

# Uwharrie National Forest

## Social and Economic Sustainability Report

### Introducing the Uwharrie National Forest

In 1931 during the Great Depression, the federal government began purchasing the land in Montgomery, Randolph, and Davidson Counties, North Carolina that is now the Uwharrie National Forest. In 1961, President John F. Kennedy proclaimed these lands as the Uwharrie National Forest, making it one of the newest and smallest forests (at 50,178 acres) in the National Forest System. This national forest is made up of many small parcels, interspersed with private lands, and much of the land is accessible by road. The Uwharrie National Forest contains no inventoried roadless areas.

The Uwharrie National Forest (hereafter, the Uwharrie or the Forest) is located in the North Carolina Piedmont and includes portions of the Uwharrie Mountains. The rolling topography, with well-rounded hills and long ridges, ranges in elevation from 400 to 1000 feet above mean sea level. The town of Troy and a number of small communities are within the proclamation boundary and several towns are just outside the boundary. The Forest is also within a 2-hour drive from the largest population centers in the State.

The vegetation is approximately half hardwoods and half pines, with associated understory vegetation. Timber harvest and prescribed fire are tools used to thin overstocked stands, remove undesirable trees, and sustain wildlife habitats. Harvested timber is a commodity available to the local community and contributes to supply of wood products sought after by American consumers.

Good habitat for wildlife species exists, and the Forest has the highest hunting use per acre of any game lands in the State. Fishing is popular as well, and small streams and adjacent lakes provide habitat for both warm and cool water fisheries.

The Uwharrie is rich in heritage resources; everything from prehistoric rock shelters to historic mines and settlements. Old gold mines dot the landscapes, and recreational gold panning still goes on.

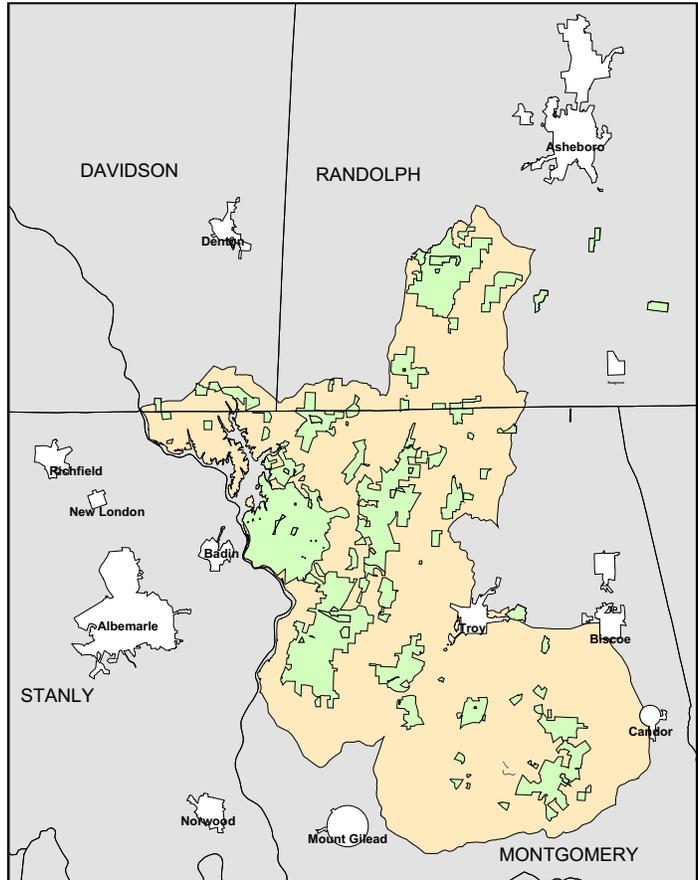
All typical outdoor recreation activities are popular the Uwharrie. Its lakeside developments and trails systems are of particular note. Refining management of the trails systems, campgrounds and other facilities represents perhaps the best opportunity to contribute to the development of the local economy through supporting tourism.

### **This Report is divided into three parts:**

1. Changing economic and social conditions and trends (1921.72b(1)(2));
2. How the Uwharrie contributes to social and economic systems within the plan area, including the need to change the current plan (1921.72b(3)(6));
3. How the revised plan will contribute to sustainable social and economic systems (1921.72b(4), 1909.12 Chapter 42).

**Throughout this document, five spatial areas are referenced:**

- The Uwharrie (also referred to as the Forest or the National Forest System (NFS) lands): This is the actual Uwharrie National Forest ownership;
- The Administrative Boundary: also known as the proclamation boundary, this is the area within which the Federal Government is permitted to acquire lands to add to the National Forest;
- The three-county area: This is comprised of Montgomery, Randolph, and Davidson Counties, North Carolina. These are the three counties that contain Uwharrie National Forest Lands. Montgomery County contains the majority of the Uwharrie, about 39,884 acres. Randolph County has about 9,332 acres, including the Birkhead Mountains Wilderness. Davidson County contains about 958 acres.
- The Market Area: All counties within a 75-mile radius from the Forest Administrative Boundary;
- The Piedmont: A thirty-five county area in the middle of North Carolina, between the western mountains and eastern coastal plain.



