

**Cherokee National Forest
Ocoee Ranger District**

**Travel Analysis Process
Report**

for

**Conasauga River/Middle Lower Ocoee/Sylco
Creek
Assessment Area**

April 2014

BACKGROUND

In August 1999, the Washington Office of the USDA Forest Service published Miscellaneous Report FS-643 titled Roads Analysis: Informing Decisions about Managing the National Forest Transportation System. The objective of roads analysis is to provide decision makers with critical information to develop road systems that are safe and responsive to public needs and desires, are affordable and efficiently managed, have minimal negative ecological effects on the land, and are in balance with available funding for needed management actions.

In January 2001, the agency published the Transportation Final Rule and Administrative Policy authorizing units to use, as appropriate, the road analysis procedure embodied in FS-643 to assist land managers making major road management decisions.

The 2005 Travel Management Rule was developed in response to Forest Chief Dale Bosworth's 4 key threats to the national forests and national grasslands – specifically the 4th threat of “unmanaged recreation”. The rule dealt with how motor vehicles are used on the national forests and national grasslands units. It reorganized the Forest Service travel management regulations found in CFR 212. The rule created parts A, B, and C, moving the bulk of what was called the “2001 Roads Rule” into the new Subpart A.

In addition to reorganizing the Forest Service travel management regulations, the new rule also updated terminology, The terms “forest transportation system” and “unauthorized road” were introduced and the previous terms were made obsolete. The bulk of the new requirements included as part of the new “2005 Travel Management Rule” were organized into the new Subpart B of the regulations. These focused on designation of roads, trails, and areas for motor vehicle use on National Forest Service lands.

The new policy made some changes to the previous process called “roads analysis” or RAP. The new established process was called “travel analysis” and the scope was expanded to now include trails and areas in addition to roads. Some of the procedures were streamlined, but the same six-step process that was previously used was carried forward into the travel analysis process. A complete inventory of unauthorized routes is no longer required.

Sub-Part A Travel Analysis is required by the 2005 Travel Management Rule (36 CFR 212.5). Forest Service Manual 7712 and Forest Service Handbook 7709.55-Chapter 20 provide specific direction, including the requirement to use a six step interdisciplinary, science-based process to ensure that future decisions are based on an adequate and balanced consideration of environmental, social and economic impacts of roads. The travel analysis process (TAP) report It is intended to inform future proposed actions related to identifying the minimum road system. The TAP process is designed to work in conjunction with other frameworks and processes, the results of which collectively inform and frame future decisions executed under NEPA.

The Federal Register Notice (73 FR 74689) for the final travel management directives was published on December 9, 2008. The directives became effective January 8, 2009 (Forest

Service Manual (FSM) 7700 – Travel Management). FSM 7703.25 changes the term “roads analysis” to “travel analysis”. Consequently, the terms are changed in this document to reflect the current direction unless there are references from previous documents using the term “roads analysis.”

These directives require that a travel analysis is conducted to inform decisions related to:

- a. Identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System (NFS) lands per 36 CFR 212.5(b)(1).
- b. Designation of roads, trails and areas for motor vehicle use per 36 CFR 212.51.

PROCESS

This travel analysis is a six-step process. The steps are designed to be sequential with the understanding the process may require feedback among steps over time as an analysis matures. The amount of time and effort spent on each step differs by project, based on specific situations and available information. The process provides a set of possible issues and analysis questions for which the answers can inform choices about the transportation system management. Decision makers and analysts determine the relevance of each question, incorporating public participation as deemed necessary.

- Step 1. Setting up the Analysis
- Step 2. Describing the Situation
- Step 3. Identifying Issues
- Step 4. Assessing Benefits, Problems and Risks
- Step 5. Describing Opportunities and Setting Priorities
- Step 6. Reporting

The analysis is an integrated ecological, social, and economical approach to transportation planning that addresses both existing and future transportation system (USFS, 1999a). This analysis follows the process outlined in the document “Roads Analysis: Informing Decisions About Managing The National Forest Transportation System,” (USFS, 1999a). *This is not a NEPA document*, but rather a site specific NFMA analysis for the Conasauga River Middle and Lower Ocoee and Sylco Assessment Area. This area encompasses approximately 47,109 acres of National Forest ownership. This NFMA analysis defines the existing and desired conditions of the transportation system, and opportunities are identified to move towards the desired condition.

