

A Lands Legacy Program For Orange County



As adopted by the Orange County Board of Commissioners

April 4, 2000

**Orange County, NC
Environment and Resource Conservation Department**

Part 1

Introduction and Rationale

The natural and cultural landscape of Piedmont North Carolina has changed considerably in the 250 years since an English proprietary colony began expanding from the coastal areas into the frontiers of the Piedmont.

In Orange County, stories of natural and cultural landmarks have been part of tradition passed down through the generations. The Eno River, Occoneechee Mountain and the 1840 Courthouse still exist, but many other places of natural and cultural significance have been lost over time. The important natural and cultural places of the County exist in harmony with the lands of which they are part. These places constitute a legacy to future Orange County residents, and preservation of the lands which contain the County's most significant resources will provide a "lands legacy" for future generations.

I. Overview and Rationale

On June 22, 1998, the Orange County Commissioners established a new initiative related to environment and resource conservation. This initiative was the culmination of three years of research and discussion on the role of Orange County in the preservation of natural and cultural resources. A 1996 report by the late County Planning Director Marvin Collins ("Preservation as a Function of Local Government") served as the initial basis for discussion. Meanwhile, from 1996-1998, a number of activities occurred to broaden the scope of the question:

- A Commission for the Environment was formed to advise the Board of Commissioners on matters related to the environment and natural resources.
- The Phase I report of the Ground Water Resource Investigation was received, and a second phase indicated the need for more research in the area of ground water quality and quantity.
- The Joint Master Recreation and Parks Work Group began work to follow-up on a new recreation and parks element of the Comprehensive Plan, discussing land-banking and future parkland acquisition approaches.
- New activities and initiatives, such as Shaping Orange County's Future, have provided a new means of receiving citizen input on important issues - broadening the scope of several other programs.

- The need for a centrally located resource database on environmental programs was identified.

Based on these new events and activities, the Board of Commissioners expanded the scope of discussion on the County's role in environmental and resource preservation issues to look at creating an "umbrella", under which resource conservation initiatives in the County could be coordinated.

On June 22, 1998, the new Environment and Resource Conservation Department was established. This action also called for the creation of a comprehensive resource database and a long-term program for the acquisition of some of the County's most-critical and high-priority natural and cultural resources. This program is contained herein and is titled *A Lands Legacy Program for Orange County*.

In the fall of 1998, the Board considered a draft proposal for organization of the new Environment and Resource Conservation Department. On December 1, 1998, the Board formed the department by unanimous vote, and charged the department with the following general tasks and duties:

- Overseeing, implementing and coordinating County goals for environmental protection and resource conservation (Natural Resource Preservation, Water Resources, Historic Preservation, Farmland Preservation, Watershed Protection, Shaping Orange County's Future, Sustainability)
- Developing and implementing a program for the acquisition and management of land for resource conservation
- Integrating current and future natural and cultural resource data into a Comprehensive Resource Database
- Providing staff support to Commissions and Boards (Commission for the Environment, Historic Preservation Commission, Agricultural Districts Advisory Board, Water Resources Committee, Shaping Orange County's Future Task Force/ Steering Committee, Master Parks and Recreation Work Group)
- Working collaboratively with other departments and agencies on resource conservation

The June 22, 1998 action establishing the new department and the December 1, 1998 departmental program may be found as *Appendix A* to this document.

A. Why Protect Critical Resource Lands?

As a nation, awareness of the loss of natural and cultural resources has flowered in the last 25 years. This awareness has translated into a variety of different programs to preserve public lands in recent years. This interest in preserving a natural and cultural legacy for future generations has been most pronounced in areas where growth and development pressures have altered the landscape forever. Often the driving concern is that important forests and farmland that have defined rural character and quality of life for centuries will be lost without a program to prioritize and acquire natural and cultural landmark sites.

In November of 1998, at least 148 open space-related funding measures were on the ballot nationwide. A total of 124 (84%) passed, with roughly \$5.28 billion in funding for open space approved. Twenty-five of the funding referenda were at the County level, and 20 of the 25 County issues passed. This does not include an expected \$3 billion authorized but not yet allocated by the Florida state legislature for open space purchase.

Therefore, in 1998 alone, examples of interest in preserving open space can be found all across the nation¹:

- Fairfax County, Virginia has allocated \$20 million for land acquisition.
- Palm Beach County, Florida okayed a \$150 million open space bond by a 2-1 margin.
- Johnson County, Kansas passed a \$6 million park acquisition bond
- The governor of Ohio has proposed a \$200 million open space and farmland protection fund.
- The state of Utah has agreed to put almost \$3 million into a land conservation fund to provide grants to local governments.
- North Carolina's trio of land conservation funding sources (the Clean Water Management Trust Fund, Natural Heritage Trust Fund and Parks and Recreation Trust Fund) were all funded again by the General Assembly to the tune of \$44 million.
- New Jersey voters approved a \$1.5 billion open space plan

On the horizon are two possible Federal programs that could add over \$10 billion of funding to the mix. The national Lands Legacy Initiative is currently in Congressional committee. This program would make available \$588 million for grants to states and local governments for the protection of "local green spaces" including forests, farmland and open space, and park renovation.

A parallel program from the Clinton-Gore administration is the Better America Bonds program, which would provide \$9.5 billion in bonding authority to state,

local and tribal governments over five years. Zero-interest financing of the bonds for “smart-growth” projects will be available. A description of these programs is provided as *Appendix B*.

In addition to the new funding approved in 1998 and under consideration, many local governments across the nation have previously developed land acquisition programs of their own, working in partnership with existing land trusts and other agencies. Several counties and cities have formed local government land trusts, such as Davis, California; Dane County, Wisconsin; Boulder, Colorado; and Anne Arundel County, Maryland. Some of these programs were outlined in the 1996 “Preservation as a Function of Local Government” report.

In Orange County, it is significant to recognize that while some of our important resources have been protected through state parks and privately held research forests, many natural and cultural resources have also been lost.

- The amount in farmland in Orange County has decreased from 187,000 acres in 1957, to 67,000 acres in 1997.
- The County may have lost as much as 25% of its prime forestland in the last 20 years, according to a recent Triangle Land Conservancy report², and many other forests have become fragmented and unable to accommodate diverse species. (Nationally, the State of North Carolina ranked 5th in the nation in the amount of forest and farmland converted for development between 1992 and 1997.)
- At least four (and perhaps more) of the County’s 64 significant natural areas identified in 1988 have been lost or modified substantially from their former condition.
- The County is projected to have a deficit of 645 acres of parkland in the year 2000 and a 1,265-acre deficit in 2025.
- Many important archaeological sites may be lost annually due to lack of information and relevant data on their location.

County citizens have continually recognized the importance of protecting our most critical resources. This was most recently reflected in the Shaping Orange County’s Future visioning efforts, where protecting the environment and open space was listed one of the top issues facing the County. The ability to prioritize the most important of these resources for protection was also continually noted, both in the 1993 Rural Character Study and in Shaping Orange County’s Future.

It is for these reasons that the County is developing its first-ever land acquisition program, contained herein. The program as outlined in this document would be of a voluntary nature. While not all resources can or should be protected by the public sector, a focused program on identifying the most critical of these areas will allow the County to take steps to protect these areas in the public interest.

Part 2 *Summary of Resources and Priorities*

II. Summary of Existing Inventories and Available Knowledge

In order to provide a benchmark for a long-term acquisition program, it is first necessary to examine what we already know about the County and its natural and cultural resources. The following sub-sections provide thumbnail synopses of some of the important existing data sources.

These sources begin to sharpen the picture of County resources into focus. For brevity, the documents referred to are not included here, but are available at the ERCD for perusal and further review. Excerpts from many reports are included as appendices.

A. Inventory of Existing County-Owned Lands

Orange County contains 400 square miles or 256,000 acres within its boundaries. Despite over two centuries of existence as a local government, Orange County owns very little land.

As a part of this report, a complete inventory of County-owned lands was conducted by ERCD staff in the summer of

1999. The County currently owns a total of 632 acres of land (0.24%, or less than a quarter of one percent of the County). This includes all land, whether for County offices, parks, water bodies, street rights of way, vacant land, or solid waste sites.

The vast majority of the 632 acres are in small parcels scattered across the County. County-owned and affiliated office buildings and parking lots account for 100 acres, with an additional 11 acres in streets or rights-of-way reserved for future subdivision streets.

Scattered parcels comprising 110 acres are County-owned lots in subdivisions (open space or undeveloped lots). However, two-thirds of these lots are less than two acres in size.

Water bodies and lands at future reservoir sites (Lake Orange and Seven-Mile Creek, respectively) total 317 acres. This also includes a small parcel in Mebane with a water tower. A total of 94 acres are held for parks or were dedicated for recreation purposes.

Of the County's current landholdings, there is no identified wildlife habitat or prime farmland. County lands at Seven-Mile Creek contain very small portions of two identified natural areas. Of the land currently held for parks, none is actively used for recreation – although 81 acres are planned for parks in the future (Fairview Park, Northern Human Services Center Park).

The Efland-Cheeks Park is on land owned by Orange County schools. In terms of other resources, the County owns one historic site - the Dickson House in downtown Hillsborough, which serves as offices for the County Visitor's Bureau and the Alliance for Historic Hillsborough.

Portions of the 160 acres owned on Seven-Mile Creek provide riparian buffers, and Lake Orange is a 157-acre water resource and flow augmentation impoundment that is owned by the County.

Table 1 shows the type/amount of acreage owned by the County.

**Table 1
Orange County Land Holdings**

<i>Type of landholding</i>	<i>Acres</i>
<i>Water-related</i>	<i>317</i>
<i>Parks</i>	<i>94</i>
<i>County Office Buildings</i>	<i>100</i>
<i>Other (street ROW, vacant subdivision lots, etc)</i>	<i>121</i>
<i>TOTAL</i>	<i>632</i>
<i>TOTAL County Land Area</i>	<i>256,000</i>
<i>% of County land area</i>	<i>0.247%</i>

B. Inventory of Other Public and Privately-Owned Lands

While Orange County is by no means a large landowner, the same is not true of a number of other public and private entities.

For example, the Orange Water and Sewer Authority owns over six times as much land in the County, with 3,091 acres of land (1.21%) in October, 1998 - including Cane Creek Reservoir (but not including University Lake, which is owned by UNC). OWASA, the County's second-largest landholder, has plans to acquire an additional 1,365 acres in Cane Creek watershed over the next decade.

Duke University is the County's largest private landowner, with almost 4,933 acres in Orange County. This equates to almost two percent (1.93%) of the County's 256,000 acres. See Table 2 for a breakdown on land ownership by public and large private entities.

The County's third-largest landholder is the University of North Carolina. Between the areas of campus, the Botanical Garden and Mason Farm area, and the Horace Williams tract, UNC owns approximately 2,585 acres of land in the County. The vast majority of this land is in or near Chapel Hill.

**Table 2
Public/Institutionally-Owned
Lands in Orange County**

<i>Owner</i>	<i>Acres</i>
<i>Duke University</i>	<i>4,933 acres</i>
<i>OWASA</i>	<i>3,091 acres</i>
<i>UNC</i>	<i>2,585 acres</i>
<i>Eno River State Park (w/ Occonneechee Mt.)</i>	<i>1,897 acres (in Orange)</i>
<i>Town of Chapel Hill</i>	<i>1,077 acres</i>
<i>Town of Hillsborough</i>	<i>724 acres</i>
<i>Town of Mebane</i>	<i>269 acres</i>
<i>Town of Carrboro</i>	<i>144 acres</i>
<i>Orange County</i>	<i>632 acres</i>

Among municipal jurisdictions, when considered in proportion to corporate limits the Town of Chapel Hill owns 9.1% of the area inside its Town limits. Much of the Town of Hillsborough land holdings are recent acquisitions for the West Fork reservoir, and are outside of the Town corporate limits, but equate to 31% of the Town jurisdiction. Mebane’s landholdings in Orange County are comprised largely of its Lake Michael reservoir. The Town of Carrboro owns considerably less land than others, 144 acres corresponding to 5.2% of the Town Limits. By far, Orange County owns the smallest percentage of the land within its own boundaries – at the aforementioned 0.24%.

C. Inventory of Natural Areas and Wildlife Habitats, Orange County, NC (Triangle Land Conservancy, 1988)

This inventory, funded by Orange County and a grant from the N.C.

Natural Heritage Program, was developed by Triangle Land Conservancy. Authored by Steve Hall and Dawson Sather, the Inventory is the most-widely used and recognized assessment of the County’s resources. Many of the findings of the Inventory have been incorporated into the Land Use Element of the Comprehensive Plan and the Flexible Development section of the Subdivision Regulations. The inventory identified 64 sites of importance in the County, identified by basin and ranked in terms of significance and threat. The Inventory also proposed a wildlife corridor network concept that has also been incorporated into County plans.

A map of the 64 sites is included as *Appendix C*.