## **PART 1: Changing Economic and Social Conditions and Trends**

### **Population Growth**

The rate of population growth for the three-county area is below that for the market area as a whole, especially in Montgomery County. Still, populations are increasing. While Montgomery County is largely undeveloped with a population of just over 27,000 people, the market area contains several large cities and a population of over six million. The rate of growth for the market area is slightly higher than in the southeast as a whole, which means the Uwharrie can expect more pressure from increasing recreational use in the future than other national forests in the region.

### **TREND:**

- Increases in demand for recreational uses of the Forest are expected to continue, and at a slightly higher rate than for the rest of the southeast.

### **Demographic Trends in the Market Area**

- The percentage of population over fifty-five is expected to increase from now through 2020, with the over sixty-five age group having a slightly higher population than any other age group. Otherwise, a fairly even distribution of age groups is expected.
- Two-person households are expected to be most prevalent in 2020 as they are today, followed by one-person households. Together they comprise about 60% of all households.
- The race and ethnic composition is not expected to undergo major changes in the next fifteen years. While the percent of Hispanic Americans is expected to double, the population is still expected to remain under five percent. By 2020, Anglo-Americans are expected to make up 71.5% of the Market Area, African-Americans 25.5%, Asian-American & American Indian 3.0%, and Hispanic Americans 4.7% (total greater than 100% due to participants responding to more than one category).



- Residents are expected to be slightly more affluent and slightly more urban than today.

**Demographic Trends in the Three-County Area**

Trends in the three counties are somewhat different from the market area trends. By 2000 Latino residents made up over 10% of the population in Montgomery County, 6.7% in Randolph County, and 3.2% in Davidson County. Montgomery County also has a higher percentage of residents of Asian decent, in part due to a large community of Laotian immigrants.

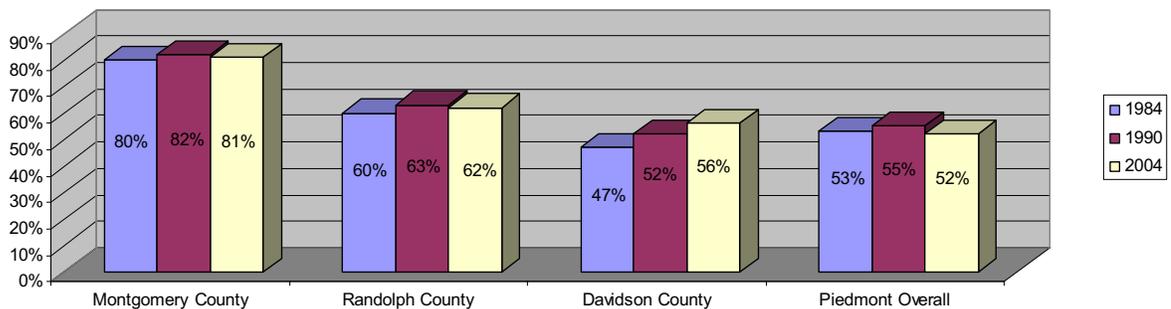
**Development of the Built Environment and Infrastructure in the Three-County Area** (This discussion refers to ALL land in the three counties, not just National Forest System land)

Based on U.S. Census Bureau and Forest Inventory and Analysis data, all three counties are rural (less than 500 persons per square mile), with low population densities and relatively small land use changes over the past twenty years. Montgomery County, where most of the Uwharrie is located, is more than 80% forested, more than any other county in the 35-county Piedmont of North Carolina. Development occurs mostly adjacent to existing main roads. Figure 2 below displays the relatively minor fluctuations in the amount of all forest lands in three counties and the Piedmont over the past twenty years. Overall, trends in amount of forest land were upward slightly from 1984 to 1990, then downward slightly from 1990 to 2002. In Davidson County however, the amount of forest showed gains in both time periods.

**TRENDS:**

- For the three-county area, Davidson and Randolph Counties are expected to develop over the next fifteen years at a rate similar to the past fifteen years. Based on projecting the number of housing starts, development in Montgomery County is expected to increase at a faster rate than in the past fifteen years, but even with this increase the county would remain mostly forested. All three counties would remain rural in character.

Figure 2. **Changes in the Amount of Forest Cover in the 3-County Area and the Piedmont over the Past 20 Years**



### **Infrastructure Changes Expected to Impact Uwharrie Users**

- Highway 49 from Charlotte, NC to Burlington, VA, which touches the edges of the proclamation boundary at Badin Lake on its way to Asheboro, has been identified by the State as a “North Carolina Strategic Corridor” in the next 10 year horizon. This means it is likely to be widened to four lanes of traffic.
- Interstate 73/74 which skims the eastern edge of the Uwharrie is expected to be extended south to connect to Interstate 95, making this extension a likely major travel route with possible associated secondary developments.
- Highway 52 that connects Salisbury to Albemarle and beyond is currently being 4-laned. Although not within or touching the proclamation boundary, it may still serve to improve access to the Forest.
- Widening of Highway 24/27 is in the initial planning stages.