This analysis provides a framework to identify travel related concerns and management opportunities that can be incorporated into subsequent projects being evaluated through the NEPA process. This analysis will assist in the decisions involving transportation systems in the Conasauga River Middle and Lower Ocoee and Sylco Assessment Area.

PRODUCTS

The product of an analysis is a report for decision makers and the public that documents the information and analyses used to identify opportunities and set priorities for future national forest transportation systems. Included in the report is a map displaying the known transportation system for the analysis area, and the needs and opportunities for each road and trail, or segment of road or trail. A complete list of all the maps is included in Step 6. This report will:

- Identify needed and unneeded roads, trails, and areas for motor vehicle use;
- Identify travel-associated environmental and public safety risks;
- Identify site-specific priorities and opportunities for travel-related improvements and decommissioning;
- Identify areas of special sensitivity or any unique resource values.

THIS REPORT

This report documents the travel analysis procedure used for the Conasauga River Middle and Lower Ocoee and Sylco Assessment Area (wherever analysis area is referenced in this document, it corresponds to the Conasauga River Middle and Lower Ocoee and Sylco Ecosystem Assessment Area boundary). This report is a “living” document and reflects the conditions of the analysis area at the time of writing. The document can be updated as the need arises and conditions warrant. Any future updates will be reflected in the title (e.g., version 2.0).

STEP 1 SETTING UP THE ANALYSIS

PURPOSE AND PRODUCTS

The purposes of this step are to:

- Identify the geographic scale or scales for the analysis,
- Develop a process plan for conducting the analysis, and
- Clarify the roles of technical specialists and line officers in the team.

The products of this step are:

- A statement of the objectives of the analysis,
- A list of interdisciplinary team members and participants,
- A list of information needs, and
- A plan for the analysis.

OBJECTIVES OF THE ANALYSIS

This travel analysis is specific to the project scale; it is being completed for the Conasauga River Middle and Lower Ocoee and Sylco Ecosystem EA and will be used to develop the Forest TAP. Unless otherwise stated, the boundary for this roads analysis will match the Conasauga River Middle and Lower Ocoee and Sylco Ecosystem Assessment Area boundary. (See maps in Appendix A.)

This report analyzes all the roads, trails, and areas for motor vehicle use in the analysis area – including the existing Forest Service transportation system and unauthorized roads and trails (see Step 2 for definitions). It will identify the minimum road system for the analysis area by determining which routes are needed, and it will describe opportunities and set priorities. Some of these opportunities will be carried forward in the Conasauga River Middle and Lower Ocoee and Sylco Ecosystem EA.

INTERDISCIPLINARY TEAM MEMBERS AND PARTICIPANTS

Name	Title	Role for Travel Analysis
Janan Hay		Planning Team Leader
Bob Lewis & Eric Taylor	Silviculturist	Forest Health / Soils
Mary Miller & Laura Morris	Wildlife Biologist	Terrestrial Wildlife
Jim Herrig	Aquatic Biologist	Aquatic Resources / Water
Mark Pistrang	Botanist/Ecologist	Botanist/Ecologist
Steve Carlson	South Zone FMO	Fuels/Fire Management
Gary Hubbard	Forest Engineer	Transportation Management
James Ehrlich	Infra Coordinator	TAP Editor
Doug Byerly	Landscape Architect	Visual Resources
Mary Jane Burnette	Other Resource Assistant	Recreation Resources
Anita Bailey	GIS Specialist	GIS Support
Quentin Bass & Chris Bassett	Archeologist	Cultural Resources / Social Issues
Bill Jackson		Air Resources

Individuals from this Interdisciplinary team were utilized for the Travel analysis as needed. At critical points, Line Officers established sideboards, identified issues, and summarized management recommendations.

