be amended to make them more usable. The Committee's report reviews these tools, assesses their utility and makes specific recommendations about their use or amendment.

The Committee believes that all of its recommendations are sound and that, if carried out, they will help local governments' green space efforts. The major recommendation is to create the Community Green Space Program and to provide adequate funding for the Community Green Space Fund. The others will remove impediments to program implementation or will improve existing green space tools. Although the Committee recognizes that it may not be possible to implement all of these recommendations immediately, it is confident that the outcome of a Community Green Space Program will be a great step forward for Georgia and its richly varied communities.

Appendix A

List of Committee Members and Staff

Committee Members

Mr. Clay Long, Chairman—Mr. Long is Chairman of the Law Firm of Long Aldridge & Norman LLP. Mr. Long has served as President of the United Way of Metropolitan Atlanta, as Chairman of the Board of Directors of the Metropolitan Atlanta Rapid Transit Authority (MARTA), as a member of the Governor's Commission on Economy and Efficiency in State Government, and as Chairman of the Board of Trustees of the Georgia Conservancy. He is currently serving as Vice-Chairman of the Jekyll Island Authority.

Ms. Tricia Allen—Ms. Allen is Vice-President of the Nature Conservancy of Georgia, former Chair of the Atlanta Botanical Gardens, and a past director of the Georgia Wildlife Federation. Ms. Allen is also on the Board of Counselors of the Carter Center. She has been active in environmental issues for many years and is an advocate for land preservation. Ms. Allen is very concerned about urban sprawl.

Mr. Tom Bradbury—Mr. Bradbury is the Chairman and owner of Colony Homes, a family home construction business. He has served on the Board of the Georgia and Atlanta Homebuilders Associations. He served on the Commission that developed the nationally recognized Land Use Plan for Cherokee County. Mr. Bradbury has devoted much energy and concern to the issue of providing adequate housing for back office staff of businesses.

Mr. Timothy Connolly—Mr. Connolly, President of Capstan Capital, LLC, is an investor in commercial office space, shopping centers and other land development projects. Mr. Connolly has served as a Department of Community Affairs Board member and served on Governor Zell Miller's Wetlands Study Committee. Mr. Connolly is particularly interested in finding a balance in environmental protection policy and private property rights. He is also concerned with the efficiency of the regulatory process.

Mr. Joel H. Cowan—Mr. Cowan has been an innovative developer for decades, beginning with establishing Peachtree City in the 1950's, a pedestrian friendly community with 80 miles of paved paths and 20 percent open space. In the 1970's, Governor Jimmy Carter called on Cowan to head a blue ribbon panel on planned growth. In the 1980's, Governor Joe Frank Harris tapped Cowan to chair the Growth Strategies Commission. Governor Roy E. Barnes named Cowan as Chairman of the Georgia Regional Transportation Authority. He is a former trustee of the Georgia Conservancy, past Chairman of the Board of the Department of Community Affairs and also served as Vice-Chairman of the Georgia Chamber of Commerce. Mr. Cowan's current business interests include entrepreneurial efforts in the emerging economies of Eastern Europe, Russia and China.

Mr. Al Crace—Mr. Crace is the Manager of the Unified Government of Athens–Clarke County, and currently serves as the Chairman of the Economic Development and Transportation Committee of the Association of County Commissioners of Georgia. Mr. Crace served on Governor Zell Miller's River Care 2000 Advisory Committee, and as Chair of the Urban Nonpoint Source Pollution Advisory Committee for DNR. Mr. Crace is particularly concerned with the issues of implementation of state policy at the local government level.

Mr. Glenn Farley—Mr. Farley is Executive Vice-President of Tucker Federal Bank, a lending institution providing significant funding to residential and commercial developers in major cities throughout Georgia. He wants to create an environment that promotes the preservation of green space as well as provide economic incentives for builders and developers to continue to provide affordable housing.

Honorable Michael Hightower—Mr. Hightower is Vice-Chairman of the Fulton County Board of Commissioners, serving his 4th four-year term. Mr. Hightower is a former President of the 3,000 member National Association of Counties, and is active with the National League of Cities and the National Organization of Black County Officials. At the state level, Mr. Hightower serves on the Georgia Environment Facilities Authority, the Association County Commissioners of Georgia, and the Georgia Municipal Association. Mr. Hightower

established Fulton County's first Community Improvement District, helped to streamline Fulton County's development services and has advocated for a wide variety of programs for disadvantaged citizens.