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### **Travel and Tourism is a Growth Industry in the Three County Area**

The Montgomery County Economic Development Corporation notes that lakeside communities on the western border of the county are providing upscale housing with premier golf courses, and more developments are planned. Each year lake development accounts for an increasingly larger portion of the county tax base. They acknowledge that the Uwharrie National Forest and Town Creek Indian Mound state historic site can attract millions of visitors each year and the county has just begun to realize these economic benefits. They also recognize an unmet demand for rental property (cabins or lodges) near the lakes. This reinforces the importance of lake and river frontage and water-based recreation on the Forest. Several businesses have grown up at the outskirts of the Forest to serve the needs of Forest visitors and potential exists for some additional businesses.

The Randolph County Tourism and Development Authority highlights Birkhead Mountains Wilderness as an area attraction. In addition, interested parties collaborating on the Plan revision have emphasized the desire for better access to the Forest in Randolph County and a strong desire to fill in the gaps of the 50-mile Uwharrie Trail which are primarily in Randolph County. Close proximity of Birkhead Mountains Wilderness, the North Carolina Zoo, Seagrove Potteries and other attractions can provide a magnet for visitors. Randolph County has expressed support for developing a visitor center collocated with rest areas on I-73/74 that would serve as a gateway for visitors to the area. Such a center could be an outlet for providing information about the Uwharrie.

With less than 1000 acres in Davidson County, the Uwharrie National Forest is not really a player in the outdoor recreation opportunities there. However the Davidson County Parks and Recreation and Tourism Development Master Plan published in June 2005 has as its purpose to “serve as a guide to protect and enhance the natural, cultural, and

historic resources of Davidson County, while capitalizing on the County's unique assets to stimulate public and private investment in the local economy." Their vision complements the Forest-wide desired conditions for the Uwharrie National Forest and future opportunities may present themselves for closer cooperation.

### **Nature-Based Recreation Opportunities**

Over time less and less private land is available for recreation uses such as hunting, fishing, or hiking. The Uwharrie National Forest is the largest single tract of public land in the mid-state and provides a variety of nature-based recreation opportunities. Several state parks, the North Carolina Zoo, and a National Wildlife Refuge also provide opportunities for nature-based recreation in the North Carolina Piedmont. The closest of these are listed below:

Pee Dee National Wildlife Refuge – 8,443 acres. Opportunities include bird watching, hunting, fishing, and hiking.

Morrow Mountain State Park – 4,742 acres. Opportunities include swimming, boating, camping, cabins, hiking, and horseback riding.

Weymouth Woods Sandhills Nature Preserve – 898 acres. Opportunities include hiking and nature study

NC Zoo - +/- 1500 acres. Opportunities include walking miles of trails through various animal habitats and viewing animals.

The only OHV opportunities currently available in the market area other than the Uwharrie is TNT Motorsports in Chester, SC. Several other facilities have recently closed.

### **Market Area Recreation Trends**

1. Day hiking continues to grow in popularity, while participation in backpacking has declined; 83.8% of surveyed residents report walking for pleasure.
  2. Viewing and/or photographing wildlife, birds, and fish continues to grow in popularity, while the percentage of people participating in hunting has gone down. Fishing, however, is growing in popularity.
  3. Off-road driving, while not among the most broadly popular outdoor recreation activities, is growing in popularity at a faster rate than most other activities. Mountain biking grew in popularity in the 1990's, but growth has apparently leveled out. Horseback riding is currently on an upswing in popularity.
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**Table 1: Broadly Popular Activities in the Market Area**

<b>Activity</b>	<b>Percent who Participate</b>
Walk for pleasure	83.8
Family gathering	74.2
View/photograph natural scenery	54.1
Visit nature centers, nature, museums, etc.	53.4
Sightseeing	52.7
Driving for Pleasure	51.3
Picnicking	47.5
Visit historic site	44.5
Bicycling	31.8
Boating	30.7
Motorboating	22.6

**Table 2: Rate of Growth in the Market Area for Selected Outdoor Recreation Activities**

<b>Activity</b>	<b>Percent change in number of participants 1995-2001</b>
View or photograph fish	+79.8
Drive off-road	+76.2
View wildlife	+49.6
Warmwater fishing	+43.4
View birds	+28.8
Swimming in streams, lakes, ponds, or the ocean	+16.9
Horseback riding	+16.7
Horseback riding on trails	+12.1
Day hiking	+10.2
Primitive camping	+3.0
Developed camping	-1.2
Small game hunting	-10.1
Big game hunting	-11.1
Backpacking	-25.3

### **Market Area Wood Products Trends**

Within the five counties (Davidson, Montgomery, Moore, Randolph, and Stanly) that are in the wood products market area of the Uwharrie National Forest, there are approximately seventy two (72) companies that buy timber, provide logging services or further process forest products. These companies include logging companies, sawmills, timber purchasers, wood dealers, and specialty mills such as plywood, planer, or pallet plants. Over the past five years Uwharrie timber offered for sale has received bids from five companies. In most cases the successful bidders logged the sale or contracted the logging with the various products merchandized to several locations to maximize the value of return.