The Cherokee National Forest’s Revised Land and Resource Management Plan (RLRMP) and amendments provide the management objectives, baseline information, and standards and guidelines to meet legal requirements. Additional information was obtained through field surveys, knowledge of forest personnel, and database queries. The analysis incorporates the best available scientific information as summarized in the document “Forest Service roads: a synthesis of scientific information” (USFS, 2001). This information was the foundation for determining impacts to different resources and identifying recommended management actions.

A Forest Wide Roads Analysis was completed in December 2002 (CNF RAP 2002). This analysis will tier to that document.

INFORMATION NEEDS

The data currently housed in the geographic information system (GIS) will be the information used for this analysis. Updates will be made as new information becomes available. Extensive GIS maps are needed for the various resource fields and are discussed in Step 2 and displayed in Appendix A.

ANALYSIS PLAN

Review of the document will occur on the Cherokee NF (Forest Service specialists); and, the report will be available for other Forests as well. Once finalized, the document will be available to the public if requested. It will be part of the administrative record for the Conasauga River Middle and Lower Ocoee and Sylco Ecosystem EA, for much of the information and many of the opportunities identified may be carried forward in the EA. The Conasauga River Middle and Lower Ocoee and Sylco Ecosystem Team conducted the analysis using GIS data, field data, and public involvement. The interdisciplinary (ID) team developed issues related to road management and reviewed all the questions in Step 4 to determine which were applicable to the analysis area. In Step 5 the team brought together all the resource information and made recommendations and set priorities.

STEP 2 DESCRIBING THE SITUATION

PURPOSE AND PRODUCTS

The purpose of this step is to:

- Describe the existing transportation system in relation to current forest plan direction.

The products of this step are:

- A map or other descriptions of the existing transportation system defined by the current forest plan or transportation plan, and
- Basic data needed to address travel management issues and questions.

EXISTING TRANSPORTATION SYSTEM DESCRIPTION

Most of the study area is on National Forest System land. The roads assessed in and near the boundary of this study area are mostly National Forest System Roads (NFSRs) under the jurisdiction and maintenance of the Forest Service. There are approximately 74 miles of Forest Service jurisdiction roads within the analysis area. Approximately 39 miles of the Forest Service roads are closed to motor vehicle use by the public. These roads are gated, vegetated, and closed seasonally or throughout the year. The remaining approximately 27 miles of roads are open to public motor vehicle use. Most of the NFSRs are in fair to good condition, but all have annual routine maintenance needs. Deferred maintenance needs exist for most of the roads.

System Summary for Conasauga River and Lower Ocoee

	System Roads					Unauthorized		Total Decom	Net change to System
	Open	Seasonal	Closed	Decom	Recommend Decom	To Be Added To System	Recommend Decom		
Conasauga River and Lower Ocoee	55.94	1.46	42.91	2.13	6.03	0	.05	6.08	-6.03
Middle Ocoee Sylco	14.98	2.66	38.75		7.95	.14	.06	8.01	-7.81

The Forest is aware of approximately 0.14 miles of unauthorized routes. This mileage may not represent all the existing unauthorized routes in the analysis area.

There are no system trails or areas for motor vehicle use in the analysis area.

LAND AND RESOURCE MANAGEMENT PLAN EMPHASIS

The Conasauga River Middle and Lower Ocoee and Sylco Assessment Area covers approximately 47,109 National Forest acres.