Honorable Pierre Howard—Mr. Howard served as the ninth Lieutenant Governor of Georgia from 1990 to 1998. Prior to his position as President of the Senate, he was a member of the Georgia Senate for 18 years. Mr. Howard is co-founder of Special Corporate Strategies, a full service communications firm. Mr. Howard serves on the Board of The Nature Conservancy of Georgia, the Trust for Public Land and the Georgia Trust for Historic Preservation. He sits on the Board of the Department of Natural Resources. Mr. Howard is particularly concerned with river basin protection.

Mr. Charles Johnson—Mr. Johnson is President of the engineering firm of Williams-Russell and Johnson (WR&J) providing consulting engineering, architecture, planning and construction/program management services throughout the eastern and midwestern United States and the Caribbean. WR&J has been involved in a wide variety of projects including the Georgia Dome Stadium; the International Olympic and Turner Field Stadiums; Hartsfield Atlanta International Airport Expansion, widening portions of Interstate 85, and MARTA projects. Mr. Johnson has been very supportive of community organizations, serving on the Atlanta Metropolitan YMCA Board of Directors, the Atlanta Chamber of Commerce Regional Development Council, the DeKalb County Merit Council, and as President of the Atlanta Tipoff Club.

Mr. Rick Porter—Mr. Porter is President of Richport Properties, Inc., a home building company which has diversified into land development and real estate brokerage as well. Mr. Porter has served on the Board of the Georgia Department of Industry, Trade and Tourism, as President of the Home Builders Association of Georgia and serves on the Board of Directors of the National Association of Homebuilders. He serves on the Atlanta Regional Commission and on the Gwinnett Council for Quality Growth. Mr. Porter has won numerous awards, including Metro Atlanta Builder of the Year, Gwinnett County Builder of the Year, Lewis Conker Award, and the Home Buyers Warranty Diamond Builder Award. Mr. Porter is an advocate of smart growth policies.

Ms. Julie Roth—Ms. Roth is Vice-President of Manufacturing, Bobs Candies, Inc., a company founded by her grandfather in 1919 in Albany, Georgia, and currently employing over 600 employees. Ms. Roth has been very active in civic and community organizations throughout her professional career, including Treasurer, Chair-Elect and currently Chairperson of the Albany Area Chamber of Commerce. She has served on the Albany/Dougherty Payroll Development Authority, Albany/Dougherty Economic Development Commission, Leadership Albany, Leadership Georgia, and the Dougherty County Rotary Club.

Ms. Pam Sessions—Ms. Sessions is Co-owner and President of Hedgewood Properties, which builds approximately 350 homes a year in Atlanta. In addition, Ms. Sessions and her husband own and operate companies in development, real estate sales and marketing, mortgage lending, and a retail home furnishing and interior design store. Ms. Sessions is Chairperson of the Greater Atlanta Homebuilder's Earth Craft House Program, a "green" building initiative. She is Vice-President of The Greater Atlanta Home Builder's Assoc., serves on the Board of the Home Builder's Assoc. of Georgia and the Board of the National Association of Homebuilders. Ms. Sessions is interested in establishing a method of performance based zoning that will promote the preservation of our natural resources and a sustainable way of doing business.

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Appendix B

What State and Federal Funding Mechanisms Are Available to Help Local Governments Acquire Green Space?

Although local governments will acquire some land, they typically must purchase the property interests they need, especially if public access is desired. However, funds for local governmental land purchases always seem to be in short supply. Most federal and state grant programs require matching funds, and local governments may also need to acquire lands for which no federal or state assistance is available. This appendix identifies a number of existing or potential sources of capital funding that local governments may find useful as they design their green space programs.

State Program Funds

The Georgia Department of Natural Resources (DNR) distributes funds from only two, relatively small, funding programs that could assist local participation in the Community Green Space Program. Governor Barnes and the Department could amend the criteria currently used to grant the funds, in order to award extra points to those communities that are qualified participants in the Green Space Program.

The Governor's Emergency Fund receives an annual appropriation of \$3 million to \$4 million, though the General Assembly may provide more funds if there is a need to expense the cost of natural disasters. Individual grant awards, which help with non-recurring needs, average \$10,000–\$25,000. Eligible recipients are local governments, including boards of education, and local non-profit organizations. No match is required. Because the Governor disburses these funds at his discretion, the fund is sometimes called the Governor's Discretionary Fund.

DNR administers the Recreation Assistance Fund, which receives no regular annual appropriation. The General Assembly placed a \$500,000 continuation item in DNR's budget for state fiscal year (FY) 2000. Individual grant awards average \$8,000–\$10,000. The funds are granted on a competitive basis to local

governments for recreation improvements, including land acquisition, capital improvements, and rehabilitation. DNR's FY-2001 budget request includes no funds for this purpose.