### **Uwharrie Trends in Minerals and Energy**

In the 1990's there were about seven prospecting permits, one surface occupancy permit on land with outstanding mineral rights, and two contracts for the sale of common variety

minerals in effect. All of these expired by 1998, so that there is currently no active mineral extraction or exploration except for a small amount of recreational gold panning that does not require a permit. The Uwharrie has 822 acres of outstanding mineral rights that are located in the area of the historic Russell Gold Mine. Recent increases in the value of gold may cause an upsurge in interest over the short term, but that remains speculative.

There has never been any interest in energy development and the Forest is not considered a likely candidate for this activity. The Forest is not identified as having any high potential for renewable energy development from solar or wind power. It does rate in a moderate category for photovoltaic solar energy potential, but is not identified as having *development* potential (U.S. Department of Energy 2004).

### **Snapshot of the Local Economies**

**Montgomery County:** Manufacturing remains the largest employer and income generator in the county, with government employment second. Population growth and wage growth is somewhat lower than the state as a whole, but remains in positive territory. The county ranks 74<sup>th</sup> (out of 100) in travel and tourism score, but county leaders recognize greater potential to tap into this market. The Uwharrie National Forest is the main tourist attraction in Montgomery County.

**Randolph County:** Manufacturing is by far the largest employer, followed by the retail trade. Population growth during the past decade exceeded the state average, but wages only increased at about half the state average. The county ranks 78<sup>th</sup> (out of 100) in travel and tourism score. Several tourist attractions are located here, including the North Carolina Zoo, Seagrove Potteries, and portions of the Uwharrie National Forest that should put the county at an advantage for increasing receipts from tourism.

**Davidson County:** Manufacturing is the number one employer, with the service industry and retail trade neck-in-neck for second place. Population growth during the past decade was similar to the state average, but wages increased only about 20% as much as the state average. The county ranks 73<sup>rd</sup> (out 100) in travel and tourism score. The Uwharrie National Forest is of minor importance as a tourist attraction for Davidson County.

## **PART 2: How the Uwharrie contributes to social and economic systems within the plan area, including the need to change the current plan**

### **Outdoor Recreation Opportunities**

A wide variety of land-based activities take place on the Forest. Hunting, hiking, driving for pleasure, biking, horseback riding, OHV riding, developed camping, dispersed camping, picnicking and target shooting are all popular activities. Fishing, swimming, and various types of boating are available on Badin Lake. Canoeing and fishing occur on the Uwharrie River and fishing in many area creeks. Unauthorized OHV riding occurs in some locations.

The amount of use for most activities is gradually increasing, especially for those opportunities that are in relatively short supply in the mid-state such as horseback riding and OHV riding.

Most visitors come from the mid-state less than 100 miles from the Forest. They tend to be repeat visitors and less ethnically diverse than the general population of the mid-state.

The Uwharrie currently offers a range of camping experiences, from primitive camping with no facilities to highly developed, fully accessible campgrounds. The Forest maintains nine campgrounds with a total of 140 camp sites. Two camping areas cater specifically to horseback riders. The majority of campgrounds are in the Badin Lake vicinity.

Hikers and horseback riders currently use the designated trail system as well as most closed roads and occasionally travel cross-country. The exceptions are the few roads or trails designated as closed to horses. Mountain biking occurs on roads and designated trails, and off-roading is limited to trails designated specifically for this use.

### **TRENDS:**

- Over the course of the past fifteen years several major recreation facilities were completed in the Badin Lake area. These improved the Forest’s ability to address user demands for camping, horseback riding, fishing, and swimming. Also, several

The current recreation facilities and trails are:

50 miles of hiking trails - designated for hiking only, including 20.4 miles of the Uwharrie National Recreation Trail. All trails, including those designated for horses, bikes, or OHVs, are open for hiking.

Badin Lake Horse Trails – 40 miles  
Cane Brake Horse Camp - 29 camp sites

Mountain Bike Trails – 16.6 miles in the Woodrun part of the district

1 OHV Trail System – 16 miles

2 developed picnic areas with another large area currently under construction  
Arrowhead Campground – 50 sites, many amenities

Badin Lake Campground – 39 sites, many on lakeshore

Baden Lake Horsecamp – open field with access to horse trails

East Morris Mountain – primitive camping

Uwharrie Hunt Camp – 8 sites, no water

West Morris Mountain – 14 sites, no water

Yates Place – primitive camping

projects are currently underway. These include Kings Mountain Point Day Use Area now being expanded to include a picnic shelter, 40 accessible picnic table sites, parking for 60 vehicles, a playing field, four accessible trails to the water, and three fishing piers. This trend in increasing developed recreation areas is not expected to continue. The future focus is expected to be on operation and maintenance of existing facilities

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### **Roads on the Uwharrie**

The Uwharrie road system is comprised of 98 classified roads totaling approximately 107 miles in length. Of these, 23.6 miles are open for public use, and another 5.0 are seasonally open. Over half the roads are closed to motor vehicles or in some way restricted. These roads provide access to administrative, research, and communication sites, access to private in-holdings, and roads that are available by special use permits, such as those providing accessible hunting opportunities.