D. Inventory of Sites of Cultural, Historic, Recreational, Biological and Geological Significance in the Unincorporated Portions of Orange County (Orange County Planning Department, May 1986 and May 1988)

This inventory was created as an intern project in 1985 and was completed and received by the Board of Commissioners in 1986. The survey documents, with brief narrative and map location, sites such as churches, cemeteries, archaeological sites, wildlife renew areas and endangered plant/animal sites (as per a 1975

product of the NC Museum of Natural History and the Natural Heritage Program). Much of the information contained in this Inventory has been superseded in recent years by further work in natural areas/wildlife habitat and historic sites, but it remains a source for cultural sites that serves as a basis for further research.

E. Land Evaluation and Site Assessment (LESA) Program for Farmland Evaluation (Orange County Agricultural Districts Advisory Board, 1992)

As a part of the County's efforts to develop a farmland preservation program in the early 1990's, the Agricultural Districts Advisory Board worked with Planning and Soil and Water staffs to develop a method to rank and assess prime farmland based on the LESA model. The LESA model was developed by the US Department of Agriculture in 1981. The program was developed to 'make objective ratings for agricultural land suitability.'³ It uses a land evaluation rating system to rate a tract's soil potential for agriculture. The program also takes into site assessment factors such as location, access to market and adjacent land use.

A summary of this model and how it was envisioned for use in

Orange County may be found in Section IV and as *Appendix D*.

F. Water Supply Watershed Studies

In the past 12 years, the status of four of the County's 10 water supply watersheds has been evaluated through creation of a watershed study technical report. The watersheds that have been studied (along with date and study client) are:

- University Lake Watershed (1988, OWASA)
- Little River and Lake Michie Watersheds (1988, City of Durham)
- Cane Creek watershed (1996, OWASA)

A fifth watershed, the Upper Eno, is currently in the midst of a less-technical evaluation that may nonetheless involve recommended water quality protection strategies.

These watershed studies offer a variety of technical data, as well as recommendations for not only land use controls but programs for land acquisition to protect water quality. The Cane Creek Study, in particular, has a heavy emphasis toward land purchase programs for riparian buffers. A map of water supply watersheds is found as *Appendix E*.

G. Ground Water Recharge to the Regolith-Fractured Crystalline Rock Aquifer System, Orange County, NC (1996, USGS)

As the first phase of the County's ongoing ground water investigation, this report introduces a method of evaluating the quantity of ground water in the County's underlying geology by estimating ground water recharge to the aquifer system. The report, conducted by the U.S. Geological Survey, also shows how this data can be used to gauge the amount of land needed to accommodate adequate ground water supplies.

While there are no proposals in the report related to land acquisition, this report and the second phase of the project (currently underway) note the importance of protecting wellhead protection areas, and may indicate areas of high yielding wells where some protection of the recharge area may be needed. This report is scheduled to be completed in August 2000.

H. A Landscape With Wildlife, Part I (1997, Triangle Land Conservancy)

To follow-up on the 1988 inventory, the Triangle Land Conservancy (with funding via a grant from Orange County) prepared a report identifying and

evaluating the remaining prime hardwood forests *in the County*. *The study found that 10% of the prime forests in the County were lost or reduced in size due to building activity. The report also reiterated, through a series of maps, the significance of buffers and connections between the existing core areas of prime forest. Permanent protection of large hardwood and mixed hardwood forests was a recommendation of the report, along with the provision of buffers for core areas of forest. The preservation and/or rehabilitation of forests along streams and in overland connecting corridors was also recommended. Appendix F contains a map from this report of prime forest areas.*

I. Land Use Element of the Orange County Comprehensive Plan (Natural and Cultural Resources section)

Many of the above data and information from other sources was aggregated into this section of the County Comprehensive Plan, which was adopted by the Board of Commissioners in January 1996. The creation of this section serves two purposes. First, it provides an important link to land use policy with the information know about natural and cultural resources, some of which is part of the Flexible Development program. Second, it

was envisioned as a method to address natural and cultural resources in the short-term until a full-scale Natural Areas element of the plan was created.

J. Rating Land in Orange County for Its Wildlife Value: A Landscape With Wildlife, Part II (July, 1999 Triangle Land Conservancy)

This most recent study, which follows up on the 1996 report, is timely in its development of rating system to identify which areas of the County are likely to be most significant for habitat. This work takes the prime forests data from 1996, updates it with new information, and classifies the forest areas using Intrinsic and Contextual formulas. New mapping of these forest areas is provided, focusing in on the areas where ratings are highest. The report recommends the County use these ratings to preserve and restore large tracts of forests and important connections between forests and other habitats, among others.

Since this study is directly relevant to the purpose of this program, it is provided as *Appendix G*.

K. New Hope Corridor Open Space Master Plan (1991)

This study was developed as a joint venture between Orange County, Durham County, Chapel

Hill town and Durham city. A 1989 resolution recognized the importance and value of preserving the New Hope Creek in southeastern Orange and western Durham counties. The Master Plan recommended that steps be taken by a variety of means to acquire the stream and adjacent floodplain, along with steep slopes and tracts of significance along the corridor. A three-phase approach to corridor acquisition was developed, to result in purchase of 1100 acres. All of the elected boards adopted this plan, and it is incorporated into the Orange County Comprehensive Plan.

In 1993, a UNC student workshop explored another idea in the 1991 study, ways to connect the New Hope Corridor system to Eno River State Park. No action was taken on this proposal.

In the last few years, acquisitions by Triangle Land Conservancy and the City of Durham have preserved portions of the corridor.

L. Report of the Joint Master Recreation and Parks Work Group (May, 1999)

Efforts to coordinate the long-term planning of parks began in 1996, with a report from the combined staffs. A follow-up report in 1997 from the County's managers identified the need for coordinated park capital funding.

In November 1997, a joint task force with representatives from school boards, elected bodies and other interested parties began work on a coordinated plan, looking at park standards, an inventory of existing facilities, and an assessment of parks needs. The task force report was produced in May 1999, and projects a parkland deficit of 645 acres in 2000 and 1,265 acres by 2025. A coordinated funding and land acquisition program was recommended, along with a new Parks Council and a policy calling for open facilities countywide.

The report identifies goals for parkland site evaluation and criteria for possible parkland acquisition. The goals and criteria may be found in Section IV.D of this document. An executive summary of the report is provided as *Appendix H*.

M. Historic Preservation Element, Orange County Comprehensive Plan

This element of the Comprehensive Plan was created and adopted in 1996. The report explores the County's historical and cultural development, noting historic resources and areas of archaeological importance.

An action strategy for preserving important historic and cultural landmarks, crossroads and historic road corridors is included, and illustrated through a

Preservation Plan map. The map also shows "archaeological resource zones", where the potential for archaeological finds may be of higher distribution. Finally, the Historic Preservation Element identifies state scenic byways and a proposed scenic corridor along St. Mary's Road.

N. Listings from the Natural Heritage Program

These listings have served as a basis for many of the above documents, and have been incorporated into many inventories and works – including the Natural Areas and Wildlife Habitat inventory. An updated list has been acquired and is part of the County's current resource database.

III. Comprehensive Resource Database

In order to adequately identify and rank sites, a series of mapping coverages are needed to overlay different variables and information on individual sites. The use of Geographic Information Systems (GIS) technology has, in recent years, greatly enabled these abilities to overlay data sets for analytical work. A database is needed to accomplish the tasks of this program.

A. How the Database Would Be Created

In the past decade, a substantial amount of information has been created and/or purchased for the County's GIS system. Beginning with mapping coverages for the 1988 Inventory of Natural Areas and Wildlife Habitats, the County has incorporated into its GIS system a great deal of information relevant to the preservation of resources. By the same token, however, there are a number of gaps and data management issues that must be addressed for the database to be truly comprehensive.

B. Listing of Existing Coverages

To date, the following environment and resource-related coverages exist in the ERCD GIS system. A more complete inventory is included as *Appendix I*.

- Watersheds and Critical Areas
- Geology
- Floodplains
- Wetlands
- Prime farmland
- Steep slopes
- Soil limitations – septic systems
- Soil limitations – dwellings
- Vegetation
- Natural areas and wildlife habitats
- Wildlife corridors
- Historic sites
- Archaeological remains
- Recreation sites
- Scenic roads
- Development constraints
- Comprehensive Resource map
- Biosolid (sludge) sites
- Businesses on ground water
- Community water supplies
- Golf courses
- Hazardous disposal sites
- Hazardous waste facilities
- Hydrology
- Hydrogeology
- New wells (since 1996)
- NPDES sites
- Quarries
- Petroleum contaminated soils
- National Register nominations
- Potential land acquisition site maps
- Water quality monitoring sites
- St. Mary's Road Study architecture and archaeology
- Superfund sites
- Underground petroleum tanks
- Utility transmissions lines
- Wastewater systems (public and community)
- Prime forests coverages (TLC - 1996)
- Wildlife Rating system (TLC report 1999)

C. Gaps and New Coverages Needed

Despite the fact that Orange County is well ahead of most counties in the state in the area of GIS resource data, there are a number of areas where additional information is needed. Efforts are already underway in ERCD or Planning to address some of these data needs.

Current Data Gaps

- Topography (coming via Land Records in 2000)
- Impervious surfaces
- Existing land use pattern
- Land in active cultivation (farmland)
- Existing zoning and Land Use Element (parcel level)
- Feedlots, pesticide application and animal waste lagoons
- Ground water recharge areas (may be created from USGS ground water resource investigation report - June, 2000)
- Data from adjoining jurisdictions
- Historic corridors (Trading Path, others?)

Data in Need of Update

- Wetlands
- Aerial photography (coming via Land Records in 2000)
- Soils
- New building permits and development projects (Planning)

Upkeep and maintenance of the database will be as substantial an undertaking as creating new data. Some of the County's older GIS coverages are "shape" files that were created prior to the existence of land parcel data and therefore do not match the parcel data when overlaid together. Other coverages have data that change over time, requiring regular maintenance and monitoring.

D. Continued/Long-term Data Needs

Based on the long-term maintenance considerations and the data needs previously identified, the following are proposed as goals for the Comprehensive Resource Database in FY 99-00:

Goals 1999-2000

- Upkeep and maintenance of existing database (NAD conversions, match-up older coverages to new parcel data, update with new information)
- Digitize new coverages (abandoned wells, animal waste lagoons, continue inputting new wells, impervious surfaces)

- Purchase/receive coverages to cover gaps (topography and aerial photography from Land Records department, ground water supplies and wellhead protection areas from USGS and ongoing Water Resources work, existing land uses from Planning as created.

Finally, there are also a number of long-term program issues that must be addressed to have a viable Comprehensive Resource Database:

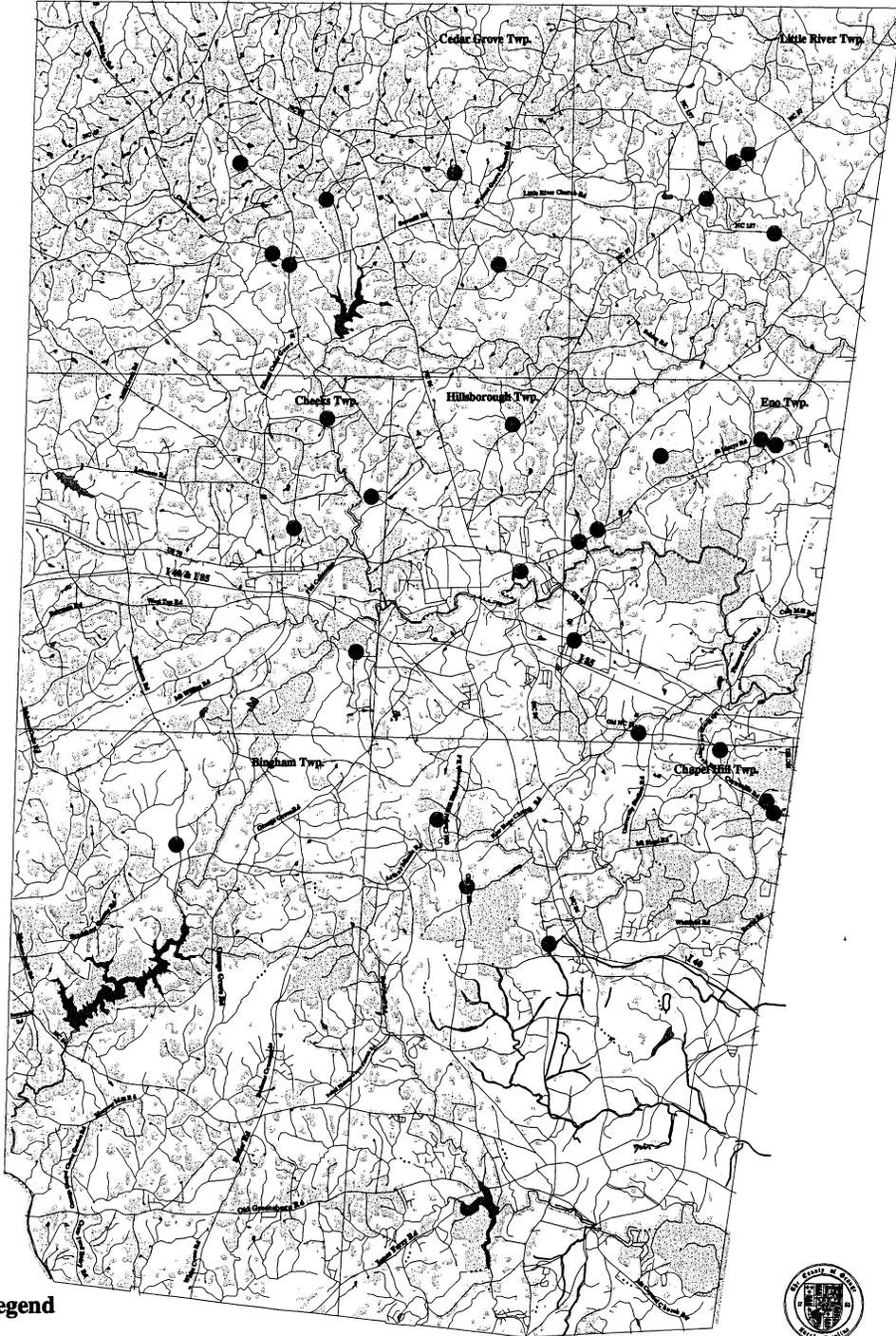
- Ensuring that new coverages are consistent with upcoming parcel data format, to avoid previous problem of pre-parcel "shape" files that don't line up to parcel lines
- Operating System changes: The GIS technology field is, like most computer technology, rapidly changing. Work is already underway across County government to convert, over the next five years, from the current UNIX-language operating system to PC-based operating systems and software (Windows NT). The fashion in which users of GIS data interface with the data creation and application will also need to be addressed.
- A number of coverages are time-related coverages (well/septic systems, existing land use, etc.), and a long-term plan for regular updating of this data will be needed to ensure that it is not out of date.