Sum of ACRES	HUA				
FID Mgmt Areas	Conasauga River	Lower Ocoee River	Middle Ocoee River	Sylco Creek	Grand Total
Outside PROC	24054.3	14987.5			39041.8
12	609.8	19846.2	6178.4	6505.1	33139.5
14		3892.4			3892.4
15			1.6		1.6
16	3.6		9729.7	99.3	9832.6
17	20757.8	65.3		33.9	20857.0
Grand Total	45425.5	38791.4	15909.8	6638.3	106765.0

Sum of GIS_ACRES2	OWNERCLASS			
HUA	Outside PROC	NON-FS	USDA FOREST SERVICE	Grand Total
Conasauga River	24098.3	8266.7	13060.5	45425.5
Lower Ocoee River	14985.1	10839.9	12966.5	38791.4
Middle Ocoee River		1217.6	14692.2	15909.8
Sylco Creek		247.7	6390.6	6638.3
Grand Total	39083.4	20571.8	47109.8	106765.0

Acres in Assessment Area

Assessment Area	GIS Acres of FS Land	GIS Acres FS & Pvt	% FS Ownership
Conasauga River and Lower Ocoee	13,633	13,873	98%

Upper Ocoee Watershed extends outside proclamation boundary with those private acres not accounted for in the above figures.

This acreage is contained in compartments within Management Areas 12, 14-17 and is allocated into the following Management Prescriptions:

Compartments Conasauga River and Lower Ocoee

Management Prescriptions and Allocation (general description within assessment area)

- 1.A Wilderness
- 1.B Wilderness Study Area
- 2.B.1 Eligible Wild River
- 2.B.3 Eligible Recreational River
- 4.E.1 Cultural/Heritage Areas

- 4.F Scenic Areas
- 5.A Administrative Sites
- 5.B Designated Communication/Electronic
- 7.A Scenic Byways Corridors
- 7.B Scenic Corridors/Sensitive Viewsheds
- 7.D Concentrated Recreation Zone
- 8.C Black Bear Habitat Management
- 9.F Rare Communities
- 9.H Restoration

Sum of ACRES	Column Labels				
Row Labels	Conasauga River	Lower Ocoee River	Middle Ocoee River	Sylco Creek	Grand Total
Outside PROC	32365.3	25253.9	397.5	247.8	58264.5
Outside PROC		572.5	820.2		1392.8
1.A	1701.1		3373.8		5074.9
1.B			651.1		651.1
2.B.1	1109.5				1109.5
2.B.3	120.6				120.6
4.E.1				135.9	135.9
4.F		0.0			0.0
5.A		826.3	18.7	42.3	887.3
5.B			0.1		0.1
7.A		2379.2	4697.6	417.4	7494.2
7.B		701.1			701.1
7.D		47.5	40.5	64.3	152.4
8.C	10075.2	8616.7	2650.2	5730.6	27072.6
9.F	53.7				53.7
9.H		394.2	3260.0		3654.2
Grand Total	45425.5	38791.4	15909.8	6638.3	106765.0

Red = suitable for timber management

Sum of ACRES	Column Labels				
Row Labels	Conasauga River	Lower Ocoee River	Middle Ocoee River	Sylco Creek	Grand Total
	32365.3	25253.9	397.5	247.8	58264.5
		572.5	820.2		1392.8
s	10075.2	9711.9	5910.2	5730.6	31427.9
u	2985.0	3253.1	8781.9	659.9	15679.8
Grand Total	45425.5	38791.4	15909.8	6638.3	106765.0

DEFINITIONS (36 CFR 212.1)

The Federal Register published the Final Rule and Administrative Policy which established new definitions for road management on the National Forests. Listed below are some of the new definitions related to travel management and analysis.

Area. A discrete, specifically delineated space that is smaller, and in most cases much smaller, than a ranger district (36 CFR 212.1).

Designated Road, Trail, or Area. An NFS road, an NFS trail, or an area on NFS lands that is designated for motor vehicle use pursuant to 36 CFR 212.51 on an MVUM (36 CFR 212.1).

Forest Road or Trail. A road or trail wholly or partly within or adjacent to and serving the NFS that the Forest Service determines is necessary for the protection, administration, and utilization of the NFS and the use and development of its resources (36 CFR 212.1).