Additional roads (approximately 33 miles) exist that are not part of the Forest Service road system. These roads include unplanned, abandoned travel ways, old off-road vehicle (OHV) tracks, and roads that were once under permit or other authorization and were never decommissioned when the authorization was terminated. Roads in this category are awaiting management direction as to whether or not to include them as part of the transportation system or to decommission or restrict them from further use.

### **TRENDS:**

More miles of NFS roads are closed to public access than was anticipated in the original Forest Plan. The 1986 Plan also anticipated road construction of approximately 2 miles per year. In reality, less than 6 total miles of road has been constructed over the past 17 years; far less than anticipated.

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### **Heritage Resources on the Uwharrie**

The Uwharrie contains many significant heritage resources, prehistoric and historic. These resources include artifacts and archeological sites that document human use of the area for more than 14,000 years. The diversity of sites ranges from prehistoric quarries to gold mines, from 250 year old homesteads and 150 year old farms to 50 year old fire lookouts. The Forest has been home for thousands of years to people who extracted its resources and the Forest holds abundant evidence of their activities and habitations. Their effects on the landscape and the environment's effects on the people can only be understood with further study of these resources.

Opportunities for scientific research, public interpretation, and resource preservation abound on the Uwharrie. Past cultures and lifeways can be studied, climatic changes and environmental conditions can be better understood.

The State of North Carolina, along with the Forest Service and adjacent land owners, is pursuing a National Register of Historic Places District designation for the area that includes much of the Uwharrie National Forest as well as adjacent State and private land. There is one of the highest site densities in the country in this area. The National Register of Historic Places (NRHP) recognizes sites 50 years or older, along with other criteria.

TRENDS:

1. There are currently 1,527 formally recorded sites on the Uwharrie. Almost 26,000 acres is completely inventoried while another 10,000 has been sampled. Overall site density is 1 site in 18.8 acres. Some sites are less than an acre in size and some are greater than 15 acres in size.
2. Compared to the erosion from historic clearing, logging and mining of the area, Forest Service management of the Uwharrie has resulted in a relatively stable environment. This has helped to preserve many of the previously exposed and impacted archeological sites.
3. Current trends of increasing use on the Forest have, however, caused severe impacts to a number of important heritage resources. Recently exposed artifacts have been collected without authorization and some sites have been intentionally looted and vandalized for personal gain. These activities are prohibited under the Archeological Resources Protection Act of 1979, which protects all artifacts and sites over 100 years of age located on Federal lands and has criminal and civil penalties.



Thornburg - A Heritage  
Resource Site



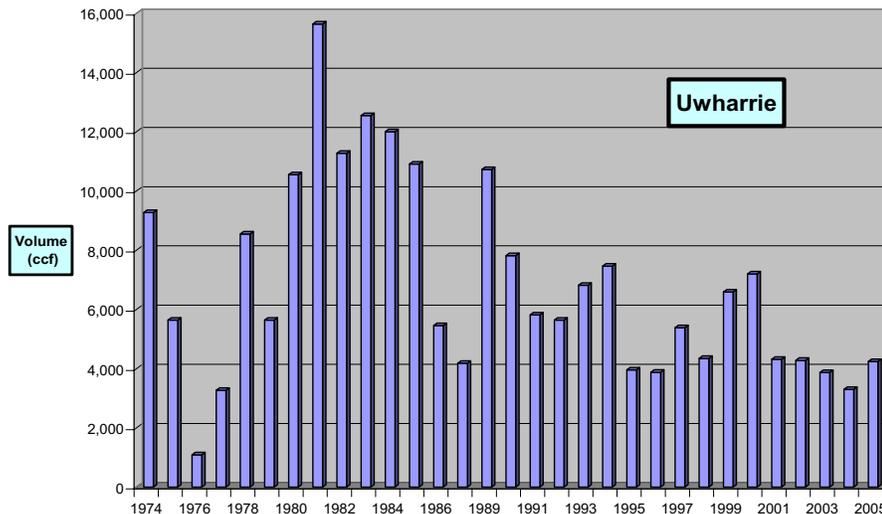
**Timber and Wood Products**

An average of 500,000 cubic feet (5,000 ccf) of timber has been sold annually from the Uwharrie over the past fifteen years. This is only about half as much timber as was sold on average per year during the period 1980 through 1989. This is consistent with nationwide trends that resulted from a move away from intensive timber production on national forests to a more integrated resource approach to managing the landscape. Under the 1986 Plan over 80% of the Forest is currently managed as suitable for sustainable timber production. In addition to contributing to America’s supply of wood products, commercial timber sales are used as a method for creating certain wildlife habitat conditions, for managing fuels, and other vegetation management needs

Over the period 2003-2005 the average volume harvested per acre was 7.8 CCF (Hundred Cubic Feet) with that volume split approximately equally between pulpwood and sawtimber volume. The low volume per acre is due to the fact that over period 2003-2005, 93% of all harvest acres were thinnings rather than some type of regeneration cutting. The value of the timber harvested during the past three years was \$282,512. From the total funds generated all required reforestation costs were covered as well as various wildlife habitat improvement projects. Uwharrie timber sales are generally competitive, with several bidders and bids often well above the advertised price. This indicates there is good demand for the timber.