E. Using the Resource Database to Target Acquisition Priorities

All of the coverages currently available or identified as needs can be mapped together to show overlapping areas of resources. This concept has already been utilized to a degree with the Land Use Element of the Comprehensive Plan's primary and secondary conservation areas, which are also used in the voluntary Flexible Development program. However, this idea could be expanded, using newer coverages for a Comprehensive Resource map that identifies the County's most important resource areas.

The overlay mapping technique will allow staff to evaluate potential acquisitions against the full spectrum of resources present in the County, and to develop priorities for acquisition efforts. A map of acquisition priorities could be included in the annual action plan proposed in Part 4 of this document. The comprehensive map would also allow the Board to consider multiple resource needs and goals in making acquisition decisions.

Orange County Priority Resource Areas



Legend

 Prime Farmland, Rural Wildlife Corridors, Natural Areas, Existing and Proposed Town Greenways, and Cultural Sites.
• Dots shown are National Register Historic sites and National Register Study List Sites.



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IV. Criteria and Priorities for Acquisition

The significant GIS system data that the County has developed in natural and cultural resources will not be useful to the County without a set of criteria to guide site evaluation, prioritization, and significance. Over the spring and summer of 1999, each of the County's advisory boards with roles in resource preservation were asked to provide thoughts on criteria that should be used to evaluate resources. These ideas have been used to develop the following criteria, modified in some cases to fit the overall context of the program.

A. General Evaluation Criteria

While certain types of resources will best be evaluated against specific criteria for the type of resource, all potential land acquisitions (whether fee-simple or other) may be initially evaluated on several general criteria. The general criteria may also be useful, in conjunction with the Board's adopted goals, in deciding among competing resource preservation opportunities.

In late 1998, a general evaluation template was created to evaluate interim land acquisition proposals being considered by the County. The evaluation template assesses, for each site, the following variables:

General Evaluation Template
How is the land classified in the Comprehensive Plan and zoning map?
Inventory and Resource checklist – what is present on the site?
Are there development constraints to the property?
Is there an imminent threat to development or purchase the property?
What type of access exists to the site?
What are the surrounding land uses?
Ownership and Value (both market and assessed) information.
What is the asking price and timeframe for sale?
Are there previous evaluations or assessments? Liability concerns?
What are the possible uses of property?
Would the acquisition meet County goals?

Beyond this basic evaluation, more-detailed and specific site assessments will be needed, depending on the type(s) of

resources. The following sub-sections contain potential criteria for evaluating certain types of resource acquisitions. The criteria have been developed in conjunction with the County's advisory boards in each area, where possible. Criteria comments were discussed with the Commission for the Environment, Agricultural Districts Advisory Board, Recreation and Parks Advisory Council, Historic Preservation Commission and Water Resources Committee. In addition, the Parkland Criteria has been adopted by the Board of Commissioners.

B. Criteria for Natural Areas and Wildlife Habitat

(developed in conjunction with the Commission for the Environment)

Orange County is fortunate in having funded three reports on natural areas and wildlife habitat, conducted by the Triangle Land Conservancy, that go a long way toward identifying the most important areas in the County. The County is also fortunate that a number of public, private and non-profit entities have previously been involved in protecting some of the 64 known natural areas and wildlife habitat. *However, over half of these sites remain unprotected in private ownership.*

To date, 10 of the 64 identified natural areas and wildlife habitat (16%) are protected (in full or in part) through state park or land trust ownership/easement. Three of the sites are within Eno River State Park, with all or portions of six others protected by the Triangle Land Conservancy. One site is held by The Nature Conservancy.

An additional 19 natural areas are owned by public or private educational institutions – namely, Duke University and/or the University of North Carolina.

Duke holds 12 of the identified sites within the boundaries of Duke Forest. While these sites are not protected in perpetuity and are held by a private institution, Duke has a long-standing policy for protection of the natural areas within the forest. The 1988 Duke Forest Management Study, commissioned by the University, does recognize that important natural areas are contained within the forest. Duke policy is that the University “will be sensitive to...unique natural areas”, and that Duke “should not permit negative environmental impacts as a consequence of disturbance of sensitive natural and cultural resources.”

A 1988 forest management study classified land holdings into four categories. The study recommended that Duke retain portions of the forest classified as Class 1 – Permanent Research Forest and Class 2 – Research Project Land as areas to be retained in their forest state. All 12 of the sites in Duke Forest are within portions of the forest that are classified as Class 1 or 2 research lands. However, there is no binding agreement that guarantees that the forest study will be adhered to, and there are no easements for perpetual protection for natural areas located on lands owned by Duke.

Owner/easement holder	Number of 1988 Inventory Sites
Held by Public or Non-Profit Land Trust	
....Eno River State Park	3
....Triangle Land Conservancy	6 (3 are partial easements)
....The Nature Conservancy	1
Owned by Public Institution	
UNC (Mason Farm)	7
Owned by Private Institution	
Duke University (Duke Forest)	12
In Private Ownership	
Privately-owned	35
	Total 64

Seven sites are located on lands owned by the University of North Carolina. Most of these sites are located on the Botanical Garden or adjacent Mason Farm Preserve property. The University has a long-standing policy for protection of these areas. However, like Duke, there is no formal guarantee that these lands will be perpetually protected.

Even with 29 sites in some method of protection, there are at least 35 natural areas as yet unprotected. There also may be many sites not yet identified, whether through lack of review or oversight in previous work. The new prime forest areas shown in the 1997 and 1999 reports from the Triangle Land Conservancy (TLC) may contain additional areas not yet identified.

Some of the 35 sites in private ownership may be high priorities for public acquisition, particularly as filtered through the recent TLC reports. A method for prioritizing and evaluating natural areas and wildlife habitat will need a set of criteria for review.

In the spring of 1999, the Biological Resources Committee of the Commission of the Environment considered criteria to these ends. The following criteria were developed by that group and are recommended by the Commission for the Environment for use in evaluating potential acquisitions:

Natural Areas and Wildlife Habitat	
PRIORITY	PHYSICAL LAYOUT
High	Size (area)
High	Shape (re: minimization of edge effects –could be quantified as ratio of edge to interior area)
High	(Slope / elevation / orientation topography) – might make it more or less susceptible to development; might have some special or unique feature (things that might make a group willing to contribute to its protection)Topography: slope/elevation/orientation - -
Medium	Proximity / geographic relation connectivity :proximity/geographic relation to other natural areas
Medium	Does it contribute to a Wildlife Corridor (water & land, or just land)?
Low	Position in watershed (distance from source re: water quality)
Low	Geographic evenness (by watershed?)
Low	Does it have body of water?
PRIORITY	BIOLOGICAL VALUE
High	Biodiversity – species richness
High	Integrity (needs clarification of definition, but things like crossing by roads, power lines, selective logging in recent history, other signs of degradation)
Medium	Number of rare species/ State listed (Natural Heritage), species of conservation concern
Medium	Ecosystem distinctness (state/regional/country): need to develop means to judge this)
Medium	Presence of invasive exotic plant species (how many species, how severely infested)
Low	Ecosystem representation: Should we preserve some of all types? (beta diversity) contribution to even representation Of the diversity of Orange County's ecosystems, preserve some of all types
Low	Importance for bird breeding sites
PRIORITY	INTACTNESS
High	Degree of threat (proximity to urban area, proximity to development – residential or industrial, proximity to roads and planned roads, proposed development, on the market, said to be about to go on the market, threat of logging
Medium	Other forms of pollution or proximity to dump sites, highways, underground tanks, hog farms, etc.
Low	Noise
Low	Distance from artificial light sources

PRIORITY	HUMAN VALUES
High	Scenic value (to be used judiciously)
Medium	Potential for recreational use
Medium	Presence of historical/archeological sites/significance
Low	Proximity to population centers/users
Low	North county vs. south county (both as human and spatial issue)
Low	Presence of species/resources of economic value (is there anything other than timber?)
PRIORITY	OTHER
High	Meeting multi, multiple biological/conservation criteria across lines
High	Availability of second funding source
PRIORITY	ECOSYSTEM FUNCTION
High	Presence of wetlands: hydrologic buffering, contribution to water storage.
Medium	Vegetation: thermal buffering, water storage natural areas serving as sites for insect pollinators and predators, which serve agriculture, nutrient cycling.
Medium	Vegetation as riparian buffer.

In addition to these criteria, the 1999 Triangle Land Conservancy report, "Rating Lands in Orange County by Its Wildlife Value," takes the use of criteria to a new level. The report uses a formula on contextual ratings and intrinsic ratings to evaluate the County's remaining prime forests, and actually identifies areas of significance that are recommended to be the focus of acquisition efforts. A map showing the forest areas with highest ratings is provided as *Appendix G*.

The Commission for the Environment (CfE) has evaluated the recent TLC report. The CfE recommends viewing the map of priority prime forests (Map 8) with some caution, because it includes an inherent bias toward forests that include inventoried natural areas. The CfE suggests that the presence of an inventoried site should not be a factor in ranking a forest as wildlife habitat. Overall, the CfE supports the report recommendations and encourages any County policy changes that would help implement the recommendations.

C. Criteria for Prime Farmland
(developed in conjunction with the Agricultural Districts Advisory Board)

Prime Farmland – Land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimal inputs of fuel, fertilizer, pesticides and labor. (US Department of Agriculture)

Currently, over 67,000 acres of land in the County is used for farm purposes (27% of the total County land area). While this is a substantial amount of land, it is only one-third of the acreage that was in farming a generation (30 years) ago.

The identification of prime farmland and ways of protecting the County's most viable farmland has been subject to a great deal of discussion in previous years. To define prime farmland, the Agricultural Districts Advisory Board has used the definition from the Land Evaluation and Site Assessment (LESA) program, originally developed by the U.S. Department of Agriculture.

In 1994, a report was prepared that used the LESA system to categorize the County's soil types and propensity for agricultural production into eight categories. Those categories were then refined into agricultural soil groups, with the higher group containing the highest class of farmland. A table showing the soil types and their assessment and ranking criteria is included as part of *Appendix D*. The six agricultural groups with lands classified as prime are shown below. These groups comprise 54% of the County land area.

Soil Type/Category	% of Orange County Land Area
1 – Prime	7.1%
2 – Prime	19.7%
3 – Prime	11.7%
4 – Prime	9.0%
5 – Prime	8.8%

A formula was recommended in the 1994 "Preserving Our Farms" report that provides for further refinement of this data – for the purpose of assessing sites for potential acquisition. A calculation on the relative value of a site (its yield potential, soil productivity and agricultural class) may be performed. This involves:

- Locating the site on a soil survey map and determining the type of soils present
- Determining the acreage of each soil type and its agricultural group (see above)
- Multiplying the number of acres in each group by the relative value and summing all groups
- Divide the total relative value by the total acreage to obtain average relative value

The number generated by this analysis will allow comparative assessment with other prime farmland. A master list could be generated of the most significant prime farmland, from which potential acquisitions could be pursued as desired. An update of the work from 1994 will be needed to establish a new map and master list of areas.

This approach, while several years old, is still recommended by the Agricultural Districts Advisory Board. There is considerable additional detail on the method of using the LESA approach to evaluate farmland. In fact, the LESA system is sometimes seen as cumbersome and formulaic. Some modification may be needed to address how new types of crop production, such as organic farming, turf farming and other new changes to the agricultural field that have become more popular in the last 15 years affect the scoring system. In addition, there may be other components of farmland evaluation that deserve inclusion.