Federal Program Funds*

Transportation Enhancements (TEA-21)

Originally authorized in 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) provided an important source of federal funds—transportation enhancements—for various park and recreation projects. Prior to 1991, federal transportation funding usually went to the interstate highway system. But ISTEA took a broader approach to the nation's transportation needs. ISTEA stipulated that 10 percent of federal funds distributed to states through the Surface Transportation Program be dedicated to transportation “enhancements.” Between 1991 and 1997, \$2.6 billion were dedicated to enhancement projects, such as bicycle and pedestrian facilities and the conversion of abandoned rail corridors into greenways and multiple-use trails. Historic and archeological sites were preserved. Highways were landscaped and roadside billboards removed. A fraction of the funds also went to secure ecologically sensitive land and scenic areas. In 1998, Congress re-authorized ISTEA under the name TEA-21, the Transportation Efficiency Act for the 21st Century. Under this six-year extension, the transportation enhancements program received an important vote of confidence in the form of a 40 percent increase in funding, averaging about \$630 million per year.

Land and Water Conservation Fund (LWCF), and Conservation and Reinvestment Act (CARA)⁵⁸

The LWCF, created by Congress in September 1964, has been the principal source of funds for acquiring new outdoor recreation lands for federal agencies. As part of the LWCF, the National Park Service of the Department of Interior has administered a 50:50 matching grants program to assist states, and their local governments, in acquiring and developing recreation sites and facilities. While frequently amended, the most important amendments have

*Except as otherwise noted, these federal program descriptions were derived from material appearing on The Trust for Public Land's website, www.tpl.org/tpl/tech/fedaff/index.html, as of December 3, 1999.

been to increase the authorized amount of the fund to \$900 million and to mandate that offshore oil and gas leasing revenues be used to assure that the full authorization of \$900 million is dedicated each year to the LWCF. The fund is credited with revenues up to the authorized ceiling, but Congress must also appropriate monies for them to be available for use. Typically, the amount appropriated is well below the full authorized level, which ranges between \$200 and \$300 million.

The program of matching grants to states has been used to fund 37,000 projects and helped acquire 2.3 million acres. Land purchased through LWCF grants must remain in recreational use in perpetuity. Since the beginning of the program, the states have received \$3.2 billion from the LWCF of the total \$10.4 billion that has been appropriated. Although the state grants have not been funded since FY-1995, the Interior Appropriation for FY-2000 includes \$40 million in state grants. (Georgia's allocation is \$926,035.)

A continuing policy issue regarding the LWCF has been the need for an annual appropriation and the size of the available fund, including guarantees for the state grant program. The Clinton Administration has presented its "Lands Legacy Initiative" and Congress has responded with several funding bills, of which the most prominent has been the Conservation and Reinvestment Act of 1999 (CARA). On November 10, 1999, the House Resources Committee approved its version of CARA (HR 701), which will go before the full House of Representatives when the new session begins in January 2000. It contains a re-authorization of the LWCF program which would include direct funding ("off-budget") without an appropriation at the \$900 million level; the states are designated to receive \$450 million, or half the total amount. (Georgia's share would be almost \$16 million, of which half, or nearly \$8 million, is to go to local governments.) CARA would divert \$3 billion annually from offshore oil and gas lease rentals to support the LWCF, energy impact assistance for coastal communities, and selected wildlife programs. The Urban Park and Recreation Recovery Title would provide \$125 million in local government grants and has been amended to include the development of new areas and facilities.

The Senate Energy and Natural Resources Committee is also preparing its version of CARA, in order to have a version ready

for passage early in the year 2000. Final passage will depend on how quickly the House and Senate versions are approved during this election-year session. In lieu of this new source of funding for the LWCF, now that the state grant program has received funding in the Interior Appropriation Bill, further funding may be expected. The LWCF, in either form, may become a very significant source of funding for the Georgia's local governments to implement the Community Green Space Program. DNR administers this program for the State.

Clean Water Act—Section 319

The Clean Water Act (Section 319) funds the national and state non-point source pollution programs. Non-point source pollution occurs when rainfall, snow-melt, or irrigation water runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, and coastal waters, or groundwater. Each year the United States spends \$100 million through the Section 319 program to restore and protect areas damaged by non-point source pollution. In order to qualify, each state needs to put together a unified watershed assessment that prioritizes, through nine key elements, watersheds in need of restoration. In FY-2000, states that have effectively implemented all nine key elements will be awarded by grant additional funding above and beyond the base level funding of \$100 million.

