



## **Efland-Mebane Small Area Plan**

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## Executive Summary

The “Current Major Issues and Solution Recommendations” section of the Efland-Mebane Small Area Plan includes a Goal for the planning area and an Objective for each topic area. This section of the plan begins on page 63 and concludes on page 83. Recommendations have been made in the following topic areas:

- Water and Sewer
- Land Use (including community character issues)
- Transportation
- Housing
- Parks, Recreation and Open Space
- Communications
- Intergovernmental Issues
- Other Recommendations:
  - Potential Transfer of Development Rights (TDR) Program
  - Emergency Shelters
  - Impact Fees
  - Historic Preservation
  - Incorporation
  - Plan Updates
  - Implementation

Additionally, some of the Task Force Responses to Citizen Comments (Appendix B, starting on page 99) are recommendations and should be considered in any future implementation actions.

Following is a brief synopsis of the most significant recommendations made in this plan. All topic areas for which recommendations have been made are not included in this synopsis.

### Water and Sewer

- Update the 1984 Sewer Plan and develop a comprehensive long-range Master plan for sewer and water see page 64 for considerations related to these recommendations).
- Complete an engineering study of the OAWS water system.
- Ensure adequate infrastructure is available concurrent with development.

### Land Use

- A corridor overlay plan and zoning district for the Highway 70 corridor should be created (see page 68 for a list of considerations related to this recommendation).
- Areas suitable for Mixed Use development are identified (see map on page 83 for Possible Future Land Use). The plan contains recommendations for implementing Mixed Use development such as developing Design Guidelines for site and architectural design.
- Permit well-planned growth in the area through rezoning and cluster design while maintaining community character.

## **Transportation**

- Realign the Efland-Cedar Grove/Forrest Avenue/Mt. Willing Road to Interstate 85/40 corridor. The realignment should consider a vehicular underpass under the railroad.
- Identify and pursue a connection from Highway 70 east southerly to the existing 4-lane Interstate connector and evaluate possible traffic pattern changes in Efland.

## **Housing**

- Examine strategies to preserve affordability through preservation of existing neighborhoods and encouragement of affordable housing policies with new growth.
- Designate the planning area as a possible TDR (transfer of Development Rights) Receiving Area.

## **Economic Development (Office, Light Industrial, and Commercial)**

- Job creation and boosting the tax base are important while ensuring the non-residential development does not overpower the area with traffic or be permitted at an incompatible scale.

## **Intergovernmental/Community Issues**

- Orange County and the City of Mebane should work cooperatively to create and agree to a Joint Planning Understanding or Agreement to allow for orderly growth within Orange County.
- Orange County should hold an annual open house with community residents to discuss local issues.

The maps on pages 80 and 81 enumerate recommendations that are suited to mapping. The map on page 82 enumerates proposed changes to the current Future Land Use Map and the map on page 83 shows the Possible Future Land Use.

## **I. Introduction**

In April 1991, the Orange County Board of County Commissioners (BOCC) approved a Study of the Efland Area. The Study analyzed the defined area and made recommendations regarding Housing, Community Services, Transportation, Open Space, and Land Use and Economic Planning.

In 2004, discussions regarding the need for an updated Efland area plan occurred within County government. Significant residential growth was occurring in this portion of the county, especially within the City of Mebane; a new Middle School was slated for construction within the Buckhorn Economic Development District (EDD) and the City of Mebane and Orange County had entered into an Interlocal Agreement to extend the City's water and sewer lines to the Middle School site; and the planned extension of the Efland sewer system was becoming imminent. The proximity of the Efland area to Interstate 40/85 and between the "Triangle" and "Triad" regions of the State coupled with the availability and potential expansion of public water and sewer systems provides the area with a unique potential for growth not seen in other areas of Orange County's Planning jurisdiction.

As a result of the discussions, the BOCC approved the formation of a citizen Task Force in December 2004 to work with Planning Staff in developing a plan for the area defined by the BOCC. The 2004 defined planning area is significantly larger than the area considered in the 1991 study (See Map 1). Prior to Task Force formation, the general scope of Task Force responsibilities was defined as follows:

The general mission of the Task Force is to evaluate the existing Land Use Element of the County's Comprehensive Plan, as it pertains to the Efland/Mebane area, and offer local perspective on whether the existing Land Use Element Map categories of: 10-Year Transition, Residential; 20-Year Transition, Residential; Economic Development District; Commercial/Industrial Activity Node; Resource Protection Areas; and roadways are adequate in size, density, intensity, scale, or location to address changes that are occurring in the area.

A Task Force of 12 citizens, primarily people who live in the study area, was appointed by the BOCC. Additionally, the City of Mebane was invited to appoint representatives to the Task Force since Intergovernmental coordination would be essential given that the planning area abuts Mebane's city limits and extraterritorial jurisdiction (ETJ). Two City of Mebane representatives served on the Task Force. A member of Orange County's BOCC also served on the Task Force. After formation of the Task Force, members subsequently adopted the following Mission Statement:

### **MISSION STATEMENT**

The Efland/Mebane Small Area Plan Task Force is charged with developing a small area plan for the defined Efland/Mebane area (as is shown in Map 1). A small area plan provides specific planning and design proposals for a defined geographic area. Small

area plans are generally prepared when there are changing conditions in an area or when defined issues in a specific area need to be addressed.

The Efland/Mebane Small Area Plan Task Force will address the following issues:

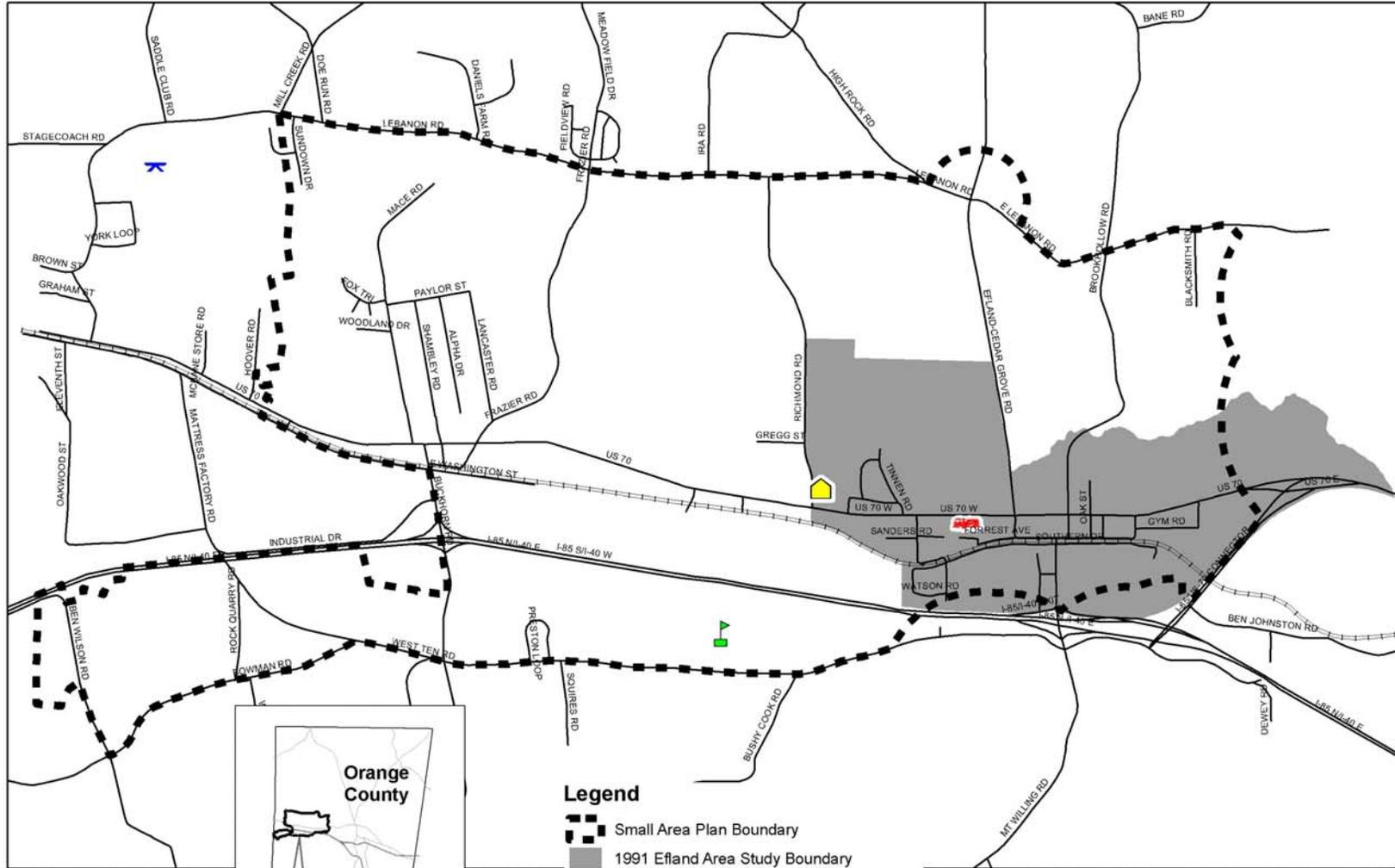
- Have the goals and objectives included in the 1991 Study been met?
- Is the pattern for development set forth by the existing Land Use Element Map relevant today?
- Since 1991, have there been significant changes to community character and form?
- What changes need to be made to the goals and objectives?
- Is there demand for additional infrastructure in the study area? (With particular consideration in respect to sewerage issues)
- Do Transition Areas need to be expanded, contracted, or moved?
- Are locations for economic development appropriate?
- What is the development potential of existing Transition Areas?
- Which areas of the study area are most suitable for development?
- Are there areas appropriate for higher density/intensity of residential development?
- What role may Mebane play in the future of the study area?

Recommendations made by the Task Force will be incorporated into a final report to be prepared by the Orange County Planning Staff, reviewed by the Task Force, and forwarded to the Board of County Commissioners. Recommendations, where appropriate, will be incorporated into the Draft Orange County Comprehensive Plan Land Use Element, Orange County Zoning Atlas and/or text, and Orange County Subdivision Regulations.

The area within the 2004 Small Area Plan Boundary depicted in Map 1 is referred to as the “planning area” throughout this document. The planning area is comprised of approximately 7,490 acres.

This Plan is the result of a series of twelve (12) Task Force meetings that occurred throughout 2005 and 2006 and a Community Meeting that was held in March 2006.

# Efland/Mebane Small Area Plan Boundary



## Legend

- Small Area Plan Boundary
- 1991 Efland Area Study Boundary
- Fire Station
- Efland Cheeks Park and Community Center
- Gravelly Hill Middle School
- Lake Michael Park

Orange County

Boundary Site

Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman March 02, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983



Map 1



## II. Previous Plans

### **1981 Orange County Land Use Plan** (Renamed Land Use Element in 1988)

The Board of County Commissioners officially adopted the Land Use Plan in September 1981. Although the Plan is almost 25-years old, the basic themes and concepts of the plan are retained and adhered to by the County. These premises include watershed protection, focusing commercial/industrial development to nodes at strategic transportation intersections, and requiring zoning to be consistent with the Plan.

Since 1981, minor amendments to the Land Use Plan occurred. One of the more significant changes was approved in April 1988. The County moved towards a Comprehensive Plan model that breaks major topic areas out into various “Elements.” As a result, the Land Use Plan was renamed the Land Use Element of the Comprehensive Plan. When this change was made in 1988, the following Elements were to comprise the Comprehensive Plan:

- Land Use
- Transportation
- Housing
- Open Space
- Recreation
- Economic Development
- Services and Facilities
- and additional Elements as Required

The Land Use Element contains typical planning analysis of existing conditions related to demographics, building activity and trends, development constraints, land use and infrastructure, and goals, objectives, and policies. A county-wide Future Land Use Map is the result of the analyses. In addition, each of the seven Townships located in the county is covered in a Township Plan.

The Efland area is situated in Cheeks Township, which is located in the west-central portion of Orange County. The Comprehensive Plan advocated the following proposals for Cheeks Township:

- Medium and higher intensity commercial development that would be most appropriately served by a centralized water and sewer system should be located within the U.S. 70/I-85 corridor from the Efland community to the extraterritorial planning jurisdiction of Mebane.
- Low and medium intensity commercial, industrial, and residential development which would create minimal negative impacts on the Upper Eno water supply watershed should be located in Efland’s Transition Areas in proximity to the designated activity nodes.
- The undeveloped areas south of McGowan Creek and south of the I-85 corridor are suitable for medium and higher intensity residential, commercial, and industrial development toward the end of the plan period.

- The area of the Township that contains the Upper Eno water supply watershed, the Back Creek water supply watershed, and the Cane Creek water supply watershed should be afforded the protection necessary to minimize adverse development impacts.

In addition, the Comprehensive Plan designated five (5) activity nodes in Cheeks Township. The activity nodes are:

- Efland Center (Commercial-Industrial Transition). Focused on the intersection of Southern Drive and Mr. Willing Road.
- Miles North (Commercial-Industrial Transition). Located at the intersection of US 70 and Buckhorn Road.
- Miles South (Commercial-Industrial Transition). Located at the intersection of I-85 and Buckhorn Road.
- Fairfield (Rural Neighborhood). Located at the intersection of Lebanon Road and Efland-Cedar Grove Road.
- I-85/Buckhorn (Economic Development). Located at I-85, Buckhorn Road, and US 70.

These activity nodes are indicated on the current Future Land Use map on page 51.

In 1999, the Board of County Commissioners adopted a goal to prepare a new Comprehensive Plan beginning with the update of the Land Use Element. Extensive data collection, research, trends analysis, and community outreach for the Land Use Element was initiated in 2000 and is continuing.

### **1991 Efland Area Study**

In response to citizen concerns regarding the protection of the character of Efland, Orange County Planning staff completed a study of the Efland area in conjunction with a Citizens' Steering Committee in January 1991. The Orange County Board of Commissioners approved the study in April 1991. Part of the study's purpose was to define the boundaries of Efland. A survey of area residents was completed and a map of the general boundaries was included in the study.

The Study included a Profile of the area which incorporated natural environmental features, historic and cultural sites of significance, existing land use and zoning, and demographic and employment data. The study also enumerated Community Infrastructure and Systems (Transportation; Utilities; and Recreation, Parks, and Open Space) and described the Community Character and Form. Recommendations regarding Housing, Community Services, Transportation, Open Space, and Land Use and Economic Planning were made. Appendix A of this plan contains the status of recommendations made in the 1991 Efland Area Study.

### **III. Area Description**

This section is a description of conditions/factors in the planning area.

#### **A. Environmental**

##### **Soils, Slope and Topography**

Several different soil types are found within the study area but the predominant types are Georgeville Silt Loam, Herndon Silt Loam, Appling Sandy Loam, and Enon Loam. Georgeville, Herndon, and Appling soils are considered to be suitable soils for urban uses but all three of these types may need septic field modifications due to their “moderate” permeability characteristics. Enon Loam is not considered a good soil for urban uses because of its slow permeability and high shrink-swell character.

Maps 2 and 3 depict the Soil Limitations for Dwellings and Septic Systems, respectively, in the planning area. (Note: The data used to produce the maps is from a USDA Soil Survey. Site-specific soil testing is necessary to confirm limitations). As Map 2 shows, severe soil limitations for dwellings (structures) are found in portions of the planning area, predominantly adjacent to and in the vicinity of water drainageways. Moderate soil limitations for dwellings (structures) are found in additional portions of the planning area. In the planning area, soil types can pose a challenge for locating structures and may increase construction costs since foundations that will support a structure on poor soils are generally more costly to design and construct.

Soil types that pose a challenge for buildings also tend to have poor characteristics for locating functional septic systems. As Map 3 shows, portions of the planning area contain soil types that pose severe limitations for septic systems. This limitation is not a factor in areas served by public sewer systems but it is a principal development consideration in areas where public sewer is not available.

# Soil Limitations - Dwellings



### Legend

- Small Area Plan Boundary
- Streams

- #### Soil Limitations
- Severe
  - Moderate
  - Slight

- Fire Station
- Eiland Cheeks Park and Community Center
- Gravelly Hill Middle School
- Lake Michael Park

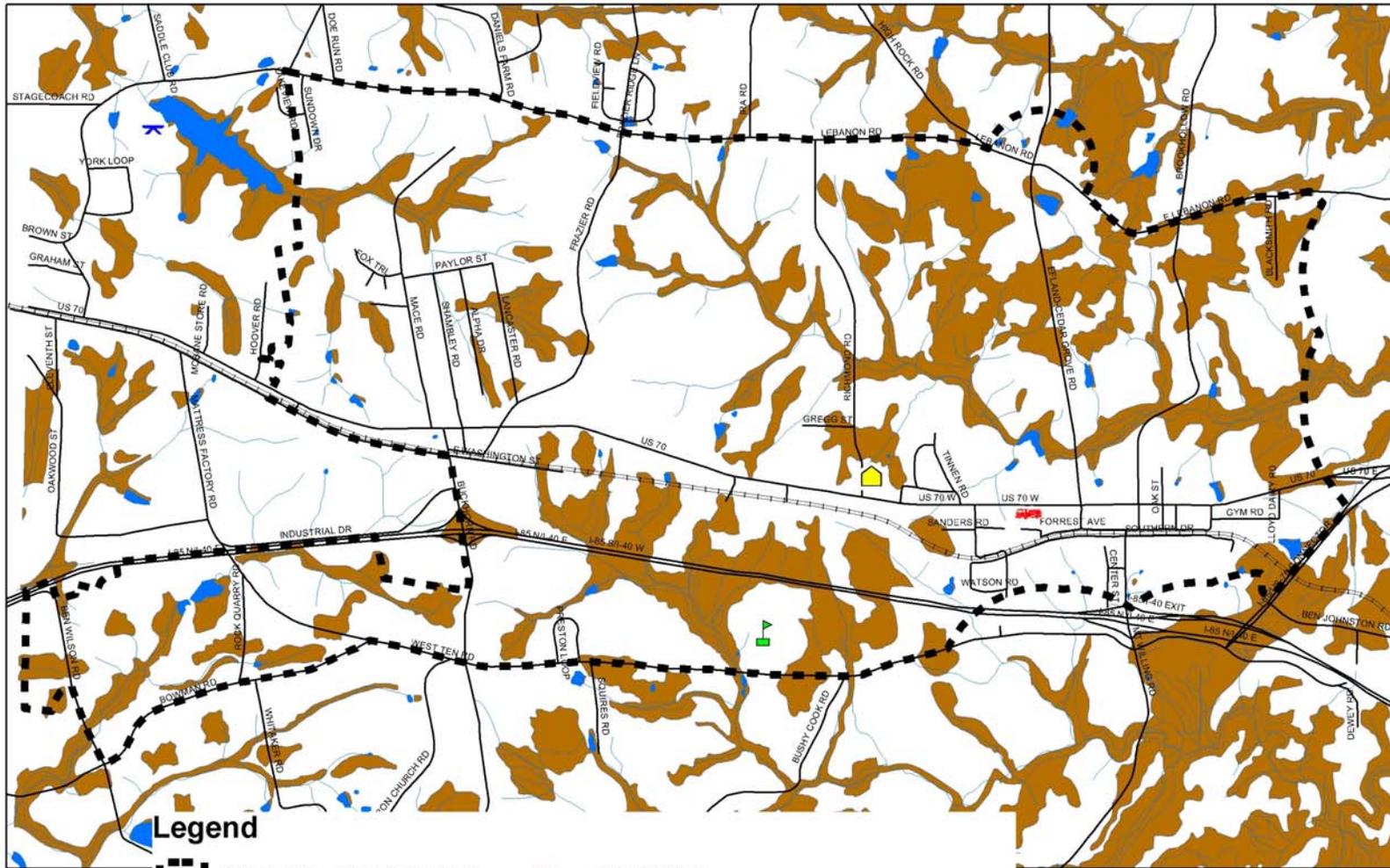
Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman March 10, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983



Source: Orange County Comprehensive Plan – Land Use Element

The data used to produce this map is from a USDA Soil Survey. Site-specific soil testing is necessary to confirm limitations.

# Soil Limitations - Septic Systems



## Legend

-  Small Area Plan Boundary
-  Soils with Severe Limitations
-  Streams
-  Fire Station
-  Efland Cheeks Park and Community Center
-  Gravelly Hill Middle School
-  Lake Michael Park



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman March 10, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983



Map 3

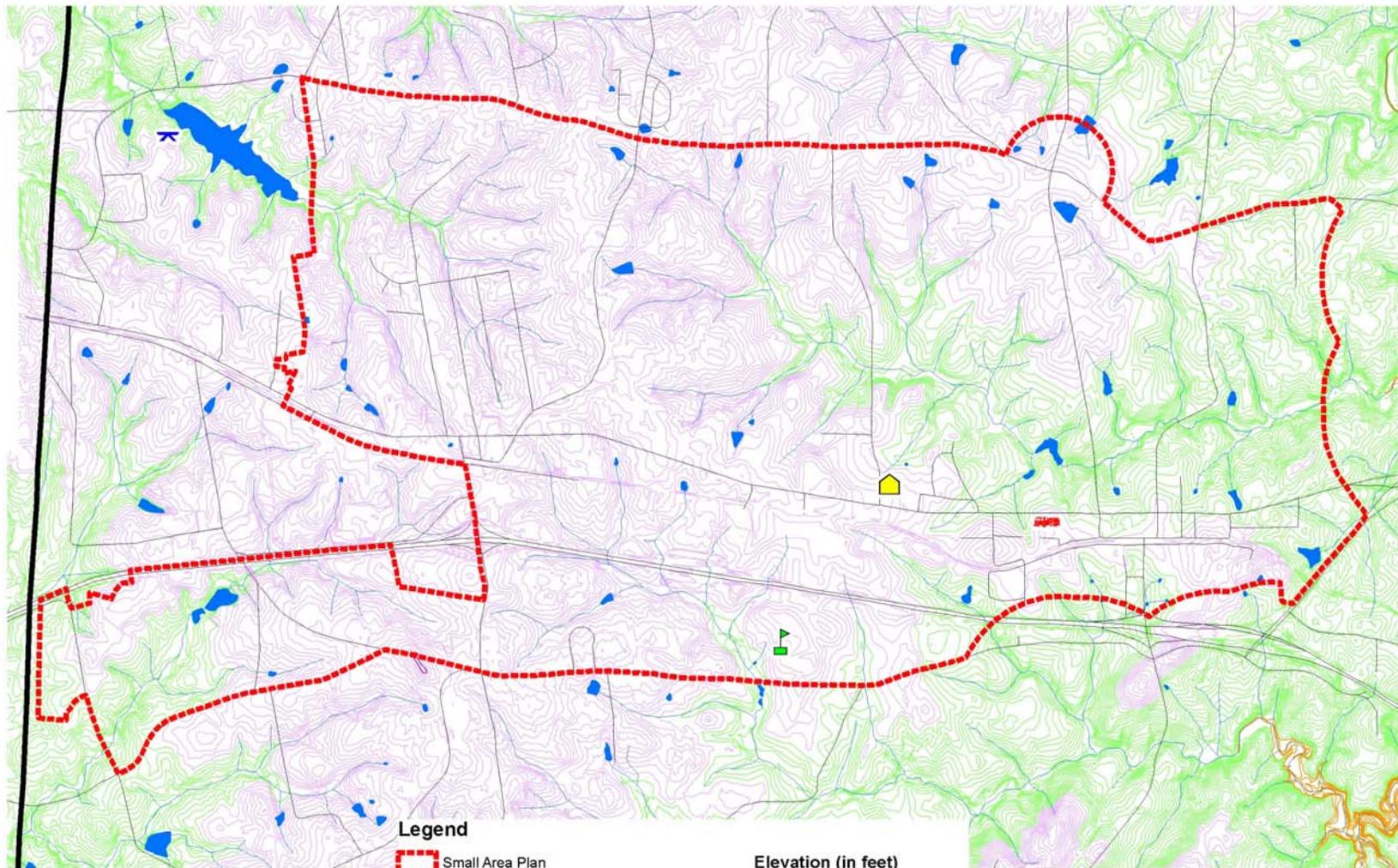
Source: Orange County Comprehensive Plan – Land Use Element

The data used to produce this map is from a USDA Soil Survey. Site-specific soil testing is necessary to confirm limitations.

The study area tends to have gradual changes in topography. Elevation within the planning area ranges from 551 feet above sea level to 750 feet above sea level. As is typically expected, steeper areas are found in the vicinity of water drainageways. However, in the planning area, even areas adjacent to most drainageways are not excessively steep. An exception is McGowan Creek in the eastern portion of the planning area where slopes are steeper.

Topography is an important factor in the location of gravity sewer lines where a goal is to minimize or even eliminate the number of necessary lift stations. Lift stations add substantially to the construction and on-going maintenance costs of the system. Map 4 depicts the Topography of the planning area.

# Topography



## Legend

-  Small Area Plan
-  Fire Station
-  Efland Cheeks Park and Community Center
-  Gravelly Hill Middle School
-  Lake Michael Park

- ### Elevation (in feet)
-  340 - 450 (None on this map)
  -  451 - 550
  -  551 - 650
  -  651 - 750
  -  751 - 850

Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman March 10, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983



Map 4

## **Hydrology**

The planning area contains parts of three different watersheds:

- Upper Eno (protected)
- Back Creek (protected)
- Haw Creek (unprotected)

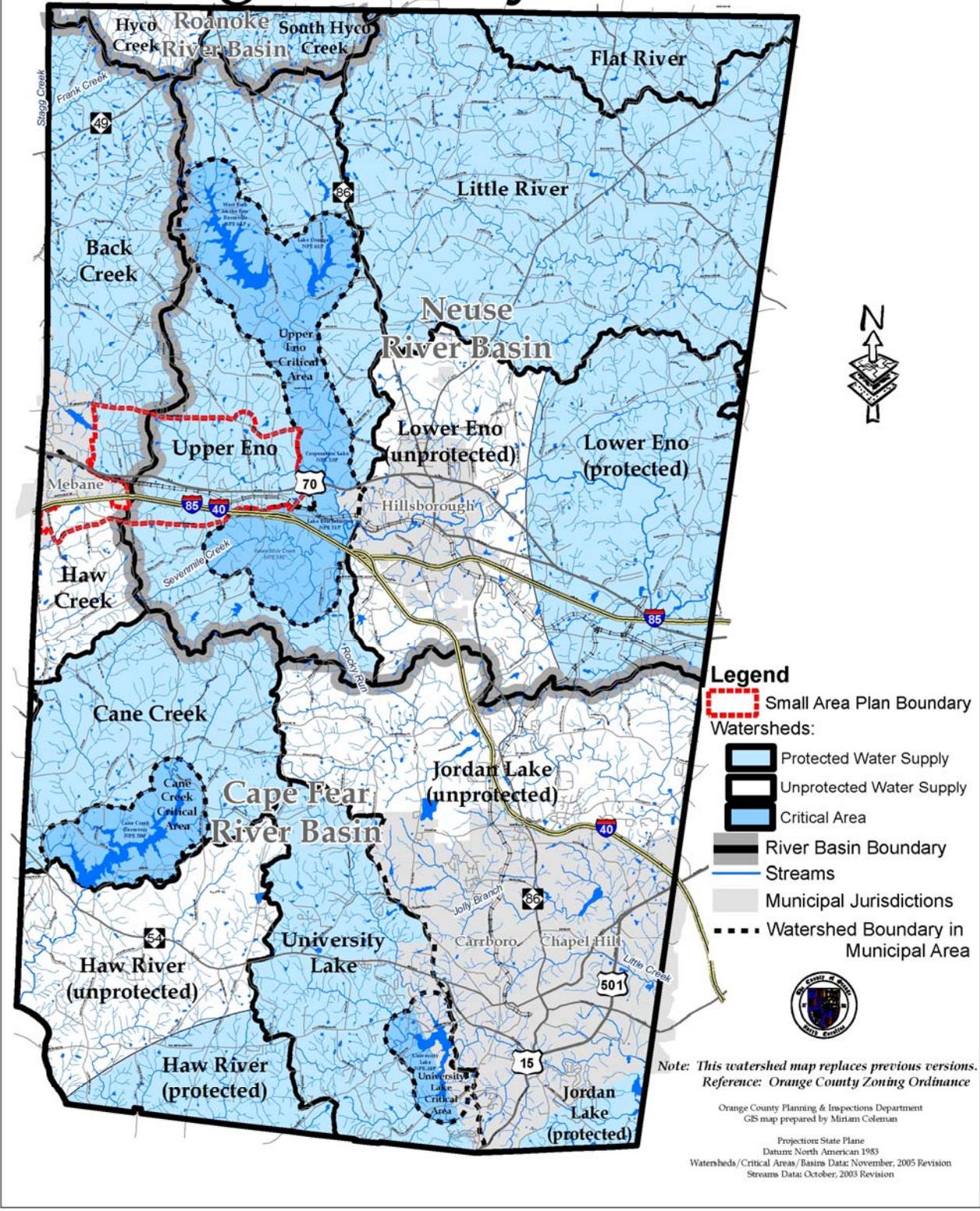
The protected and unprotected designations are related to State regulations associated with water-supply watersheds and measures implemented locally to protect water supply. Development within protected watersheds is subject to different restrictions than development in unprotected watersheds. The primary differences are in impervious surface limits, density restrictions, and septic system requirements.

The Upper Eno River has four (4) drinking water supply impoundments: Corporation Lake, Lake Ben Johnson, Lake Orange, and West Fork on the Eno. While none of these four impoundments are located within the planning area, Corporation Lake is a source of public drinking water for the Orange-Alamance Water System (OAWS). OAWS provides drinking water to a significant portion of the Study Area.

Lake Michael is located in the Back Creek (protected) watershed and is situated immediately adjacent to the northwest boundary of the planning area within the City of Mebane's city limits. A portion of the planning area drains into Lake Michael. With the completion of Graham-Mebane Lake in Alamance County as the City's primary water supply, Lake Michael now serves only as a secondary back-up supply for the City of Mebane.