Whatever the criteria, the acquisition of conservation easements from interested farmers may be the best tool for the County's efforts to keep the County's most valuable prime farmland in long-term cultivation for food production. This tool would allow the farmer to retain ownership to the land (see Section V).

In developing a program for farmland preservation, it should be recognized that other components of farmland are important factors and warrant consideration along with soil productivity and the LESA system. These factors might include threatened status for conversion, visual resource and rural character, part-time farming and economic considerations ("keeping farmers farming"). All of these issues are part of the "New Consensus for Farmland" initiative currently underway with the Agricultural Districts Advisory Board. As a part of this effort, it is proposed that the Ag Board and ERCD staff work together in the next several months to develop a more up-to-date set of criteria that can be used for prioritizing farmland easement acquisitions.

D. Criteria for Historic and Cultural Sites

(developed in conjunction with the Historic Preservation Commission)

Orange County has been an important locus for human activity since well before the first European settlers arrived in the 1740's. The ancient Trading Path, used first by Native American tribes of

the Occoneechee and Saponi, crossed through the County. Hillsborough was “ground zero” for the Regulator movement in the colonial era, and even served as the seat of state government for a short while. Other significant activities, architectural, cultural and archaeological, have occurred in the past 250 years.

In 1992, the County adopted a Historic Preservation Element of the Comprehensive Plan. This document and concurrent surveys of historic sites in the County, contains a preservation plan for the County that focuses on tools such as national and local designations, legal and regulatory measures, buffers, financial incentives and public awareness. The Element was not developed with potential acquisition of historic or cultural sites in mind, but does note the potential for preserving historic sites through park creation. It also notes the importance of stream corridors for future archaeological potential. The Preservation Plan map is shown as *Appendix J*.

In recent years, the Historic Preservation Commission has been involved in a number of initiatives. A number of National Register nominations have been approved or are pending for important historic sites such as Chatwood and the Bingham School property. One National Register landmark district (Cedar Grove) has been approved. Work is underway at this time on a preservation plan for the St. Mary's Road corridor. In addition, recent information on the potential location of the Trading Path corridor through Orange County has heightened awareness of this historic component of the County's character.

In evaluating possible acquisitions of a historic or cultural nature, the Historic Preservation Commission has suggested a set of criteria developed in 1997 for a “Historic Resource Evaluation” form. This form was created to evaluate sites being proposed for National Register of Historic Places nominations and Local Landmark proposals, and contains parameters directly relevant to the County's goals for historic and cultural preservation. The criteria address type, age of structure, historic significance, architectural significance, environmental significance, contributing features and integrity – using a weighting system.

Historic and Cultural Preservation	
WEIGHTING	ATTRIBUTE
Resource Type	
10	Listed on National Register of Historic Places or NR Study List
7.5	Archaeological site or cemetery of significance
5	Building Complex of significance
2.5	Individual building of significance
1	Other historic or cultural resource present
Age of Structure	
10	Pre-1800
7.5	1801-1865
5	1866-1885
2.5	1886-1930
0	Post- 1930
Historic Significance	
10	Associations with person, event, group or institution of national significance
7.5	Associations with person, event, group or institution of State significance
5	Associations with 3-4 persons, events, groups or institutions of local significance
2.5	Associations with 1-2 persons, events, groups or institutions of local significance
0	No association of significance
Architectural Significance	
10	Very significant builder, architect, period, style or genre
7.5	Significant builder, architect, period, style or genre
5	Notable builder, architect, period, style or genre
2.5	Minor builder, architect, period, style or genre
0	None
Environmental Significance	
10	Very significant resemblance to historic landscapes and land use patterns
7.5	Significant resemblance to historic landscapes and land use patterns
5	Notable resemblance to historic landscapes and land use patterns
2.5	Minor resemblance to historic landscapes and land use patterns
0	None
Contributing Features	
5	Very significant diverse additional elements related to history, landscape or architecture that contribute to knowledge of the site and enhance its cultural or historic significance
2.5	Notably significant diverse additional elements related to history, landscape or architecture that contribute to knowledge of the site and enhance its cultural or historic significance
0	None
Integrity – Condition	
10	Excellent condition
7.5	Good condition
5	Fair condition
2.5	Poor condition
0	Ruin
Integrity – Alterations	
0	None
-2.5	Minor
-5	Some
-7.5	Significant
-10	Major
Other	

-5	Structure has been moved
0	Structure has not been moved
5	The structure is at risk
0	The structure is not at risk
Total Score	

While the above criteria does not readily apply to archaeological sites, these are important components of the County's cultural character. As more is learned to build on the existing known archaeological corridors, criteria may be added to address these sites in annual action plans (see Section VIII). Additionally, many sites may hold multiple attributes – qualifying as riparian buffers, for example.

E. Criteria for Current and Long-Term Parkland Acquisition
(developed from the Joint Master Recreation and Parks Report, and approved by the Board of Commissioners 12/7/99)

In May, 1999, the Joint Master Recreation and Parks Work Group released a report for future park coordination between the different jurisdictions. With a \$3 million bond available for parkland acquisition, goals for parkland acquisition and criteria were developed to guide decisions on land evaluation and purchase.

The goals, objectives and criteria of the work group are as follows, with additions provided by the Board of Commissioners:

Goals

- * Encourage school/park joint planning
- * Preserve natural resources
- * Promote multi-jurisdictional recreation and preservation efforts
- * Preserve watersheds and water quality
- * Encourage historic and cultural preservation
- * Identify and emphasize targeted needs
- * Establish public/private partnerships
- * Encourage the dedication of easements
- * Implement land-banking opportunities
- * Acquire/purchase parkland through development process
- * Develop linear parks concepts and plans

Using these goals, more specific objectives were identified:

Objectives

- * Keep active recreation facilities away from land that is environmentally sensitive, such as wetlands;
- * Develop a program for land dedication/recreation payment that is more effective and comprehensive;
- * Protect identified natural areas and wildlife habitats in conjunction with the creation of recreation facilities;

- * Develop linear parks in the Rural Buffer, and explore opportunities along other identified stream corridors;
- * "Retrofit" existing developed properties for recreation;
- * Enhance efforts like the New Hope Creek Corridor Study and the Upper Eno River preservation efforts;
- * Develop land-use planning mechanism for securing neighborhood parks

Criteria for Evaluating Possible Land Acquisition

On December 7, the Board of Commissioners approved the criteria from the Joint Master Recreation and Parks Work Group, with modifications. This criteria is to be used to evaluate all parkland acquisition opportunities, and the components of this system would become the basis of the Recreation and Parks Acquisition section of the County's Resource Acquisition Program (see Section V of Joint Master Recreation & Parks Work Group Report).

Parklands Acquisition Criteria (adopted 12/7/99) (Note: All criteria are applicable and will be used for evaluation)
The existence of matching funds from a requesting jurisdiction, with the expectation of at least 1:1 match in funding
Existence of prior partnerships and previous commitments to the same entity
Relationship to the inventory of existing facilities and lands
Potential for grants and other funding opportunities
Cost of project, relative to available County resources
Completion of existing projects with an adopted facility plan
Contains a site identified in the Inventory of Natural Areas and Wildlife Habitats of Orange County, N.C.
Compatibility of planned park use with adjacent land uses
Appropriate intensity of land use for the surrounding area
Geographic location relative to the area to be served (central location for the target population), as well as location relative to the number of people served
Promotes continuity of wildlife corridors, greenways and linear parks
Land is adjacent to new or existing schools
Land for active recreation is suitable and appropriate for the planned uses (i.e., avoids wetlands and environmentally-sensitive lands)
Acquisition would further purposes of Upper Eno and New Hope Corridor preservation efforts
Access (transportation) is safe and easily-accomplished
Meeting multiple goals (of the above) gets higher weighting

There are two other important considerations that relate to park acquisition criteria. Perhaps more than any other type of acquisition, parkland can accommodate multiple uses and resources within the framework of a "park". As noted in the Historic Preservation Element of the Plan, historic structures can be preserved within a park setting, and there are many examples of such approaches. West Point on the Eno in Durham preserves a historic mill and homesite, and Sloan Park in Rowan County has preserved an 1823 grist mill as part of the park facilities. The same

can be said and has been done with active farms, such as the Horne Creek Living Historical Farm in Stokes County. *Natural areas can be protected within parks as long as careful attention is given to maintaining the integrity of the site.*

The other consideration for acquiring park land relates to the ongoing effort of the Schools and Land Use Council to co-locate school and park facilities in the future. Both the Schools and Land Use Council and the Joint Master Recreation and Parks report recognize the benefits of co-locating facilities. A Memorandum of Agreement for Providing Coordinated Site and Facility Planning has been developed, and is included as Appendix K.

As criteria are developed by the schools for land acquisition, the addition of the above criteria for parks could also be factored in, as practical, for a set of criteria to evaluate both school and park feasibility. The potential for collaborative work on parkland acquisition will be discussed in early 2000 by the local governments through review of the Master Recreation and Parks report.

F. Criteria for Riparian Buffers in Water Supply Watersheds

Riparian (streamside vegetative) buffers play an important role in protecting water quality in the County's 10 water supply watersheds. These areas also tend to be areas that support wide varieties of wildlife species. In January 1999, the Triangle J Council of Governments staff created a technical memo on riparian buffers. The memo offers ideas for protecting buffers based on four primary goals:

- Water Quality Protection
- Ecosystem Protection and Restoration
- Recreational and Educational Use
- Flood Damage Prevention

The Clean Water Management Trust Fund awards state grants for acquiring riparian buffers and protecting them using conservation easements. Other organizations that share interest in preserving certain riparian corridors include OWASA, the Eno River Association, and the Orange Soil and Water District.

Potential evaluation criteria for riparian buffers might include:

Watershed Riparian Buffer Preservation
Proximity to water supply intake
Nature and classification of the watershed (WS-II, etc)

Nature and extent of existing vegetation in buffer
Potential for improving water quality downstream
Located in a watershed with nutrient sensitive waters
Contains prime bottomland hardwood forests or identified natural areas (high weighting)
Meets other land preservation goals

G. Ranking and Weighting Competing Resources

Invariably, as resource preservation opportunities arise, consideration of potential acquisitions for differing purposes will arise. On occasion, this may require allocation decisions for funding based on the relative importance of the resource in question.

While a matrix assigning a weighting scheme to natural resources, prime farmland and other acquisitions could be developed to assess relative significance, such a formula would likely be unwieldy.

At any given point in time, all resource preservation opportunities will not be equal. Funding and the environmental significance of each type of resource will change over time. However, opportunities that meet multiple goals may be a prime consideration in evaluating these choices. The following guidelines might prove useful in the consideration of opportunities among competing resource goals:

Possible Guidelines for Evaluating Competing Resource Acquisition Opportunities
Level of significance relative to the type of resource (i.e., regionally-significant natural area as compared to County-significant local historic landmark)
Does the acquisition meet multiple County goals? (i.e., a park with an identified natural area, or prime farmland containing a historic property)
Cost of the acquisition
Type of grant and outside funding availability
Potential for interlocal or collaborative preservation
Potential for acquisition by other preservation organizations
Stewardship/maintenance needs
Previous funding provided for the type of resource
Location relative to the purpose of preservation and type of resource

Over time, the method in which competing resource objectives are evaluated will likely need to be adjusted based on the Board's adopted goals, community needs, and other factors.

Part 3 **MANAGEMENT AND FUNDING**

V. Tools and Techniques

There are a number of methods available for the County to consider in seeking to acquire or preserve important natural and cultural resources and parklands. The following section offers a number of the most-likely techniques, with a brief assessment of the potential use of the tool in the County's program.

A. Fee-Simple Purchase

Certainly the most straightforward and easily-understood method of acquiring land resources is simple purchase of the land for fee-simple considerations.

Fee-simple is the most common tool for acquisition, for a variety of reasons. The approach is straightforward and is most easily understood by both the seller and buyer, as a standard real estate transaction. There are no questions about ownership of the land acquired, and importantly no questions over who has responsibility for monitoring and stewardship concerns, which is a significant issue (as mentioned later in Section VI). A fee-simple purchase is the most certain type of acquisition, without the spectre of perpetuity issues in the future.

However, the outright purchase of land does have drawbacks in a program of land acquisition. The cost is usually higher for full purchase, and it requires a subdivision of the property if the owner is not conveying the entirety of the property in question. In some cases, the buyer may not be interested in owning the property and there may be interest in keeping the land in private ownership (such as a working farm, for example).

In the Orange Lands Legacy program, fee-simple purchase would likely be a primary tool for acquisition. For very sensitive lands that contain natural areas or wildlife habitat, where long-term maintenance needs to be simple and straightforward, this tool may be most appropriate. For parkland, which is generally (but not always) owned by the provider, purchase would be the primary

tool. It also may be important to hold title to historic and cultural sites that are of landmarks important to the County's rural character.

B. Donations and Charitable Gifts

In some cases, there may be substantial tax breaks (both now and in the future) for the donation or charitable gift of land. If approached with a potential donation, the County may wish to consider three issues:

- An evaluation of the property should be conducted to see what resources are present on the site and what liens or liabilities are present.
- Does the County wish to accept donations of land that do not contain identified priority resources, to be held as open space? If so, evaluation of this latter possibility should include a long-term assessment of the stewardship and management needs of the property.
- Clear understanding of the impact (or lack thereof) of the donation on future development of other portions of the tract should be pursued. For example, will the donation count as open space in development ordinances toward a future development proposal on the remaining portion of the property?