Forest Transportation Atlas. A display of the system of roads, trails, and airfields of an administrative unit (36 CFR 212.1).

Forest Transportation Facility. A forest road or trail or an airfield that is displayed in a forest transportation atlas, including bridges, culverts, parking lots, marine access facilities, safety devices, and other improvements appurtenant to the forest transportation system (36 CFR 212.1).

Forest Transportation System. The system of NFS roads, NFS trails, and airfields on NFS lands (36 CFR 212.1).

Forest Transportation System Management. Travel planning, analysis, designation of roads, trails and areas for motor vehicle use, recordkeeping, scheduling, construction, reconstruction, maintenance, decommissioning, and other operations undertaken to achieve environmentally sound, safe, and cost-effective access for the use, enjoyment, protection, administration, and management of NFS lands.

Highway-Legal Vehicle. Any motor vehicle that is licensed or certified under state law for general operation on all public roads in the state. Operators of highway-legal vehicles are subject to state traffic law, including requirements for operator licensing.

Jurisdiction Over a Forest Transportation Facility. The legal right to control or regulate use of a forest transportation facility derived from title, an easement, an agreement, or other similar source.

Motor Vehicle. Any vehicle which is self-propelled, other than:

- a. A vehicle operated on rails; and
- b. Any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion and that is suitable for use in an indoor pedestrian area (36 CFR 212.1).

Motor Vehicle Use Map (MVUM). A map reflecting designated roads, trails, and areas on an administrative unit or a ranger district of the NFS (36 CFR 212.1).

National Forest System Road. A forest road other than a road which has been authorized by a legally documented right-of-way held by a state, county, or local public road authority (36 CFR 212.1).

National Forest System Trail. A forest trail other than a trail which has been authorized by a legally documented right-of-way held by a state, county, or local public road authority (36 CFR 212.1).

Non-Highway-Legal Vehicle. Any motor vehicle that is not licensed or certified under state law for general operation on all public roads within the state. Operators of non-highway-legal vehicles are subject to state requirements, if any, for licensing and operation of the vehicle in question.

Private Road. A road under private ownership authorized by an easement granted to a private party or a road that provides access pursuant to a reserved or outstanding right.

Public Road. A road under the jurisdiction of and maintained by a public road authority and open to public travel (23 U.S.C. 101(a)).

Road. A motor vehicle route over 50 inches wide, unless identified and managed as a trail (36 CFR 212.1).

Road Construction or Reconstruction. Supervising, inspecting, actual building, and incurrence of all costs incidental to the construction or reconstruction of a road (36 CFR 212.1).

Road Decommissioning. Activities that result in restoration of unneeded roads to a more natural state (FSM 7734).

Road Maintenance. Ongoing upkeep of a road necessary to maintain or restore the road in accordance with its road management objectives (FSM 7714).

Road Subject to the Highway Safety Act. An NFS road that is open to public use in a standard passenger car, including a road with access restricted on a seasonal basis and a road closed during extreme weather conditions or for emergencies, but which is otherwise open to public travel.

Route. A road or trail.

Temporary Road or Trail. A road or trail necessary for emergency operations or authorized by contract, permit, lease, or other written authorization that is not a forest road or a forest trail and that is not included in a forest transportation atlas (36 CFR 212.1).

Trail. A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).

Unauthorized Road or Trail. A road or trail that is not a forest road or trail or a temporary road or trail and that is not included in a forest transportation atlas (36 CFR 212.1).

BASIC DATA NEEDS

Basic data needs are listed below for the Big Creek/Upper Ocoee River Travel Analysis; these were data needed to adequately address the issues. Some of the data are displayed in this report, and other data was used to help answer questions in Step 4, but are located on file at the Ocoee Ranger District.