The area immediately to the south of the southeastern boundary of the planning area is designated as a watershed "critical area" primarily because Seven-Mile Creek was one of several options proposed in 1989 to be considered for an additional water supply impoundment for the Town of Hillsborough. More recent discussions have indicated that creating an impoundment on Seven-Mile Creek may no longer be planned. The status of creating a reservoir on Seven-Mile Creek affects the planning area because the Critical Watershed line, which creates the border of the planning area boundary in the southeast portion of the planning area, could be revised and moved further south if a reservoir is not located on Seven-Mile Creek. The critical watershed line was based upon the projected pool level of the proposed reservoir. Seven Mile Creek would remain a Protected watershed even if a reservoir is not constructed because the creek is a water supply watershed; however, the critical watershed line would be re-drawn from the creek limits, rather than from the pool level of a reservoir. Therefore, the critical area would be less if a reservoir were not constructed.

# Orange County Watersheds

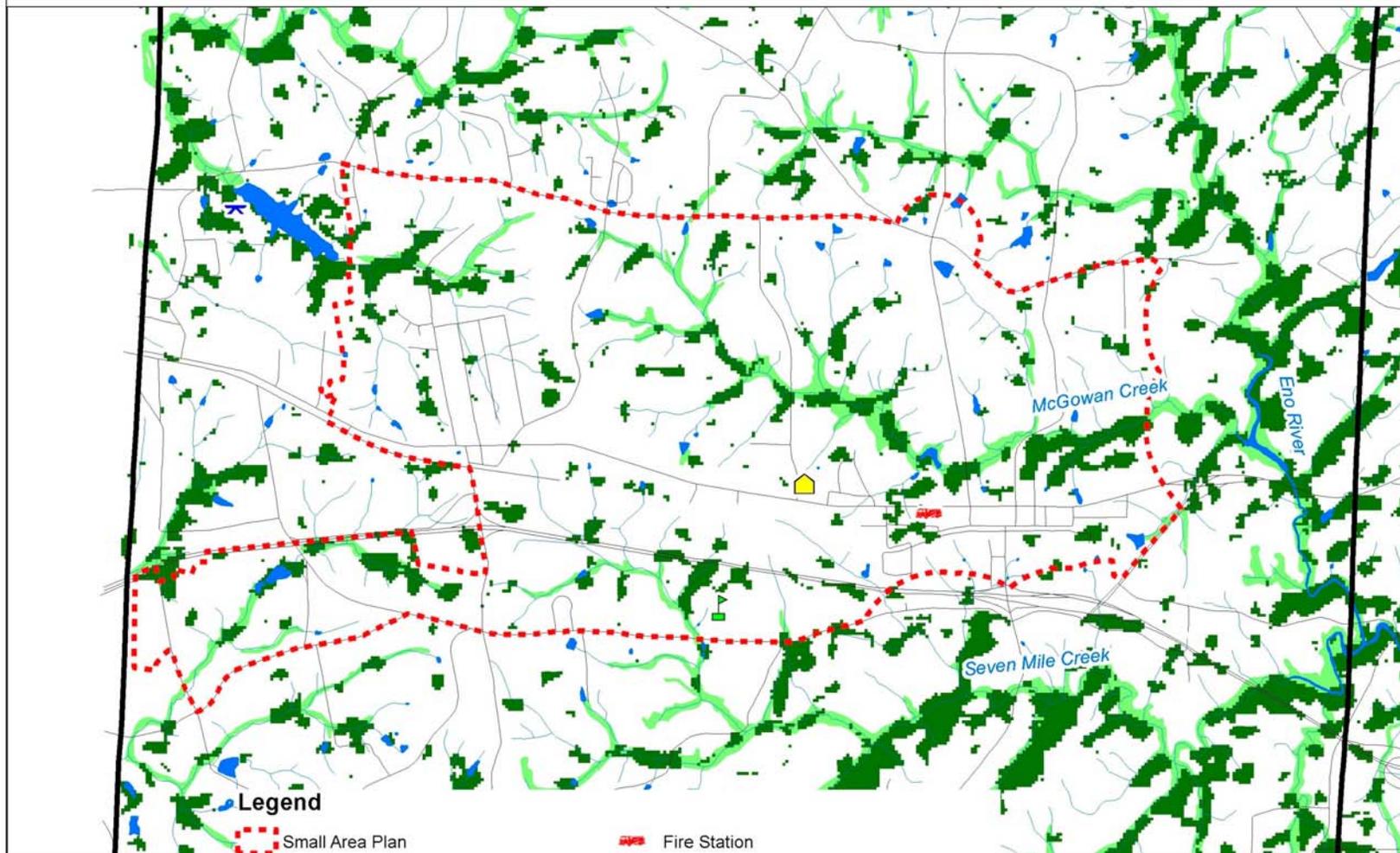


Source: Orange County Planning Department, GIS Division, using watershed planning data

Floodplains and alluvial soils are located within the planning area but their extent is not very significant and they are located predominantly along McGowan Creek. Alluvial soils are soil types located along stream corridors which have resulted from repeated deposition by flood waters over many years. They indicate areas of past and potential future flooding and therefore are areas that should remain in their natural state. Development regulations in Orange County prohibit development within floodplains.

Potential Wetlands have also been identified throughout the planning area by using the presence of Bottomland Hardwood Forest vegetation as an indicator for the presence of wetlands. Wetlands are generally unsuitable for development and normally require additional regulatory oversight and permitting by the U.S. Army Corps of Engineers. Map 6 depicts the location of Wetlands and Floodplains and Alluvial Soils within the planning area.

# Wetlands, Floodplains, and Alluvial Soils



**Legend**

- Small Area Plan
- Bottomland Hardwood Forest
- Floodplains (100 - year) and Alluvial Soils
- Fire Station
- Efland Cheeks Park and Community Center
- Gravelly Hill Middle School
- Lake Michael Park

NOTE: The presence of Bottomland Hardwood Forest vegetation was used as an indicator for the presence of wetlands. A site specific wetlands delineation would need to be completed to determine the actual presence of wetlands on a particular site.

Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman March 10, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983



Map 6

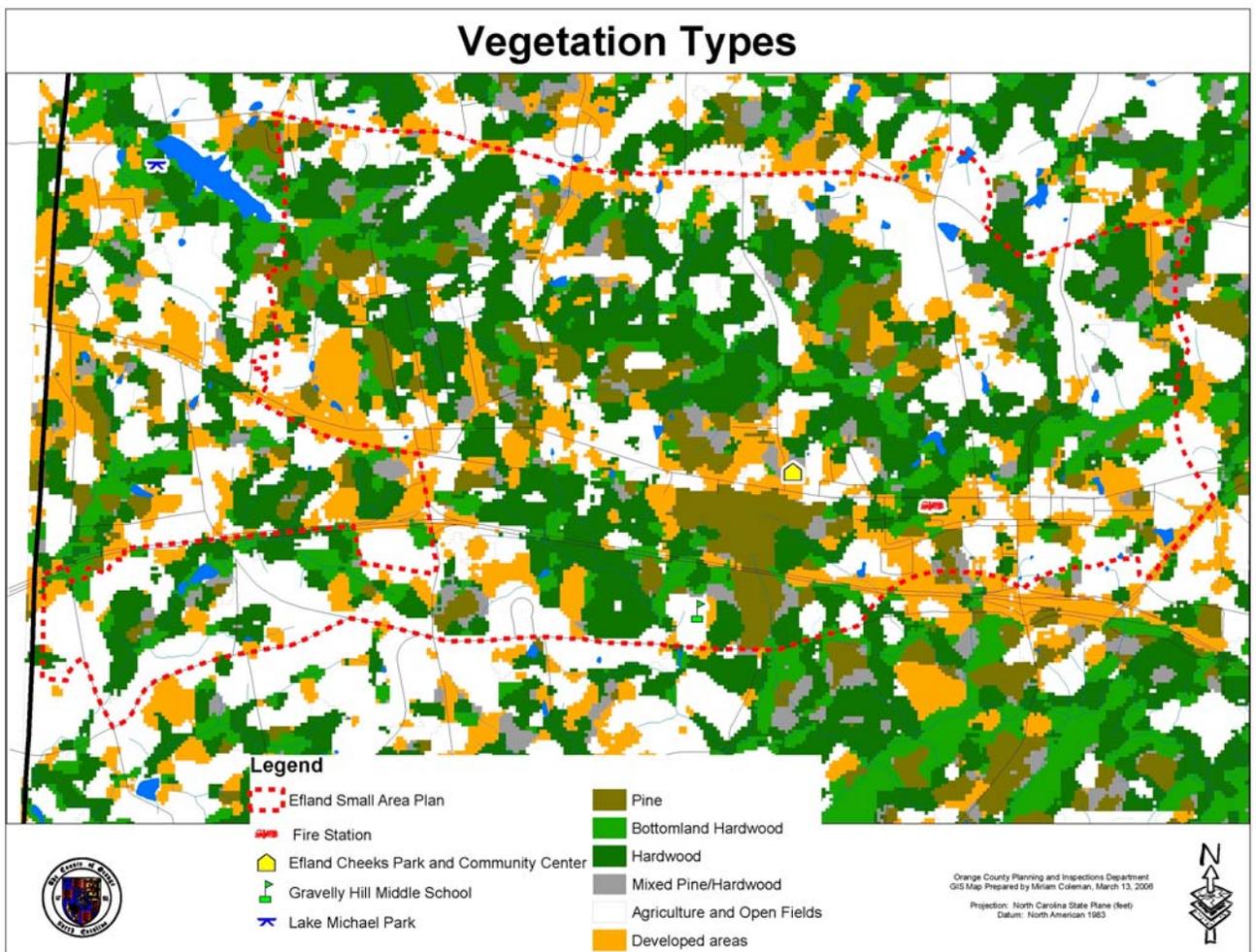
Source: Orange County Comprehensive Plan – Land Use Element

The data used to produce this map is from generalized sources. Site-specific delineation is necessary to confirm the presence of wetlands, floodplains, and alluvial soils.

## Vegetation

Natural vegetation cover in the planning area consists mostly of hardwood and pine forests. Bottomland Hardwood is also found adjacent to drainageways. Map 7 depicts the Vegetation types in the planning area using generalized data. The Land Use Element of the Comprehensive Plan includes a significance rating for Natural Areas/Wildlife Habitats. No significant sites are located within the planning area; however, the Upper Eno River, just east of the planning area, is a significant wildlife corridor and significant aquatic habitat and contains many rare aquatic animal species, according to the North Carolina Wildlife Resources Commission, Wildlife Management Division. (Map 6 shows the location of the Eno River relative to the planning area).

Map 7



Source: Orange County Comprehensive Plan – Land Use Element

## B. Cultural

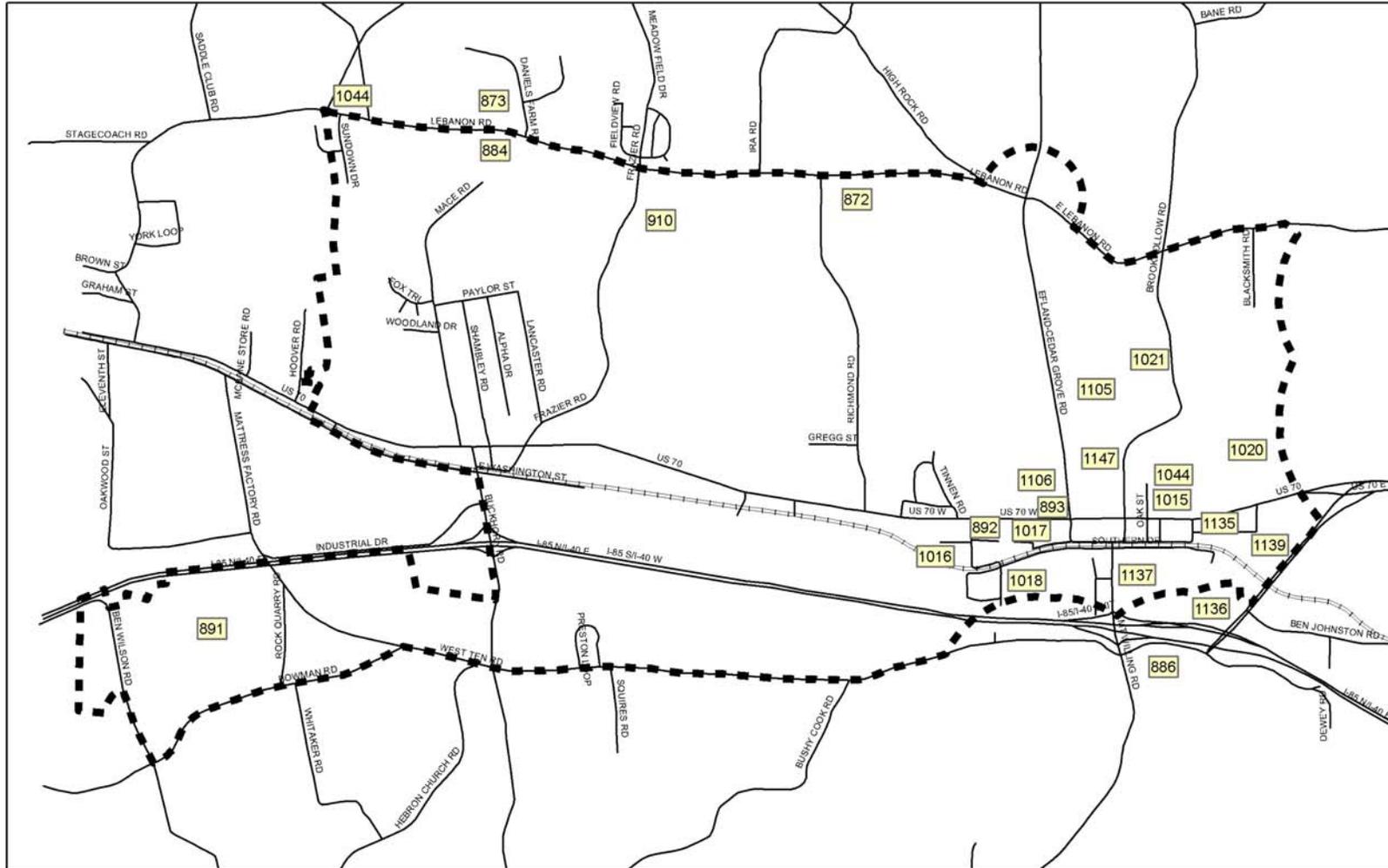
The planning area contains one (1) property – the S.C. Forrest house on Highway 70 – that is listed on the National Register of Historic Places Study List. Additionally, the planning area has 20 properties that have been identified in a 1991 survey of historic properties as potentially having historic significance. There are also three (3) historically significant properties located immediately adjacent to the planning area boundary. The following table lists the identified historic sites in the planning area.

<b>Site Number</b>	<b>Property Name or Type</b>
871	County Cemetery
872	White Cross AME Church
873	Lebanon Methodist Church (adjacent to planning area boundary)
884	Cheeks House
886	House on West Ten Rd. (adjacent to planning area boundary)
891	House on Rock Quarry Rd.
892	Gaines AME Church
893	Efland United Methodist Church
910	House on Frazier Rd.
1015	Thomas Riley House
1016	Pearl Efland House
1017	Charles Boggs House
1018	Office/Barber Shop (former gas station?)
1019	Brown House
1020	S.C. Forrest House II ( <b>National Register Study List</b> )
1021	S.C. Forrest House
1044	Log Building on Lebanon Rd. (adjacent to planning area boundary)
1105	House on Efland-Cedar Grove Rd.
1106	Efland Presbyterian Church
1135	Evelyn Cecil House
1136	Thompson House
1137	Efland House
1139	Lloyd Dairy Farm
1147	House on Brookhollow Rd.

Map 8 shows the general location of the historic resources.

According to existing available studies, no areas of high or medium potential of archaeological remains are located in the planning area. However, the Upper Eno River corridor, immediately east of the planning area, has been identified as having a “medium” potential for archaeological remains.

# Efland Small Area Plan Historic Sites



### Legend

 Small Area Plan Boundary

Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman March 13, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983



Map 8

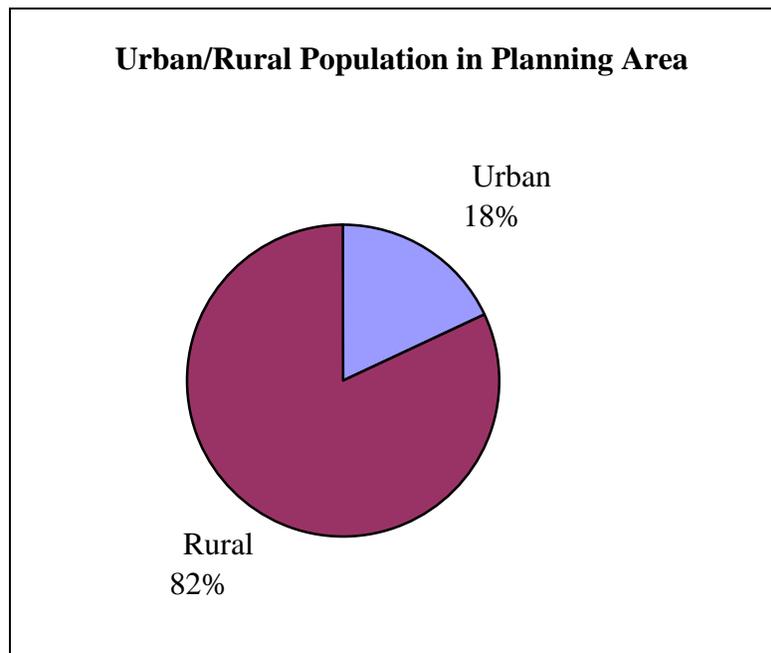
### C. Demographics

The Year 2000 U.S. Census figures show that 2,650 people live in the planning area. Because Census Blocks were significantly different in Cheeks Township in previous censuses, a direct comparison of only the planning area to previous censuses is not possible. (Census Blocks in 1990 and earlier censuses were geographically much larger than Census Blocks in 2000 and stretched far beyond the planning area boundaries).

However, Cheeks Township data is available and comparisons of the area through time can be made. The charts that follow depict various demographic information for the planning area, if available, or for Cheeks Township if planning area data is not available.

<b>Total Population in Planning Area</b>	<b>2650</b>
<i>Urban</i>	<i>475</i>
<i>Rural</i>	<i>2175</i>

Source: U.S. Census Bureau, Census 2000



Source of data: U.S. Census Bureau, Census 2000

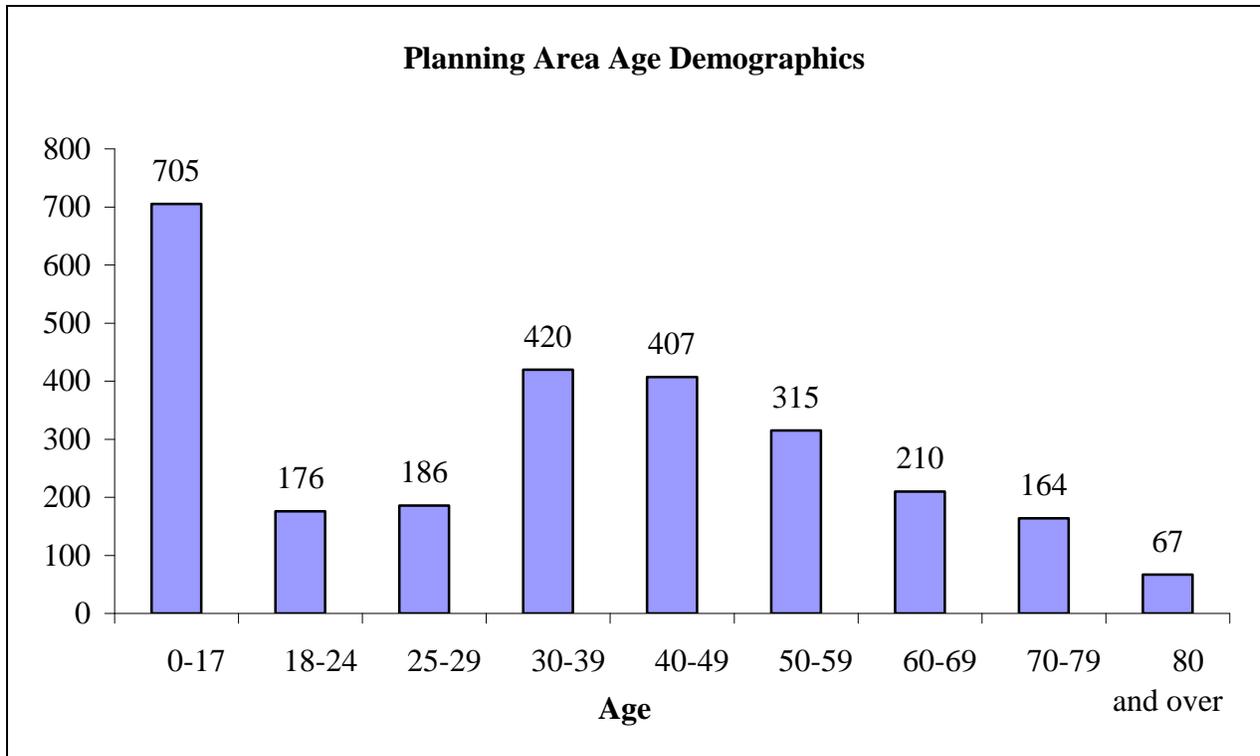
<b>Planning Area Racial Demographics</b>	
<b>Not Hispanic or Latino</b>	2579
<i>White</i>	1542
<i>Black (African American)</i>	995
<i>American Indian or Alaskan Native</i>	2
<i>Asian</i>	4
<i>Some other Race</i>	4
<i>Two or more Races</i>	29
<b>Hispanic or Latino</b>	71
<i>White</i>	41
<i>Black (African American)</i>	6
<i>Some other Race</i>	24

Source: U.S. Census Bureau, Census 2000

Persons of Hispanic or Latino origin comprise approximately 3% of the planning area population. Approximately 60% of the population in the planning area is White and 38% of the population is Black (African American). Other racial groups account for approximately 2% of the planning area's racial demographics.

<b>Planning Area Age Demographics</b>	
<b>Total</b>	2650
<i>Age 0-17</i>	705
<i>Age 18-24</i>	176
<i>Age 25-29</i>	186
<i>Age 30-39</i>	420
<i>Age 40-49</i>	407
<i>Age 50-59</i>	315
<i>Age 60-69</i>	210
<i>Age 70-79</i>	164
<i>Age 80 and over</i>	67

Source: U.S. Census Bureau, Census 2000



Source: U.S. Census Bureau, Census 2000

Planning Area Number of Households	
<b>Households</b>	<b>1004</b>

Source: U.S. Census Bureau, Census 2000

The average household size in the planning area is 2.64 persons per household.

### Cheeks Township Population and Population Projections (Simple Linear Model) (Unincorporated portion only)

Year	1980	1990	2000	2010	2020	2030	2040
<b>Population</b>	4,440	4,937	6,389	7,363	8,337	9,311	10,285
<b>Increase</b>	N/A	+497	+1,452	+974	+974	+974	+974
<b>% Increase</b>	N/A	11.2%	29.4%	15.2%	13.2%	11.7%	10.5%

Data Source: U.S. Census Bureau and Orange County Planning Department

Cheeks Township has experienced fairly significant population growth since 1980. The Township's population grew 11.2% from 1980 to 1990 and 29.4% from 1990 to 2000. Using a simple linear projection model, Orange County Planning Staff projects that Cheeks Township will continue to grow and will have a population of 10,285 people in 2040.

## D. Infrastructure

### Transportation

#### Roads

As part of county-wide transportation planning, roads in the planning area have been classified using a road classification system refined from the NC Department of Transportation's classification system. Classification categories and general descriptions are as follows:

<b>Category</b>	<b>General Description</b>
Interstate	Major traffic-carrying facilities that are part of the Federal Interstate Highway system; trip length characteristics are predominantly long-distance intra- and inter-state. Right-of-way width is a minimum of 230-feet and can increase to over 300-feet, depending on the number of lanes.
Arterial	The primary traffic-carrying facilities in the county; trip length and travel density characteristics of substantial inter-county travel or of serving urban-type development; typically would include rural freeways. Right-of-way width is typically 70- to 110-feet, depending on the number of lanes and whether bicycle lanes are provided.
Collector	Facilities that generally service intra-county travel. Provides the network connection between local roads and the arterial system. Shorter lengths, lower volumes, and more land access than the arterial system. Right-of-way width is typically 60- to 100-feet, depending on the number of lanes and whether bicycle lanes are provided.
Local	Primarily serves as access to adjacent land use. Any traffic is local in nature, therefore volumes and length are relatively low. Local roads comprise all remaining public roads not classified as a higher function. Right-of-way width is typically 60- to 80-feet.

Map 9 depicts the road classifications in the planning area.

# Efland Small Area Plan - Road Classifications



**Legend**

-  Small Area Plan Boundary
-  Interstate
-  Arterial
-  Collector
-  Local
-  Fire Station
-  Efland Cheeks Park and Community Center
-  Gravelly Hill Middle School
-  Lake Michael Park



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman March 13, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983

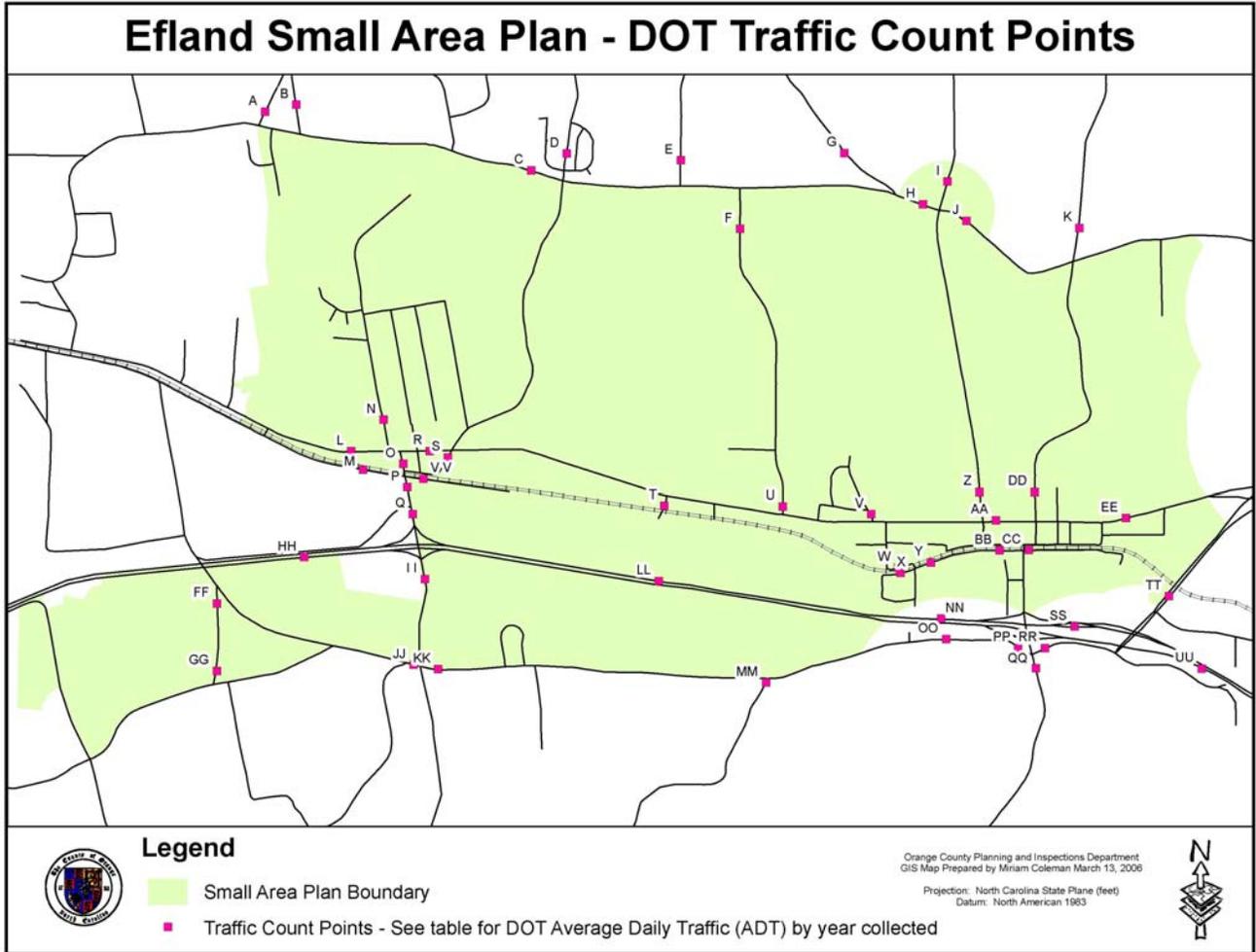


Map 9

Source of Data: Orange County Planning Department

Map 10 depicts the points at which the North Carolina Department of Transportation (DOT) collects traffic count data. The Table that begins on page 26 shows the Average Daily Traffic counts collected by the (DOT) from 1999 to 2003. DOT does not collect traffic count data at every collection site every year. Years for which no data was collected at a specific point do not have a value in the chart showing the count.