While the total volume of timber harvested off the Uwharrie National Forest in any given year is a small percentage of the gross raw material the area mills utilize, it still represents one source of material to the local mills. Several local loggers and mills do rely on purchasing National Forest Timber for a considerable percentage of their annual work. Figure 4 displays the timber volume offered for sale each year beginning with 1974.

Figure 4. Trends in Timber Volume



**Non-timber Forest Products**

The Forest issues permits for firewood collection from time to time. There is currently no demand for “special forest products” such as medicinal or floral herbs such as exists in the Mountain counties.

**Special Uses**

**TRENDS:**

- The number of special use permits on the Uwharrie was fairly stable from the mid-1980’s until 2000. Since 2000, the number of permits issued has more than doubled. The number of special recreation events has increased, such as events on the Off-Highway Vehicle (OHV) trail system. Military training exercises and private road easements have also increased. Still, there are under 70 current special use permits issued in total.
- Among the more complex special use permits issued on the Uwharrie are those for military exercises. The amount of use fluctuates according to military involvement in foreign theaters of operation.



Special Use – Communication Site

Table 3. Number of Current Special Use Permits by Type – Uwharrie National Forest

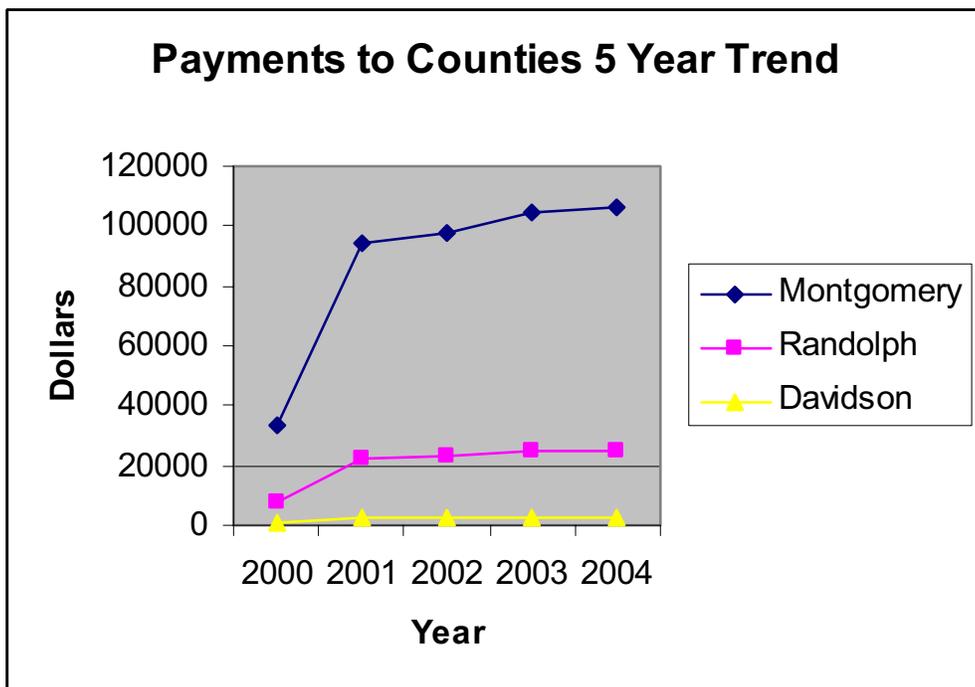
Type	Number
Easements	43
Utilities	7
Military Training	4
Communication Sites	3
Recreation Events	3
Springs	2
Solid Waste	1
Other	4

**Minerals and Energy**

There are currently not any minerals or energy activities on the Uwharrie except for recreational gold panning that does not require a gold permit.

**Payments to Counties Five Year Trend**

Historically, each year through the year 2000 the Forest Service returned to the State Treasury Office 25 percent of money received from production of goods and services on national forest lands. The treasury office then distributes these funds to county school systems. The amount is spread on a pro-rated basis by national forest acreage per county. Beginning in the year 2001, Public Law (PL) 106-393 went into effect, which changed the basis of annual payments to counties. This was done largely to compensate for the reduced income stream from timber sales in the western U.S. as timber harvest declined. The amount is now based on the average of the state's three highest payments from FY 1986 to 1999. The State Treasury Office distributes these funds to county school systems. The Bureau of Land Management also makes payments in lieu of taxes (PILT) to counties with federal land. In FY '04 this equaled \$1.74 per acre. Amounts shown in the chart below are the total of both payments.



## Identifying the need to change the current plan

### **Growing as a Tourist Destination**

As population in the area grows, local public lands are increasingly being seen as a place of relaxation; a quiet, peaceful retreat. The Uwharrie is the top tourist destination in Montgomery County, and one of several popular tourist destinations in Randolph County. There may be tourism related opportunities to provide more economic benefits to local communities. The 1986 Plan did not place great emphasis on developing a tourism-related infrastructure that would attract dollars to the extent that is possible today.