- GIS layer of existing transportation system.
- Road logs.
- GIS layer of wildlife cover types.
- GIS coverage and mapping of critical, unique or sensitive wildlife habitats.
- GIS map of potential unroaded areas (roads buffered ¼ mile).
- Classification of all roads by type and level of use, season of use and maintenance needs.
- Identification of illegal OHV use within the analysis area.
- Mapping of wetlands, landforms, and ecological land types within the analysis area.
- Identification of wildlife species most at risk from roads, whose viability is a concern.
- On-Forest wildlife monitoring data.
- Identification of wildlife habitat management needs facilitated by the existing road system.
- Identification of existing monitoring/inventory sites and the required roads necessary for access.
- An assessment of the degree of encroachment and proximity of roads to wetland areas, and the potential impacts is needed.
- The location of roads relative to riparian boundaries and the intersections that influence riparian vegetative communities.
- Vegetation inventory data.

STEP 3 IDENTIFYING ISSUES

PURPOSE AND PRODUCTS

The purpose of this step is to:

- Identify the key questions and issues affecting travel management, and
- Describe the origin of the issues.

The products of this step are:

- A summary of key travel-related issues, including their origin and basis, presented by general categories of environmental, socio-cultural and economic, and
- A description of the status of current data, including sources, availability, and methods of obtaining information.

ISSUE SUMMARY

The following issues were identified by the interdisciplinary team for this travel analysis.

Issue 1 – Private Property/Special Use Access

Private property access and special use permit access are issues in this analysis. They are factors in deciding the management of roads in all Management Prescriptions in the Conasauga River and Lower Ocoee Assessment Area. Roads they need for access are retained on the road system.

Issue 2 – Use of roads for wildfire suppression and prescribed burning.

Existing system roads serve an important role in safe and efficient wildfire suppression operations. Timely access for suppression personnel and equipment is dependent upon an adequate road system.

Existing roads often serve as the primary control lines. This allows for suppression with minimal ground disturbance and minimal exposure of personnel to hazards. In addition to wildfire suppression, system roads serve as the primary containment sources for the Zone's Hazardous Fuels Reduction prescribed burning operations.

Issue 3 – Access for Vegetation Management

Generally, the road network in the Conasauga River Middle/Lower Ocoee Sylco Assessment Area was designed and built to facilitate vegetation management. Access is generally good, but small amounts of roading may be needed for future management.

Issue 4 – Access/Use for Wildlife Management

The presence of roads, especially roads open to public traffic, can have adverse effects on wildlife. Many adverse impacts are the result of disturbance, illegal harvest, and habitat

alterations caused by roads. Controlling access, by gating roads, is an important tool for mitigating adverse impacts. Gated roads also provide benefits for wildlife when these areas are managed as linear wildlife openings or provide access to spot openings. Roads also facilitate and provide access for hunting and wildlife viewing opportunities. Maintaining un-roaded areas is crucial in order to provide wildlife with large contiguous blocks of un-fragmented habitat with low levels of disturbance. Controlling access, providing wildlife openings, and maintaining un-roaded areas were identified as important road issues for wildlife in the Conasauga River Middle/Lower Ocoee Sylco

Issue 5 – Recreation/Heritage Use

Roads are important factor from a recreational standpoint for numerous reasons. They serve as the primary conduit for visiting the Cherokee National Forest. Existing roads and highways connect visitors with recreation opportunities in the Ocoee River and Big Frog Mountain Recreation Zones, both recreation zones that encompass the Middle Ocoee/Sylco Creek watersheds.

The Ocoee River Zone is the most highly developed recreation corridor in the Cherokee National Forest with many developed facilities and trails. US Highway 64/74 presently provides access for the commercial whitewater rafting industry and functions as a state scenic highway and Forest Service Scenic Byway.

Big Frog Zone provides opportunities for backcountry, dispersed recreation. Graveled roads provide adequate access. All of these recreational activities require a road system to access the desired setting and activities. Additionally, from an administrative standpoint, roads are a necessity for emergency response and maintenance of recreation infrastructure.

The Ocoee Whitewater Center is one of 8 regional visitor centers in the Southern Region of the Forest Service. In addition, it is a hub for recreational special use events.