C. Conservation Easements

A conservation easement is a legal agreement between a landowner and a government entity or land trust that intentionally and permanently limits the use of all or part of the property for conservation purposes. This technique, rather than selling the land itself, sells the "rights" that are owned along with the land.

When a landowner donates or sells a conservation easement, he/she permanently gives up some of those rights in exchange for monetary considerations and/or tax breaks. For example, a farmer might sell the right to build additional residences while retaining the right to grow crops or operate a dairy. Future owners are also bound by the conservation easement – if the land is sold after an easement is agreed to, the new owner inherits the easement with the land. The agreement can be written so as to meet both the interests of land conservation by the government or land trust, and the financial and personal needs of the landowner.⁴

There are tax benefits to donating a conservation easement – both at the Federal income tax level and in state and Federal estate taxes. Many large landowners have, in recent years, begun using conservation easements as a way to keep their land in a desired state for the long-term and meet estate planning financial needs.

Among the benefits to conservation easements are the aforementioned ability to meet financial needs of the landowner without actually transferring title to the land. This approach has been used widely, particularly in the area of farmland preservation to allow farmers to remain in agriculture while received some return on the property. Conservation easements, since they are less than fee-simple, are also generally less expensive to the purchasing entity. Awareness of this tool has increased dramatically in recent years, and the tax benefits of easements are touted by many financial planners.

On the down side, the actual legal agreement for a conservation easement can be complex, as it attempts to meet many of the needs of both parties. Agreeing on a fair value for the easement and the terms of monitoring by the easement holder must also be carefully developed. And specifying the responsibilities clearly for stewardship monitoring and maintenance may avoid some of the pitfalls that have occurred in other easement cases, after later land transfers. In all, conservation easements offer many benefits but are not as clear as fee-simple purchases. Additional information on conservation easements is provided in *Appendix L*, and a resolution on County's holding of easements is *Appendix S*.

D. Dedication/Acquisition Through the Development Process

A key area of potential land acquisition will be those through the development process. Currently, the County has a program for the dedication of land for recreation purposes, although the alternative payment-in-lieu of dedication program is more often used. There are also incentives in the voluntary Flexible Development program to set aside lands with significant natural and cultural resources.

The Joint Master Recreation and Parks report has recommended revamping the payment-in-lieu and recreation dedication provisions, and with changes to the Flexible Development ordinance underway it may be timely to develop a comprehensive approach to acquisitions through the development process. There has also been an interest expressed in expanding the buffers for

development adjacent to historic sites listed in the National Register of Historic Places. In addition to these provisions, the potential for transfer of development rights (TDR) and purchase of development rights (PDR) programs has been discussed frequently over the past decade.

Because of the complexities in acquisitions of this nature, ERCD, Planning and Recreation/Parks staffs are jointly developing a parallel program for acquisitions through the development process over the next several months (addressing TDR and PDR possibilities) – for inclusion in this program.

E. Life-Lease Agreements

A life-lease agreement may be structured as part of a fee-simple transaction, where the landowner sells their land, but retain via deed/covenant the right to remain on the land for a specified duration of time agreeable to both parties. This date can be fixed in time, or can run with the lifetime of the selling parties (hence the commonly-used name herein). This tool is often attractive to longtime, elderly landowners that wish to spend the rest of their lifetime on their land.

The provisions of sale must clearly define the terms of the life-lease, and may address topics such as alterations/changes to structures and use of the land, if desired. Problems inherent with this type of arrangement, if any, often result from unclear provisions of the type above.

F. Timber Rights and Other Easements

Easements are legal agreements between the buyer and seller, and as such may be written to address a wide variety of topics. Other types of easements can be developed as needed if the County wishes to allow some development of a property containing an easement. Other possible uses may be addressed through an easement.

In addition to buying the rights to develop the property, the rights to timbering the property may also be purchased. This tool could be used in cases where visual resources are of a critical nature, or on pieces adjoining important natural areas to preserve a forest buffer. Timber rights can often be purchased for considerably less cost than fee-simple or easements that restrict development potential.

VI. Funding Sources

Concurrent with any plan for the preservation of resources through land acquisition must be a program or plan for providing financial resources to accomplish this goal. The combination of County funds, grants and cooperative ventures will provide a vehicle for the County to fund acquisitions on both a short-term and long-term basis. In addition, the need for stewardship and land management must be factored into the costs of a Lands Legacy program.

What sorts of costs are involved in land acquisitions? While total acquisition costs vary in both amount and type, the primary costs that would require funding resources are:

- Purchase cost of property or easement
- Appraisal of the property
- Survey of the property
- Environmental site assessment of property
- Contract/closing costs for attorneys
- Title insurance
- Stewardship cost (long-term)

In addition to these standard costs, other types of special assessments of property may be desirable in certain cases.

The following are funding options that represent different techniques that could be used to acquire property. No recommendation is being made here on the type of funding source to be selected.

A. Orange County Capital Investment Plan (CIP)

Orange County, like other local governments, has a 10-year program of capital funding outlay known as a Capital Investment Plan (or CIP). The CIP is developed annually concurrent with the budget process, and is approved by the County Commissioners. It is based on the Board's Capital Funding Policy, earmarking revenues to fund important projects or initiatives. The most recently adopted CIP for Orange County is for the period 1999-2009.

There are several funds within the CIP that are (or could conceivably be) designated for land acquisition along the lines of this program.

- **County Park Bonds Fund**
- **School/Park Reserve Fund**
- **Environmental Resource Conservation Fund**
- **New Hope Creek Corridor Fund**
- **Triangle Land Conservancy allocation**

Additional information from the 1999-2009 CIP on these funds is provided as *Appendix M*.

B. Other County Funding Sources

There are a number of other possible County funding sources that could be developed, if so desired. These funding sources could be annual appropriations, or incorporated into the CIP.

- **General obligation bonds** may be submitted for the public's approval for a variety of purposes: parks, natural resources, cultural resources, or open-space preservation.
- **General fund appropriations** could be made on an annual basis from the County's general fund, to augment or supplement special projects. This type of appropriation would be more compatible with short-term projects or to augment long-term projects over a one-year timeframe.
- **Sales tax revenues** could be designated from the General Fund.
- An **impact fee** could be instituted under the County's existing special legislative authority for open space preservation.

C. New Funding Sources with Legislative Approval

Over the past several years, a major topic for local governments at the state legislative level has been the need for new local funding mechanisms to address community needs, to avoid increased reliance on the property tax.

These potential funding sources will likely continue to be discussed. Of particular note are three types of funding that have been used in other communities for a variety of community purposes, including land resource acquisition:

- A **real estate transfer tax** that is applied on the sale of property. This method attempts to tie funding of programs that

are related to growth to a revenue source that is generated from growth.

- A **dedicated surcharge** levied on the general tax base. This is the approach that was predominant in the 1998 referenda at local government and state level. One difference of note is that in North Carolina, where local governments do not have “home rule,” this would require authority from the N.C. General Assembly.
- An **impact tax** could be pursued for parks or open space purposes that would fund new parklands or open space from the permits for new homes. This, like the real estate transfer tax, could tie new parks needed because of increased population growth to the new houses that create the need. Unlike an impact fee, an impact tax could be developed with distinctions within the types of housing units created.

D. **Appropriations from Other Local Governments and Public Entities**

This source may be more of a long-term proposition, but it could be a potential method if a joint acquisition mechanism is selected at some point in the future. The possibilities for collaborative acquisition of parklands, if pursued, may facilitate efforts in this direction, and could prove a pilot project on ways to coordinate funding from multiple public entities. Ways that this mechanism could work might include:

- **Coordinated bond referenda** with the towns for agreed-upon land resource acquisitions. Again, the parks area could be a test case of this method.
- **Synchronized Capital Investment expenditures.** Also discussed in the Master Recreation and Parks report, this idea has been broached as a way to more efficiently acquire and develop parks and recreation facilities. This method would have the participating towns and County work together to adopt CIP's such that funding for parks and recreation needs from all sources are available at the time needed. This approach might also be workable for other land acquisition needs, where there are common goals and objectives among the jurisdictions. Finally, this method could also be explored with OWASA, which is planning a long-term land acquisition strategy in the Cane Creek watershed.

- **Direct appropriations** from other local general funds for special cases that may arise (i.e., properties that have significance across jurisdictional boundaries).
- **Collaborative acquisitions with the University of North Carolina, Duke University and Orange Water and Sewer Authority** could be explored. As previously mentioned, these entities are large landholders in the County and contain many valuable resources. This approach could prove complex, however, and UNC's requirements for acquisition through the State may preclude this possibility.

E. Stewardship Endowments

The term stewardship relates to both long-term maintenance of the site, and the cost of having it monitored by a knowledgeable person. Research from the Land Trust Alliance indicates that stewardship and maintenance of properties can range as high as 8-12% of the cost of the property purchase.⁵ As time goes by, the County may wish to establish a fund that addresses stewardship needs for properties acquired – or reflect this need in other funding sources that are developed for acquisition.

The County's cost for stewardship will likely be considerably lower with the existence of a Land Conservation Manager on staff – negating the substantial personnel cost of stewardship. However, some stewardship funding will be needed for maintenance of sites over the years. Many organizations involved in resource preservation have set up a stewardship endowment fund to address the ongoing maintenance and monitoring needs. This could be a more substantial issue in the long-term, as the County property holdings increase and long-term maintenance needs likewise increase.

F. Grants

A major portion of the funding stream for land acquisitions will likely come from grants by other entities. There are a number of existing grants that are available for resource preservation purposes, and current legislation at both the state and federal level could greatly enhance the availability of funding to support acquisition of important land resources.

The following is a list of the primary grant sources that exist at this time, followed by a brief synopsis of the program and purpose:

1. *Clean Water Management Trust Fund*

The Clean Water Management Trust Fund is one of the largest grant funding sources in North Carolina. With \$30 million in annual appropriations, this fund is designed specifically to address acquisitions that protect and enhance water quality, acquire and preserve riparian buffers or greenways along streams in water supply watersheds, repair failing waste treatment systems (in certain cases), and otherwise protect unpolluted waters or restore degraded waters. Guidelines for this grant program are provided as *Appendix N*.

Orange County was awarded a grant from the Trust Fund in 1999 to help protect a portion of Duke Forest adjacent to the Corporation Lake water supply. Other grant recipients include the Town of Chapel Hill to preserve an area in the New Hope Creek corridor, The Town of Hillsborough to acquire riparian buffers along the Eno River, and the Orange Water and Sewer Authority for riparian buffer purchase in Cane Creek watershed.

2. *Parks and Recreation Trust Fund*

The Parks and Recreation Trust Fund (PARTF) is a dollar-for-dollar matching grant program available for local governments and state agencies for parks and recreation projects. It is funded through a portion of the real estate deed transfer tax - revenue stamps collected by counties for both the state and county.

As reported in the Master Recreation and Parks report, through March 1999, Orange County (including the towns) deed transfers have contributed \$1,351,727 into the Parks and Recreation Trust Fund. Of that amount, \$304,139 has gone to the local government matching grants program. To date, the N.C. Recreation and Parks Authority has allocated \$31,500 back into Orange County, to the Town of Hillsborough for the Occoneechee Mountain Park. This is the only local funding received.

Orange County applied for a PARTF grant in January 2000 to protect a portion of the Little River Corridor for a joint Orange/Durham county regional park and natural area.

Criteria for this grant program may be found in *Appendix O*.

3. Natural Heritage Trust Fund (through state agencies)

The Natural Heritage Trust Fund is also funded through a portion of the real estate deed transfer tax. This fund, however, is available only to state agencies as a funding source to acquire and protect the state's ecological diversity and cultural heritage, and to inventory the natural areas of the state.

Although only state agencies may request funding, there are precedent for state/local cooperation on areas of mutual interest. If the County were to work collaboratively with a state agency (such as Eno River State Park) on preservation of a natural area, this could be a funding source to help with preservation.

4. N.C. Farmland Preservation Trust Fund

A relatively new grant program, the FPTF awarded a total of \$250,000 statewide in 1998 and \$500,000 in 1999. This funding is administered by the Conservation Trust for North Carolina, and is targeted toward transactional costs of agricultural conservation easements, or to provide matching funds for the purchase of development rights (PDR) on farms. County governments, Soil and Water Conservation Districts, and Land Trusts are eligible to apply for funding⁶. The County currently has designated \$100,000 of the CIP funds for land purchase for farmland easements. The Agricultural Districts Advisory Board plans to have an Orange County Farmland Preservation Program established in time to apply for the next FPTF grant cycle in the Fall 2000.