### **Nature Hikes and Day Use More Popular**

Many visitors to the Uwharrie seek a place to walk, view nature, and perhaps picnic, swim, or fish. The Forest, with its lake and river frontage, rolling topography, and facilities, is currently providing a variety of these desired opportunities. These opportunities for outdoor recreation are values recognized throughout the collaborative process. These opportunities can help support the health and well-being of the populations of forest visitors, as individuals, couples, and families. There may be ways to make visits more even enjoyable, especially along the Uwharrie National Recreation Trail, Badin area trail systems, and the Uwharrie River. The revised plan could place more emphasis on the hiking trails and day use areas, and recognize their importance to the local social networks.

### **Transportation System in Need of Improvement**

There may be opportunities to improve the existing Forest road and trail system, to enhance public access while minimizing visitor conflicts and resource damage.

The 1986 Plan overestimated the amount of new road construction that would be needed on the Forest. There is a need for the Plan to recognize that new roads should be kept to a minimum, to minimize costs and environmental impacts.

While the 1986 plan has goals and objectives for the trail system, it predates the increased developments and amounts of use in the Badin area and is lacking in specific, focused attention to the trail system there. The system of horse trails and OHV trails in the Badin area came about largely by happenstance – without employment of proper design and construction techniques. With the tremendous increase in trail use in the Badin area, user conflicts, safety issues, and conflicts with management of the natural and cultural resources in the area have taken center stage in management of

	the Uwharrie. Plan emphasis on developing and maintaining a premier trail system in Badin that would accommodate high levels of use while minimizing resource impacts could serve as an economic asset to local communities.
<b>Interpreting History</b>	Archeological and historical resources on the Forest provide a unique opportunity for current forest visitors to learn about those who lived here in the past, and at the same time provide an outdoor recreation experience. Careful, innovative planning may ensure that historically important sites are protected yet still accessible for interpretation.
<b>Providing Visitor Information</b>	While the 1986 plan does provide direction for visitor information in regard to trails and cultural resources, this direction is minimal and not a major focus of the management plan. More Plan emphasis on visitor information could increase visitor enjoyment and be a useful tool in controlling visitor impacts.

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### **PART 3: How the revised plan will contribute to sustainable social and economic systems**

The Uwharrie is described by many as an island of serenity surrounded by the huge metropolises of Charlotte, Winston-Salem-Greensboro, and Raleigh-Durham. Interested parties commonly value the naturalness and native diversity of the Uwharrie National Forest in its setting within a larger forested, rural landscape. Many visitors talk about the peacefulness and views enjoyed while visiting the Forest, while others also mention valuing the opportunity to get together with family and friends to enjoy the outdoors.

The following list of social and economic desired conditions for the Revised Plan developed as a result of a collaborative process with interested parties including Forest Service employees, members of the public, representative of user groups and environmental organizations, local landowners, cooperating agency representatives, and members of the academic community.

#### **Overarching Recreation Desired Condition**

Outstanding recreation opportunities draw visitors to the Uwharrie, provide opportunities for visitors to experience natural forest settings while enjoying physical activities with family and friends, and provide economic benefits to the local communities. Conflicts among users are rare.

## **Giving People Access to the Forest**

- Exceptional trails are available for hikers, horseback riders, off-roaders, mountain bikers, hunters, and anglers. The trails are designed, constructed, and maintained so that a variety of levels of challenge is available and minimal damage occurs to other forest resources such as soil and water.
- The trail system has trails of varied lengths, including loop trails and trails with multiple access points. Trail users are well-informed about the trails and about ways to minimize their impacts on the environment during their visits. Many trails have vistas – points along the trails that allow for long-range views.
- Trails are safe and safe vehicle parking is nearby. Trails and trailheads are well marked and easy to find; trails that cross roads are well marked for safety at all intersections. There are few hazard trees. For added safety, horse use and OHV use occurs on separate trails.
- Recreation use is dispersed across the Forest and there is good trail access for visitors to both northern and southern portions of the Forest.
- The 50-mile Uwharrie National Recreation Trail is complete and marked for hikers.
- Mountain biking occurs only on roads and designated trails in several parts of the Forest.
- Horseback riding occurs only on a designated trail system and Forest Service roads. Riders are conscientious about safety when riding. Horse trails are well designed and maintained to provide varied user experiences (easy to more rugged) while minimizing resource damage. While trails avoid wet areas, access is available to horse watering areas. While on the horse trails, visitors seldom see evidence of litter or erosion and sediment transport into streams.
- An OHV trail system exists that is well designed and maintained to provide varied user experiences (easy to more challenging) while minimizing resource damage. Off-highway vehicles are operating only on designated routes during the established open season. Little sediment can be seen entering streams from the OHV system, and trails are free of litter.
- Access to the water is available for water-oriented activities such as canoeing, kayaking, power boating, fishing, waterfowl hunting, and horse watering. These access points are located in areas that do not degrade the aquatic resources and provide safe, reliable access for users of all abilities where practical.