Map 10



Source of Data: North Carolina Department of Transportation

Average Daily Traffic relates directly to a concept called “Level of Service” (LOS). LOS calculations attempt to describe the traffic conditions of a given roadway as it relates to the carrying capacity of the road. The following are descriptions of LOS:

<b>Level of Service</b>	<b>Description of Operating Condition</b>
A	Free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and maneuver within the traffic stream is extremely high.
B	Stable flow but the presence of other users in the traffic stream begins to be noticed. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream.
C	Stable flow but marks the beginning of the range in flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. Selection of speed affected and maneuvering within the traffic stream requires substantial vigilance on the part of the user.
D	High-density but stable flow. Speed and freedom to maneuver are severely restricted. Small increases in traffic flow will generally cause operational problems at this level.
E	Operating conditions at or near the capacity level. Speeds are reduced to a low, but relatively uniform level. Freedom to maneuver within the traffic stream is extremely difficult.
F	Forced or breakdown flow. In the extreme, speed can be reduced to zero.

*Source: Highway Capacity Manual, Transportation Research Board, 1985.*

For reference, many local governments adopt policies requiring that new development not decrease LOS below level C or D. Whether Level C or D is chosen depends upon the individual policy decision of the local government and/or the jurisdiction having maintenance control.

Determining the LOS for a given roadway involves complex calculations taking into account factors such as roadway grades and lane width. However, generalized tables have been developed to serve as a guide in determining LOS using Average Daily Traffic (ADT) counts. The following table depicts the information relevant to the planning area:

<b>Average Daily Traffic and Generalized Level of Service</b>					
Total Number of Lanes	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Freeways in Urbanizing Areas</b>					
4	23,500	38,700	52,500	62,200	69,100
6	36,400	59,800	81,100	96,000	106,700
8	49,100	80,900	109,600	129,800	144,400
<b>State Two-Way Arterials</b> (Less than 2 signalized intersections per mile)					
2, Undivided	*	4,000	13,100	15,500	16,300
<b>State Two-Way Arterials</b> (2 to 4.5 signalized intersections per mile)					
2, Undivided	*	*	10,500	14,500	15,300
<b>Major County Roadways</b>					
2, Undivided	*	*	7,000	13,600	14,600
<b>Signalized Intersections on Major County Roadways</b>					
2, Undivided	*	*	4,400	9,400	12,000

\* - Not Determined

Source: Florida Department of Transportation, Systems Planning Office

The Orange County/North Carolina DOT road classifications that correspond to the categories shown above are as follows:

Interstate: Freeways in Urbanizing Areas  
 Arterial: State Two-Way Arterials  
 Collector: Major County Roadways  
 Local: (not addressed)

**Average Daily Traffic Counts, by Year  
1999 – 2004**

(See Map 10 for ID Locations)

<b>ID</b>	<b>Location</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
A	Mill Creek Rd., just north of Lebanon Rd.*	2,100		1,700	1,800		1,600
B	Doe Run Rd., just north of Lebanon Rd.*		150				
C	Lebanon Rd., just west of Frazier Rd.	1,900		1,800			
D	Frazier Rd., just north of Fieldview Rd.*		200				
E	Ira Rd., just north of Lebanon Rd.*		400				
F	Richmond Rd., south of Lebanon Rd.		220				
G	High Rock Rd., north of Lebanon Rd.*		900				
H	Lebanon Rd., between High Rock Rd. & Efland-Cedar Grove Rd.	2,000		2,300			2,800
I	Efland-Cedar Grove Rd., north of Lebanon Rd.	2,900		3,100			
J	Lebanon Rd., just east of Efland-Cedar Grove Rd.		160				
K	Brookhollow Rd., north of Lebanon Rd.*		340				
L	Hwy 70, west of Mace Rd.			6,300			
M	Washington St., west of Buckhorn Rd.*	5,200		1,400			
N	Mace Rd., north of Hwy 70	990	970	990	950		870
O	Buckhorn Rd., between Hwy 70 & Railroad tracks			5,600			
P	Buckhorn Rd., just south of Railroad tracks	5,000				6,800	
Q	Buckhorn Rd., between Industrial Dr. & Interstate 85/40			6,300	6,500		6,700
R	Hwy 70, between Shambley Rd. & Frazier Rd.	6,000	5,800	5,500	5,200	5,600	5,100
S	Frazier Rd., just south of Hwy 70					760	
T	Redman Crossing Rd., just south of Hwy 70	50		210			320
U	Richmond Rd., just north of Hwy 70		660			940	
V	Tinnen Rd., between Hwy 70 & Fuller Rd.		400				
W	Gaines Chapel Rd., north of Railroad			340		290	
X	Southern Dr., west of Gaines Chapel Rd.		140				
Y	Southern Dr., east of Gaines Chapel Rd.	330					
Z	Efland-Cedar Grove Rd., north of Hwy 70	4,200		4,800	4,800		5,400
AA	Hwy 70, between Efland-Cedar Grove Rd. & Brookhollow	4,600	4,400	4,100	4,200	4,500	4,500
BB	Southern Dr., west of Mt. Willing Rd.	450		440			450
CC	Mt. Willing Rd., between Railroad tracks & Forrest Ave.	5,300		6,300		6,500	
DD	Brookhollow Rd., north of Hwy 70	1,000		1,100	1,200		1,200
EE	Hwy 70, between Forrest Ave. & Gym Rd.	4,200	4,100	3,700	3,700	4,100	4,100
FF	Rock Quarry Rd., just south of West Ten Rd.		380				
GG	Rock Quarry Rd., just north of Bowman Rd.		390				
HH	Interstate 85/40 between Buckhorn Rd. interchange & Mattress Factory Rd. overpass	83,000	81,000	81,000	83,000	77,000	
II	Buckhorn Rd., south of Interstate 85/40	2,300		2,400		2,500	
JJ	West Ten Rd., just west of Buckhorn Rd.			1,200			

<b>ID</b>	<b>Location</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
KK	West Ten Rd., just east of Buckhorn Rd.	860		860	790		880
LL	Interstate 85/40 between Buckhorn Rd. & Efland interchanges		82,000		84,000	77,000	83,000
MM	Bushy Cook Rd., just south of West Ten Rd.*		310		240		230
NN	Interstate 85/40, west of Mt. Willing Rd.	85,000		81,000			
OO	West Ten Rd., west of Mt. Willing Rd.*			810		830	
PP	West Ten Rd., west of Mt. Willing Rd.*	820					
QQ	Mt. Willing Rd., south of West Ten Rd.*	1,500		1,600	1,800		1,800
RR	West Ten Rd., west of Mt. Willing Rd.*		200				
SS	Interstate 85/40, between Mt. Willing Rd. & 85/70 Connector	88,000	84,000	86,000	88,000	82,000	84,000
TT	85/70 Connector between Ben Johnston Rd. & Railroad overpass			3,200	3,300	3,600	3,400
UU	Interstate 85/40 east of 85/70 Connector*	88,000				79,000	82,000
VV	Frazier Rd., south of Hwy 70		230				

\* - Not within Planning Area but within very close proximity to Planning Area.

Note: Cells with no data indicates that counts were not performed at the given location in the given year.

Source of Data: North Carolina Department of Transportation

Comparison of Average Daily Traffic (ADT) Counts and Generalized Level of Service shows that all roadways within the planning area are operating at Level of Service C or better. However, ADT has been increasing at most count points over the period analyzed (1999 through 2004). Additionally, Peak Hour counts are not available but planning area residents have reported that “rush hour” traffic volumes are particularly heavy in the stretch of Mt. Willing Road/Forrest Avenue/Efland-Cedar Grove Road north of Interstate 85/40.

## **Rail**

Efland was “born and grew up” around the railroad and was an important stop for tobacco and other agricultural products from the late 1800’s to the mid 1900’s. Although rail traffic has decreased considerably in North Carolina, the Southern Railway right-of-way traverses the south-central portion of the planning area and is still used for general rail transport and intrastate commuter service provided by Amtrak.

The Triangle Transit Authority (TTA) has completed final plans for Phase I of its regional commuter rail service in the Triangle. TTA is presently attempting to procure Federal funding to implement Phase I service that will link Raleigh, Cary and Durham. Phase I service, originally planned to start by the end of 2007, has been set back because of changes in federal cost-effectiveness guidelines. TTA has been given a September 30, 2006, deadline to meet current cost-effectiveness guidelines, or be dropped from further consideration for funding by the Federal Transit Administration. Future plans to link Durham and Chapel Hill in Phase II of the Regional Transit Plan are currently unfunded.

TTA’s “Recommendations for a Regional Transit Plan” long-term recommendations include extension of the regional rail service to smaller municipalities and outlying neighborhoods, including Hillsborough and the Efland area.

## **Pedestrian/Bicycle Facilities**

The planning area lacks pedestrian facilities. Sidewalks are not provided adjacent to any of the major thoroughfares nor are they located in any subdivisions.

The NCDOT recently widened US 70 to include 2-foot paved shoulders on both sides of the highway. The extra width, while not providing a full bicycle lane, provides extra road width and enhances safety for bicycling. Many other thoroughfares require additional right-of-way in order to be widened to include bicycle lanes.

## **Bus, Car/Van Pool, and Park ‘n Ride Lots**

General bus services do not serve the Efland area at this time. However, Orange Public Transit (OPT) provides transit service for area senior citizens to the Efland-Cheeks Community Center for the Monday through Friday senior lunch program. In addition, seniors and low income residents can arrange for transportation to and from medical appointments through OPT. Orange and Alamance Counties are currently discussing the possibility of partnering to add east-west OPT service into Alamance County. If implemented, this new service would be available to the general public.

Triangle Transit Authority (TTA) operates a ridesharing matching service for commuters who are interested in carpooling. In addition, TTA operates vanpools that are made up of at

least seven commuters who live and work near each other and who share approximately the same work hours. One leg of the vanpool's trip must begin or end in Wake, Durham, or Orange County. TTA provides the van, pays for gas and insurance; and arranges, oversees, and pays for all maintenance. Riders pay a monthly fare based on the average daily round-trip mileage. At this time, no vanpools begin or end in Efland although two different vanpools pass by Efland from Greensboro to Raleigh and RTP. One of the vanpools picks riders up at the Petro Station on Buckhorn Road and one picks up riders at the B.P. Station across from the Petro Station. Commuters who are interested in joining a vanpool may contact TTA to inquire about joining an existing vanpool or starting a new vanpool.

At the present time, there are no official park 'n ride lots located in the Efland area.

## **Utilities**

### **Communications**

#### **Telephone**

Land-line telephone service in the planning area is provided by either Mebtel or Sprint. Mebtel serves the western portion of the planning area and Sprint serves the eastern portion. The "boundary line" between the two service providers is generally in the vicinity of Richmond Road (the line tends to "zig-zag").

Cellular phone service in Orange County is provided by nine (9) providers. Service providers with antennas in and in close proximity to the planning area include: Nextel, Alltel, Sprint, Cingular, Verizon, and BellSouth. Verizon, Nextel, and Alltel operate at 800 Mhz; the other service providers operate at 1.8 Ghz. The 800 Mhz providers are able to provide more extensive coverage in rural areas because the lower wavelength frequency translates into fewer towers needed for coverage.

The planning area has fairly good wireless phone coverage. Outlying areas still have a number of zones where reception can be weak. At least one additional tower/antenna facility would be needed to provide coverage in the "dead zones."

#### **Internet Service**

Mebtel recently installed new optical cable along U.S. 70 from Mebane to slightly west of Ashwick subdivision. Mebtel is in the process of ensuring DSL service is available in addition to dial-up service throughout their service area in the planning area.

Sprint provides dial-up service in its service area. At this time, Sprint has no plans to provide DSL service in the portion of the planning area it serves.

Time Warner Cable (TWC) provides Road Runner broadband service along the Highway 70 corridor but services do not extend past McGowan Creek. TWC and Orange County are currently working on an agreement for service extensions to areas that contain at least 18 houses per street mile. Some portions of the planning area are expected to meet the 18 houses per street mile minimum threshold and would receive access to the TWC cable network.

Verizon Wireless is in the process of offering wireless broadband service on the tower located on Southern Drive. Coverage will extend throughout the southeast portion of the planning area once the service comes on-line.

### **Natural Gas and Electric Power**

Natural gas service lines run along U.S. 70. Generally, the service lines extend approximately ½ mile north of U.S. 70 and approximately 1 mile south of U.S. 70. Areas that are not served by natural gas rely on individual propane tanks for any natural gas needs.

Electric service in the planning area is provided either by Duke Power or Piedmont Electrical Membership Cooperative. Neither electrical provider has a map that shows their exact service areas. Generally speaking, Duke Power serves the more developed areas and Piedmont Electrical Membership Cooperative serves the predominantly rural areas. There is service overlap in transitional areas.

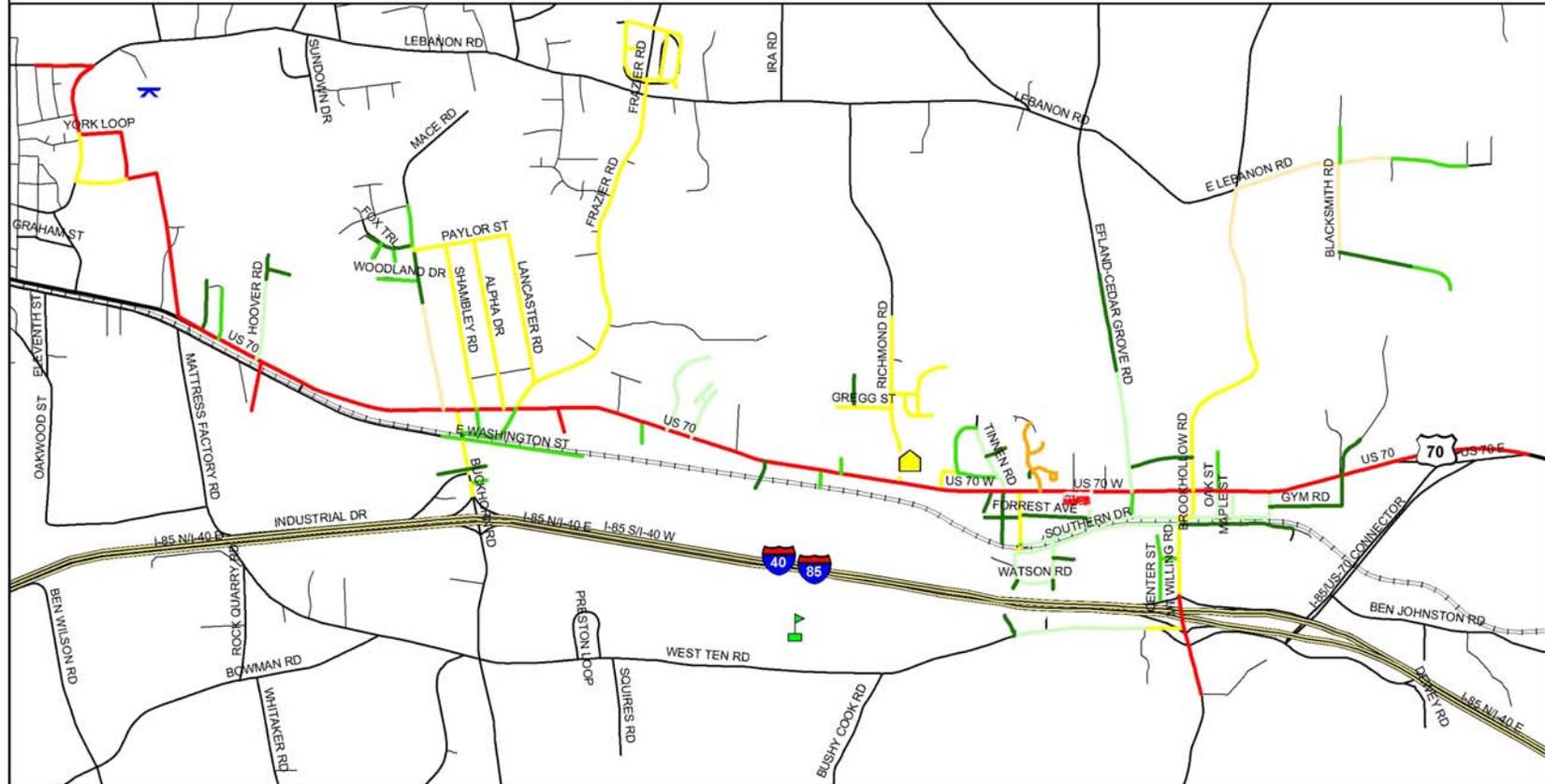
### **Water Service**

Water service in the planning area is provided by the Orange-Alamance Water System (OAWS), a non-profit membership corporation organized in 1965. OAWS lines extend through much of the planning area and those areas not serviced rely on individual wells for water. (See Map 11 for the location of existing water lines). In some parts of its service area, OAWS water pressure is not sufficient for fire suppression needs due to small diameter pipe sizes. In partnership with Orange County, OAWS may eventually plan to conduct an engineering study of the water system. Funding for the study may be discussed in future Orange County and OAWS budgets.

Within Orange County, OAWS' raw water comes from Corporation Lake, an impoundment on the Eno River just north of U.S. 70. Water withdrawals on the Eno River are subject to the Eno River Capacity Use Agreement which regulates how much water the Town of Hillsborough, Orange-Alamance Water System, and Piedmont Minerals can withdraw from the Eno River at various storage capacities (i.e., during times of drought and diminishing water storage, less water may be withdrawn by each of the parties). Corporation Lake's safe yield was 0.8 MGD. Major sedimentation in the lake has limited capacity and yield. Water treatment is provided by a 1.0 MGD water filtration facility at Corporation Lake. In addition, within neighboring Alamance County OAWS has a pumping station in Haw River and a water purchase agreement with the City of Burlington. OAWS also has agreements with the Town of Hillsborough and the City of Mebane to provide back-up water supplies if necessary. Large capacity wells are available as well.

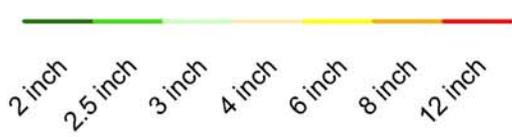
In the summer of 2004, Orange County entered into a Utility Service Agreement with the City of Mebane to provide water and sanitary sewer service to much of the Economic Development District located between West Ten Road and Interstate 40/85. The City of Mebane will serve the areas designated as 1a, 1b, 2a, and 3 on Map 12. Service lines to provide service to the new Orange County Middle School that is under construction on West Ten Road have been engineered and the project is currently in permit review. Construction is expected to start in early 2006 and be complete in the summer of 2006.

# Efland Area Water Lines



## Legend

### Pipe Size



- Fire Station
- Efland Cheeks Park and Community Center
- Gravelly Hill Middle School
- Lake Michael Park



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman, March 13, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983

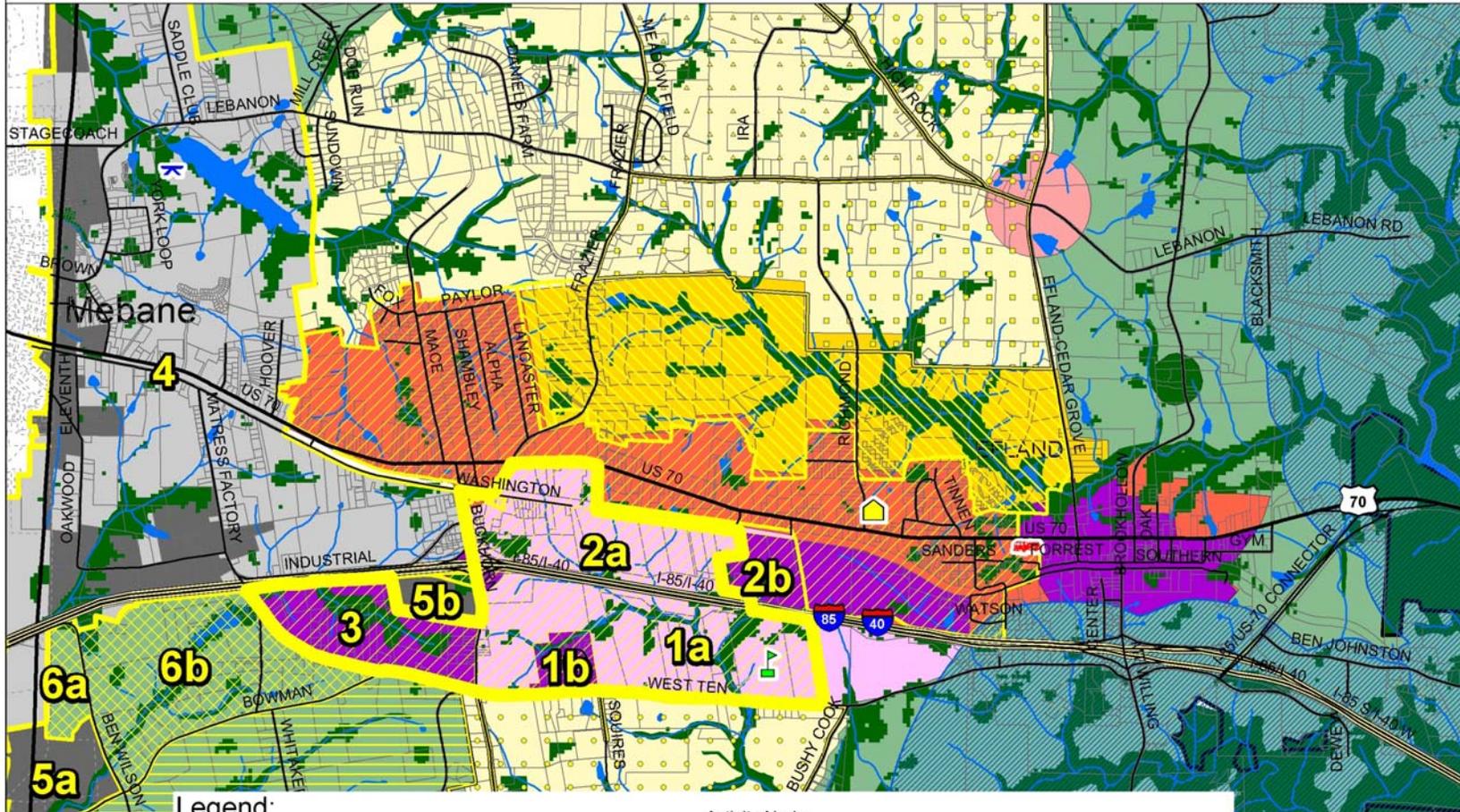
Map 11

Source of Data: Orange-Alamance Water System

# City of Mebane Utility Service Agreement Map

(City of Mebane will serve area 1a, 1b, 2a and 3)

Original Adoption Date: 9-8-01  
Amended through: 5-29-08



### Legend:

- 10 year transition
- 20 year transition
- Rural Residential
- Rural Buffer
- Agricultural Residential
- Resource Protection Areas

- Municipal Jurisdictions
- Public Interest Areas
- Water Supply Watersheds
- Watershed Critical Areas
- OC/CH/CA Joint Planning Area

### Activity Nodes

- Rural Community Node
- Rural Neighborhood Node
- Rural Industrial Node
- Commercial Node
- Commercial/Industrial Node
- Economic Development

- Fire Station
- Efland Cheeks Park and Community Center
- Gravelly Hill Middle School
- Lake Michael Park



Base Map Source: Land Use Element of the Orange County Comprehensive Plan



Orange County Planning & Inspections Department  
GIS map prepared by Miriam Coleman  
3/13/08  
Projection: State Plane  
Datum: North American 1983

Map 12

## **Sanitary Sewer Service**

Sanitary sewer service is available in a small portion of the planning area. In 1984, the John R. McAdams Company completed a "Cheeks Township Water and Sewer Extension Feasibility Report" which identified possible water and sewer service areas (see Map 13). However, the feasibility report was not adopted by the Orange County Board of Commissioners. Instead, the decision was made to provide sewer service to only a portion of the area identified in the Feasibility Report. The first phase of the Efland Sewer Project was completed in 1988 and provided sewer service to the area identified as "Phase I West" on Map 14.

In 1997, a \$1.2 million bond was passed to extend sewer service in Phase I and Phase II areas of the Efland sewer system. Several details needed to be resolved prior to moving forward on the expansion and the expansion project is currently in the final design engineering stages. Sewer service is expected to be provided in "Phase I East" and "Phase II." The extent of service may be contingent upon construction cost estimates which could mean that the entire area of Phase I East and Phase II may not be served at this time. Construction of the project is expected to begin in late Spring, 2006.

The sewer infrastructure is owned by Orange County and the county has an agreement with the Town of Hillsborough to accept up to 360,000 gallons per day (gpd) of effluent for treatment by the Town's treatment facility. The existing capacity of the sewer system is limited predominantly by the characteristics of the existing pumps. The maximum capacity of the pumps is approximately 750,000 gpd. However, when taking into consideration a peaking factor and a general desire to have the pumps working approximately 8 hours per day, the functional capacity is approximately 100,000 gpd. Currently, the sewer system handles roughly 35,000 gpd of effluent, resulting in 65,000 gpd of unused capacity. The Phase I East and Phase II expansion, anticipated to be accomplished in the near future, is expected to use 35,000 gpd of the existing unused capacity, leaving 30,000 gpd of unused capacity. Increasing capacity could be accomplished by a change in the pump capacity.

In the summer of 2004, Orange County entered into a Utility Service Agreement with the City of Mebane to provide water and sanitary sewer service to much of the Buckhorn Economic Development District located between West Ten Road and Interstate 40/85. The City of Mebane will serve the areas designated as 1a, 1b, 2a, and 3 on Map 12. Service lines to provide service to the new Orange County Middle School that is under construction on West Ten Road have been engineered and the project is currently in permit review. Construction is expected to start in early 2006 and be complete in the summer of 2006.

**Legend**

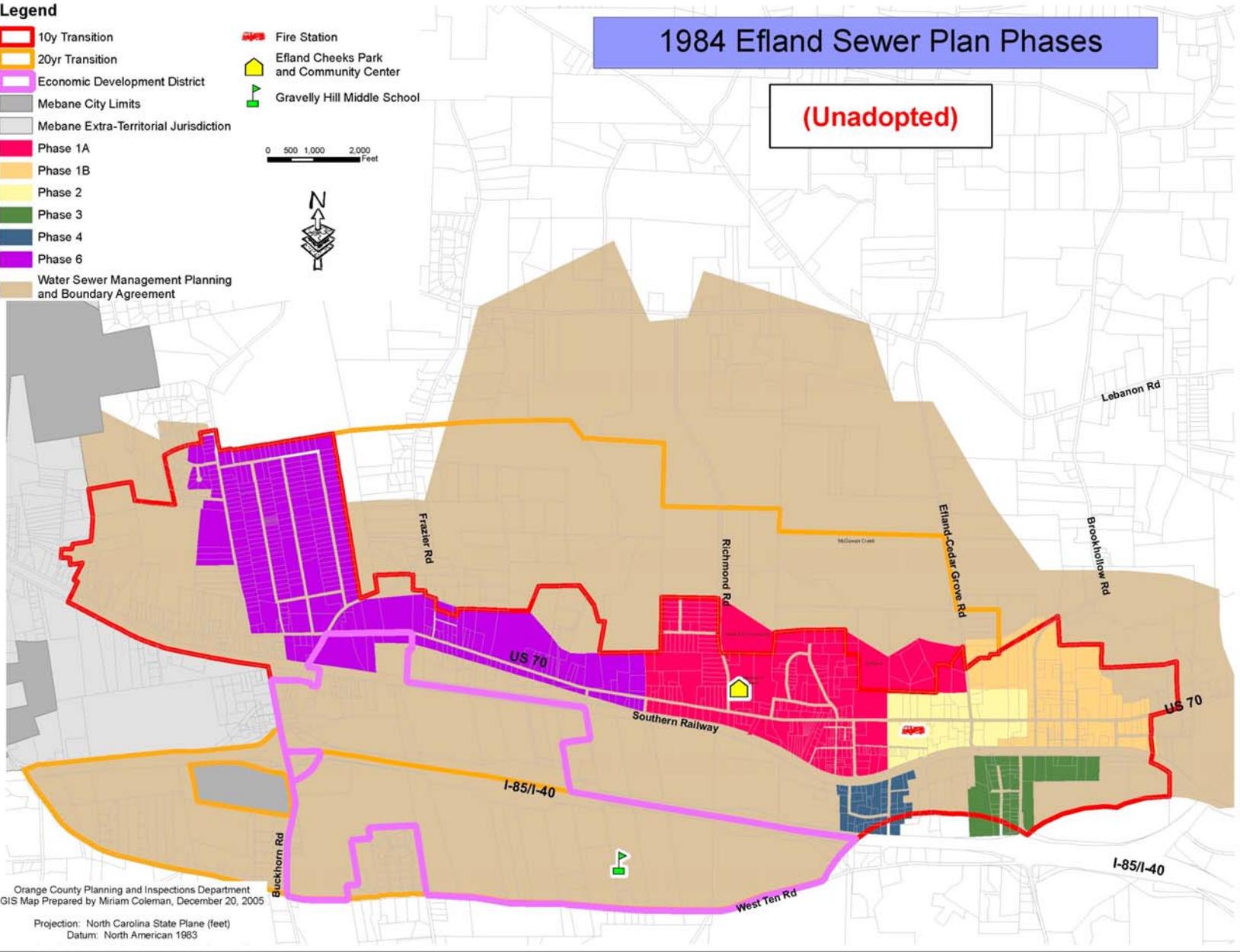
- 10yr Transition
  - 20yr Transition
  - Economic Development District
  - Mebane City Limits
  - Mebane Extra-Territorial Jurisdiction
  - Phase 1A
  - Phase 1B
  - Phase 2
  - Phase 3
  - Phase 4
  - Phase 6
  - Water Sewer Management Planning and Boundary Agreement
- 🚒 Fire Station
  - 🏠 Efland Cheeks Park and Community Center
  - 🏫 Gravelly Hill Middle School

0 500 1,000 2,000 Feet



# 1984 Efland Sewer Plan Phases

(Unadopted)



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman, December 20, 2005  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983