5. Programs administered through Natural Resource Conservation Service and Soil and Water District

There are a number of programs administered (usually on an individual basis) through the US Department of Agriculture, the Natural Resource Conservation Service and state affiliate, the local Soil and Water Districts. These programs target preserving lands, in different fashions, for 10- to 50-year periods. The Wildlife Habitat Incentive Program (WHIP) is used to enhance habitat for small game via five to ten year contracts that specify landowner maintenance responsibilities. The Environmental Quality Incentives Program (EQIP) is available to livestock or agricultural producers and landowners for a 5-10 year contract. EQIP offers cost-sharing and incentive payments for activities such as streambank and shoreline protection and stream channel stabilization among others.

The Conservation Reserve Enhancement Program (CREP) offers 10-15 year contracts to remove lands from agricultural production, and plant hardwoods, or maintain filter strips, riparian buffers and wetland restoration to reduce excessive nutrient and sedimentation loading due to agricultural runoff. Incentive rates are 70% for filter strips and 100% for riparian buffers and wetland restoration.

Other programs available through the local Soil and Water offices are shown in *Appendix P*.

6. The Federal Lands Legacy initiative, Better America Bonds, and EPA grant programs

As mentioned in Section I, there are two new proposals making their way through Congress that could open up billions of dollars to local governments for open space preservation. Both bills are currently in House and Senate committees.

In addition to these programs, there are a number of other grants administered by the Environmental Protection Agency that might be available for land acquisition, such as the Wetland Protection Program.

7. Other Programs

In addition to EPA and the new proposals in Congress, there are a variety of grant programs available at the Federal level. The N.C. Department of Transportation also has programs that could be used to assist in land acquisition. While too numerous to list in entirety here, examples of these programs include:

- National Conservation Corps
- American Battlefield Protection program
- National Trails Program / State Trails Program
- NC Urban and Community Forestry Grants (limited)
- NC DOT Wetland and Stream Restoration
- NC DOT Transportation Enhancement Program (acquisition of scenic vistas, historic sites and abandoned railway corridors)

VII. Options for Land Management

In any program of expenditure of public funds, the ultimate authority rests with the duly-elected representatives of the public. Delegation of that authority, unless under special agreements, can undermine that authority.

As such, any final decisions on the way that land is acquired, used and managed for the Orange Lands Legacy program should fall to the Board of County Commissioners. As is the case in other places around the country, only a board elected by the people can adequately and equitably weigh the priorities, community goals and interests in making an acquisition decision.

Recognizing the Board of Commissioners' role as ultimate decision-maker in land acquisitions, however, there are several paths that the County could select in the structure for acquiring and managing lands. Some of the management structures may be more feasible in the short-term, others may be more practical in the long-term, and some may prove not to be workable at all.

The following subsections illustrate three options for the Board's consideration in setting up a County land management structure, followed by several variations of the theme in the way of coordination, and issues related to land management:

A. Lands Legacy Program Through Existing County Statutory Authority

Counties in North Carolina, as political subdivisions of the State, have the statutory authority to acquire and hold lands, as set out in the N.C. General Statutes (NCGS 153A-158):

"A county may acquire, by gift, grant, devise, bequest, exchange, purchase, lease, or any other lawful method, the fee or any lesser interest in real or personal property for use by the county or any department, board, commission, or agency of the county".

With this authority, Orange County could enter into a program for acquisition of critical land resources without any further provision.

In this fashion, a program such as outlined herein, after agreement by the Board of Commissioners, could be instituted as desired. This

would include the ability to hold land under fee-simple and conservation easement arrangement, as well as the other possible tools mentioned in Section V.

The benefits of this approach are its simplicity and potential immediate use under existing statutory authority. No legislative approval would be needed in this case. A Lands Legacy program under these auspices could be adopted and in place as quickly as desired. This approach could also serve as a short-term structure while other, more-complicated means are explored.

One potential area of concern with this structure might be adoption of this method without a concurrent agreement on the use of the land acquired. Potential sellers may be interested in knowing the County’s long-term disposition and planned use for the land. This may be addressed however, by a statement of use and intent when the property is purchased. This method also would require provisions for addressing any inter-jurisdictional ventures.

Lands Legacy Through Statutory Authority	
➤	Requires no special legislation or approval
➤	Implement Lands Legacy program as defined herein (with amendments by Board) through existing County structure, with ERCD reporting to Management and Board
➤	Advantage: Simple and straightforward land management structure
➤	Advantage: Could be instituted quickly, and requires no outside approvals
➤	Advantage: Could serve as short-term program while other, more complex arrangements explored
➤	Concern: Might need use and intent statement on land purchases to assure sellers

B. Establishing a County Land Trust

As mentioned in the 1996 Preservation as a Function of Local Government report, the establishment of a County land trust is one approach that has been taken by a few other jurisdictions around the nation.

In this option (as used in Davis, California, Anne Arundel County, Maryland, and Boulder, Colorado), the County would file papers to create a 501(c)3 non-profit corporation which could be funded by appropriation from the County, or by a combination of sources (and grant funds, where available). A Board of Directors would be appointed by the Board of County Commissioners (or at a future date, if of a intergovernmental nature, by a process spelled out in an interlocal agreement), which could include Commissioners if

desired. A working agreement would be needed to assign responsibilities of the Board of Directors. In most cases, this involves the ability to approve land acquisitions consistent with criteria approved by the funding entity. If this were pursued, staffing for the land trust could be provided by the ERCD Director, Land Conservation Manager and GIS Coordinator. Other staff assistance, such as Recreation and Parks for parkland acquisitions, could be arranged as needed.

There is one important difference in this option for counties in North Carolina. Because this is not a “home rule” state, special legislative authority would likely be needed for the County to set up and fund a non-profit corporation⁷. Questions exist about the ability to qualify the corporation as a non-profit with the IRS, if funding is coming only from Orange County. However, this may not be an issue for Orange County, as a tax-exempt entity.

One of the benefits of this approach is that there would likely be few questions about the use of land being acquired by a land trust – with the assumption that it would be preserved in perpetuity. A County land trust could also be expanded to be funded by multiple governments at some future date and could become countywide, with representatives from the municipal areas and acquisitions with pooled funds.

The difficulties with a County land trust would lie in the complicated nature of the arrangement, the questions about non-profit status for a corporation created by a local government, the need for special legislation, the need for a charter, membership and bylaws, and potential communication issues with the funding source.

Lands Legacy Through County Land Trust
➤ County creates non-profit corporation
➤ Board of Directors appointed by BOCC (including two commissioners?)
➤ Staff through existing ERCD
➤ Would require special legislation from General Assembly
➤ May be problems with non-profit status if funding only from County
➤ Clear acquisition intent for preservation
➤ Potential for expansion to intergovernmental nature, if desired
➤ Complicated bylaws and communication channels?
➤ Funding sources complicated?

C. Establishment of an “Open Space Authority”

Closely related to the idea of a County land trust is the option of creating an Open Space Authority to coordinate the preservation of land. Such an entity would be a special independent authority under the N.C. General Statutes, as OWASA is.

This approach would also require special legislation from the General Assembly to set up an Open Space Authority⁷. Bylaws, a charter, operating guidelines, and method of appointing a Board of Directors would be needed for startup of an authority. In other respects, the authority would function much as the local government land trust would. The Board of Directors could be charged with evaluating land acquisitions and approval of the purchase of land within guidelines from the elected boards involved.

As with the local government land trust, benefits from the open space authority approach might include clarity of purpose for acquisitions (preservation), the inclusion of a variety of interests on a Board of Directors, and the fact that an authority of this nature would serve as an intergovernmental mechanism.

The disadvantages of this type of arrangement would include questions about the ability to achieve the needed special legislation, concerns over the complexity and role of the authority, the need for consensus among the local governments on the role and activities of the authority, and the ability to ensure that needs and interests are communicated adequately to the Board of Directors. Funding sources may also be complicated.

Lands Legacy Through a Special Open Space Authority
➤ Special legislation needed to create authority (OWASA)
➤ Potential intergovernmental funding, appointments, and nature
➤ Charge and mission agreed to by the creating party(ies)
➤ Board of Directors appointed by the parties involved
➤ Staff through existing ERCD, with assistance as needed
➤ Advantage: Clarity of acquisition purpose
➤ Advantage: Coordinated intergovernmental mechanism
➤ Disadvantage: Ability to achieve special legislation
➤ Disadvantage: Unwieldy and complex nature of arrangement?
➤ Disadvantage: Requires clear consensus among funding parties to convey charge and interests
➤ Disadvantage: Funding sources complicated?

In addition to these three management structures, there are other approaches to managing land acquisitions that involve coordination with different parties.

D. Joint Ventures With Existing Land Trusts

As noted in the 1996 "Preservation as a Function of Local Government" report, existing land trusts or associations such as the Triangle Land Conservancy (TLC), the Eno River Association and The Nature Conservancy have done much to preserve several of the County's important natural areas, but these trusts on their own will not be able to protect all of the most important resources present in the County – due to financial limitations, differing areas of interest, and obligations in other areas of the Triangle (and the nation, in The Nature Conservancy's case)⁸. It is this recognition that has led the County to develop a program of its own to work on preserving the most significant areas of County interest, while building a collaborative relationship with existing trusts for possible joint ventures.

In evaluating acquisition potential, there will likely be occasions when projects of regional significance become possible – projects that may offer benefits beyond the County boundaries and protect lands that are important to the regional public interest.

While the County and the existing land trusts will certainly wish to pursue their own plans and programs for preservation of areas deemed important, one method of coordinating the efforts of the different groups might be the formation of an "Orange County Land Trust Alliance", based on the successful national organization of the same name.

The basis for this type of arrangement has already been laid through a joint meeting of staff representatives of local governments and TLC earlier this year. In addition, during 1999 the Environment and Resource Conservation staff has also been involved in discussion of potential joint ventures with TLC staff, and an informal agreement to share information and keep each other informed to avoid duplication of effort has been successfully instituted.

Despite the type of management structure selected by the Board, the potential will continue to exist for cooperative efforts between land trusts and the County in areas of mutual interest. After a

County program is adopted, the potential for a County Land Trust Alliance and agreements between the different parties may be pursued to formalize to some degree the level of collaboration already begun. In addition to collaboration on acquisitions, another area of continued interest might be in joint resource investigation. TLC has recently completed the third of three reports funded by the County on natural resources and wildlife habitat in the County. With this history of collaboration on resource investigation, the potential of continuing this arrangement (augmented by the input of the new ERCD Land Conservation Manager) may be prudent.

E. Working with Other Organizations

In addition to the land trusts, there are other public organizations within the County that may have related goals that warrant further consideration.

For example, as noted in the program forming the Environment and Resource Conservation Department, the **Orange Soil and Water District** has a number of programs and interests – particularly of an agricultural nature – that are related to the County's potential program. The District has the authority to hold easements, and has staff experienced in the monitoring of agricultural operations.

Previous discussions have explored, to a limited degree, the District's interest in holding and monitoring agricultural easements obtained by a County farmland preservation program. No agreement has been reached through these discussions, however. As the priorities for a farmland preservation program are developed through the upcoming "New Consensus for Farmland" effort, further discussion of the Soil and Water District role could occur. If desired, the Board of Commissioners could develop an agreement with the District for the holding and monitoring of agricultural easements.

A second area for potential involvement with an outside organization could be with the **Orange Water and Sewer Authority**. OWASA, as the County's second-largest landowner, is preparing to acquire an additional 1,200 acres in Cane Creek watershed for watershed protection purposes. While there have been no discussions with OWASA (beyond general questions on the potential for parks on OWASA lands) to date, there may be occasions where OWASA's interests in watershed protection may coincide with the County's interests in preservation of critical

resource lands. The Board may wish to ask staff to explore the potential for acquisitions of mutual interest and/or property swaps in the watershed, as well as previous proposals to locate parkland on OWASA-owned land.

Another area of joint initiative that could be pursued is with Duke University and the University of North Carolina. Conversations with Duke officials might be prudent on a variety of fronts: to discuss future objectives for Duke Forest, the potential for conservation easements to protect particularly sensitive areas, and possible collaboration on a limited rustic trail network through less-sensitive portions of Duke Forest. The current informal arrangement related to Orange County's "right of first refusal" for purchases of lands coming out of Forest ownership might also be formalized. In the case of UNC, long-term plans for the Botanical Garden and Mason Farm reserve could be reviewed, with the County offering any needed assistance to protect these areas. The County and UNC could also work collaboratively to identify long-term land acquisitions by UNC that might serve both University and County recreation or open space purposes.

F. Inter-jurisdictional Efforts and Other Partnerships

A final area for potential joint venture is with other local governments, the State, and/or the private sector.

The potential for joint local government acquisition of critical resources has already been broached through the Joint Master Recreation and Parks Plan, a request from the Town of Carrboro, and the recent proposal from Durham County for a joint park along the County line.

The concept of land-banking for potential park sites is one of the primary themes of the new Master Recreation and Parks report. Joint capital funding and coordinated land acquisition is recommended by the work group, and this issue is currently under consideration by the local elected boards. Beyond the issue of joint park acquisition, there may be lands of mutually-important natural, cultural and visual resource significance that could be a collaborative venture.

Durham County has identified the Little River watershed as an area of focus for preservation, because of its watershed protection importance and the presence of important natural areas in the

corridor. The watershed extends into much of northern Orange County, and Durham staff has indicated an interest in exploring the development of a long-term coordinated plan in this area. Other watersheds are shared with adjoining jurisdictions, such as University Lake watershed, which extends south into Chatham County.