- Roads open to public vehicles are safe for forest visitors in non-4-wheel-drive vehicles and for emergency vehicles: there are no gullies, washouts, or slides; there are adequate turnouts or passing areas and adequate sight distances; the road surface is relatively smooth. Some heavily traveled Forest roads are paved.
- Closed roads are used by hikers, mountain bikers, and horseback riders except when signed as closed to a particular use. The road surface is free of gullies and is generally covered with native materials or native grasses and forbs. The road edges are intact and not broken by excessive traffic of forest visitors. During rain events, water is able to seep into the soil gradually without causing erosion.

### **Providing Facilities and Information for a More Pleasant Stay**

- Campgrounds, restrooms, and showers are clean, safe, and in good repair. Campgrounds are available, convenient, and appropriately designed for a variety of Forest visitors.
- Parking areas exist for users at convenient locations and are well-designed for their intended use, including parking for vehicles towing trailers. Forest users are parking in a safe manner along roads: not blocking roads, and not impacting adjacent landowners.
- Trash receptacles are located at high-use areas, but forest visitors pack out their own trash and generally leave the forest cleaner than they found it.
- Visitors have access to accurate maps and detailed information so they can have a safe, positive experience in the forest. Information on trails includes distances, difficulty, and trailhead locations.
- Up-to-date printed information such as brochures or visitor guides is widely distributed and available at other area attractions such as the zoo, and at area visitor/welcome centers.
- Visitors have access to natural and cultural history information, including interpretive exhibits. Information on both aquatic and terrestrial resources is available.
- Visitors are informed about ways to lessen their impact on the environment, including the importance of not littering in the forest and not leaving trash at campsites, parking areas, or the rifle range.

## Providing a Natural Forest Setting

- Scenery is natural appearing and generally consists of older, multi-storied, closed-canopy forests, or park like or semi-open forests, except in young regeneration areas, woodlands, prairie-like openings, glades, and wildlife openings.
- Viewpoints along roads and trails reveal mid- and long-distance views of attractive environments
- The Uwharrie National Forest is free of litter and refuse.
- The wilderness exhibits little evidence of modern human disturbance, and is remote from the sights and sounds of 21st-century civilization such as traffic from roads. Natural processes such as succession, decomposition and natural regeneration, and disturbance factors such as fire, wind, and water shape vegetation. Large areas of uninterrupted habitat provide a safe haven for animals.
- Visitors to the area include nature enthusiasts, hikers, hunters, and researchers. No facilities are present other than the occasional fire ring. Motorized or mechanical vehicles, equipment, or devices are absent. Information signs are not seen within the wilderness boundary.

## Providing Commodities from the Forest

There are no desired conditions directly related to forest products such as sawtimber, roundwood, fiber, or non-timber forest products. However several of the vegetation-related desired conditions will indirectly produce timber outputs. Specifically, the desired conditions related to restoring forest communities more common in the past will require some amount of removal, over time, of the existing overstory trees as they are inhibiting this restoration. For example, over the past fifty years numerous loblolly pines were planted on sites that will be restored to either longleaf pine, oak-hickory, or mixed pine-hardwood forest communities. Removal of the loblollies using some type of timber harvest such as group selection, thinning, or partial overstory removal will produce timber for local markets and contribute to the supply of wood products used by the American public. Following are the desired conditions that will likely result in outputs of timber-related forest products:

- Woodlands and open forests with small canopy gaps, interspersed with glades and Piedmont prairies, occupy portions of the forest where they occurred historically. These forests contain mixed ages with old trees and old forest conditions.
- Plant communities more common in the past occur on appropriate sites across the forest. Examples include longleaf pine woodlands, shortleaf pine woodlands, and oak-hickory forests.

- Regenerating hardwoods are evident following disturbances in tree canopies (canopy gaps) in multi-age deciduous forests and mixed pine-hardwood forests.
- Forests are in a healthy condition. Most trees are in good health, well-formed, and with little evidence of widespread insect and/or disease damage. A healthy forest includes some dead and dying trees and hollow den trees used by wildlife. A healthy forest also contains various size patches of disturbance that provide habitat components desired by a variety of wildlife, and space and light for young trees (“regeneration”).

Use of a commercial timber sale for removal of the overstory will also generate receipts to the Forest Service which can be used to cover the cost of reforestation, stand improvements, wildlife habitat improvements and other identified work. This tool can be used when there is enough quantity and quality of timber to be removed to make a sale economically feasible for a purchaser. The minimum quantity would generally be four to six hundred cubic feet per acre of sawtimber, although markets may develop from time to time for lower quality products.

We anticipate the Revised Plan will provide approximately 10,000 ccf (hundred cubic feet), which is twice the volume made available in recent years, but still below the long-term sustained yield. About one-half of this volume is expected to be sawtimber, with the rest being pulpwood (smaller in diameter than sawtimber). The increase in expected volume output is due to the Revised Plan’s focus on thinning in overstocked pine stands, and conversion of loblolly pine stands to more ecologically appropriate forest types. This will put more trees (especially loblolly and shortleaf pine) up for sale while the effort to restore oak-hickory forests and longleaf pine forests proceeds.

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