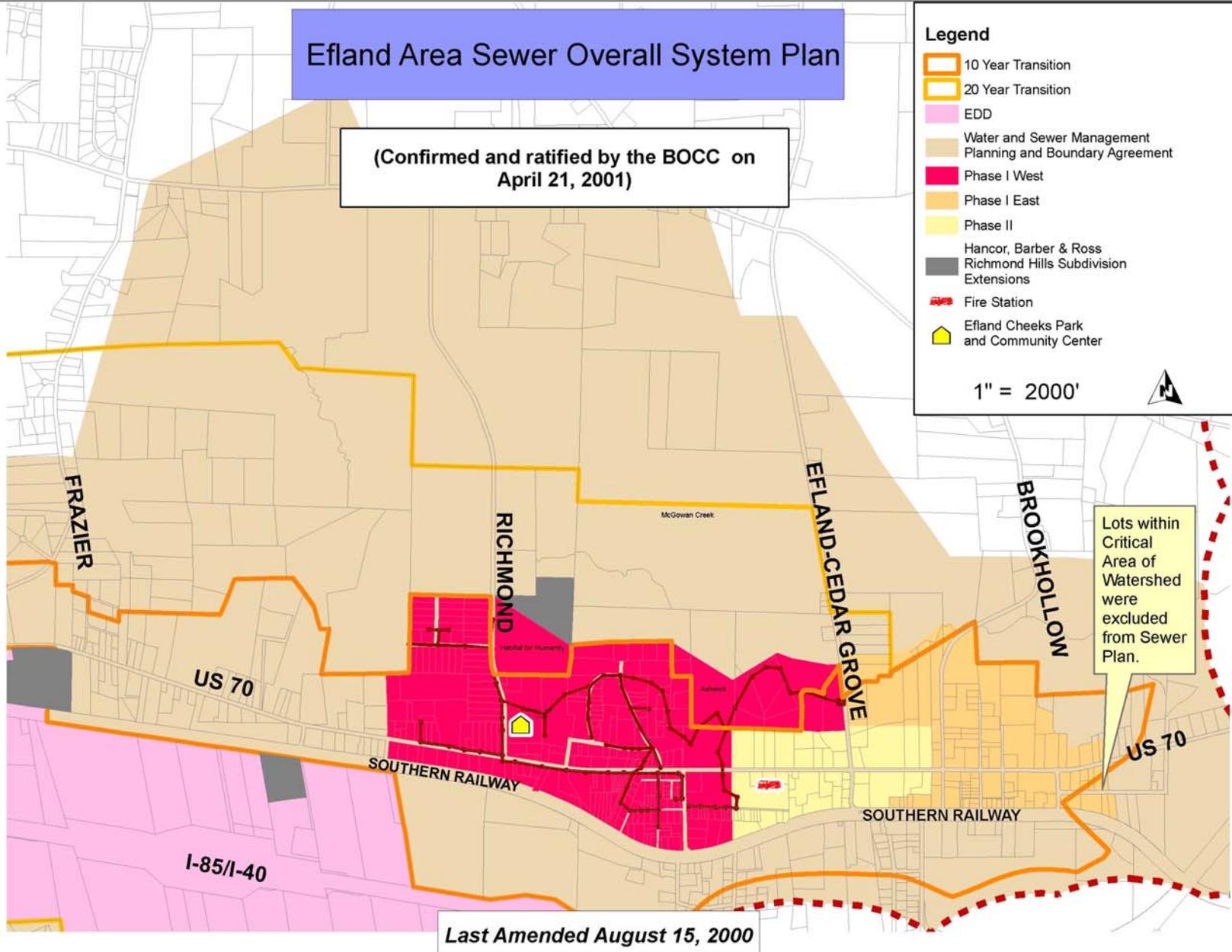
# Efland Area Sewer Overall System Plan

(Confirmed and ratified by the BOCC on April 21, 2001)

## Legend

-  10 Year Transition
-  20 Year Transition
-  EDD
-  Water and Sewer Management Planning and Boundary Agreement
-  Phase I West
-  Phase I East
-  Phase II
-  Hancor, Barber & Ross Richmond Hills Subdivision Extensions
-  Fire Station
-  Efland Cheeks Park and Community Center

1" = 2000'



Last Amended August 15, 2000

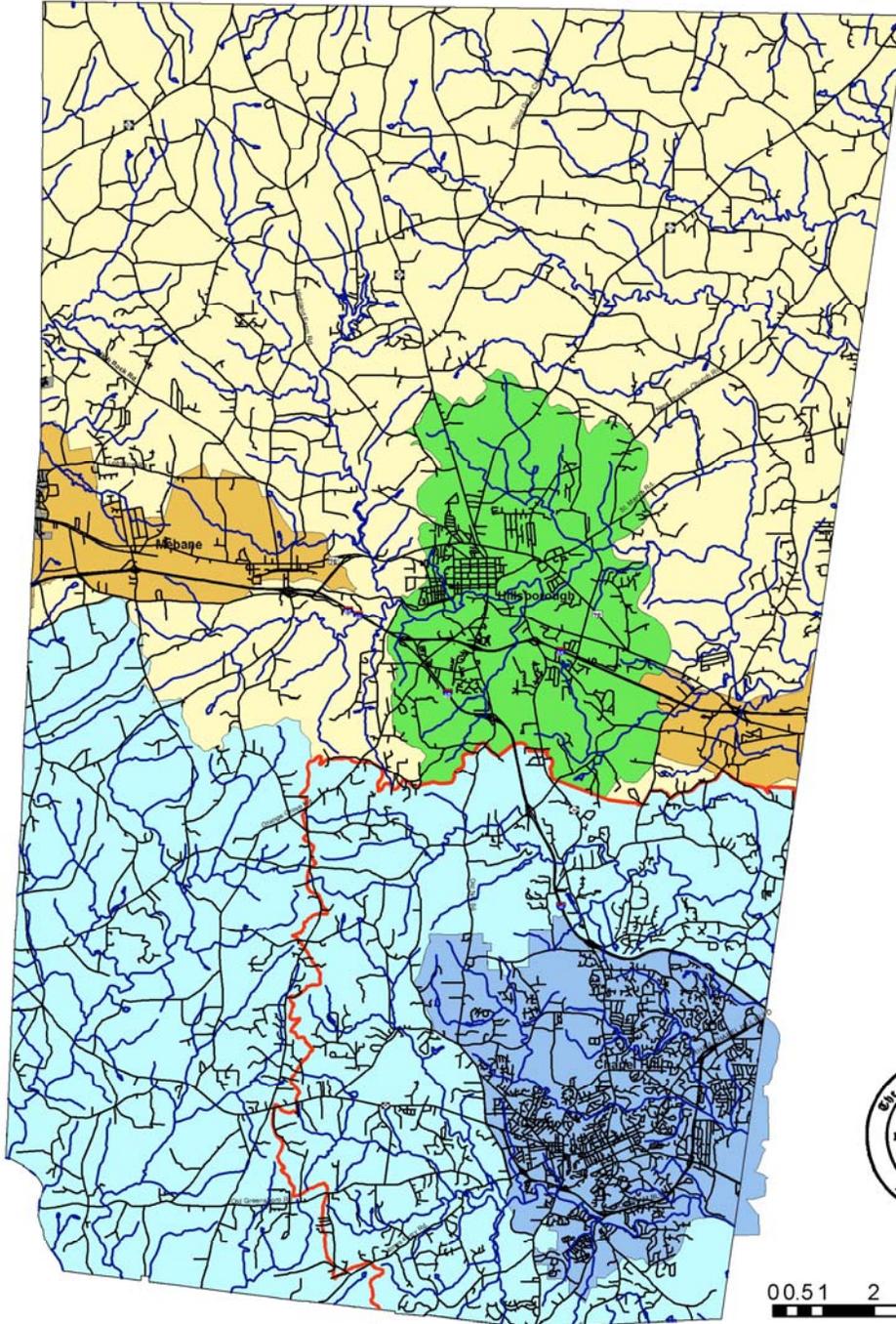
## **Water and Sewer Management Planning and Boundary Agreement**

As a result of many years of discussion among the local governments located in Orange County and the Orange Water and Sewer Authority (OWASA), in 2001 Orange County, OWASA, and the Towns of Chapel Hill, Carrboro, and Hillsborough entered into a Water and Sewer Management Planning and Boundary Agreement (WSMPBA). The agreement provided a comprehensive county-wide system of utility service areas upon which the signatory entities could rely when making decisions related to issues such as planning, land use, annexation, zoning, and growth management.

The agreement is in effect for 10 years and will renew automatically unless a signatory party provides a notice of intent to withdraw by following the process outlined in the agreement. All parties to the agreement must approve any changes to the service boundaries shown on the WSMPBA map.

Map 15 is the WSMPBA map approved by the signatory parties. Primary Service Areas shown on the map are those areas where water and/or sewer service is now provided, or might reasonably be provided in the future. Long-Term Interest Areas are those areas within which public water and/or sewer service is not anticipated to be provided but if such services were to be provided for “emergency” purposes due to private system failures, the designated party would be the service provider.

# Appendix A Water and Sewer Management Planning and Boundary Agreement



**Legend**

Water and Sewer Boundaries

	Hillsborough Primary Service Area		Rural Buffer Boundary
	OWASA Long-Term Interest Area		
	Orange County Primary Service Area		
	OWASA Primary Service Area		
	Orange County Long-Term Interest Area		



Orange County Planning and Inspections Department  
Updated Streets, Miriam Coleman, 2002  
Revised Map to show retracted Chapel Hill Urban Service Boundary  
Prepared by Carrie Whitehill  
11/14/01  
Original Map Prepared by Beth McFarland  
04/17/97

## **E. Recreation, Parks and Open Space**

### Recreation and Parks

The Orange County Recreation and Parks Master Plan (also known as the Recreation Element of the Orange County Comprehensive Plan) was adopted in July 1988. The Plan called for the development of a community park within Efland by 2008. A community park provides recreational opportunities for the entire family and contains areas suited for intense recreational purposes such as athletic fields, tennis courts, and paths for walking/jogging. In addition, community parks usually contain outdoor areas for passive recreation such as picnicking, nature viewing, and sitting.

Construction of Efland-Cheeks Park & Community Center was completed in phases. Phase I construction began in 1999 and was completed in 2000. Phase II began in 2004 and was completed in April 2006. The park is located on Richmond Road just north of Highway 70 and offers indoor meeting space, a catering kitchen, a small stage, lighted outdoor basketball courts, a picnic shelter, a walking track, a ball field, picnic tables, BBQ grills, a playground, and a soccer field.

The Park Master Plan also calls for a District Park to be located in Cheeks Township. A district park is typically at least 75-acres in size and serves a population with a 30-minute trip range. District parks usually contain the same types of uses as a community park but typically include added amenities, such as a water feature, an expanded number of playing fields, and an indoor recreation building. The 1988 Parks Master Plan identified a preferred location for a district park east of the planning area at Corporation Lake and identified an alternative site as the general area around the proposed Seven Mile Creek Reservoir, which is located southeast of the planning area. While the Plan mentions these specific locations, the practice of parkland acquisition over the past 17 years has been to acquire and site district parks less-specifically in the general area of the “bubbles” on the Parks Plan map.

Since 1988, several actions have occurred which may serve to make the Seven Mile Creek area the preferred location for a “split-site” district park. The McGowan Creek Preserve was acquired by the County in 2000 and is intended primarily for use as a preserve with low-impact recreation provided by way of a nature trail. McGowan Creek Preserve is located in the vicinity of Corporation Lake. The Seven Mile Creek Nature Preserve has been acquired over time; several parcels were acquired in the 1970s, two parcels were acquired in 2001, and additional parcels are being negotiated and are expected to be acquired in the future. The preserve will largely serve to protect important identified Natural Heritage sites but will also contain public access areas, which will likely feature low-impact recreation uses such as a primitive campsite and nature trail. In 2004, the County acquired land on West Ten Road adjacent to the new Middle School site for use as a Soccer Center. The Soccer Center and Seven Mile Creek Nature Preserve are both located on the south side of Interstate 40/85 in relatively close proximity to each other. The County’s Department of Environment & Resource Conservation (ERCD), which is responsible for coordinating the planning, acquisition and design of parks and open spaces, is recommending

that the Cheeks District Park proposed in the Plan be considered to be a “split-site” park. The West Ten Soccer Center will serve as the “active” component of the district park and the Seven Mile Creek Nature Preserve Public Access Area(s) will serve as the “low-impact” component. The two components can eventually be linked by a bike path and/or walking trail.

A new Orange County Middle School, to be named “Gravelly Hill Middle School,” is currently under construction on West Ten Road. The school site will contain various ball fields, athletic fields, and a track which will be accessible to the general public during non-school hours. Construction of the school is scheduled for completion in 2006. Orange County is developing a soccer center on approximately 30 acres adjacent to the Middle School site. The soccer center is proposed to contain six (6) soccer fields and a concessions area. The site has been graded and funding is available to construct up to two fields. Future funding for the full facility will have to be secured. Construction of the field(s) for which funding is available will likely begin in late 2006.

Lake Michael Park is owned and operated by the City of Mebane. It is located in Orange County on Lebanon Road immediately adjacent to the northwest portion of the planning area. The park contains over 200 acres with a 59-acre fishing lake that has two piers and small boat access. There are also nature trails, picnic areas, paddleboat and johnboat rentals, pontoon boat rides, overnight group camping, sand volleyball, tot areas, three large covered shelters, and one small covered shelter. The park is open from mid-March until the end of October.

Additional recreation opportunities in the planning area include the Efland Ruritan Club facilities (ball fields, small walking track, meeting buildings) and Cobb Field, a privately owned ball field. Duke Forest also owns property accessible to the public for hiking east of the planning area.

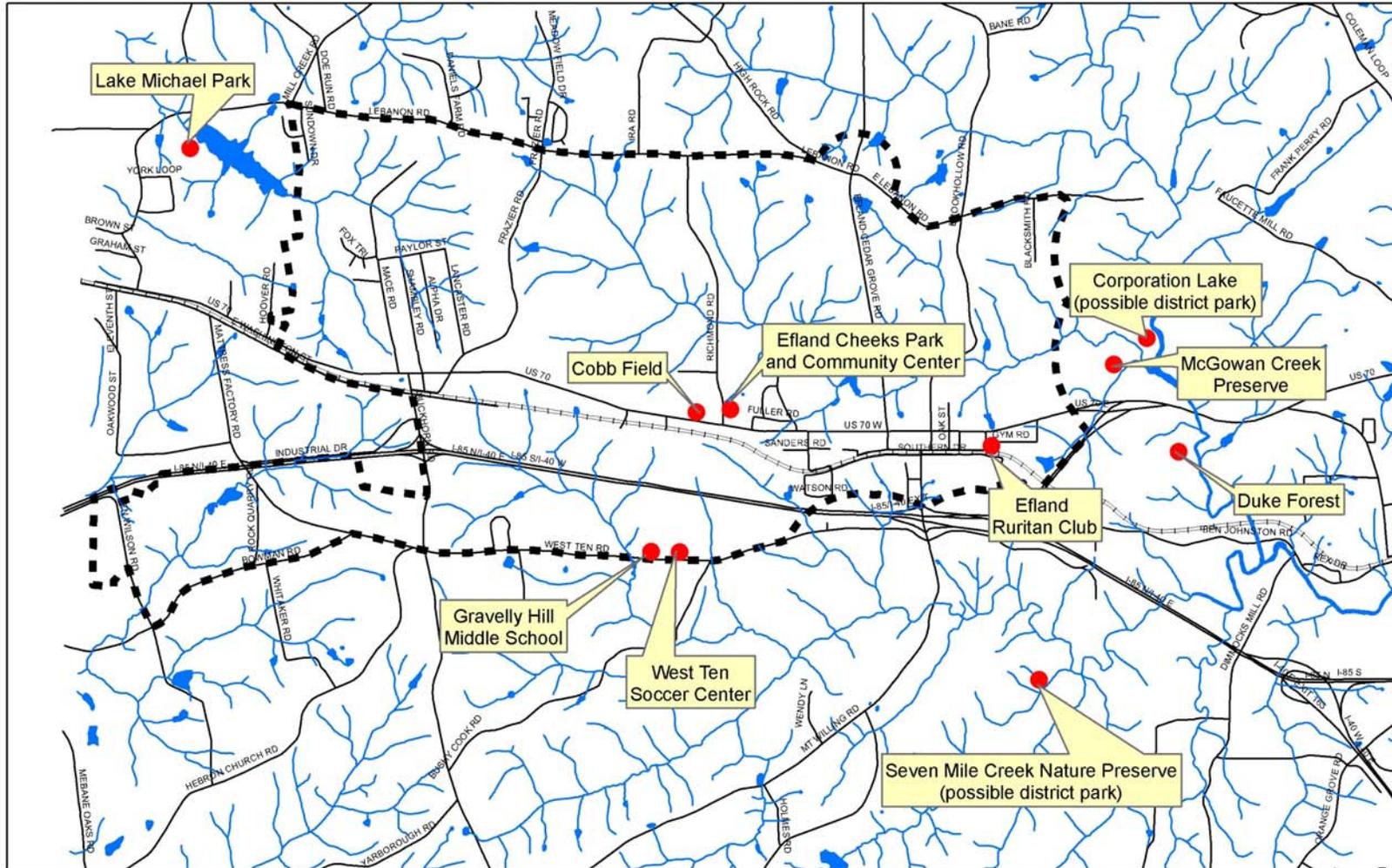
Map 16 shows the locations of existing and proposed recreation and park facilities.

### Open Space

Private Open Space has been required as part of the development approval process of subdivisions platted in the recent past. The Existing Land Use Map on page 44 shows Private Open Space parcels.

As shown on the present Future Land Use Map on page 51, the planning area contains Resource Protection areas which are located predominantly adjacent to streams. Given the farming and forestry nature of large portions of the planning area, open space has not historically been a significant issue in the area. However, as the planning area develops, maintaining areas in open space will become increasingly important.

# Efland Small Area Plan - Parks and Recreation



## Legend

-  Small Area Plan Boundary
-  Park and Recreation Locations

Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman March 13, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983



Map 16

## **F. Community Character and Form**

The historic importance of the railroad and the continuing importance of Highway 70 are evident when studying Efland and the planning area. Efland “grew up” as a Mill Village focused on the railroad with a station that no longer exists in the vicinity of Southern Drive and Efland-Cedar Grove Road. Development in the core area of Efland and linearly along Highway 70 reflects a much higher density than is typical in modern times for development on individual septic systems.

Housing types and styles reflect a wide range of architectural types. Efland contains historic, small millhouse type of structures as well as larger two-story historic homes. Redevelopment of some parcels in the core area has resulted in a pattern of modern homes located next door to historic homes. Efland’s core and the entire planning area represent an eclectic development pattern, that reflects prevailing architectural styles of various historic eras. The area gives the impression of a vernacular, organic development pattern, not a rigidly planned area.

Farming and forestry are prevalent throughout the planning area. These uses create the impression of undeveloped property and wide-open spaces to people traveling the secondary roads away from Highway 70. Many of the parcels of land used for forestry and farming also have a residence located on them, many of which are occupied by the landowner who farms the land.

By and large, the planning area is characterized by functional, simple, cost-effective development built by and serving people who are part of the “workforce.”

## **G. Land Use**

### **Existing Land Use**

During the summer of 2005, Orange County Planning staff mapped the existing land uses in the planning area. Information regarding existing land use was pulled from Tax Assessor records, aerial photos, and “windshield surveys.” Maps 17 through 21 show the existing land uses in the planning area. Commercial uses include Retail, Services, and other non-residential uses that were not classified into the other land use categories. Parcels identified as Industrial are those on which manufacturing processes are occurring. Agricultural uses were identified using Tax Assessor records as they relate to Agricultural Use Value taxation. Undeveloped parcels are those containing no structures and which are not registered for the Agricultural Use Tax program.

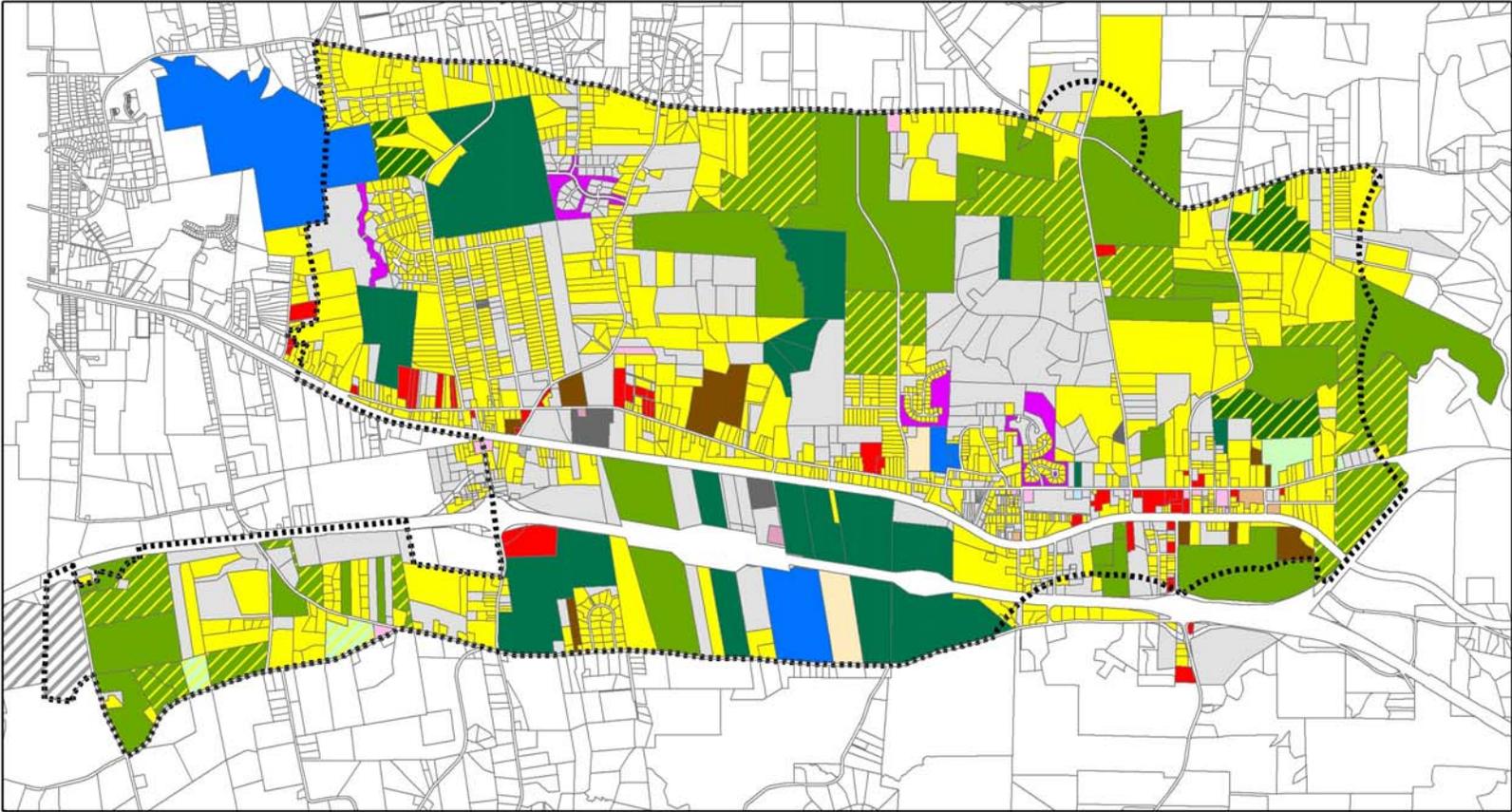
The predominant land uses in the planning area are Residential uses and various Agricultural uses (Forestry, Fields, or a mix of the two). Many of the parcels in Agricultural use also have a residence located on them.

The vast majority of Residential uses are single-family dwelling units which include site-built dwellings, manufactured homes, and modular homes. Within the core area of Efland, there are a

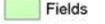
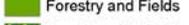
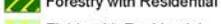
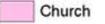
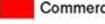
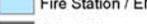
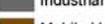
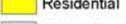
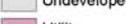
few duplexes, triplexes, and quadplexes but there are no large-scale multi-family housing units in the planning area. Nine parcels of land, totaling 80.84 acres, are categorized as “Mobile Home Parks.”

The Table on page 49 shows existing land use information by Land Use Category.

# Existing Land Use for the Efland Small Area Plan



**Legend**

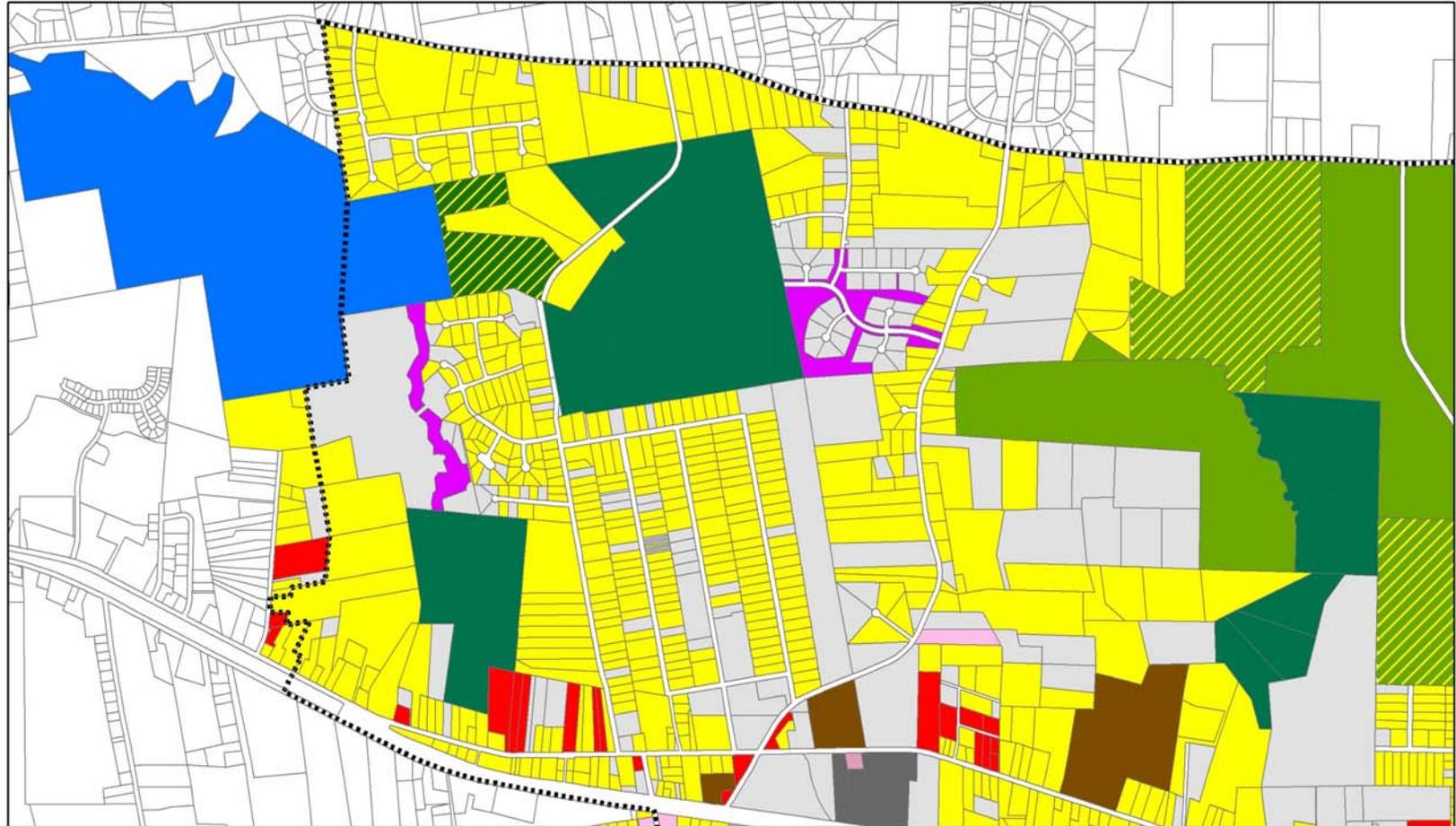
-  SAP Boundary
- Existing Land Use**
- Ag. Use Value:**
  -  Forestry
  -  Fields
  -  Forestry and Fields
  -  Forestry with Residential
  -  Fields with Residential
  -  Forestry and Fields with Residential
-  Cemetery
-  Church
-  Commercial
-  Fire Station / EMS
-  Industrial
-  Mobile Home Park
-  Municipal
-  Park
-  Private Open Space
-  Private Recreation/Assembly Space
-  Public
-  Residential
-  Undeveloped
-  Utility



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman, March 14, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983

Source: Orange County Planning Department

# Existing Land Use for the Efland Small Area Plan



0 500 1,000 2,000 Feet



Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman, March 13, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983

## Legend



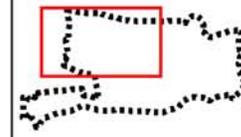
### Existing Land Use

#### Ag. Use Value:

- Forestry
- Fields
- Forestry and Fields
- Forestry with Residential
- Fields with Residential
- Forestry and Fields with Residential