Safe Drinking Water Act

The Safe Drinking Water Act of 1974 was re-authorized in 1996 to make more loans and grants available to the states for the protection of drinking water throughout the United States. This bill created a state revolving-loan fund of up to \$1 billion a year which states can use to upgrade local water systems. A state may receive loan assistance to acquire land or a conservation easement from a willing seller or grantor to protect a water source from contamination.

North American Wetlands Conservation Act (NAWCA)

Enacted by Congress in 1989 through the U.S. Fish and Wildlife Service, NAWCA encourages voluntary, public-private partnerships to conserve North American wetland ecosystems. The North American Wetlands Council must approve proposed wet-

land projects for federal funding. The project must have a match for the federal grant funds and must support conservation of migratory non-game birds and endangered species. Congress appropriated \$15 million for NAWCA in FY-1999 and is proposing \$15 million for FY-2000. Georgia has received \$1 million in NAWCA funding for the purchase of Ocmulgee River wetlands in Bibb County.

Wetlands Reserve Program (WRP)

Congress authorized and amended the WRP under the Farm Bill in 1996 as a means of addressing the loss of wetlands nationwide. The program is administered through the U.S. Department of Agriculture's Natural Resources Conservation Service. This program offers landowners three options: permanent easements, 30-year easements, and restoration cost-share agreements of at least 10 years' duration. In order for a property to be eligible for a WRP grant, the landowner must have owned the land for at least one year (unless the land was inherited or the owner can prove the land was not purchased for enrollment into the program), and the land must be restorable and suitable for wildlife benefits. The landowner continues to control access to the land, and may lease the land for recreational activities. The amount of funding available in a given fiscal year depends on the amount of acres Congress authorizes for enrollment in the program. The funding level also depends on the value of the land. A per-acre value is assigned in each state. To date, appropriations have supported the enrollment of 774,076 acres within the program nationwide.

Migratory Bird Conservation Fund

The Migratory Bird Conservation Fund provides the U.S. Fish and Wildlife Service with funding to acquire migratory bird habitat. The Fund has four major fund sources: revenues from the sale of the federal waterfowl stamp, appropriations from the Wetlands Loan Act, import duties collected on arms and ammunition, and receipts from the sale of refuge admission permits. The Fund has two land acquisition programs. One is the purchase of major areas for migratory birds. Lands acquired through this program must be considered and approved by the Migratory Bird Conservation Commission, which includes members of Congress as well as members of the Cabinet. The second program involves acquisition of small wetland areas with associated up-

lands. These lands, known as waterfowl production areas, are acquired under the revenues of the federal duck stamp, and do not require the Commission's approval.

Farmland Protection Program (FPP)

The FPP provides funding to acquire conservation easements on agricultural lands to prevent these lands from being converted to non-agricultural uses, such as urban development. To qualify, farmland must be part of a pending offer from a state, tribe, or local farmland protection program; be privately owned; have a conservation plan; be large enough to sustain agricultural production; be accessible to markets for what the land produces; have adequate infrastructure and agricultural support services; and have surrounding parcels of land that can support long-term agricultural production. In addition, funds are available only to projects in states with an existing state farmland protection program.

At present, no funding available is available from the FPP. Under the 1996 Farm Bill, Congress granted a one-time authorization to the FPP of \$35 million from the Commodity Credit Corporation. In fiscal year 1998, the last of that money was appropriated, leaving no funding available unless the Congress authorizes more.

Forest Legacy Program

Authorized by Congress in 1990, the Forest Legacy Program helps preserve working forest lands and protect critical resources. As the nation's population grows and land values rise, many private productive forests are in danger of conversion to urban uses. The Forest Legacy Program, administered by the U.S. Forest Service through grants to state forestry agencies, provides a mechanism and a small amount of federal funds to purchase forest land so it can stay in productive use. The Forest Legacy Program's multiple benefits are the key to its success. The program enables landowners to retain ownership of their land and continue to earn income from it; conserves open space, scenic lands, wildlife habitat, and clean water; and ensures continued opportunities for outdoor recreational activities such as hunting, fishing, and hiking. In addition, with its minimum requirement of 25 percent non-federal matching funds, the program leverages state and private dollars to complement federal money, creating partner-

ships that have lasting value. The Forest Legacy Program was funded at only \$4 million in 1998, but the potential need is estimated at more than \$80 million nationwide. In the northeast alone, \$50 million is needed to protect working forests. Fourteen states and one territory* are currently eligible to receive funds from the program, with several more in the process of applying for eligibility.

*The states are California, Connecticut, Hawaii, Illinois, Massachusetts, Maryland, Maine, New Jersey, New Hampshire, New York, Rhode Island, Utah, Vermont, and Washington; the territory is Puerto Rico.

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