The State of North Carolina is already active in land acquisitions in Orange County, owning the lands in Eno River State Park. The park system has recently worked with TLC and the Town of Hillsborough, and the City of Durham, to preserve and maintain important areas in the Eno basin. Those sort of joint possibilities also exist for Orange County, perhaps more so, due to the amount land in the county that is within the Eno basin.

Finally, the potential may exist for public-private partnerships on acquisitions and eventual facilities development. Further research in this area, if desired, would be needed.

Finally, there are two issues related to any program or structure for land acquisition. These issues deal more with how land management occurs after purchase. A full policy on the issues of stewardship and use/access will likely be needed as the Lands Legacy program moves forward.

G. Stewardship and Post-Acquisition Structure

Once lands are acquired, there are a number of responsibilities that begin for the County as the owner (or, to a different degree, as the holder of an easement):

- What are the maintenance needs for the property? Will any prescribed burns be needed? Are there diseased trees that will require removal?
- What type of access and hunting provisions should be made?
- Are there any liability concerns beyond those noted in the purchase evaluation?
- How frequently will the property need to be monitored?
- Will adjacent land uses affect the status of the property?
- If an easement, is the owner well informed of his/her responsibilities on maintaining the property?

These and other questions will require careful attention to monitoring and maintenance of the property. Many of these issues can be identified by the Land Conservation Manager and addressed

by the County, with the assistance of staff such as the County Engineer and Public Works Director.

One possible recommendation to make in this area is to require a thorough assessment of the likely stewardship issues as a part of the purchase site evaluation, and instruct the Land Resources Manager to prepare an assessment of these needs and the property status on an annual basis. A Stewardship Plan could be prepared to work with any plans for use and access to address these issues.

H. Use and Access to County-Owned Lands

In addition to maintenance, the issues of use and access to County-owned lands will be of key importance. This issue will apply primarily to lands the County holds in fee-simple, as most conservation easements will include language limiting the access to the property to the County's stewardship and monitoring responsibilities.

The use of the property, in order to be as clear with the seller as possible, would be best addressed at the time of purchase, with the understanding that, as other needs arise, flexibility to consider different uses on the property may be needed.

Access issues should also be addressed at the time of purchase, and may vary depending on the rationale for purchase. If the property is acquired for recreation purposes, access would likely be a prime consideration and should be thoroughly addressed. Some acquisitions for natural areas and wildlife habitat, however, might be adversely affected by public access and would require a more limited control of access.

To address these issues, a proposed "Use and Access" policy is discussed in Section VIII of this report and is shown in the Appendices.

Part 4

Implementation Recommendations

VIII. Recommended Implementation Program

On October 22, 1999, an initial draft of this report was presented to the Board of Commissioners. The Board provided substantial feedback on the direction this program should take, and the structure that would be most conducive to accomplishing the goals of protecting critical resource lands.

Toward this end, there are 4 basic principles that may guide the rationale for this program:

1. **The County cannot continue to rely on outside parties to provide parks and open space.** There are no guarantees that Duke Forest, Eno River State Park and other important resources will be able to continue to expand in scope as the County's population increases. These facilities will offer limited recreational opportunities, and it is partly due to this reliance that the County and Towns have few parks at this time.
2. **The need for an incremental approach must be balanced against the increased cost of land acquisitions in the future.** In other words, while recognizing the financial limitations to an aggressive program, the County should be proactive, recognizing that lands that will need to be purchased will cost more in future years.
3. **The program should balance acquisitions to preserve some of all types of the County's important resources.** The Lands Legacy program should work to ensure that natural areas, farmland, cultural sites and riparian buffers are all represented in land acquisitions to some degree, recognizing that the Board and the public will set priorities for each type of resource acquisition.
4. **The Towns could greatly benefit by working in partnership with the County on land acquisitions.** To avoid duplication of services, the County ERCD with its land acquisition experience, could provide a valuable resource to the Towns in land acquisitions not only for parks but for other open spaces. Such a partnership would need to recognize the interests and needs of each party, and could set the stage for an eventual Countywide open space authority.

The following implementation plan is based on the Board's October 1999 discussion and these principles:

A. Proposed Land Management Structure: Existing County Statutory Authority

Although there are many possibilities for the long-term, the most prudent and timely land management structure for the County is the Option A shown on pages 39-40, **Lands Legacy Program Under Existing County Statutory Authority**. With many inquiries about acquisition already occurring, the County needs to develop a program as quickly as possible, to provide a framework through which to view potential acquisitions. All of the goals and objectives of the program can be addressed through the County's existing statutory authority to acquire lands.

Additionally, as noted on page 39, the only elected body in Orange County with the authority to evaluate and secure purchase of the County's most-significant resource lands is the Board of County Commissioners. The Board, as elected officials charged to protect the health, safety and general welfare of all County residents, would rightly be the final decision-making authority for land acquisitions made by the County. Delegation of that authority to other boards opens the door to conflicts of interest and potential difficulties in dealing with competing goals of different organizations. As the County's elected board, the Board of Commissioners addresses the issue of competing multiple goals on a daily basis in all of its decision-making.

While the County program is recommended as the best approach to starting this program, two other measures of exploration are recommended:

1. Representatives from the Board of Commissioners should meet with the Orange Soil and Water District Board *to see if the Soil and Water District is interested in holding agricultural conservation easements* that might be acquired by Orange County through this program. A Memorandum of Understanding will need to be developed if this approach is utilized and the Soil and Water Board is interested.
2. ERCDC staff should prepare a report for the Board of Commissioners (and eventually other County elected boards) outlining the *pros and cons of a future Countywide Open Space Authority*. Due to the many other responsibilities and

pressing needs to get the Lands Legacy program up and running, this report would be programmed for the upcoming 2000-2001 budget year and produced by April, 2001.

B. Funding Plan

Despite a strong environmental ethic in the County, Orange County annually spends very little on preservation of natural resources. The recent acquisition of 63 acres along the Eno River is the County's first acquisition targeted for resource conservation purposes.

The last several years have shown that there is support among the electorate in many local governments for land acquisitions to preserve important resources and parklands. The success of the bond referenda listing on page 3 stands as testament to this fact. And not all of the local governments embarking on resource acquisition programs have been large in size – there are a number that are equal or smaller than Orange County in population and land area.

As outlined in Section VI, there are a variety of options – both current and potential – that the County could pursue to fund acquisitions. Based on existing funding sources and the Board's goals, it is anticipated that the top priorities for the Lands Legacy program over the next few years are to begin a systematic acquisition program in the following areas:

- **Parkland** that accommodates active recreation, low-impact recreation, and preservation of natural areas
- Parkland that is acquired in conjunction with **potential school sites**
- Preservation of targeted **natural areas and wildlife habitat**
- Preservation of prioritized key **farmlands**

With these as top priorities, the ERCDC could also work toward acquisition in the other goal areas of **riparian buffers** in watersheds and identified **cultural and historic sites**. These could be part and parcel of the above acquisition priorities, and could also be pursued through acquisitions in the development process.

The key question becomes: What level of acquisition is needed, and to what degree is the County the appropriate entity to make these acquisitions (whether easements or fee-simple purchases)?

While there are many different methods for answering these questions, some thoughts are provided by the work of advisory boards and recent task forces:

- The Joint Master Recreation and Parks Work Group has strongly recommended proactive land-banking for parks. The Work Group has proposed use of the existing \$2.89 million in parks bond funds (which on average should purchase 300-400 acres), and that a new \$8 million bond for parks be floated in November 2000 for the purchase of an additional 1200 acres.
- The Commission for the Environment, in their new "State of the Environment" report, calls for a goal of 10% of the County land area to be preserved or in some type of conservation-oriented management (County Lands Legacy, Eno River State Park, Triangle Land Conservancy easement, Duke Forest, etc) by the year 2010. This equates to 25,600 acres, or an additional 16,000 acres of land by the year 2010. This amount would include parklands, farmland and other lands to be preserved. In 1999 dollars, the cost for these acquisitions (potentially by a number of parties, with the County being but one) would total \$128 million over the 10-year period.
- The Agricultural Districts Advisory Board in the "New Consensus for Farmland" effort is working toward a farmland preservation program by the fall of 2000, hoping to use \$100,000 of the Environmental Resource Conservation Fund as matching funds for a state grant from the Farmland Preservation Trust Fund. If a goal were set to have an equal amount of land in easements to that in the Voluntary Agricultural Districts program, this would total 1,360 acres (at a cost of \$7 million to \$11 million, depending on location and the amount of easements versus fee-simple purchase).

It is recognized that funding sources to accomplish all of these goals cannot be instituted overnight. However, to begin working toward long-term accomplishment, a dramatic increase in funding for resource acquisition will be needed. The following approaches are offered as examples toward this stated goal:

- **Increase the Environment and Resource Conservation Fund.** Until the 1998-99 fiscal year, one cent on the tax rate has been designated for the School/Park Reserve fund for land acquisitions. That amount is now 1/3 of one cent. Adding back 2/3 of a cent to the Environment and Resource Conservation Fund would provide up to \$700,000 per year for land acquisitions (1/3 cent for future school/park sites and 2/3 cent for the acquisitions outlined in this program). If this funding can be leveraged with grant and outside moneys at a goal of \$1:\$1, it could provide \$14 million for land acquisitions over the next decade. This would be a long-term fund, however, needing time to accrue.
- **Piggyback on proposed new parks bond.** The Joint Master Recreation and Parks Work Group has proposed an \$8 million parks land acquisition bond to erase the current deficit in parklands. Adding an additional \$2-3 million to this bond for open space (natural areas, prime forest, cultural sites, and farmland) would provide funding to aggressively pursue acquisition of the County's most-critical resources. Or, the bond could be adjusted and combined to reflect that intent of preserving natural areas etc. within the context of parks. The actual amount could be established by identifying current needs and possibilities, compared to the County's other funding needs.
- **Accept donations that meet County goals.** There can be a number of tax incentives for private landowners to donate lands to the County. If those lands are in keeping with the County's goals and do not pose a liability concern, this would be another way to build the County's land resource base at little or no cost.
- **Pursue inter-local funding coordination with other local governments and organizations.** Over time, land acquisitions through the Lands Legacy program will almost surely also promote many goals and interests of the County's municipalities. For example, a new park or open space area between Hillsborough and Chapel Hill will provide new resources for residents of both towns. Acquisitions accomplished for the municipalities toward this end might encourage the Towns to consider paying into an inter-local fund for land acquisitions. It would be important to provide assurances to the Towns that their moneys would be used for projects that benefit Town residents, but such an approach could avoid duplication of services by making the County's land resource manager available to the Town's as an acquisition resource. It might also promote the long-term possibilities for an eventual inter-local land trust or open space authority. Furthermore, the ability to

work with the Soil and Water District could be an important way to access the funding sources that the District has at its disposal. The same could be said for joint efforts with Triangle Land Conservancy and the Eno River Association, who could offer monetary and in-kind assistance on joint projects of mutual interest.

The following table summarizes the existing and proposed funding sources, and for what purposes they could be used:

Potential Funding Source (Existing/Proposed)	Uses
Parks land acquisition bonds (\$2.89 million existing, \$8 million +/- proposed)	Acquire lands for parks in Orange County, balancing active and low-impact recreation, and also preserving lands of important natural resource significance. Further, in a manner consistent with other criteria from BOCC-adopted Parklands Criteria.
School/Park Reserve Fund (\$2.4 million existing, with \$233,000 annually)	Land-banking of lands that might be appropriate for long-term school and/or park sites. Consistent with the adopted School/Park Reserve criteria, a planned school need not be apparent for use from this fund, but the land should be suitably located for a potential school/park combination in the long-term.
ERC Fund (\$250,000 existing, \$467,000 annually proposed)	Acquisitions that preserve important natural areas and wildlife habitat, farmlands, cultural sites and riparian buffers. Public access to some sites may be limited due to need to protect ecological integrity.
Open Space bonds (\$2-3 million, proposed)	Lands to protect important open spaces that protect rural character or other significant natural resources
Joint Capital Funds with Towns and other parties (Proposed. Amount unknown)	Acquisition of sites that are of mutual importance, with an interlocal agreement to ensure that needs of all funding parties are equitably met.

C. Procedure for Pursuing Acquisitions and Annual Action Plan for Lands Legacy Program

How will the County pursue acquisitions in keeping with this program? The following approach is suggested as one means of accommodating both identified needs and opportunities that arise.

Note: For the period from the present through June 2001, an Interim Annual Action Plan would be developed and brought to the BOCC for approval. The first regular Annual Action Plan would be developed for July 2001- June 2002 as shown below, and presented at the December 2000 Board of Commissioners retreat.

Create an Annual Action Plan with Performance Reports.