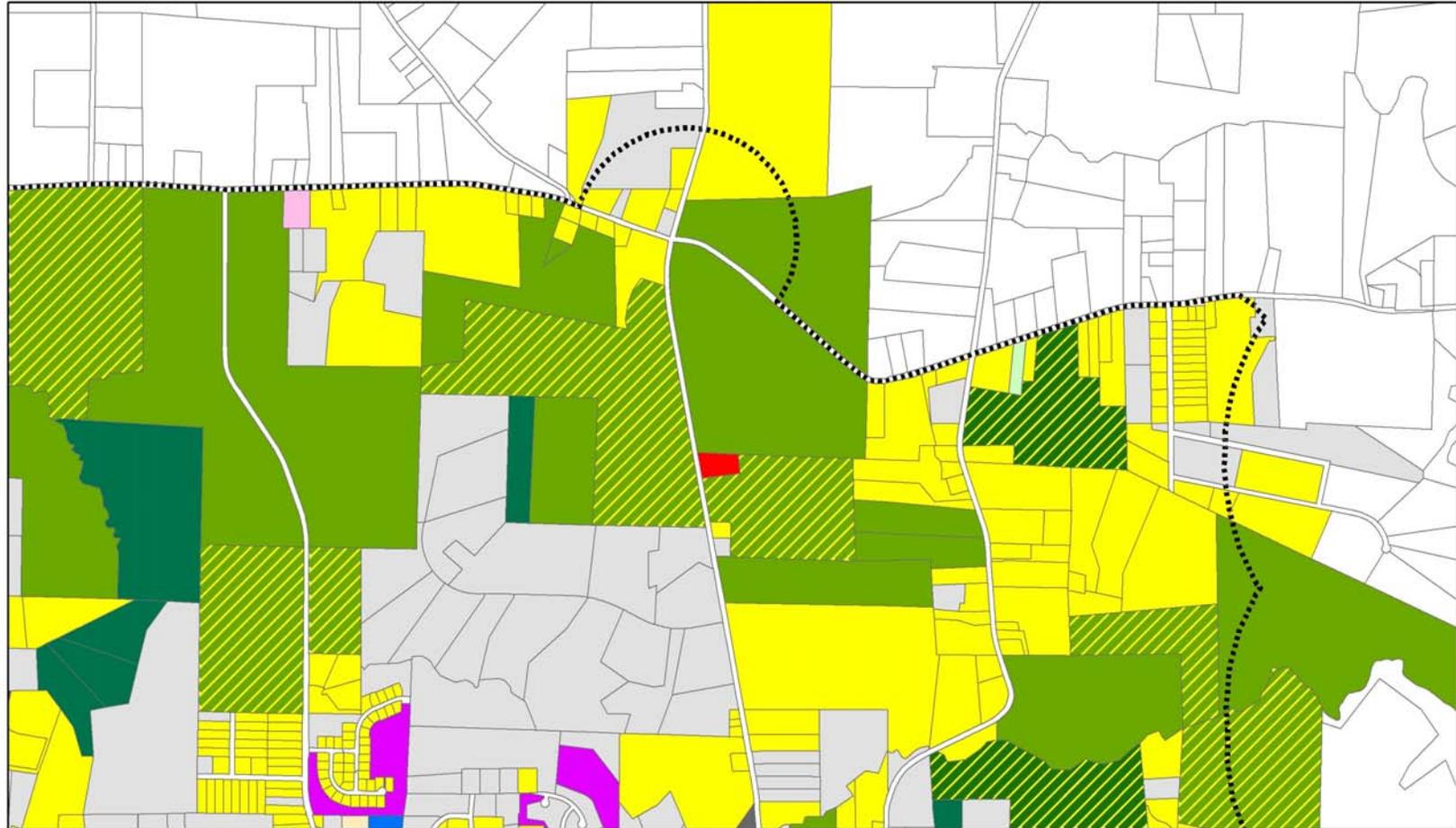
- Cemetery
- Church
- Commercial
- Fire Station/EMS
- Industrial
- Mobile Home Park
- Municipal
- Park
- Private Open Space
- Private Recreation/Assembly Space
- Public
- Residential
- Undeveloped
- Utility

## Map 1 of 4



Map 18

# Existing Land Use for the Efland Small Area Plan



0 500 1,000 2,000 Feet



Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman, October 14, 2005  
Projection: North Carolina State Plane (feet)  
Datum: North American 1983

## Legend



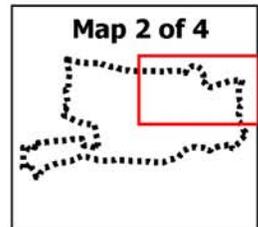
SAP Boundary

### Existing Land Use

#### Ag. Use Value:

- Forestry
- Fields
- Forestry and Fields
- Forestry with Residential
- Fields with Residential
- Forestry and Fields with Residential

- Cemetery
- Church
- Commercial
- Fire Station/EMS
- Industrial
- Mobile Home Park
- Municipal
- Park
- Private Open Space
- Private Recreation/Assembly Space
- Public
- Residential
- Undeveloped
- Utility



Map 19

Source: Orange County Planning Department

# Existing Land Use for the Efland Small Area Plan



0 500 1,000 2,000 Feet



Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman, March 13, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983

## Legend



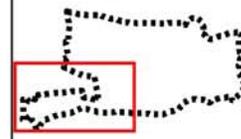
### Existing Land Use

#### Ag. Use Value:

- Forestry
- Fields
- Forestry and Fields
- Forestry with Residential
- Fields with Residential
- Forestry and Fields with Residential

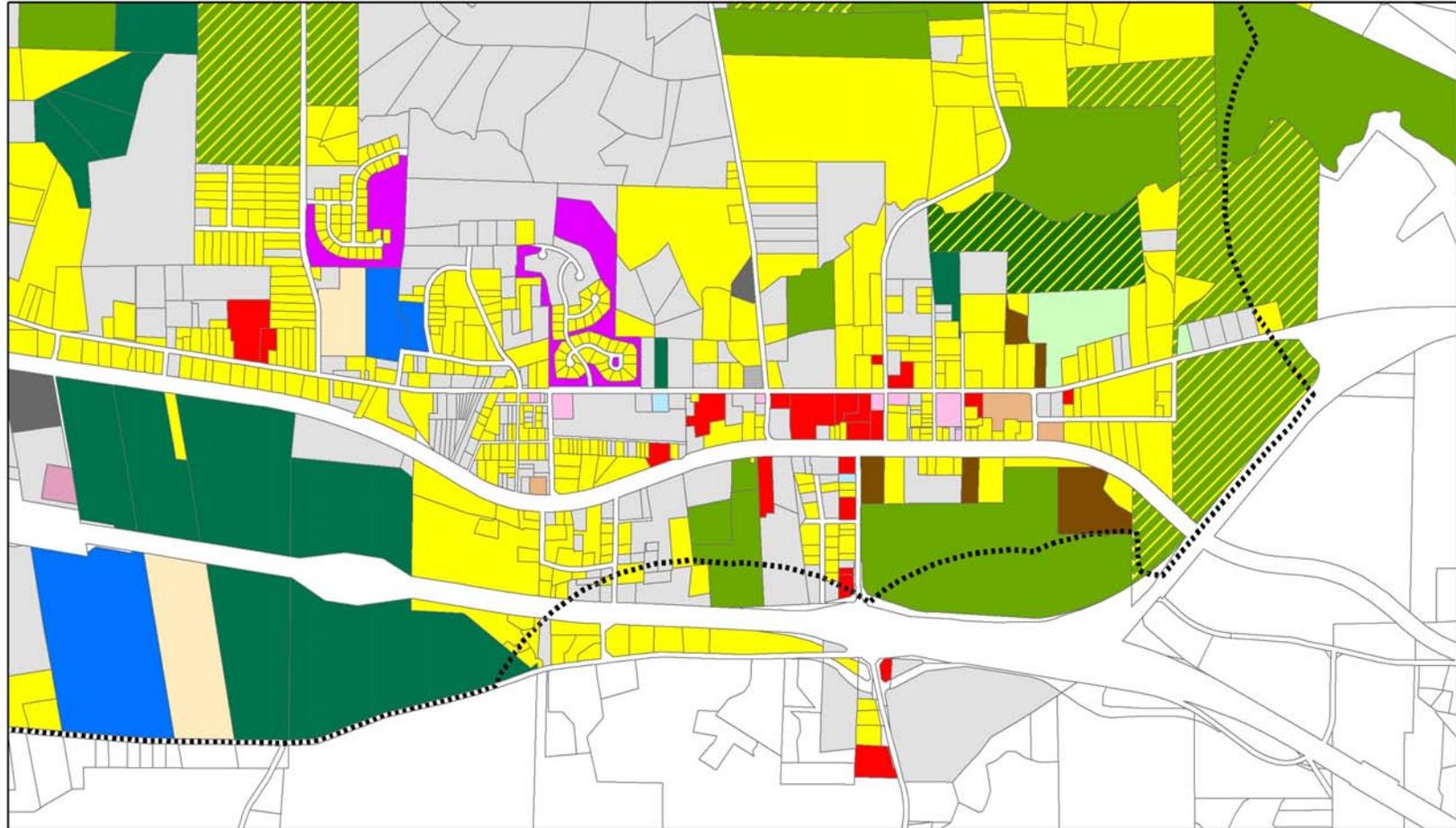
- Cemetery
- Church
- Commercial
- Fire Station/EMS
- Industrial
- Mobile Home Park
- Municipal
- Park
- Private Open Space
- Private Recreation/Assembly Space
- Public
- Residential
- Undeveloped
- Utility

## Map 3 of 4



Map 20

# Existing Land Use for the Efland Small Area Plan



0 500 1,000 2,000 Feet



Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman, March 13, 2006

Projection: North Carolina State Plane (feet)  
Datum: North American 1983

## Legend

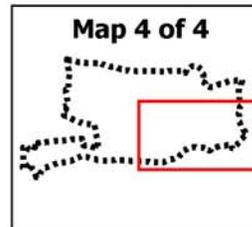


### Existing Land Use

#### Ag. Use Value:

- Forestry
- Fields
- Forestry and Fields
- Forestry with Residential
- Fields with Residential
- Forestry and Fields with Residential

- Cemetery
- Church
- Commercial
- Fire Station/EMS
- Industrial
- Mobile Home Park
- Municipal
- Park
- Private Open Space
- Private Recreation/Assembly Space
- Public
- Residential
- Undeveloped
- Utility



Map 21

Source: Orange County Planning Department

<b>Land Use Category</b>	<b>Number of Parcels</b>	<b>Total Number of Acres</b>	<b>Mean Parcel Size (acres)</b>	<b>Median Parcel Size (acres)</b>
Forestry	19	732.64	38.56	26.79
Fields	3	22.91	7.64	2.09
Forestry and Fields	28	1,144.23	40.87	28.39
Forestry with Residential	3	118.95	39.65	44.52
Fields with Residential	2	29.34	14.67	14.67
Forestry and Fields with Residential	15	613.01	40.87	29.22
Cemetery	3	2.83	0.94	1.25
Church	12	18.89	1.57	1.26
Commercial	46	101.80	2.21	1.26
Fire Station/EMS	2	1.48	0.74	0.74
Industrial	4	29.37	7.34	6.33
Mobile Home Park	9	80.84	8.98	3.58
Municipal	1	107.51	107.51	107.51
Park	2	46.87	23.44	23.44
Private Open Space	13	62.35	4.80	4.47
Private Rec./Assembly	3	7.14	2.38	1.59
Public	4	336.15	84.04	38.47
Residential	1,207	2,394.76	1.98	0.92
Undeveloped	473	1,630.91	3.45	1.00
Utility	2	4.36	2.18	2.18
Totals	1,851	7,486.34	4.04	0.97

**Future Land Use (adopted map)**

The Adopted Land Use Element of the Orange County Comprehensive Plan contains a Future Land Use Map. Map 22 is the Adopted Future Land Use Map for Cheeks Township.

The table that follows shows the adopted Future Land Use categories found in the planning area.

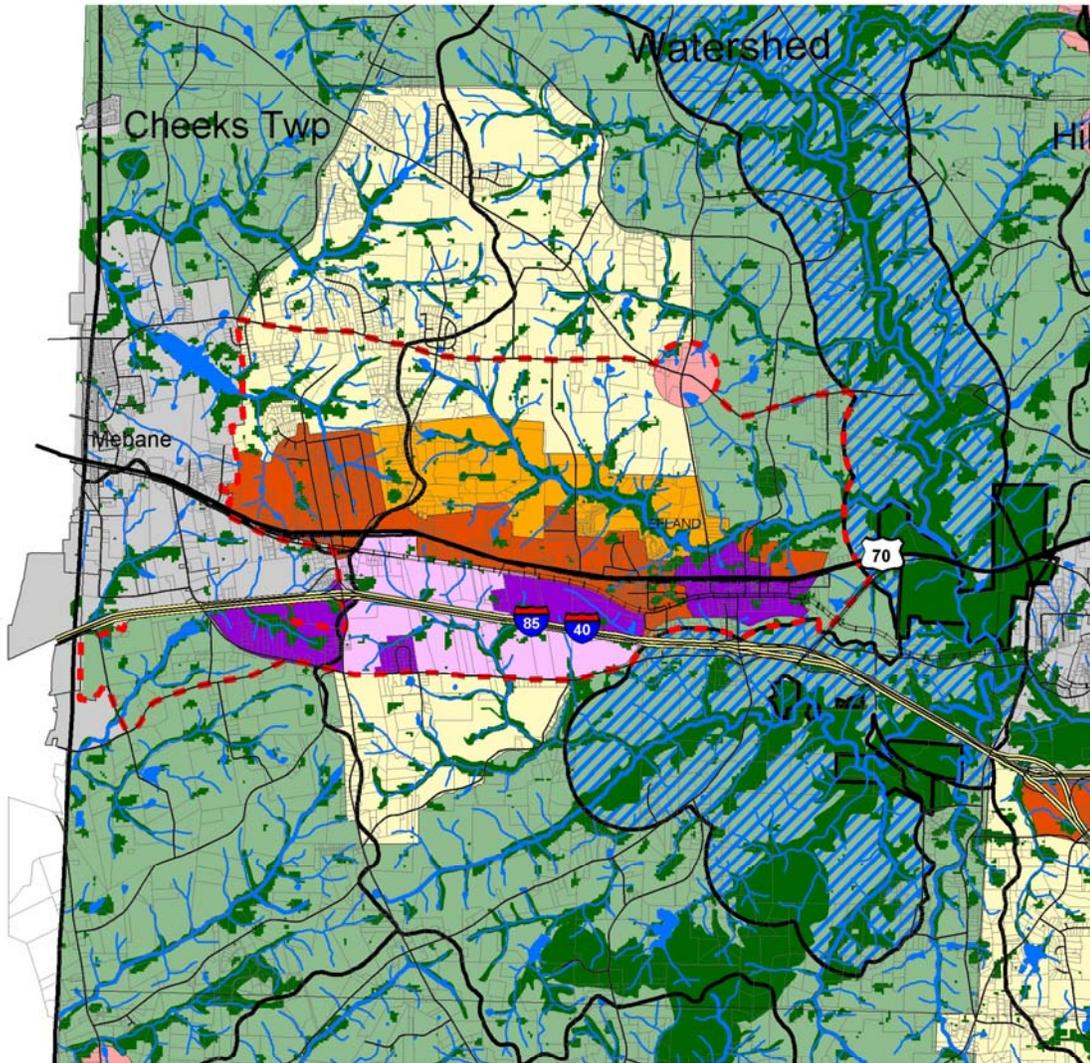
### Future Land Use Categories

<b>Category</b>	<b>Description</b> (adapted from Land Use Element of Comprehensive Plan)
10-Year Transition Area	Areas that are in the process of changing from rural to urban, that are suitable for urban-type densities and should be provided with public utilities and services within the first 10-year phase of the Plan.
20-Year Transition Area	Areas that are in the process of changing from rural to urban, that are suitable for urban-type densities and should be provided with public utilities and services within the second 10-year phase of the Plan.
Rural Residential	Rural areas of the County which are appropriate for low intensity and low-density residential development and which would not be dependent on urban services during the plan period.
Agricultural Residential	Rural areas where the prevailing land use activities are related to the land (agriculture, forestry) and which is an appropriate location for the continuation of these uses.
Rural Neighborhood Activity Node	Designated road intersections within a Rural Residential or Agricultural Residential area that is appropriate for small-scale commercial uses characteristic of “Mom and Pop” convenience stores and gas stations.
Commercial/Industrial Activity Node	Designated areas within either a 10-year or 20-year transition area that is appropriate for retail and other commercial uses and/or manufacturing and other industrial uses.
Economic Development Activity Node	Transition areas that have been specifically targeted for economic development activity consisting of light industrial, distribution, office, service/retail uses, and flex space. Located adjacent to interstate and major arterial highways and subject to special design criteria and performance standards.
Resource Protection Area	Designated Primary Conservation Areas which contain sensitive environmental resources, historically significant sites, and features considered unbuildable because of their limitations or unsuitability for development. Includes wetlands and floodplains along drainage tributaries, steep slope areas (15% or greater), natural areas, wildlife habitats and corridors, and significant historic and archaeological sites.

# LAND USE ELEMENT

## of the Orange County Comprehensive Plan

### Cheeks Township



**Legend:**

- |                           |                              |
|---------------------------|------------------------------|
| 10 year transition        | Rural Community Node         |
| 20 year transition        | Rural Neighborhood Node      |
| Rural Residential         | Rural Industrial Node        |
| Rural Buffer              | Commercial Node              |
| Agricultural Residential  | Commercial/Industrial Node   |
| Resource Protection Areas | Economic Development         |
| Municipal Jurisdictions   | OC/CH/CA Joint Planning Area |
| Public Interest Areas     | Small Area Plan              |
| Water Supply Watersheds   |                              |
| Watershed Critical Areas  |                              |



Original Adoption Date: 9-9-81  
Amended through: 6-29-00

GIS map prepared by Miriam Coleman, Orange County Planning Department, February 9, 2005

Source: Orange County Comprehensive Plan – Land Use Element

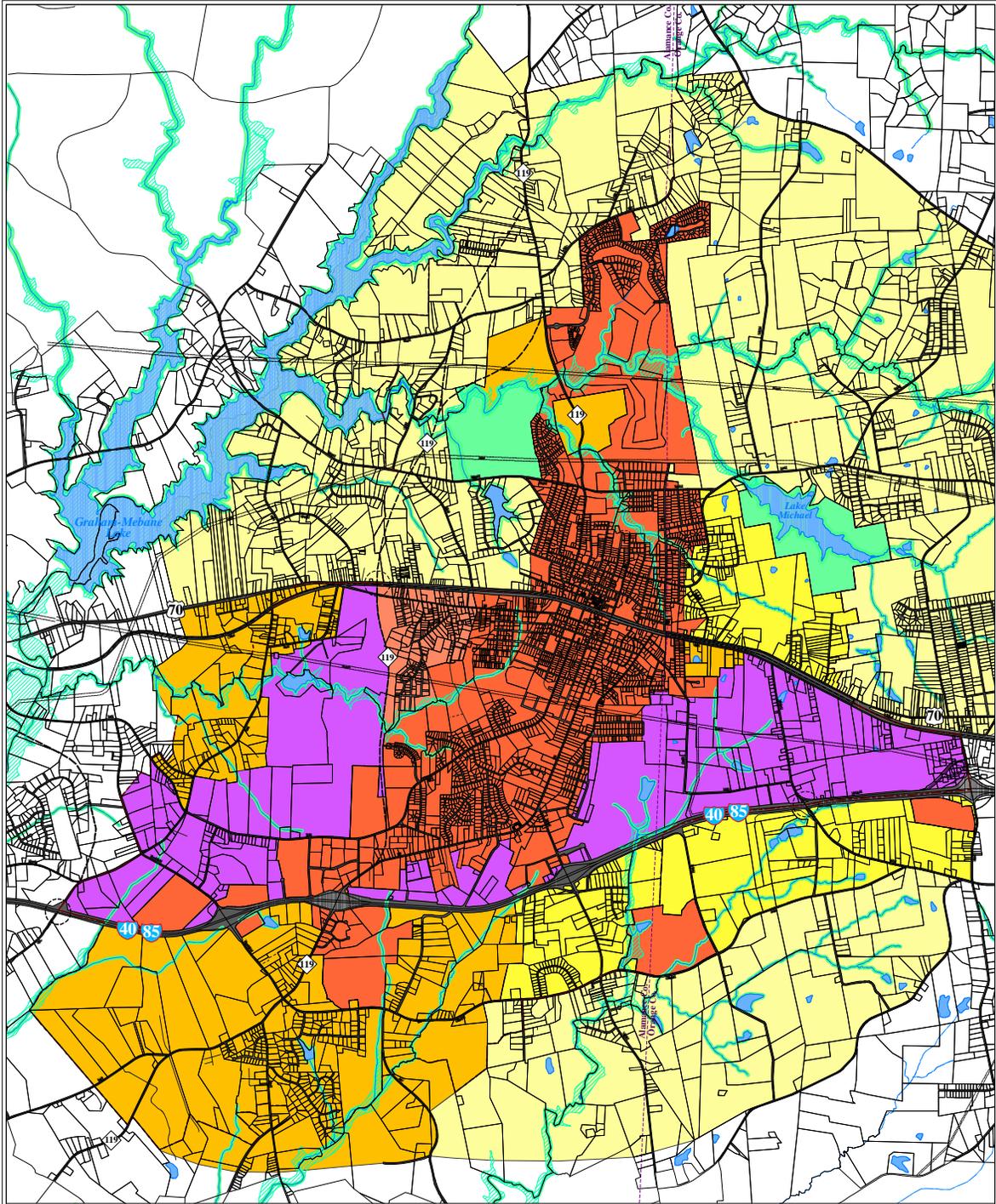
## **H. Intergovernmental Context**

The planning area is directly adjacent to the eastern boundary of the City of Mebane's corporate limits and Extra-territorial Jurisdiction (ETJ). The City of Mebane exercises zoning and subdivision control in compliance with City Ordinances within its ETJ area. Additionally, under State annexation statutes, the City of Mebane may annex lands into its City Limits. In January 2005, the City annexed a parcel within the planning area boundary. The parcel is located west of Ben Wilson Road and south of Interstate 85/40, as indicated on Map 27 on page 79.

As was stated in Section D, Water Service and Sanitary Sewer Service, Orange County and the City of Mebane entered into a Utility Service Agreement in 2004 for the purpose of providing these services to portions of the Economic Development District.

Map 23 is the City of Mebane's Growth Strategy from the City's Land Development Plan. Map 24 is the City's Proposed Land Use Map from the same document. Charts explaining the categories depicted on the maps follow the maps.

The City of Mebane's growth within Orange County in recent years has been a concern to county government because of the impacts the growth has on county operations such as public schools, social services, transportation, and emergency services. Elected officials from both jurisdictions have met on several occasions to discuss the possibility of entering into a Joint Planning Understanding or Agreement to better coordinate planning efforts. To date, an agreement continues to be pursued. City of Mebane officials participated in the meetings of the Task Force that developed this plan.



**Growth Strategy Areas**

<b>Primary</b> Adjacent Developed	<b>Long-Range</b> Rural Conservation
<b>Secondary</b> Economic Development	<b>Open space</b>

**Overlay Areas**

Floodplain	Conservation Corridors
------------	------------------------

# City of Mebane Land Development Plan *Growth Strategy*

**Scale**  
1 inch = 1,000 feet

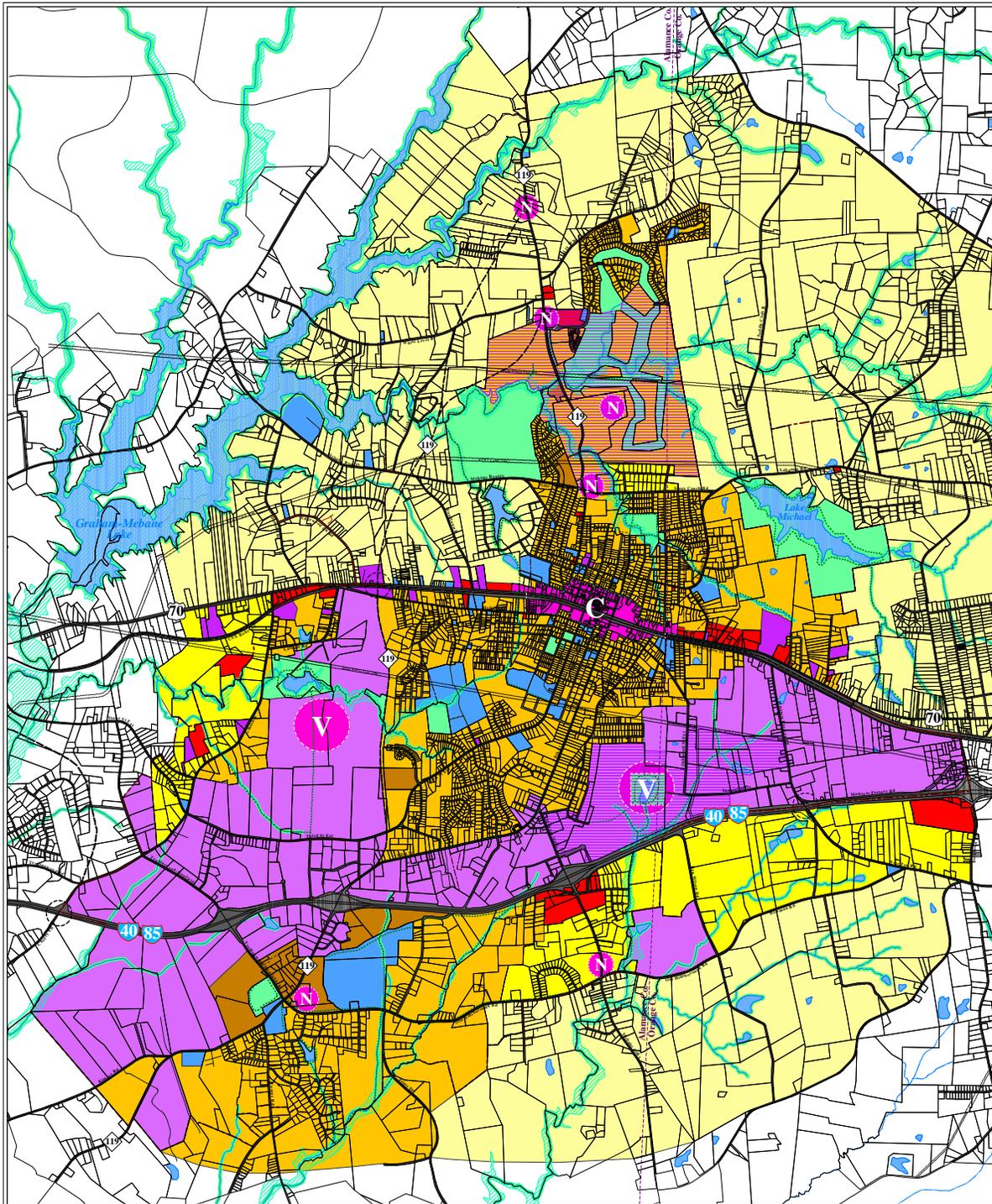
**Accuracy Indicator**

**PTCOG**  
Map Printed January, 2001

**Base Features**

- Alamance-Orange County Line (approximate)
- Mebane Extra-Territorial Limits
- City Limits
- Highway Identifiers: Interstate, US, NC
- Streams: Perennial, Intermittent
- Planned Thoroughfares, Planned Interchanges

Source: City of Mebane 2010 Land Development Plan, March 2001.



**Proposed Land Uses**

Conservation Residential	Urban Residential	Office & Institutional
Suburban Residential	Commercial	Economic Development
Neighborhood Residential	Industrial	Open Space

Village Activity Center   
 Neighborhood Activity Center   
 Neighborhood Activity Center

**Overlay Areas:**
 Floodplain   
 TND   
 Greenways   
 Conservation Corridors

# City of Mebane

## Land Development Plan

### *Proposed Land Use*

**Scale**  
1 inch = 1,000 feet

**Base Features**

- Alamance-Orange County Line (approximate)
- Mebane Extra-Territorial Limits
- City Limits
- Highway Identifiers: Interstate, US, NC
- Streams: Perennial, Intermittent
- Planned Thoroughfares, Planned Interchanges

PTCOG  
Map Printed January, 2001

Source: City of Mebane 2010 Land Development Plan, March 2001.

<b>City of Mebane “Growth Strategy” Categories (to be used with Map 23)</b>	
<b>Category</b>	<b>Description</b>
Primary Growth Area	Areas with prime access to existing city infrastructure and urban services and located within existing city limits. Suitable development sites within Primary Growth Areas should be given the highest level of encouragement and incentives for short-range development over the next 1 to 5 years.
Secondary Growth Area	Areas with access to an existing city gravity sewer interceptor, an existing pump station and sewer force main, and/or an existing or potential future thoroughfare, and located outside of, but adjacent to existing city limits. Suitable development sites within Secondary Growth Areas should be given a moderately high level of encouragement and incentives for mid-range development over the next 5 to 10 years.
Economic Development Area	Areas with prime access to a major thoroughfare and/or highway interchange, with high potential for economic development expansion, but in need of new or expanded public infrastructure investment. Suitable economic development sites within Economic Development Areas should be given a high level of encouragement and incentives for short- to mid-range development over the next 1 to 10 years.
Long-Range Growth Area	Areas with moderate potential for expansion of existing sewer services using pump stations and force mains, and/or with moderate access to an existing or potential future thoroughfare, and located outside of existing city limits. Suitable development sites within Long Range Growth Areas should be given a low level of encouragement for land development over the next 1 to 10 years, and a moderate level of encouragement over the next 10 to 20 years.
Adjacent Developed Area	Areas with a high level of existing urban development located outside of, but adjacent to existing city limits. These areas should receive careful consideration for annexation and full provision of urban services over the next 1 to 10 years.
Rural Conservation Area	Areas with a low level of existing urban development, with low potential for expansion of sewer services, and/or with low access to an existing or potential future thoroughfare, and located in a rural setting outside of existing city limits and/or within the water supply watershed. Most areas within Rural Conservation Areas should be given a very high level of encouragement and incentives to remain in a natural state, or to be maintained in very low-density, rural uses over the next 20 years.
Conservation Corridors	Areas located throughout the study area, primarily along creeks, streams, and rivers, and within areas containing floodplains, steep slopes, and/or severe soil limitations. These areas should receive a very high level of encouragement and incentives to remain in a natural state, and/or be maintained in very low-intensity, open space, recreational, or greenway uses in perpetuity. Property owners should be encouraged to locate new land development outside of conservation corridors as much as possible.