- The annual action plan would identify the goals for the upcoming fiscal year for each type of acquisition, specific target properties (if known), and the funding amounts anticipated to be needed. The plan would need to make allowance for special unknown opportunities that arise and should be flexible to enable revision during the year as needed.
- The draft action plan would be generated by ERCD staff in October of each year, with an initial review by the BOCC in that month, followed by advisory board review in November and a second review by the BOCC at their December retreat. The action plan would be implemented concurrent with the CIP in the spring. An Interim Annual Action Plan for the period from the present through June, 2001 would be approved by the BOCC (see note above).
- The action plan would serve as the official goal of the County for land acquisitions that are identified and targeted, but there will need to be plans for inquiries made to the County about land acquisitions. These inquiries would be periodically conveyed to the BOCC, with staff's assessment of the possibilities for the acquisition and how it fits/does not fit with the goals and action plan. The BOCC would then decide whether to pursue the inquiry as a substitute or addition to the annual action plan.
- To get this approach started, ERCD staff would work with the appropriate staff persons to identify the resource acquisition targets and opportunities that exist in areas such as:
 - New park sites
 - Natural Areas and wildlife habitat
 - Linear trails and riparian buffers
 - Prime farmlands
 - Threatened cultural or archaeological sites

However, in keeping with the voluntary nature of the program, the County would only pursue acquisitions with willing sellers.

- ERCD staff would continue to bring acquisition opportunities to the Board's attention for direction prior to pursuing negotiation for acquisitions. Approval of any specific sites in the Annual Action Plan would be interpreted as authorization to pursue negotiations. Other non-specific goals and inquiries would be handled as now, with a goal of considering non-emergency acquisitions on a quarterly basis.
- It is assumed that the BOCC intention is **that staff pursue outside grant funding for all applicable projects** as a matter of course. As such, any farmland acquisition targets would also involve staff pursuing grant funds to augment the funding, etc. It is also implicit in all acquisitions to be pursued that staff will explore and report on any possibilities for joint projects with other organizations that would cut costs and meet the interests of the parties involved.
- The annual action plan should **report on progress** made toward achieving County goals and objectives related to land acquisition and resource protection. Performance reports should include information on progress made to date on previous action plans.

One way to track progress is to use quantitative measures, or "environmental indicators." Such measures might include the number of County parks, acres of parkland available for low-impact recreation, acres of prime farmland, number of identified natural areas protected, and miles of wildlife corridors preserved. Current, or "baseline," measurements for a number of these indicators are available in existing County reports.

Another, perhaps more meaningful, approach is to measure progress toward meeting a desired objective, such as the percentage of the County's identified natural areas that are protected, or the number of existing County parks compared with the number desired in the Master Recreation and Parks Plan. Other examples include:

- Acres of prime farmland available vs. acres protected by conservation easements
- Miles of wildlife corridor proposed vs. miles protected
- Acres of prime forest existing vs. acres protected
- Acres of critical watershed lands vs. acres protected

- Number of identified cultural resources vs. number protected

The tracking of progress made toward achieving County resource preservation objectives should not be limited to actions by the Lands Legacy program or by the County itself, but should include progress made by all partners and entities involved in the conservation of natural and cultural resources. Similarly, annual performance reports and action plans for the next year should be developed in conjunction with partner entities and made available to the public.

D. Role of County Advisory Boards in the Program

Many of the County's advisory boards can offer valuable expertise in considering and evaluating land acquisitions through the Lands Legacy program.

- The Commission for the Environment is knowledgeable on natural areas and wildlife habitat and riparian areas, and their potential inclusion in park settings.
- The **Agricultural Districts Advisory Board** is knowledgeable on the County's most-significant farmlands
- The **Historic Preservation Commission** would offer important insight into threatened or valuable cultural and archaeological sites.
- The **Water Resources Committee** has gained significant knowledge of groundwater recharge and the importance of riparian systems
- The **Recreation and Parks Advisory Council (RPAC)** is knowledgeable about park facilities needs and the types of land needed to accommodate these needs. In addition, the proposed new **Parks Council** may offer insight into parkland acquisitions. This area of parkland is one that has significant overlap with the other resource-related boards, since parks in the future will accommodate low-impact recreation and the protection of environmentally-sensitive lands on occasion.
- The **Environment and Resource Steering Committee** brings together the chairs of each of these boards quarterly.

The following table summarizes the recommended approach to involving each advisory board in the Lands Legacy program, recognizing that it is the BOCC that retains final decision-making authority:

Advisory Board	Nature of Role
Commission for the Environment	Review draft Annual Action Plan each November, providing comment on proposed targets and acquisition goals for natural areas, wildlife habitats (prime forests) and riparian buffers . Receive periodic updates from ERCD on progress toward acquisitions and new inquiries received.
Agricultural Districts Advisory Board	Review draft Annual Action Plan each November, providing comment on proposed targets and acquisition goals for farmland preservation . Receive periodic updates from ERCD on progress toward acquisitions and new inquiries received.
Historic Preservation Commission	Review draft Annual Action Plan each November, providing comment on proposed targets and acquisition goals for cultural and archaeological sites . Receive periodic updates from ERCD on progress toward acquisitions and new inquiries received.
Proposed Countywide Parks Council (including members of the Orange County Recreation and Parks Advisory Council), and/or the Recreation and Parks Advisory Council (RPAC)	Review draft Annual Action Plan each November, providing comment on proposed targets and acquisition goals for parklands . (After formation, the proposed Countywide Parks Council would review sites countywide under broader umbrella of active and low-impact recreation lands acquisition.) Receive periodic updates from ERCD on progress toward acquisitions and new inquiries received. Where parklands will incorporate identified natural areas, wildlife habitat (prime forest) and riparian buffers, the proposed Parks Council (and/or RPAC) would incorporate the comments of the Commission for the Environment into their recommendations to the BOCC.

E. Stewardship for County-Owned Lands

The ERCD shall be responsible for coordinating stewardship for many of the properties acquired by Orange County. In the case of lands acquired for parkland use, stewardship (i.e., land management and resource protection) will be coordinated with the Recreation and Parks Department, which will have a lead role in managing active recreation areas.

Because of its small size and limited resources, the ERCD, by itself, cannot provide adequate oversight and management for all lands acquired via Lands Legacy. The ERCD Land Conservation Manager will address initial oversight and management, and will develop cooperative agreements with other entities on a site-by-site basis. Management partners might include other County departments (Recreation and Parks, Soil and Water, etc.) and other government jurisdictions (Hillsborough, Chapel Hill, Carrboro, Durham County, etc.). Other partners might include local land trusts, universities and OWASA.

At a minimum, ERCD stewardship responsibilities would include the following:

- Maintaining an inventory of County lands with natural and cultural resource values.
- Gathering data pertinent to inventory and management of those County lands.
- Posting of boundaries and developing other desired signage.
- Developing stewardship plans and joint management agreements with other partners.
- Coordinating the implementation of joint management agreements; also the update and amendment of agreements as needed
- Promoting and coordinating research and education programs using County lands.
- Providing information about County lands to the public, County departments, County advisory boards and commissions, and the BOCC.

Potential stewardship problems for each property should be considered prior to acquisition. Such problems may include a site's remote location that makes active oversight difficult, a high density of adjacent landowners that increases the likelihood of encroachment on county property, or potential difficulties with maintaining a particular on-site feature (e.g., pond impoundment, unimproved roadway).

Moreover, joint management responsibilities should also be discussed with likely management partners prior to acquisition. Some problems may not be discovered until after acquisition has occurred. Joint stewardship agreements should be revised periodically to address new issues as they arise and to eliminate management roles related to issues that no longer exist.

F. Use and Access Policy for County-Owned Lands

Most of Orange County's current landholdings (632 acres) consist of small parcels scattered around the County. They include government offices, parks, water bodies, street rights of way, vacant land and solid waste sites. None of the land was acquired for the purpose of protecting identified natural areas, wildlife habitat or prime farmland. When the County acquired 160 acres adjacent to Seven-Mile Creek (mid-1970s) it was for a proposed new reservoir. Those lands now happen to fall within a rural wildlife corridor and include portions of two identified natural areas.

Through its new Lands Legacy program the County will begin acquiring lands with the expressed purpose of protecting areas with significant natural and cultural resource values. As the County acquires property, it will be important to distinguish those lands available for public use from those with limited or restricted access. This will depend, in large part, on the reasons for which the property was acquired-- whether for parkland, natural area protection, wildlife and open space conservation, farmland preservation, historic and archaeological reasons, or a combination of the above. A clear statement of purpose and intent when purchasing property will help assure the seller and convey to the public the County's anticipated use of the land.

While public access to County-owned lands will be desirable in most cases, such as in the case of parks, some of the lands may not be suitable for members of the public to use and enjoy. Access to areas with sensitive natural resources or important wildlife habitat may need to be limited in some fashion. For instance, the County might acquire a parkland site designed with active recreation in one area, low-impact recreation located in another area, and an area with rare plant species isolated from most activity in another section of the property. Access would be controlled, in part, through the design of parking areas, walkways and signage. Another example would be where the County holds a conservation

easement to protect resources on private property. In some cases, the easement might agree to restrict public access to all or a portion of the property.

It may be appropriate for the County to establish a general policy, or set of rules, that would apply to a general category of lands protected for their "natural area values"-- whether the intended use of the property is for low-impact recreation (e.g., trails, picnic areas) or to protect wildlife habitat, a critical watershed or an important open space. Individual sites within that general category might also have additional rules tailored to protect (or take advantage of) an important feature of a particular site. Those site-specific "overlay" rules would be adopted on a case-by-case basis. Similarly, access to and use of lands acquired for purposes other than to protect sensitive natural resources or open space (e.g., historic/archaeological resources, farmlands, etc.) will need to be determined on a case-by-case basis.

A recommended Use and Access Policy for natural and low-impact recreation lands would be developed at a later date, along with proposed rules that might apply generally to Orange County natural areas (including areas for low-impact recreation). These proposed rules would have to be coordinated with existing County regulations governing the use of and conduct in recreational parks. A copy of the Ordinance Regulating Parks and Recreation in Orange County is provided as Appendix R.

G. Outreach

ERCD should develop a comprehensive outreach component to inform and educate the public and others about the Lands Legacy program. Outreach efforts should be directed toward all potential interested parties, such as community leaders, civic groups, churches, farm groups, grade schools and universities. Sharing information about Lands Legacy is important to demonstrate how public funds are being used, to solicit public input, and to build community support.

Program outreach is equally important to inform current and potential partners about Lands Legacy. Communicating the program's mission and accomplishments helps build relationships and create new opportunities for furthering mutual goals and objectives. Partner entities and organizations include other County departments (e.g., Planning, Recreation and Parks), other state and

local government agencies (e.g., NC Division of Parks & Recreation, NC Dept. of Agriculture, Town of Hillsborough), and non-profit resource conservation partners (e.g., OWASA, Duke University, Triangle Land Conservancy, Eno River Association). As was suggested earlier, the formation of an "Orange County Land Trust Alliance" could help coordinate the efforts of some of these groups.

Some of the methods likely to be employed for Lands Legacy program outreach include the following:

- Printed media: web page, brochure, newsletter, fact sheets, newspaper stories
- Street Fairs and annual educational events like Earthwalk (at Eno River State Park)
- Speaking engagements: oral presentations, slide programs
- Field trips: advertised tours of County-owned properties
- Volunteers: soliciting and organizing volunteers to help with posting borders, trail-building, trail maintenance, etc.

End Notes

1 – from "Voters Invest in Parks and Open Space, 1998 Referenda Results," Land Trust Alliance, 1999

2 – from Rating Land in Orange County by its Wildlife Value, A Landscape with Wildlife: Part 2, Triangle Land Conservancy, 1999

3 – from Preserving our Farms report, Orange County Planning Department, 1994

4 – paraphrased from Land Trust Alliance brochure, "Protecting Your Land with a Conservation Easement"

5 – from Land Trust Alliance

6 -- from Conservation Trust for North Carolina home page www.metalab.unc.edu/ctnc

7 -- Conversation with William Campbell, Institute of Government, 7/22/99

8 – "Preservation as a Function of Local Government," Orange County Planning Dept., 1996, pp.4-10 to 4-11

Appendices

NOTE: Due to the length of the appendices and their status as existing documents, they are available upon request.

- A. Formation of ERCD Department (12-1-98)
 - B. Summary of Federal Lands Legacy and Better America Bonds Programs
 - C. Map of Natural Areas and Wildlife Habitat (1988 inventory)
 - D. Excerpts of the LESA Program for Evaluating Prime Farmland
 - E. Map of Water Supply Watersheds
 - F. Map of Prime Forests in Orange County (1997 TLC report)
 - G. Rating Land By Its Wildlife Value: A Landscape With Wildlife, Part 2 (1999 TLC report)
 - H. Executive Summary, Joint Master Recreation and Parks Report
 - I. Full ERCD GIS Inventory (July 1999)
 - J. Map of Orange County Preservation Plan (Historic/Cultural)
 - K. Schools and Land Use Council Memorandum of Agreement
 - L. "Protecting Your Land with a Conservation Easement" (1994 LTA)
 - M. Excerpts from Orange County 1999-2009 CIP
 - N. Grant Guidelines for the Clean Water Management Trust Fund
 - O. Grant Guidelines for the NC Parks and Recreation Trust Fund
 - P. Soil and Water Conservation Programs
 - Q. Annual Action Plan Example
 - R. Orange County Ordinance Regulating Parks and Recreation
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