Source: City of Mebane 2010 Land Development Plan, March 2001

**City of Mebane**  
**“Proposed Land Use” Categories**  
**(to be used with Map 24)**

<b>Category</b>	<b>Description</b>	<b>Intent</b>
<b>Neighborhood Activity Centers</b>	Small, pedestrian-oriented, neighborhood activity center with a mix of uses.	To create pedestrian-friendly, community focal points containing a mixture of commercial, office and institutional, entertainment, open space, and residential uses & housing types, with ample sidewalks, street trees, on-street parking, public amenities & open space. The goal is to allow for growth while maintaining and enhancing the quality of life, and building a greater sense of community.
<b>Village Activity Centers</b>	Medium-scale, mixed-use activity center, serving multiple neighborhoods.	
<b>City Activity Centers</b>	Large-scale, mixed-use activity center, serving the entire community.	
<b>Tradition Neighborhood Development (TND) Overlay</b>	Medium- to large-scale area designated to be a “town within a town,” containing a wide variety of complementary uses and amenities, within easy walking distance.	To encourage pedestrian-friendly, mixed-use development with a strong sense of community, that offers residents an opportunity to live, work, and shop in the same area.
<b>Commercial</b>	Existing & limited new commercial uses outside of designated activity centers and employment centers.	To encourage development of new & redesign of existing commercial uses to be more visually pleasing and pedestrian-friendly.
<b>Office and Institutional</b>	Existing & limited new O&I uses outside of designated Activity Centers and Employment Centers.	To encourage development of new & redesign of existing O&I uses to be more visually pleasing and pedestrian-friendly.
<b>Industrial</b>	Existing & new industrial uses outside of designated Employment Centers.	To expand and develop new industrial uses, requiring transitional uses & buffers.
<b>Employment Center</b>	Mixed-use, medium- to large-scale employment centers along major transportation corridors and at key intersections and interchanges to serve the community and region.	To integrate a mixture of commercial, office & institutional, industrial, and open space uses into the fabric of the community, with ample sidewalks, street trees, on-street parking, public amenities & open space.
<b>Urban Residential</b>	Medium-high density single- and multi-family residential uses.	To accommodate existing & encourage new medium-high density residential uses in & around Activity Centers, and around Employment Centers.
<b>Neighborhood Residential</b>	Medium density single-family & limited multi-family residential uses.	To accommodate existing & encourage new medium density residential uses in designated areas.
<b>Suburban Residential</b>	Medium-low density single-family residential uses.	To accommodate existing & limit new medium-low density residential uses to designated areas.
<b>Watershed Residential</b>	Low density single-family residential uses.	To accommodate existing & limit new low-density residential uses in the water supply watershed.
<b>Conservation Residential</b>	Very low density single family residential uses.	To accommodate existing & limit new low-density residential uses, and encourage cluster development.
<b>Parks, Squares, Greenways, and Openspace</b>	To provide opportunities for active and passive recreation, and resource preservation.	To incorporate parks, squares, greenways & openspace into the entire community fabric as the City grows.
<b>Conservation Corridor Overlay</b>	Riparian buffer areas along streams & creeks.	To preserve stream & creek corridors in a natural state, by encouraging low-intensity open space uses.

Source: City of Mebane 2010 Land Development Plan, March 2001

## I. Housing

Housing in the planning area is predominantly single-family which includes site-built, modular, and manufactured/mobile homes. There are a few duplexes and triplexes in the core area of Efland but there is no large-scale multi-family housing. A total of nine (9) parcels totaling 80.8 acres are used as Mobile Home Parks in the planning area. The 2000 U.S. Census reported a total of 1,066 housing units in the planning area.

<u>Housing Units</u>	<b>1066</b>
<i>Urban</i>	<i>183</i>
<i>Rural</i>	<i>883</i>

Source: U.S. Census Bureau, Census 2000

Data collected by Orange County's Planning Department for purposes other than this small area plan has indicated that housing values in Cheeks Township are the lowest of any of the county's seven (7) townships. Indeed, the Efland-Mebane Task Force has indicated that continuing to promote housing affordability in the planning area is important.

Housing affordability within Orange County and its municipalities continues to be an issue. Orange County enjoys one of the highest median household income levels in the State. According to the 2005 Housing and Community Development Consolidated Plan for 2005-2010, the 2004 median household income was \$69,800 which ranks 4<sup>th</sup> in the State. However, Orange County, and especially Chapel Hill, also has one of the highest priced real estate markets in the State. The Draft 2006 Orange County Comprehensive Housing Strategy includes an Affordability Index for Three- and Four-Person Households in Orange County (excluding the Municipalities of Chapel Hill, Carrboro, and Hillsborough). The following table illustrates Housing Affordability in Orange County.

<b>Orange County Housing Affordability (excludes Chapel Hill, Carrboro, and Hillsborough municipal areas)</b>		
	Three-Person Household	Four-Person Household
Annual Income @ 60% of Median	\$38,520	\$42,672
Maximum Affordable House @ 60% of Median	\$124,737	\$138,182
Annual Income @ 80% of Median	\$51,360	\$56,896
Maximum Affordable House @ 80% of Median	\$199,579	\$210,036
Annual Income @ 100% of Median	\$64,200	\$71,120
Maximum Affordable House @ 100% of Median	\$249,473	\$262,546

Source of Data: 2006 Draft Orange County Comprehensive Housing Strategy

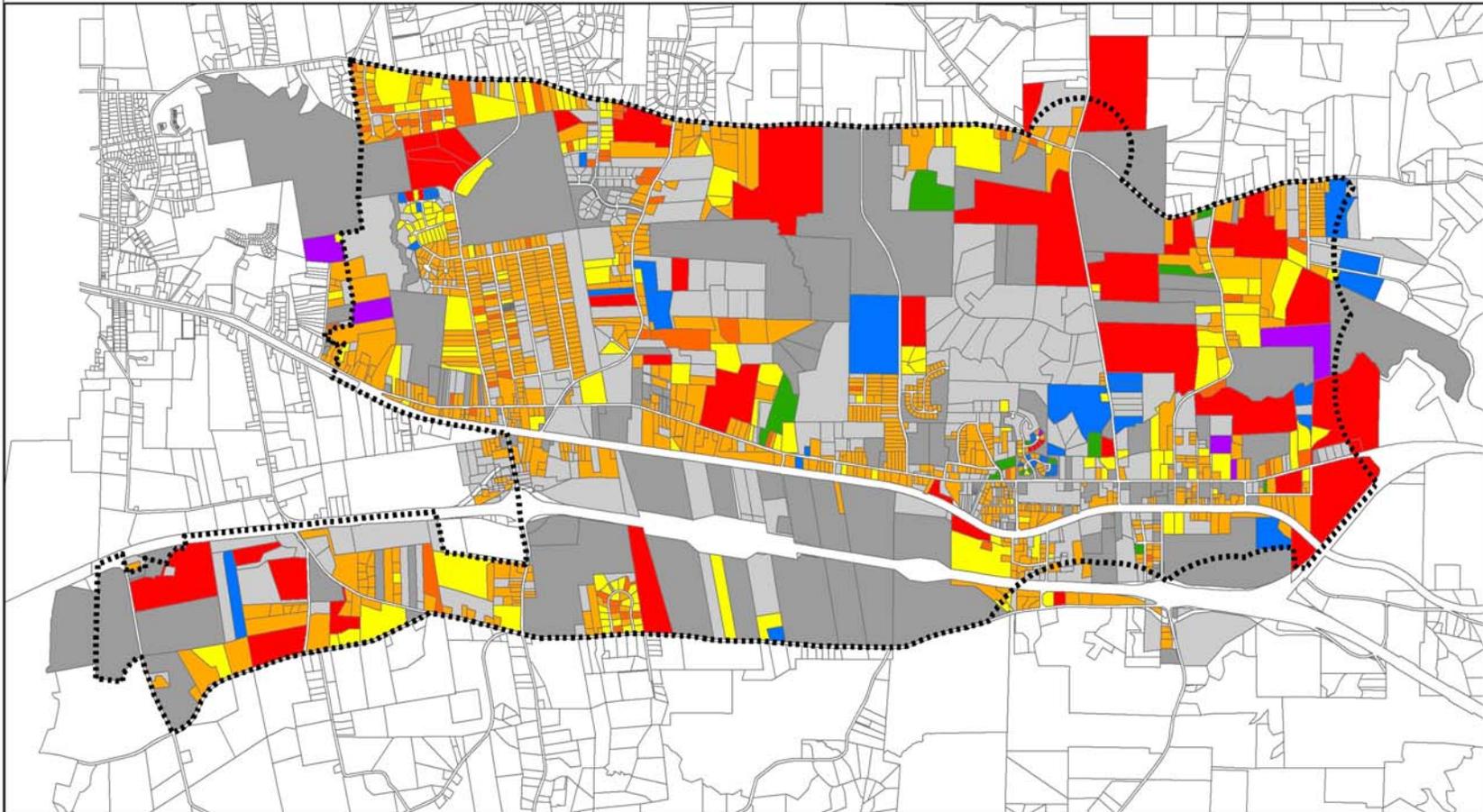
Map 25 shows the value of parcels used for residential purposes in the planning area. The map was produced by performing a GIS query on parcels shown as Residential (or Agricultural Use

Vale with a Residential component) on the Existing Land Use Map (Map 17). The value is the Total Value, as contained in County Tax Assessor information, of both the land and structure. It is noted that the map contains some anomalies in Ashwick Subdivision because the subdivision is currently under construction. Thirteen (13) of the lots are shown to have a value of less than \$124,751 because a house is either under construction or it is essentially finished but a certificate of occupancy has not yet been issued. Because of this, the lot was coded as “Residential” for land use purposes but the Tax Assessor values (on which the GIS query is based) have not yet “caught up” due to the sequence of events that occurs during the construction process.

As is evident on Map 25, a significant number of residential properties in the planning area are considered to be affordable to low- and moderate-income households. The following table depicts which color-coded residential parcels are considered affordable to the different low- and moderate-income household categories.

<b>Planning Area Residential Affordability (to be used with Map 25)</b>		
	<b>Three-Person Household</b>	<b>Four-Person Household</b>
Low Income (60% of Median)	Light Orange	Light Orange Dark Orange
Moderate Income (80% of Median)	Light Orange Dark Orange Yellow	Light Orange Dark Orange Yellow Green
Median Income (100% of Median)	Light Orange Dark Orange Yellow Green Blue	Light Orange Dark Orange Yellow Green Blue Purple
Note: Properties coded in Red on Map 25 are considered affordable only to households earning more than 100% of the Median Income for Orange County.		

# Housing Values



## Legend

-  SAP Boundary
-  Non-residential Uses
-  Undeveloped

Total Value	(Count)
< 124751	(909)
124751 - 138200	(61)
138201 - 199600	(168)
199601 - 210050	(14)
210051 - 249500	(37)
249501 - 262546	(6)
> 262546	(41)



Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman, March 10, 2006  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983

Map 25

Source: Orange County Planning Department

The planning area has experienced new residential growth in recent years. As the table below shows, residential growth has been predominantly single-family site built or modular homes. Relatively few additional manufactured homes have been sited in the planning area since 2002. The table also shows that the average value of site built or manufactured homes in the planning area has risen dramatically since 2002. In 2002, the average value of a site built or modular home was \$98,124; by 2005, the average value of new construction had risen to \$189,250. During the same time period, the average square footage of the homes increased from 1,950 to 2,410. This equates to a per-square-foot average cost of \$50.32 in 2002 to a per-square-foot average cost of \$78.53 in 2005. Some of this variance is due to the fact that Richmond Hills Subdivision (a Habitat for Humanity Project) was permitted for construction from 2002 to 2004. Because Habitat for Humanity is able to construct homes for less than market rates due to the use of volunteer labor and donation of some building materials, the construction value of the homes is significantly less than the value of a comparable home constructed by a for-profit builder.

<b>Certificate of Occupancy Permits Issued in the Planning Area, by Year</b>				
	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Total Number of COs Issued	31	42	37	24
Site Built or Modular	27	38	36	22
Manufactured Home	4	3	1	2
Average Number of Square Feet, all types	1,995	1,797	2,512	2,291
Site Built or Modular	1,950	1,884	2,538	2,410
Manufactured Home	2,190	1,295	1,600	982
Total Value, all types	\$2,999,338	\$4,008,125	\$5,587,086	\$4,184,494
Site Built or Modular	\$2,649,338	\$3,906,825	\$5,502,086	\$4,163,494
Manufactured Home	\$350,000	\$101,300	\$85,000	\$21,000
Average Value, all types	\$96,753	\$95,432	\$151,002	\$174,354
Site Built or Modular	\$98,124	\$102,811	\$152,836	\$189,250
Manufactured Home	\$87,500	\$34,270	\$85,000	\$10,500

NOTE: Value pertains to structure only (does not include value of land).

Source of Data: Orange County Inspections Department, March 2006

<b>Comparison of Planning Area to Orange County*</b>				
	2002	2003	2004	2005
<b>Site Built and Modular Homes</b>				
Total Number of COs Issued, entire county	380	380	344	313
Total Number of COs Issued, planning area (% of total)	27 (7.1%)	38 (10.0%)	36 (10.5%)	22 (7.0%)
Average Number of Square Feet, entire county	3,200	3,189	3,450	3,747
Average Number of Square Feet, planning area	1,950	1,884	2,538	2,410
Average Value, entire county	\$200,380	\$210,305	\$254,692	\$305,943
Average Value, planning area	\$98,124	\$102,811	\$152,836	\$189,250
Average square-foot cost, entire county	\$62.62	\$65.95	\$73.82	\$81.65
Average square-foot cost, planning area	\$50.32	\$54.57	\$60.22	\$78.53
<b>Manufactured Homes</b>				
Total Number of COs Issued, entire county	49	25	25	20
Total Number of COs Issued, planning area (% of total)	4 (8.2%)	3 (12.0%)	1 (4.0%)	2 (10.0%)
Average Number of Square Feet, entire county	1,514	1,471	1,217	1,497
Average Number of Square Feet, planning area	2,190	1,295	1,600	982
Average Value, entire county	\$46,511	\$50,992	\$28,738	\$41,669
Average Value, planning area	\$87,500	\$34,270	\$85,000	\$10,500
Average square-foot cost, entire county	\$30.72	\$34.66	\$23.61	\$27.84
Average square-foot cost, planning area	\$39.95	\$26.46	\$53.13	\$10.69
NOTE: Manufactured Home information includes placement of a new or pre-owned manufactured home that is not a direct replacement of an existing manufactured home (i.e., a manufactured home did not exist on the lot immediately prior to placement of the reported manufactured home).				

\*: Includes Hillsborough because Orange County administers building permitting and inspections for the Town of Hillsborough. Does not include the Towns of Carrboro or Chapel Hill, or the portion of the City of Mebane within Orange County.

## **J. Economic Development**

In 1994, Orange County designated three (3) Economic Development Districts (EDDs) within the county. One of the three EDDs is located in the planning area and is designated as such on the current Future Land Use Map (map 22 on page 51). The other two EDDs are located south of Hillsborough on Old NC 86 and in the easternmost portion of the county along Interstate 85 and Highway 70. The EDDs are subject to special development regulations, as is detailed in the Economic Development Districts Design Manual administered by Orange County's Planning Department.

The EDD located in the planning area is referred to as the I-85/Buckhorn Road EDD and is comprised of approximately 845 acres. One of the primary obstacles in developing the EDD has been the lack of public water and sewer. It was the intent of the Design Manual that sites in the EDDs be served with public water and sewer. As was stated in Section D, Water Service and Sanitary Sewer Service, Orange County and the City of Mebane entered into a Utility Service Agreement in 2004 for the purpose of providing these services to portions of the EDD. When the Utility Service Agreement was signed and adopted, it was the intent of Orange County and the City of Mebane to evaluate the situation upon buildout of the areas covered by the agreement to ascertain if service areas should be expanded. Land development in the EDD is to occur under Orange County development regulations.

The planning area contains a number of commercial and industrial uses, located primarily along the Highway 70 corridor. In the planning area, a total of 50 parcels of land totaling 130 acres are used for commercial or industrial uses.

#### **IV. Current Major Issues and Solution Recommendations**

This section contains discussion of major issues identified by the Task Force during the planning process and possible solution recommendations. Maps 27 and 28, which follow the recommendation text, show the recommendations that can be displayed on a map but the text below also contains recommendations that are not well suited for mapping. Additionally, some responses to Citizen Comments (Appendix B) contain recommendations and should be referred to for further information and during implementation actions.

**Goal: In the future, the planning area should be well served by reliable infrastructure to accommodate orderly, planned growth. The planning area will retain the core village area that will be the center of community life. An efficient multi-modal transportation system will operate in the area and commercial and light industrial uses both in the planning area and nearby will provide job opportunities to area residents. There will be a mix of housing types and sizes that will be economically accessible to a broad spectrum of working people. Parks and greenspace will be connected by a system of greenways that will allow people to enjoy a high-quality outdoor environment while also serving as corridors for wildlife migration.**

##### **A. Water and Sewer**

**Objective: Orderly and planned expansion of the sewer system and a sufficient public water supply system.**

The availability of water and sewer systems is one of the primary factors influencing the characteristics of development. Areas that are not served by water and sewer systems generally develop at very low densities because water must be obtained from individual wells and sewage must be disposed of on-site via, predominantly, an on-site septic system. Additionally, non-residential development tends to be very limited in areas served by on-site well and septic systems and often non-residential development is dependent upon the availabilities of fire service levels.

Efland is the only area under Orange County's jurisdiction that has a county-owned public sewage disposal system. Because of this, the planning area represents one of the areas of Orange County where higher density development is a viable option within the County's planning jurisdiction.

Efland residents have expressed concerns over the amount of time the sewer project first initiated in 1984 has taken to implement. Additionally, some residents would like to see all six phases shown on Map 13 implemented, not just Phases 1A, 1B, and 2. The need for a long range Master Plan and associated funding sources for water and sewer has been discussed.

The Task Force is supportive of planned growth occurring within the planning area but existing limitations on water and sewer services need to be addressed prior to permitting additional growth. Following are recommendations regarding water and sewer issues:

1. The 1984 plan needs to be updated. Areas to be designated Efland Transition Area, Mixed Use, or Economic Development Area on the Future Land Use Map of this plan (Map 30) should receive priority for water and sewer services.
2. An engineering study of the existing OAWS water systems should be completed. The county and OAWS should work cooperatively on water supply issues. The following considerations should be addressed as part of the study:
  - a) The water system area should be coordinated with sewer system areas and with designated growth areas.
  - b) The water system should have volume and pressure sufficient for both potable water and fire suppression purposes. Level of service standards for water pressure that would be adequate for fire suppression needs should be developed and adopted as part of the study process. Changes to the existing system to accomplish these objectives should be identified and implemented.
  - c) A policy should be adopted requiring that future expansions to the water system have adequate pipe sizes and pressure to ensure an ample water supply for both potable water and fire suppression. Future growth projections must be taken into account when designing the system.
  - d) OAWS has developed system capacities through agreements with other utility providers and large capacity wells but how those allocations are distributed from an engineering and area standpoint are yet unresolved.
3. A comprehensive long range Master Plan for water and sewer should be developed for the Planning Area. The following considerations should be addressed:
  - a) OAWS and the City of Mebane are not parties to the Water and Sewer Management Planning and Boundary Agreement (WSMPBA) which guides the placement of water and sewer facilities within Orange County. Orange County must act in accordance with the WSMPBA, which greatly affects Cheeks Township as a large portion of the Orange County Primary Service Area lies within Cheeks Township. In fact, a portion of the planning area is within Orange County's Primary Service Area while other portions of the planning area are outside of the Primary Service Area. This has great implications on where Orange County can place water and sewer lines.
    - i. Orange County should work cooperatively with the other parties of the WSMPBA, OAWS, and the City of Mebane to include OAWS and the City of Mebane in the WSMPBA. Any changes to the service area boundaries should be carefully analyzed during this process to ensure proper and realistic boundaries.
    - ii. As part of this process, agreements among service providers should be made as to where the various separate systems will operate.
  - b) The Master Plan should specifically address which area(s) will receive priority to encumber system capacity. Capacity should be allowed to be encumbered by areas that will promote orderly growth (e.g., "leapfrogging" of the sewer system should be discouraged). A policy decision regarding how capacity

will be divided among residential and non-residential uses should be made. Ample capacity should be reserved for non-residential uses.

- c) There should be an objective to encourage existing development to tie-in to the water and sewer systems when they are available in the area and a requirement that new development in an area served by the water and/or sewer systems utilize the system(s).
  - d) A policy regarding the self-sufficiency of the water and sewer systems should be adopted. The systems should operate in such a way that revenues cover the costs of operating and maintaining the systems.
4. Extending water and sewer infrastructure throughout the planning area is desirable if other recommendations in this plan are also adopted. Specifically, recommendations regarding site design, overall density, and design guidelines would need to be considered in any expansion plans.
- a) Although a portion of the area is outside of the Small Area Plan planning boundary, consideration should be given to extend sewer infrastructure to the Mt. Willing/Interstate 40-85 interchange north of the Interstate. Additionally, permitting limited non-residential growth on the south side of the Interstate west of Mt. Willing Road in the vicinity of West Ten Road should be studied given the proximity of the area to Gravelly Hill Middle School and West Ten Soccer Park.

## **B. Land Use**

**Objective: Preservation of community character while allowing for planned, sustainable residential and non-residential growth.**

Note: Implementation of most of the Land Use recommendations that follow will require amendments to existing development regulations such as the Land Use Element Text and Map, Zoning Ordinance Text, and Zoning Map. Additionally, Impervious Surface Limit regulations (contained in the Zoning Ordinance) will need to be studied and modified to implement the recommendations pertaining to density increases.

How land is used is a major factor in many aspects of people's lives. Land Use directly affects people's quality of life in a variety of ways. Community character, traffic generation and flow, availability of services, and the quality of the natural environment are all affected by Land Use decisions. Indeed, one of local government's principal powers is the authority to control land development so that growth is managed in such a way that negative impacts are minimized and/or mitigated.

As mentioned in "A" above, the Task Force is generally supportive of planned growth, provided that growth occurs in a managed and sustainable fashion. The Task Force is also generally supportive of the conversion of residential structures on Highway 70 into low impact office and commercial uses. However, any potential conversions of residential land uses into commercial

uses along Highway 70 should minimize impacts to the existing residential component along the Highway and the importance of existing residential uses should continue to be recognized.

There is concern that the eclectic, vernacular character of Efland be preserved to the greatest extent possible. There is no desire on the part of Efland residents to become a homogenous, “anywhere U.S.A.” community. There are strong feelings that the charm that makes Efland unique should be preserved. Development opportunities in the planning area should be based on Smart Growth and environmental stewardship principles.

One of the factors affecting growth in the southeast portion of the planning area is the Critical Area line for the once-proposed Seven Mile Creek Reservoir. At this time, a reservoir is not planned along Seven Mile Creek. However, lands acquired in the vicinity of Seven-Mile Creek are planned for a future Nature Preserve/low-impact park and land use planning regulations south of Interstate 40/85 still need to reflect these environmental constraints.

Map 29 highlights proposed changes to the Adopted Future Land Use map. If the recommended changes are adopted, Map 30 would become the Future Land Use map for the planning area. Descriptions of proposed new Future Land Use categories are found immediately below. The descriptions of adopted Future Land Use categories are found in the chart on page 50.

*Economic Development Area.* Land in transition which has been specifically targeted for economic development activity consisting of light industrial, distribution, office, service/retail uses, flex space (typically one-story buildings designed, constructed, and marketed as suitable for uses as offices but able to accommodate other uses; e.g. warehouse, showroom, manufacturing assembly or similar operations), governmental uses, and high density (multi-family) residential uses. Such areas are located adjacent to interstate and major arterial highways, and subject to special design criteria and performance standards. (Note: This definition is different than the adopted “Economic Development Area” definition. This proposed definition includes high density (multi family) residential uses as a prospective use. The adopted definition does not include residential uses).

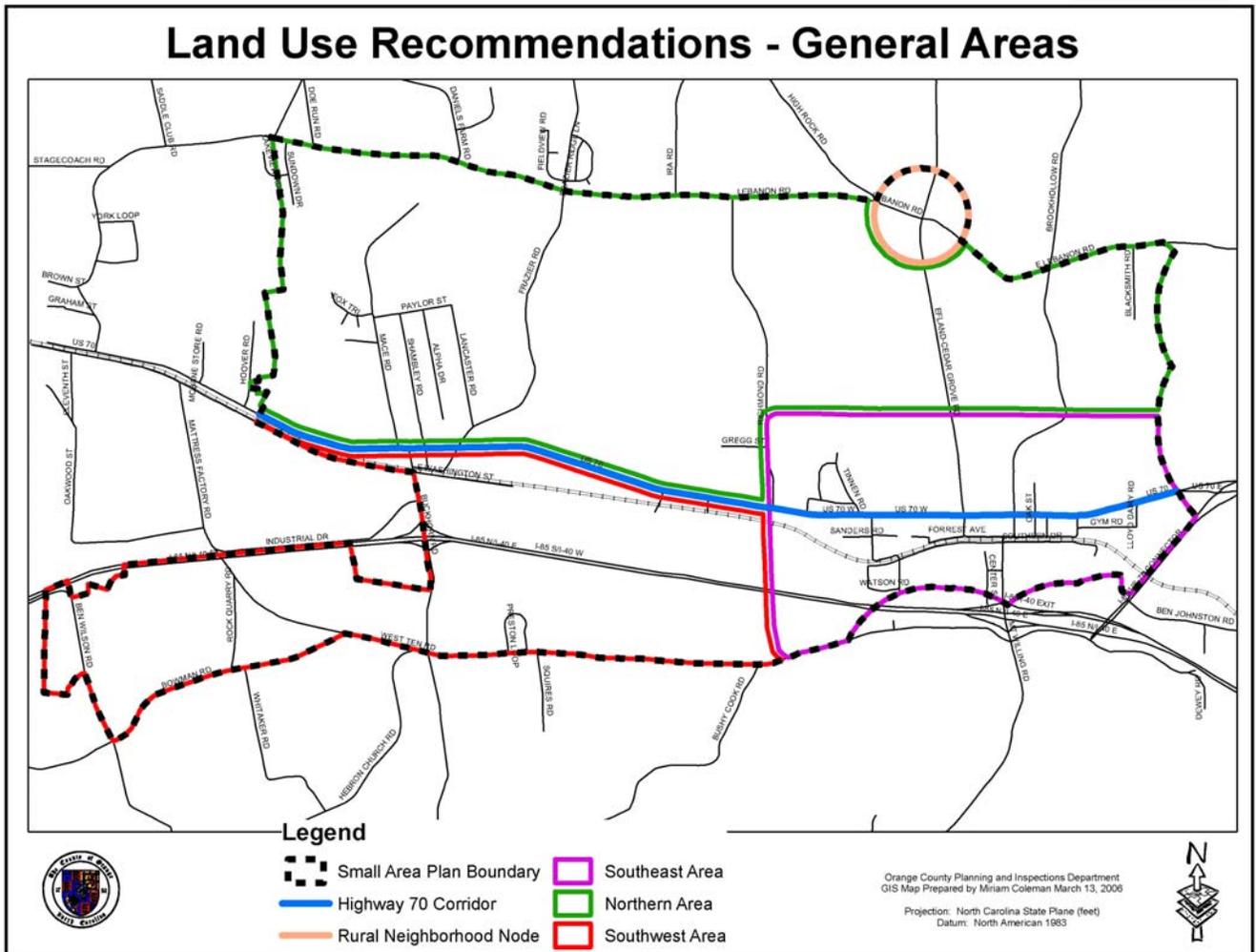
*Efland Transition Area.* Land located in areas that are in the process of changing from rural to village densities, that are suitable for higher densities and could be provided with public utilities and services within the next twenty (20) years or where such utilities and services are already present. Non-residential uses implemented in accordance with overlay districts may be appropriate. (Note: See “Highway 70 Corridor” subsection for more information on potential overlay district).

*Efland Transition Area Reserve.* Land located within Orange County’s water and sewer Primary Service Areas as provided by the “Water and Sewer Management, Planning and Boundary Agreement” and Map but outside of designated Efland Transition areas. This area is appropriate for low intensity and low density residential development when private well and septic systems are used. Off-site ground absorption sewage disposal systems or package sewage treatment plants may be allowed based on established conditions. If public water and sewer services become available, village-type densities are suitable.

*Mixed Use.* Land located in areas served or to be served by public water and sewer where a mix of residential, commercial, and light industrial uses are appropriate. Residential uses within Mixed Use areas should have a minimum density of six (6) units per acre.

The following are recommendations pertaining to land use. The planning area has been divided into general geographic areas for land use recommendations. Map 26 depicts the location of the geographic areas discussed below. Please note that the boundaries on Map 26 are general in nature for user orientation purposes and are not intended to be absolute boundaries.

Map 26



## Highway 70 Corridor

The Highway 70 corridor is an important east-west transportation route. A variety of land uses, including residential uses, are located along the corridor. Balancing residential and non-residential uses along the Highway 70 corridor is an important aspect of preserving the community character of the planning area. The following recommendations are made regarding the Highway 70 corridor:

1. A mix of uses should be allowed along the Highway 70 corridor but non-residential uses should be low-impact (i.e., low traffic generators, etc.) office and commercial types of uses. In order to achieve this, a corridor overlay plan and zoning district should be created. The plan/zoning district should incorporate the following ideas:
  - a) Additional mixed use and urban development should be served by the sanitary sewer system.
  - b) In order to protect community character while permitting appropriate growth, low impact non-residential uses such as offices should be encouraged. High traffic generating uses should not be allowed. Limits on the amount of permitted parking should be established and parking should be located at the sides or rears of buildings rather than directly in front of the buildings.
  - c) Because they are not in keeping with existing community character and tend to be high traffic generators, 'formula' (i.e., 'chain' or franchise) restaurants and/or drive through restaurants should not be permitted along the Highway 70 corridor unless they are implemented in a manner that modifies the typical design to blend with the community.
  - d) The number of curb cuts along Highway 70 should be minimized. Uses should be allowed only one curb cut on the Highway and/or be connected as part of the frontage road access management system. Additionally, opportunities for re-development and the re-combination of small lots should be identified and encouraged.
  - e) The corridor overlay plan should include a streetscape plan and design guidelines for new buildings and uses. The guidelines should encourage appropriate conversion of existing residential structures into commercial uses so that the feel of a residential corridor is preserved. The guidelines should also address signage standards to be applied to the corridor. The current eclectic, vernacular character of the area should be preserved and homogenous design should be discouraged.
  - f) The corridor overlay plan should balance commercial and residential uses. The Highway 70 corridor should not be permitted to become a predominantly commercial corridor.
  - g) The corridor overlay plan should address how to allow the expansion of existing appropriate commercial uses that are not in conformance with current zoning regulations ("nonconforming uses").
  - h) New or redeveloping non-residential uses should utilize existing housing stock and/or build at a scale and character that complements the existing architecture.
  - i) Non-residential uses in the Highway 70 corridor should be encouraged first at the following intersections: Buckhorn Road, Frazier Road, Richmond Road, and Efland-

Cedar Grove Road. Community scale uses would be appropriate at these intersections.

### Southeast Portion of Planning Area

The southeast portion of the planning area contains large tracts of land currently in agricultural use. Residents have long viewed the area as a “gateway” into the core of Efland. The character of the gateway is an important factor in the perception of Efland as a rural village.

The southeast portion of the planning area also enjoys easy access to major transportation facilities including Interstate 40/85 and the US 70 Connector. Because of this, development potential for the area is high. There is a desire among residents of the area for managed, orderly growth in conjunction with the desire to preserve the character of the area. Both desires can be accomplished if development is done in a context sensitive manner. The following recommendations are made regarding the southeast portion of the planning area:

1. The southeast portion of the planning area should be considered for “Mixed Use” designation to be developed only when public water and sewer systems are available in the area.
2. Guidelines for site and architectural design should be developed and adopted prior to development proposals being accepted for the area. The guidelines should include, at a minimum, policies on the following issues:
  - Façade materials
  - Architectural details
  - Impervious surface limits
  - Landscaping and buffering
  - Preservation of open space
  - Access Management
  - Signage
  - Site orientation
3. Non-residential uses should be allowed on Southern Drive between Mt. Willing Road and Gaines Chapel Road.
4. The status of the Seven Mile Creek Reservoir should be decided and if a reservoir will not be created along Seven Mile Creek in the future, the Critical Area line should be reevaluated. The Critical Watershed status of the lands adjacent to the southeast portion of the planning area affects their potential for development. The following recommendations are made if the Critical Watershed line is revised:
  - a) Growth served by public water and sewer should be allowed north of the Interstate in the vicinity of the Mt. Willing Road/Interstate 40-85 interchange. (A revision to the WSMPBA Map would be required to implement this recommendation).

- b) Permitting limited non-residential growth on Mt. Willing Road on the south side of the Interstate in the vicinity of West Ten Road should be studied given the proximity of the area to Gravelly Hill Middle School and West Ten Soccer Park. (A revision to the WSMPBA Map would be required to implement this recommendation).
- c) The need for additional water quality Best Management Practices (BMPs) should be evaluated since Seven Mile Creek would continue to be a water supply watershed.

### Southwest Portion of Planning Area

The City of Mebane annexed a parcel of land in the southwest portion of the planning area after the planning area boundary was established. The annexed parcel is labeled on Map 27. As was discussed in the Water and Sewer System portions of this small area plan, Orange County and the City of Mebane have a Utility Service Agreement pertaining to the existing Economic Development Area. The following recommendations are made regarding the southwest portion of the planning area:

1. The land use classification of the area designated as “3” on Map 12 should be changed from Commercial/Industrial Node to Economic Development with future water and sewer service to be provided by the City of Mebane.
2. The land use classification of the area designated as “6b” on Map 12 should be changed to Mixed Use with future water and sewer service to be provided by the City of Mebane. (Note that this area is not designated as a Primary Service Area on the current WSMPBA Map; Orange County action on providing water and sewer service to area 6b will require revisions to the WSMPBA map).

### Northern Portion of Planning Area

Much of the northern portion of the planning area was previously designated as 10- and 20-Year Transition Areas. Additionally, much of the north portion of the planning area is within Orange County’s Primary Service Area for water and sewer services under the WSMPBA. The following are recommendations pertaining to the northern portion of the planning area:

1. Change the 10- and 20-Year Transition Area designation to “Efland Transition Area.”
2. Change the portion of the planning area north of the “Efland Transition Area” area but within the WSMPBA Primary Service Area to “Efland Transition Area Reserve.”
3. If the Water and Sewer Management Planning and Boundary Agreement is revised in the future, as is recommended in the Water and Sewer recommendations, the portions of the

planning area that not currently in Orange County's Primary Service Area should be designated as Primary Service Area.

4. New residential subdivisions choosing to develop under existing density regulations (1 unit per acre unless density bonuses related to affordable housing are awarded) should be cluster subdivisions served by public or private water and sewer systems Cluster subdivisions allow for preservation of open space and environmentally sensitive features while permitting a reasonable amount of development on the overall parcel of land. Higher density development can also be achieved through rezoning which would consider development proposals on a case-by-case basis. Density may be slightly increased if Transfer of Development Rights (TDR) credits are implemented.

### Existing Rural Neighborhood Node

The current Future Land Use Map contains a Rural Neighborhood Node at the intersection of Lebanon Road and Efland-Cedar Grove Road. Rural Neighborhood Nodes are intended for small-scale commercial uses characteristic of "Mom and Pop" convenience stores and gas stations. The Rural Neighborhood Node is outside of Orange County's water and sewer Primary Service Area as per the WSMPBA. Given the proximity of this Node (less than 2 miles) from the core Efland area where services intended to be offered in a rural neighborhood node are available, it is recommended that the Rural Neighborhood Node at this location be removed from the Future Land Use map.

## **C. Transportation**

### **Objective: Provision of an efficient, multi-modal transportation system.**

The vehicular transportation system in the planning area generally functions well, but there are some concerns, especially regarding motorized vehicle flows during peak traffic hours. However, some peak hour congestion is also to be expected in an urban or suburban area. The key is managing the transportation system such that it can function as safely and efficiently as possible. Additional concerns regarding the transportation system include pedestrian and bicyclist safety and the general deficiency in the walkability/bikeability of the planning area, connectivity to the Interstate for tractor-trailer traffic, and the idea that the current transportation system encourages single-occupancy vehicle use while discouraging bicycling and walking.

Of particular concern in Efland is the volume of traffic occurring on Efland-Cedar Grove Road/Forrest Avenue/Mount Willing Road during peak hours as people make their way to and from Interstate 40/85. The fact that there is an at-grade train crossing on this route creates an even larger concern as trains passing through the area create a backup of 50 to 100 cars during "rush hours." This also creates a safety concern as emergency vehicles cannot navigate this essential route when trains pass through. Additionally, two roughly 90-degree turns are part of this high-volume route.

Sidewalks do not exist anywhere in the planning area and it was only very recently that Highway 70 was widened enough to accommodate bicycles along the route. Broadening transportation alternatives beyond the passenger car is important. “Alternative” transportation modes such as pedestrian, bicycle, and mass transit are part of an intermodal transportation system. The following are recommendations pertaining to transportation:

1. Road volumes and capacities on Brookhollow, Richmond, and Efland-Cedar Grove Roads need to be further studied before significant additional development that will utilize these roads is allowed. Improvements to these roads may be necessary to efficiently accommodate growing traffic volumes.
2. The Efland-Cedar Grove/Forrest Avenue/Mt. Willing road corridor should be realigned. A vehicular underpass under the railroad should be considered and the at-grade crossing should be eliminated if an alternative is implemented. (See Map 28 for possible alignment). Additionally, an alternative to a traffic signal should be considered to efficiently manage traffic; specifically, traffic circles should be considered to more effectively move peak hour traffic through this area. Route re-alignment should also endeavor to maintain community connectivity between areas south of the railroad track and the core area of Efland. If an underpass proves not to be feasible, then the county should work with NCDOT for a solution to more effectively route traffic through this area.
3. A connection from Highway 70 east to the Interstate connector should be identified and constructed (i.e., eastbound Highway 70 to southbound connector to Interstate which could reduce traffic volumes on Mt. Willing Road and Forrest Avenue). Mitigation measures to address any identified adverse impacts due to constructing the connection would also need to be implemented.
4. A park-n-ride lot should be located in the planning area. The exact location should be determined in conjunction with transportation planning professionals and an advisory committee but a location near the Interstate and walkable to the Efland village core should be considered. (See Map 28 for the general location of the Efland village core).
5. Bicycle lanes should be provided along all major roadways. Major roadways in the planning area include Brookhollow Road, Efland-Cedar Grove Road, Richmond Road, Frazier Road, Buckhorn Road, Lebanon Road, Forrest Avenue, Mt. Willing Road, West Ten Road, Bowman Road, and Ben Wilson Road.
6. Sidewalks are necessary for safe pedestrian travel. Sidewalks should be required in new developments and a sidewalk plan to retrofit developed areas so that sidewalks can serve as connectors between residential, commercial, and civic uses should be completed and implemented along with mechanism for handling liability and maintenance of the sidewalks. Constructing a sidewalk along Highway 70 from Tinnen Road to Lloyd Dairy Road should be a priority. Additionally, sidewalk and/or trail privileges should be

secured when sewer right-of-way is acquired so that an additional acquisition is not necessary in the future.

7. A streetscape plan should also be developed in conjunction with the sidewalks program. Trees are needed for shade along sidewalks and landscaping for aesthetic purposes should also be incorporated into the streetscape.
8. The ability to have a commuter train station in the future should be preserved, preferably within the vicinity of the Efland village core near Mt. Willing Road or Efland-Cedar Grove Road Extension. A station could serve the existing Amtrak service or a station could be incorporated into the proposed Triangle commuter rail system.
9. The county should work cooperatively with Triangle Transit Authority (TTA) to provide bus service in the area.
10. Mace Road should be planned to connect through to Lebanon Road.
11. An Interstate pedestrian overpass should be planned in the future to connect areas north of Interstate 40/85 with Gravelly Hill Middle School and West Ten Soccer Park.
12. A Buckhorn Road Access Management Plan should be explored.

#### **D. Housing**

**Objective: Provision of a mix of housing choices that includes decent, affordable housing for “the workforce.”**

Housing affordability is a significant issue throughout the nation, including within the Triangle region and Orange County. Housing prices in Orange County are notably higher than within other areas of the Triangle. Historically, Cheeks Township has enjoyed somewhat lower prices than much of the county, but prices of the homes in the newer subdivisions within the planning area are still higher than many people working in Orange County can afford to pay. Working towards ensuring the provision of housing opportunities affordable to a broad spectrum of citizens should be a priority for Orange County. The following are recommendations pertaining to housing issues:

1. Residential development that is consistent with the character, size, scale, and price range of existing surrounding homes should be encouraged. Since home prices are directly tied to the square footage of the home, Orange County should consider offering incentives such as expedited review or density bonuses for developments that offer smaller sized homes.
2. Orange County should consider adopting a policy requiring that a certain percentage of new homes within a subdivision be affordable and under the control of an organization

3. Examine strategies to preserve affordability through preservation of existing neighborhoods.

## **E. Parks, Recreation, and Open Space**

### **Objective: Provision of adequate parks and recreation opportunities and open space preservation.**

Existing recreation facilities, both public and private, serve the planning area fairly well. Desire has been expressed for a trail system in the area, including pedestrian/bicycle access to Seven Mile Creek Preserve from the planning area when the preserve is opened for public use in the future. Additionally, the desire for neighborhood “pocket parks” has been expressed.

Recommendations regarding parks, recreation, and open space are as follows:

1. The planning area should include small neighborhood parks with playgrounds to augment Efland-Cheeks Park & Community Center and private facilities. A possible means to achieve neighborhood parks and provide in-town recreation alternatives and community destinations is to require their dedication when new residential development is approved. Alternatively, as part of the required open space in a new residential development, developers could be required to provide a small park within new subdivisions that a Homeowner’s Association would maintain. However, private parks would be available only to residents of the particular subdivision in which they are located.
2. A trail system along McGowan Creek should be planned and implemented. The trail might have to cross the creek in several locations due to the proximity of existing homes near the creek but this could be accomplished using pedestrian bridges. The following recommendations are made to encourage trail development:
  - Indemnification of the landowner from lawsuits
  - Provision of a small tax incentive for the landowner
  - Prohibition of motorized vehicles on the trail
  - Assurances that local government will maintain the trail
3. A greenway along the Eno River, east of the planning area, has been proposed. If the greenway is implemented, any future trail/greenway along McGowan Creek should tie in to the planned Eno River greenway.
4. When the planned Seven Mile Creek Nature Preserve opens for regular public use, a pedestrian/bicycle connection from the planning area should be provided to the Preserve. Planning for such a connection should occur as part of the planning process for the Preserve.

5. Open space should continue to be required as part of the land development approval process.
6. Additional space may be needed in the next few years in the community center at Efland-Cheeks Park. Space needs should be monitored so that monies for expansion can be included in the county's Capital Facilities budget when additional space becomes necessary.
7. The county should consider including a branch library at the Efland-Cheeks Park & Community Center.

## **F. Communications**

**Objective: Provision of a high-quality communications system that will meet the needs of business, industry, and residents.**

Communication systems are an important aspect of attracting commercial uses to appropriate sections of the planning area. Factors such as wireless communication, high-speed internet access, and state-of-the-art communication infrastructure are analyzed by businesses and residents considering locating in a given area.

Technology is changing at an ever-increasing rate and keeping abreast of changes can be essential to staying competitive. In emergency situations, functioning communication systems can literally be the difference between life and death. Within the planning area, cellular phone coverage is currently sufficient. However, there are areas adjacent to the planning area that lack proper coverage. Given the nature of communication systems, some of the following recommendations extend outside of the planning area and are recommendations regarding a countywide policy to improve access to communication technology.

1. Achieving full cellular wireless coverage countywide should be a priority. A Telecommunications Plan that will achieve this objective should be developed and implemented. In order to minimize the number of free-standing towers necessary for antennas, the county should work with the power companies to allow wireless communication antennas on existing transmission line structures.
2. DSL and/or cable Internet service is needed, at a minimum, in areas targeted for growth. These services are particularly vital for commercial or industrial uses although providing these services to residential uses should also be considered. The county should work with the providers of these services to ensure that necessary infrastructure is extended to growth areas.
3. The county should consider asking providers of wireless communication services to install generator backup instead of battery backup at cellular switch sites. During

prolonged power outages, the battery backups are depleted and the wireless communication system stops functioning.

## **G. Intergovernmental Issues**

**Objective: A greater level of intergovernmental coordination between Orange County and the other governmental entities in the planning area.**

Planning coordination with the City of Mebane has become increasingly important as the City of Mebane continues to grow within Orange County. Intergovernmental coordination is becoming increasingly important so that growth can be planned for in an orderly method and services can be provided in a timely manner. Growth of the city affects Orange County as the county is responsible for providing certain services for residents within the county, regardless of whether they reside within municipal limits. For example, children who live in the city's limits but within Orange County attend Orange County public schools, which are a major funding item within the county's budget. Social services such as health services provided through the county's Health Department and senior services provided through the Department on Aging are available to residents of municipal areas within Orange County. Rapid population growth can have significant fiscal impacts for the county.

Additionally, Orange County is a leader in the state on preserving the quality of the environment. Great care is taken to ensure new development has the least possible impact on the environment. There is concern within the county that rampant growth within municipal limits will adversely affect the environment and have negative impacts throughout the county.

Some residents in the planning area have expressed concern over the potential of their homes and land being annexed against their wishes by a municipal government. In past years, some residents have discussed the possibility of incorporating the community of Efland to better ensure self-governance in the future. However, incorporation is only one solution to possible annexation. Another possible solution would be to establish a growth boundary agreement with the City of Mebane. Such an agreement could ease resident's concerns about annexation and provide a more solid basis for all entities in the area regarding future planning.

Orange-Alamance Water System (OAWS) is also a significant quasi-governmental entity in the planning area. The presence of a water delivery system is one of the major factors influencing growth and the nature and form of growth. Coordination among the entities providing public services in the planning area is essential to guiding the future of the area.

The following are recommendations regarding intergovernmental issues:

1. As was discussed in the Water and Sewer portion of this section, the City of Mebane and OAWS should be invited to become signatories to the Water and Sewer Management and Planning Boundary Agreement (WSMPBA). During this process, foreseeable limits to water and sewer services would be defined and agreed to by all parties. The Towns of Chapel Hill, Carrboro, and Hillsborough and OWASA (Orange Water and Sewer

2. Orange County and the City of Mebane should work cooperatively to create and agree to a Joint Planning Understanding or Agreement. Such an agreement would allow for planning orderly growth within Orange County.
  - a. One of the issues to be discussed as part of a potential Joint Planning Agreement are which local government's development regulations (especially those related to natural resource protection) should apply to lands being developed within Orange County.
  - b. Another issue to be discussed is the loss of funds to Efland's Volunteer Fire Department (VFD) when the City of Mebane annexes lands within the VFD's service area.

## **H. Other Recommendations**

### Potential Transfer of Development Rights (TDR) Program

A consultant under contract with Orange County is currently performing a Transfer of Development Rights (TDR) Feasibility study. The study is expected to be complete in late summer of 2006. If a TDR program is feasible for Orange County, it is likely that this planning area would be targeted as a receiving area for growth because of the availability of water and sewer.

If the planning area is designated a receiving area for development credits, it will be important that the recommendations contained in this plan be incorporated into the TDR program and future growth. For example, provision of adequate open space, overall density, design guidelines, and transportation issues, among all the other recommendations contained in this plan become increasingly significant if additional growth is to occur in the planning area.

### Emergency Shelters

As the population of the planning area continues to grow, it may be necessary to designate an emergency shelter in the area. Orange County's Emergency Management Services Department should revisit the county's emergency plan to determine if population numbers in the Efland area warrant a designated emergency shelter in the area. Partnering with the City of Mebane to provide an emergency shelter in this area of the county may be an option.

### Impact Fees

Population increases translate directly into needs for local public services such as schools, infrastructure, landfills, and social services. Often, residential property taxes, a major source of local government funding, do not sufficiently cover the costs of providing these services.

Orange County currently operates a payment-in-lieu program for park funding and is one of two counties in the State that has State legislative authority to collect impact fees for schools. In recent years, the State legislature has been reluctant to grant this funding source to additional local governments or to expand the types of public services for which impact fees may be collected. Orange County officials should endeavor to ensure that new development pays its fair share of necessary infrastructure costs.

### Historic Preservation

The 1991 county-wide survey of historic properties appears to have not identified all of the historic sites in the county. It is recommended that a comprehensive historic resources survey be completed for the planning area and that exact locations of historic resources be mapped. This is especially important when the historic resource is located on a large parcel of land. Future development and transportation projects should endeavor to minimize any impacts on historic resources.

### Incorporation

Local citizens have discussed the idea of potentially incorporating the Efland area for a number of years. However, no formal action has occurred on the topic for a number of reasons, including the fact that property taxes would increase if a town government were established. One of the primary motives for incorporating was concern over the possibility of being annexed by the City of Mebane. However, as discussed in previous sections of this plan, there may be other avenues to explore if this issue is the main reason residents would like to incorporate. For instance, agreements with the City of Mebane could be entered into. Agreements with the City of Mebane are the preferred method of addressing citizen concerns regarding possible annexation, and should be undertaken as the first priority.

The County should also be involved in ‘building community’ in the planning area because of the changes proposed for Efland. In areas where a town government exists, the town government is normally involved in community building activities. Since the Efland area is unincorporated but development at a higher intensity than typical rural areas is proposed, the county government should be involved in building community.

If measures to address citizens concerns about potential annexation and preserving and protecting the integrity of the Efland area prove inadequate, consideration should then be given to establishing a task force to study annexation. Such a group could determine which, if any, areas of the planning area would be eligible for incorporation under revised State laws regulating new incorporations; to complete a survey of residents of any eligible areas to determine if their stance on incorporation; and to explore the feasibility of any other avenues that may be taken to ensure the preferences of area residents are addressed.

## Plan Updates

This plan should be re-evaluated and updated as necessary in ten (10) years to ensure continued planning in the area.

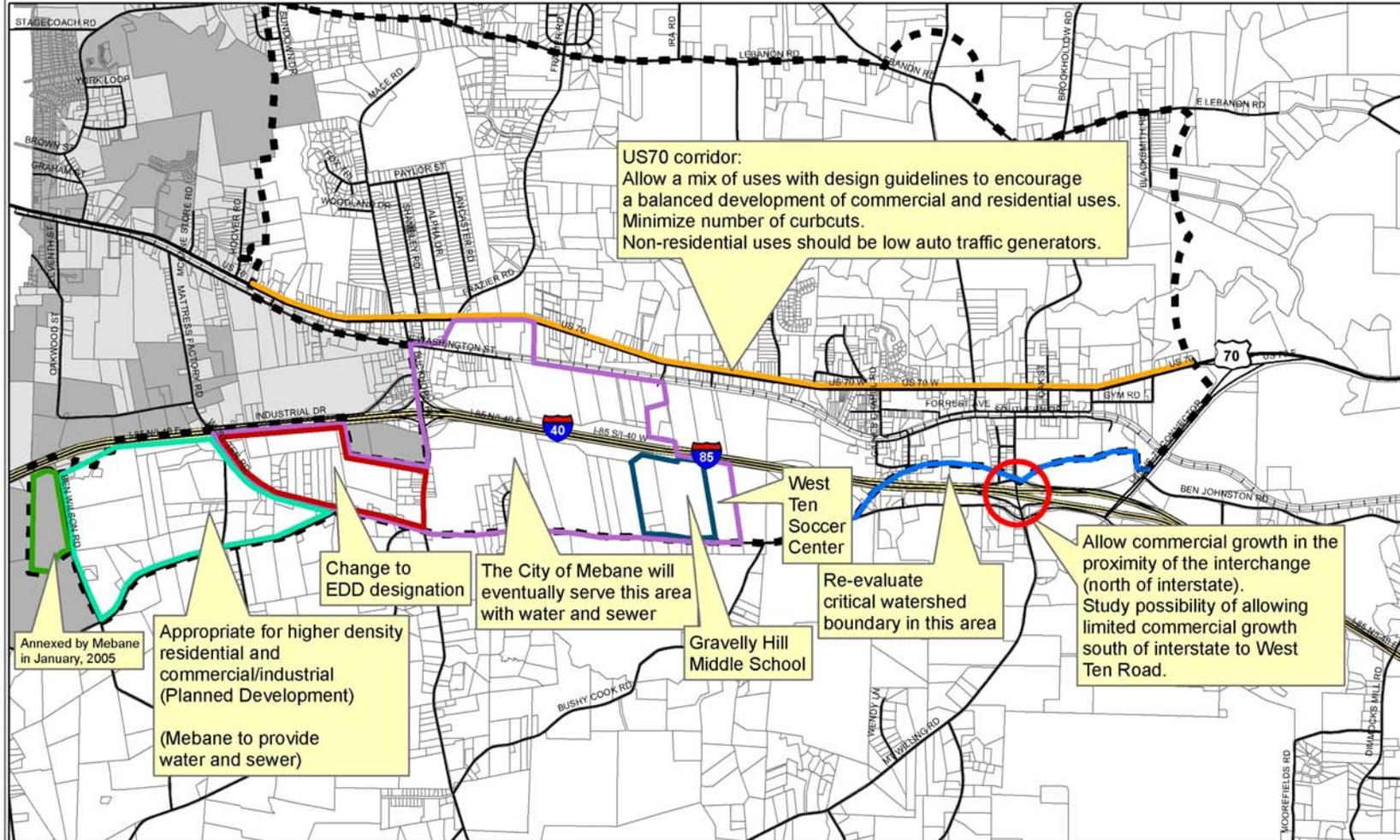
## Implementation

Implementation of many of the recommendations contained in this plan will require revisions to adopted County policies and regulations. Examples of these policies and regulations include, but are not limited to:

- Land Use Element of the Comprehensive Plan
  - Text
  - Map
- Subdivision Regulations
- Zoning Ordinance
  - Text
  - Map
  - Permitted Use Tables
  - Overlay/Design Guidelines
- Water and Sewer Policy
- Water and Sewer Management, Planning, and Boundary Agreement

County Departments and Advisory Boards other than the Planning Department and Planning Board have interests in or jurisdiction over some of the recommendation topics. These other departments and advisory boards will need to be part of the implementation process.

# Efland-Mebane Small Area Plan Boundary



## Legend

- Small Area Plan Boundary
- Mebane City Limits
- Mebane Extra-Territorial Jurisdiction
- EDD
- US 70 Corridor
- Annexed Jan. 2005 by Mebane
- Appropriate for Higher Density
- Change to EDD
- Future Mebane Water and Sewer
- Middle School Site
- Critical Watershed

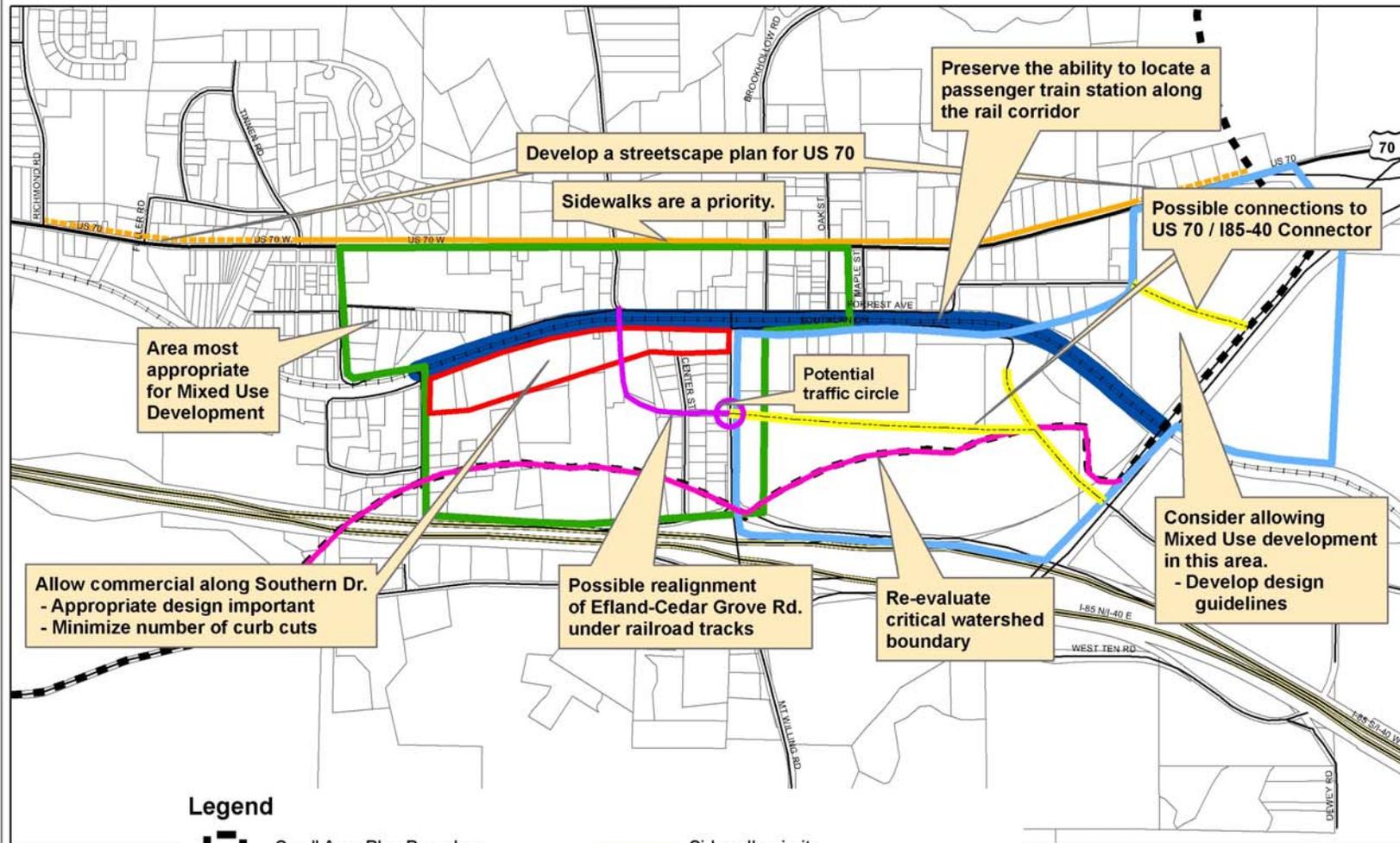
Orange County Planning and Inspections Department  
 GIS Map Prepared by Minam Coleman March 14, 2008

Projection: North Carolina State Plane (feet)  
 Datum: North American 1983



Map 27

# Efland Core Area



- Develop a streetscape plan for US 70
- Sidewalks are a priority.
- Preserve the ability to locate a passenger train station along the rail corridor
- Possible connections to US 70 / I85-40 Connector
- Area most appropriate for Mixed Use Development
- Potential traffic circle
- Consider allowing Mixed Use development in this area. - Develop design guidelines
- Allow commercial along Southern Dr. - Appropriate design important - Minimize number of curb cuts
- Possible realignment of Efland-Cedar Grove Rd. under railroad tracks
- Re-evaluate critical watershed boundary

## Legend

- Small Area Plan Boundary
- Passenger Train Station
- Consider Mixed Use
- Mixed Use Development
- Re-alignement of Efland-Cedar Grove Rd
- Sidewalk priority
- Commercial Development
- Streetscape
- Re-evaluate Critical Watershed Boundary



Orange County Planning and Inspections Department  
GIS Map Prepared by Miriam Coleman March 14, 2006

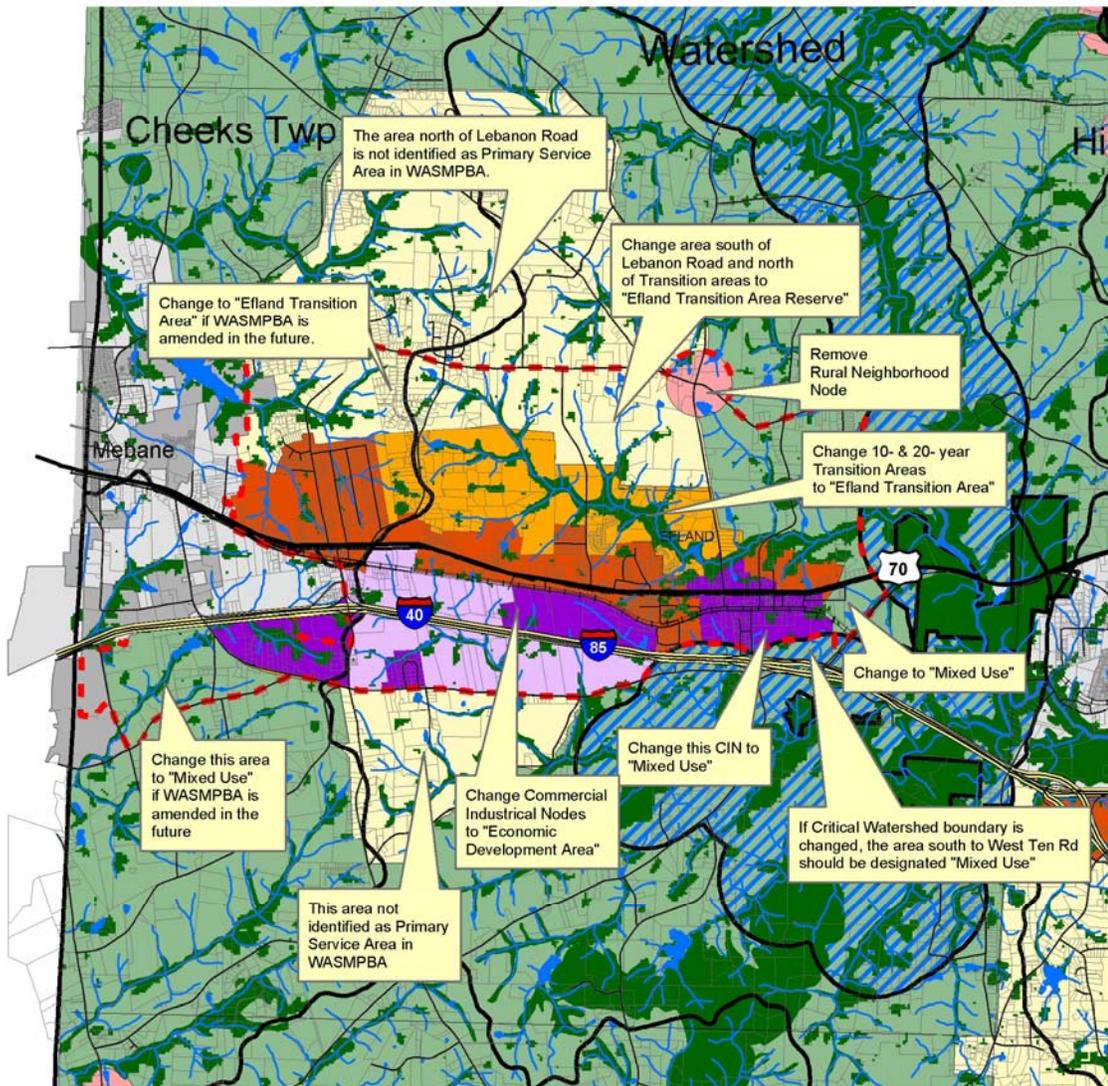
Projection: North Carolina State Plane (feet)  
Datum: North American 1983



Map 28

# Proposed Changes to Adopted Future Land Use Map (Land Use Element of the Orange County Comprehensive Plan)

Cheeks Township



**Legend:**

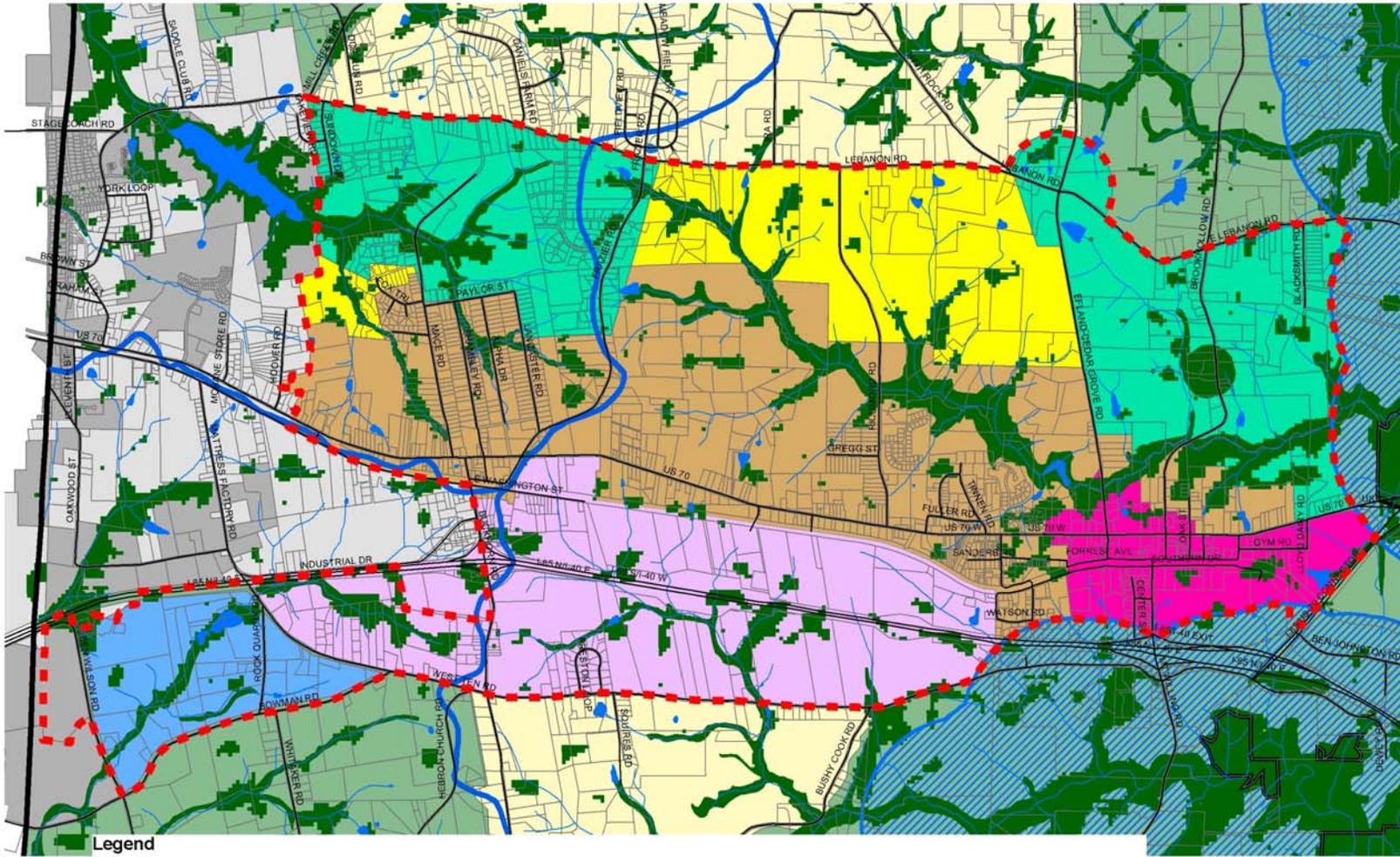
- |                           |                              |
|---------------------------|------------------------------|
| 10 year transition        | Rural Community Node         |
| 20 year transition        | Rural Neighborhood Node      |
| Rural Residential         | Rural Industrial Node        |
| Rural Buffer              | Commercial Node              |
| Agricultural Residential  | Commercial/Industrial Node   |
| Resource Protection Areas | Economic Development         |
| Municipal Jurisdictions   | OC/CH/CA Joint Planning Area |
| Public Interest Areas     | Small Area Plan              |
| Water Supply Watersheds   |                              |
| Watershed Critical Areas  |                              |



Original Adoption Date: 9-8-81  
Amended through: 6-29-00

GIS map prepared by Miriam Coleman, Orange County Planning Department, April 27, 2006

# Possible Future Land Use - Efland Small Area Plan Planning Area



**Legend**

- Small Area Plan Boundary
- Mixed Use
- Mixed Use (only if WSPBA is amended)
- Efland Transition Area
- Efland Transition Area Reserve
- Agricultural Residential
- Economic Development Area
- Rural Industrial Node
- Rural Residential
- Public Interest Areas
- Water Supply Area
- Water Supply Critical Area
- Resource Protection Areas
- Municipal Jurisdiction Town Limits
- Municipal Jurisdiction Extra-Territorial Jurisdiction (ETJ)



Original Adoption Date: 9-8-81  
 Amended Through: 6-29-08  
 Orange County Planning and Inspections Department  
 GIS Map Prepared by Miriam Coleman April 27, 2008  
 Projection: North Carolina State Plane (feet)  
 Datum: North American 1983



## **Appendix A - Status of 1991 Efland Area Study Recommendations**

The 1991 Efland Area Study contained a number of recommendations. As was stated in the Introduction of this plan, the 1991 study involved a smaller geographic area than the planning area addressed in this Plan. The 1991 study contained five (5) Community Issues with a Goal and several Objectives and Specific Action Strategies for each Community Issue. The table that follows shows the information contained in the 1991 study and provides a current status for each item.

Please note that the information contained in the following table pertains only to geographic area included in the 1991 Efland Area Study.

The Goals of the 1991 Plan are still valid unless they have been achieved or modified by this Small Area Plan. The last column in the following table identifies the page number on which readers can cross-reference inclusion of the 1991 Goals and Objectives into this 2006 Small Area Plan.

**Status of 1991 Efland Area Study Recommendations**  
 (apply only to geographic area addressed in 1991 plan)

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Community Issue #1</b>	<b>Housing Availability within Efland</b>		
<b>Goal</b>	Promote Housing Options in Efland		
<b>Objectives</b>	Pursue incentives to develop “affordable housing” alternatives to encourage young persons to live in Efland.	Orange County’s Zoning Ordinance provides a density incentive for developments that provide on-site or off-site housing opportunities for low- or moderate-income households (Section 6.28). Habitat for Humanity, in partnership with Orange County, developed Richmond Hills subdivision to provide some affordable housing options in the Study Area.	p. 73
	Encourage new housing to keep “small-town feel” by location in appropriate areas and in generally the same scale as the surrounding neighborhood.	New housing in the Study Area has generally been in keeping with the surrounding area. Ashwick subdivision and Richmond Hills subdivision are the major subdivisions that have located in the Study Area since 1991. However, new homes in Ashwick subdivision have a higher value than many homes in the surrounding area. Richmond Hills is comprised of 43 lots with an average lot size of approximately 14,500 square feet. Ashwick consists of 58 lots with an average lot size of 15,650 square feet.	p. 73

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Encourage new housing developments to protect and preserve open space that enhances the community.	Orange County development regulations generally require 33% of a parcel to remain in open space when the parcel is subdivided through the Major Subdivision process. Both Ashwick and Richmond Hills subdivisions preserved common open space. Ashwick preserved 47% of the entire development parcel in open space and Richmond Hills preserved 55% open space.	p. 75
	Encourage the development of new housing that is centrally located to services and shopping in the central Efland area. Such housing should be sensitive to the environment and in keeping with community scale.	Two major subdivisions have been developed in the Study Area since 1991. Both subdivisions have preserved open space and were developed in an environmentally sensitive manner and do not adversely affect the surrounding area.	p. 68-69, 73
	Explore the possibility of creating a local Habitat for Humanity organization to assist in creating affordable housing.	Habitat for Humanity completed the Richmond Hills subdivision in 2004.	No. (Orange County Habitat for Humanity serves the entire county).
<b>Specific Action Strategies</b>	Utilize a density bonus to be granted to developers of “affordable” housing units, both low and moderate income.	Section 6.28 (Affordable Housing) of the Zoning Ordinance was adopted on 10/22/91. The section permits a density increase for developments which provide on-site or off-site housing opportunities for low- or moderate-income households.	p. 73- 74
	Rezone residential areas near the core of Efland to moderate-density (when sewer available), to encourage housing in close proximity to businesses and services.	Sewer service is not yet widely available.	p. 83 (Mixed Use is recommended for this area).

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Representatives of the community meet with other Habitat for Humanity groups to discuss the potential for creating an Efland chapter.	Habitat for Humanity of Orange County has been serving the Efland area.	No. (Orange County Habitat for Humanity serves the entire county).
<b>Community Issue #2</b>	<b>Community Services</b>		
<b>Goal</b>	Enhance and Expand Community Services		
<b>Objectives</b>	Develop and expand the existing public sewer service currently serving part of Efland to allow all interested residents the right to acquire public sewer. Examine community water needs.	Construction of Phase I East and Phase II of the sewer system is expected to begin in late Spring, 2006. A formal water study has not been completed.	p. 64-65
	Pursue area-wide toll-free telephone service for the different telephone exchanges in the Efland area.	<b>Completed.</b> Telephone calls within Efland are now toll-free.	No. (This task is complete and no longer an issue).
	Plan a “community center” for Efland that might be used by senior citizens, youth groups, and others.	<b>Completed.</b> Phase I of Efland-Cheeks Park & Community Center was completed in 2000. Phase II was completed in April 2006. Some community members have expressed concern that the community center is not large enough and does not provide ample space for meeting rooms.	p. 75
	Encourage the establishment of needed services, including day-care, physicians, and small-scale dining and shopping within central Efland.	Establishment of all of these services has not been accomplished. One licensed day care facility is currently located within the 1991 study area and one is located immediately adjacent to the boundary.	p. 83 (land use category recommendations), p. 68 (Highway 70 Corridor recommendations)

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Specific Action Strategies</b>	Pursue (as a town or organized village) the expansion of public sewer service to the core area of Efland. Local officials meet with Orange-Alamance Water System to discuss water provision.	The community of Efland has not been incorporated and Orange County continues its jurisdiction in the area. Additional sewer construction is expected to begin in late Spring, 2006. Orange County officials met with Orange-Alamance Water System representatives in 2005 to discuss the possibility of collaborating on a water system study. Funding for such a study is not currently available.	p. 64
	Organize with other county groups to petition Utilities Commission for revisions in area-wide telephone service.	<b>Completed.</b> The telephone service concerns have been addressed and are no longer an issue.	No. (This task is complete and no longer an issue).
	Create a Community Center Committee of local volunteers to study the use and mission of such a center	<b>Completed.</b> Phase I of Efland-Cheeks Park & Community Center was completed in 2000. Phase II is currently underway and is expected to be complete in February 2006.	p. 75
	Request the Economic Development Commission's assistance in recruiting needed community services and professionals to Efland, to be located in the community focus center of Efland.	Establishment of these services has not been accomplished.	p. 83 (land use category recommendations)

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Community Issue #3</b>	<b>Transportation</b>		
<b>Goal</b>	Provide Adequate and Appropriate Transportation		
<b>Objectives</b>	Encourage the development of car-pooling and a park-n-ride lot in Efland for residents working outside the area.	An official park-n-ride lot has not been established. Rideshare (carpool) matching is available through the Triangle Transit Authority (TTA) to residents interested in ridesharing.	p. 72-73
	Recognize the strategic location of Efland in future and existing freeway transportation corridors; lay groundwork for a future transit stop in Efland as the “Gateway to the Research Triangle.”	Orange County is an active participant in regional transportation committees.	p. 72-73
	Encourage the creation of bike trails and walking trails in the community to enhance both nature awareness and alternative transportation.	Not yet completed. Orange County adopted a Bicycle Transportation Plan in 1999 that designates West Ten Road, from Hillsborough to Mebane, as a primary priority route for bicycle facilities, and Lebanon Road/Brookhollow Road, from Mebane through Efland to West Ten Road, as a secondary priority facility. The NCDOT has adopted a policy to provide bicycle lanes that are part of a local or regional plan as incidental projects in road-widening projects; however, there are no plans to widen Lebanon, Brookhollow or West Ten Roads.	p. 72-73

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Analyze current and projected automobile trips on Efland-Cedar Grove Road in order to ascertain the appropriate level of service this road should provide.	Average Daily Traffic volumes on Efland-Cedar Grove Road place the road in a Level of Service (LOS) category “C,” which is an acceptable daily LOS. Hourly traffic counts have not been performed by the NCDOT to determine if unacceptable traffic volumes occur at peak times of day.	p. 72
	Examine the current speed limit on U.S. 70 in relation to the community’s transportation and safety needs.	The speed limit on Highway 70 is 45 MPH. Lowering the speed limit is not warranted by DOT standards.	Not included directly, but see p. 72, #3.
<b>Specific Action Strategies</b>	Negotiate an easement for a park-and-ride lot near the Efland I-85/40 interchange. Community to encourage car-pooling to Chapel Hill, Research Triangle Park and Durham.	An official park-n-ride lot has not been established. Rideshare (carpool) matching is available through the Triangle Transit Authority (TTA) to residents interested in ridesharing.	p. 72
	As a long-term strategy, ask Orange County to point out Efland’s key location and potential as future transit outpost to groups working in transportation planning at the regional and state level.	Orange County is an active participant in regional transportation committees. If commuter rail were to be established in the Triangle region, the idea of locating a stop in Efland has been discussed at the regional level. TTA’s recommendations for a Regional Transit Plan (Oct. 1995) long-term plan recommendation includes extension of regional rail to the Efland area.	p. 73

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Ask the County Parks and recreation and Planning departments to assist local residents in developing an Efland Open Space/Walkways Plan that is safety-oriented and would include sidewalks along roads such as U.S. 70.	This has not yet been accomplished.	p. 72-73
	Encourage stricter enforcement of the 45 M.P.H. speed limit along U.S. 70.	The Sheriff's office has regular patrols in the Efland area and State Troopers periodically patrol the area as well.	Not included directly, but see p. 72, #3.
	Request higher priority on the Priority Paving Schedule for a number of unpaved secondary roads in the village.	Several roads have been paved since 1991. The only road slated for paving at this time is Forest Avenue which is scheduled for grading, drainage, base, and paving in 2006 (subject to available right-of-way and funding).	No. (No additional roads are on the Paving Schedule at this time).

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Community Issue #4</b>	<b>Open Space</b>		
<b>Goal</b>	Protect Open Space and Scenic Areas within Efland		
<b>Objectives</b>	Pursue a balanced and rational method of protecting open space (i.e., ways of preserving scenic places while respecting private property rights).	<p>Orange County has a Lands Legacy Program which acquires land of critical natural and cultural significance, including protection of natural areas, prime forests, future parklands, cultural sites, watershed buffers and prime or threatened farmland. These acquisitions are made by outright purchase or by conservation easement. To date, no lands within the study area have been acquired by Lands Legacy, although there are several acquisitions nearby. Also, major subdivisions are generally required to preserve at least 33% of the entire site in open space. Additionally, Orange County is currently conducting a Transfer of Development Rights (TDR) feasibility study. The feasibility study is expected to be complete in 2006.</p> <p>Note: Ashwick and Richmond Hills subdivisions both dedicated public and private open space.</p>	p. 74-75

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Identify and protect special places of scenic and historic significance.	A county-wide Historic Resource Survey was completed in 1992. This was a “windshield” type of survey (whereby resources not visible from the street were unlikely to be identified). A more comprehensive survey should be completed but funding of such a survey has been an issue over the years. However, Orange County has committed to hiring an intern in the Spring of 2006 to begin work on a comprehensive update. A comprehensive scenic resources survey has not been completed but several transportation routes in the county have been identified as potential Scenic Routes.	p. 74, 78
	Encourage new development to respect the environment in development practices.	Orange County strives to ensure new development has the least impact possible on the environment. The county is a leader in the State on such issues.	p. 75 (also accomplished through existing development regulations).
	Conduct a community campaign to clean up unsightly areas in Efland. Start with local Adopt-a-Highway campaign along U.S. 70.	A formal effort with County involvement has not been undertaken.	p. 101
	Pursue a Town Commons in central Efland as a gathering place for social and recreational needs.	<b>Completed.</b> Phase I of Efland-Cheeks Park & Community Center was completed in 2000. Phase II is currently underway and is expected to be complete in February 2006.	p. 74-75

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Use open space and sensitive design to enhance the “small town feel” of Efland.	This has been part of the development review process when new development is proposed.	p. 69, 74-75
<b>Specific Action Strategies</b>	Develop a community open space plan.	This has not yet been accomplished.	p. 74
	Set up a means of acquiring conservation easements within both new developments and existing natural areas.	Orange County has a Lands Legacy Program which acquires land of critical natural and cultural significance, including protection of natural areas, prime forests, future parklands, cultural sites, watershed buffers and prime or threatened farmland. These acquisitions are made by outright purchase or by conservation easement. To date, no lands within the study area have been acquired by Lands Legacy, although there are several acquisitions nearby. Also, major subdivisions are generally required to preserve at least 33% of the entire site in open space. Additionally, Orange County is currently conducting a Transfer of Development Rights (TDR) feasibility study. The feasibility study is expected to be complete in 2006.	p. 74 (accomplished through existing regulations and programs).

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Utilize work in process by the Orange County Planning Department to identify sites of scenic and historic significance in Efland.	A county-wide Historic Resource Survey was completed in 1992. This was primarily a “windshield” type of survey (whereby resources not visible from the street were unlikely to be identified). A more comprehensive survey should be completed but funding of such a survey has been an issue over the years. However, Orange County has committed to hiring an intern in the Spring of 2006 to begin work on a comprehensive update. A comprehensive scenic resources survey has not been completed but several transportation routes in the county have been identified as potential Scenic Routes.	p. 78
	Local civic groups to organize a Clean-Up campaign to provide help to neighbors in keeping Efland attractive. Ask Orange County to participate in areas along McGowan Creek where sewer construction debris remains.	Sewer construction debris along McGowan Creek has been removed. A formal Clean-Up campaign group does not currently exist.	p. 101
	Ask the County to consider apportioning local park funding to help provide a Town Commons. Use combined public-private effort to create the commons.	<b>Completed.</b> Phase I of Efland-Cheeks Park & Community Center was completed in 2000. Phase II is currently underway and is expected to be complete in February 2006.	p. 75

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Community Issue #5</b>	<b>Appropriate Land Use and Economic Planning</b>		
<b>Goal</b>	Develop a Growth Management/Economic Development Policy for the Efland community		
<b>Objectives</b>	Discuss and evaluate the pros/cons of Efland incorporation.	Efland has not incorporated. Typically, a group of citizens leads the call to incorporation. This has not occurred in Efland. The Rules for Incorporation changed in 1999. The Small Area Plan Task Force reviewed the new Rules of Incorporation as part of the planning process.	p. 78
	Consider and prezone appropriate areas for commercial and environmentally-sensitive employment.	Portions of the Study Area are currently designated as CIN (Commercial-Industrial Node) on the Future Land Use Map. Orange County typically does not pre-zone property because the rezoning process allows for greater oversight of development activity.	p. 83 (land use recommendations)
	Consider the role of public sewer provision, transportation routes and community character in producing such a policy.	These issues are being considered as part of the Small Area Plan process. If a more targeted Growth Management/Economic Development Policy beyond the Small Area Plan is developed in the future, these issues will continue to be considered.	Pages 63-83

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
<b>Specific Action Strategies</b>	Appoint a steering committee of area residents to study issue of incorporation.	A formal committee has not been established. However, informal communications among area residents have indicated that incorporation is not desirable mostly due to the fact property taxes would increase. One of the main reasons for incorporation was concern over the possibility of being annexed by the City of Mebane. There may be other avenues to explore if this issue is the main reason residents would like to incorporate. For instance, agreements with the City of Mebane could be entered into.	p. 78
	Request Economic Development Commission assistance in identifying appropriate sites for commercial/light industrial development. Linkages for transportation between the village and the industrial area should be coordinated and comprehensive.	In 1994, Orange County adopted three Economic Development Districts (EDDs) within the county. One of these EDDs is located near Efland. Additionally, the current Future Land Use Map identifies much of Efland as a Commercial/Industrial Node. The Small Area Plan Task Force suggested Mixed Use in the Efland village area.	p. 83 (land use recommendations)
	Request the County expedite the provision of sewer service to Phase II customers (or, as Town of Efland, pursue this matter as a Town service).	Phase II sewer construction is expected to commence in late Spring, 2006.	p. 64-65

		<b>Current Status</b>	<b>Included in SAP? If so, page number on which it is addressed</b>
	Seek meeting with Hillsborough elected officials to coordinate thoroughfare planning in Efland (currently a part of Hillsborough Thoroughfare Plan).	Orange County coordinates transportation planning with, and is a member of two regional planning organizations: the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC MPO), and the Triangle Rural Planning Organization (TARPO). Efland is no longer included in the transportation planning area for Hillsborough, and lies in the area of Orange County that is in the TARPO - outside the DCHC Metropolitan Area Boundary (MAB). The DCHC MPO Technical Coordinating Committee recognizes the potential for the Efland area to become urbanized with 20-30 years and has recently discussed extending the DCHC MAB along the I-85/US 70 Corridor to the Burlington-Graham MAB.	No. (Efland is no longer included in the transportation planning area for Hillsborough).
	Establish an informal local public-private committee to provide help with funding local needs.	A committee has not been established.	p. 78 (paragraph on “community building”).
	Adopt a 20-Year Community Plan.	The 1991 Study essentially served as a Community Plan. Additionally, Orange County has a county-wide Comprehensive Plan. The Efland Small Area Plan is expected to serve as a 20-year community plan.	This SAP is a Community Plan.

## **Appendix B – Citizen Comments Received at and after the March 27, 2006 Community Meeting and Task Force Responses**

The following pages list the comments/concerns received at and after the March 27, 2006 community meeting and the response of the Task Force.

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### **Comment/Concern:**

Several questions were asked about the upcoming Buckhorn Road area water and sewer project.

### **Response:**

The County Engineer attended the meeting and addressed the questions related to the upcoming sewer and water projects.

Some of the comments made were on a ‘neighborhood scale.’ It was the charge of the Task Force to consider the entire planning area. Smaller geographic areas of the planning area may want to address some neighborhood-level concerns or examine their areas more closely in the future.

### **Comment/Concern:**

Affordable housing should be emphasized.

### **Response:**

The plan addresses the importance of affordable housing and has recommendations that are intended to ensure continued affordability.

### **Comment/Concern:**

Commercial and industrial development is difficult in Orange County.

### **Response:**

Economic Development (commercial and light industrial uses) should be actively encouraged in designated areas. Not only do these uses provide jobs, but they augment the tax base of the county which should help make it possible to pay for implementation of some of the recommendations made in the plan.

### **Comment/Concern:**

Houses should be allowed in the EDD. If someone owns land in the EDD, they should be allowed to build a house on it. Additionally, expansion of existing houses in the EDD area should be permitted if owners desire to add-on to their homes.

**Response:**

Zoning restricts housing development in the EDD areas of the county because these areas are intended for non-residential uses due to their location and infrastructure availability. The Task Force does not intend to encourage single-family low density residential development in the EDD. However, the county may want to consider revising the EDD regulations to allow higher density residential use as a small component (no more than 25% of the total area) of a Mixed Use project in the EDD.

The implementation process for the Small Area Plan should include measures to address existing non-conforming residential uses in the EDD. Possible solutions might include rezoning existing dwellings to a residential zoning district (which may help keep property values, and hence, property taxes, lower) or re-writing EDD regulations to include existing dwellings as a permitted use.

**Comment/Concern:**

Why are residents in the community located north of 70 and west of Lancaster (western part of Phase 6 on Map 13 in the Draft SAP) not getting sewer service.

**Response:**

There is no adopted plan at this time to serve this area with sewer. Recommendations made in the Water and Sewer section of the draft plan address updating the 1984 sewer plan and suggests areas that should receive priority for sewer services. The particular development in question is located in a suggested priority area.

A watershed protection strategy for Lake Michael may want to consider sewer service to this area since it drains into Lake Michael and is relatively densely developed. Orange County and/or the City of Mebane may wish to consider serving this area with sewer services as a water quality protection strategy.

**Comment/Concern:**

What are the plans for new recreation facilities and where are impact fees that are collected for recreation going?

**Response:**

The plan addresses recommendations made for recreation facilities. Payment-in-lieu fees for parks are directed into a fund that finances parks and recreation programs.

**Comment/Concern:**

A composite constraints map should be added to the Area Description section of the draft plan.

**Response:**

There is concern about adding another map to the plan, especially when the data used to produce constraints maps tends to be generalized and an actual site analysis would need to occur to definitively conclude whether a particular parcel of land is developable or not.

**Comment/Concern:**

Abandoned houses and code enforcement are major issues.

**Response:**

The county should work with the community and owner-occupants to bring houses up to code by identifying and applying for available grant funding reserved for these purposes. The need to address code issues in rental housing should be studied.

**Comment/Concern:**

Garbage on people's property is a problem.

**Response:**

The county and community should encourage the creation of neighborhood associations to help address neighborhood problems.