STATUS OF CURRENT DATA

The roads in the analysis area are in the GIS system, and their condition/status is current as of the June 2010. The road number, name, length, and other data are detailed in **Table 1** below.

TABLE 1. CONASAUGA RIVER LOWER OCOEE WATERSHED - CURRENT TRANSPORTATION STATUS

ID	NAME	APPROX. MILES IN WATERSHED	APPROX. MILES WITHIN 100' OF STREAM	% WITHIN 100' OF STREAM	STATUS (as defined by Travel Management Rule)	RMO	SURFACE TYPE	REMARKS
NATIONAL FOREST SYSTEM ROADS (NFSR)								
101	JAKE BRANCH ORV	2.60	0.59	23%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
1024	JAKE ROAD	0.61		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
1308	PRINCE GAP	1.65	0.07	4%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
1310	BENCH	0.73		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, accesses spot opening
1324	ISLAND CREEK	1.41	0.18	13%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
1340	MINNEWAUGA CREEK	3.88		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, accesses spot opening
1351	EDWARDS BRANCH	0.65		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
1351-1	EDWARDS BRANCH EAST	0.50		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
1370	GUNTERPOLE	1.34		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
1370A	GUNTERPOLE SPUR-A	0.53		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
1372	JACK BRANCH	3.16	0.05	2%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
221	PEAVINE SHEEDS CR.	11.05	2.14	19%	OPEN	C3	AGG-CRUSHED AGGREGATE	lwlo, access to spot openings
221A	OLD WARDEN RES.	0.37	0.13	35%	DECOMMISSIONED			Use as fireline for WL burn
299	PARKSVILLE BOAT RAMP	0.20	0.07	35%	SEASONAL	A5	AC- ASPHALT	
302	INDIAN CREEK	10.33	1.37	13%	OPEN	C3	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS; ACCESSES PVT, access to lwlo, spot openings
302T	SYLCO RIDGE ORV	1.76	0.18	10%	DECOMMISSIONED			
33080	CABIN 14	0.24	0.08	34%	CLOSED	D2-HC	NAT-NATIVE MATERIAL	SPECIAL USE ACCESS
33101	THORNEBURG	1.30		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
33102	MAC POINT	1.08	0.04	4%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33231	INDIAN-HASKINS DIVIDE	1.05		0%	CLOSED	E1	NAT-NATIVE MATERIAL	lwlo
332401	HASKINS CREEK	0.27		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	accesses spot opening
33242	WEST SYLCO RIDGE	0.86	0.07	8%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	potential future wildlife projects after sale complete, access by public for hunting
333201	DEVILS BRANCH	0.19		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
333202	GRAYS BRANCH	0.10	0.02	20%	CLOSED	E1	NAT-NATIVE MATERIAL	accesses spot opening
333203	WEST FIELD	0.20		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	accesses spot opening
333204	COOKSON BRANCH	0.60		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
333205	COOKSON BRANCH SPUR	0.13		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	accesses spot opening

TABLE 1. CONASAUGA RIVER LOWER OCOEE WATERSHED - CURRENT TRANSPORTATION STATUS

ID	NAME	APPROX. MILES IN WATERSHED	APPROX. MILES WITHIN 100' OF STREAM	% WITHIN 100' OF STREAM	STATUS (as defined by Travel Management Rule)	RMO	SURFACE TYPE	REMARKS
33331	UPPER HAWKINS BRANCH	1.97	0.11	6%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33331A	UPPER HAWKINS BRANCH SPUR	0.00		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33411	HUNTERS LAST	0.83		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
334201	THOMAS BRANCH	1.10	0.73	66%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	access to spot opening
33422	SUNNY RIDGE	0.30		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
334801	DAVIS BRANCH	0.29		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
33493	WEST HALFWAY BR.	1.10		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33501	EAST HALFWAY BR.	0.93		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33502	TAYLOR BRANCH	2.05	0.23	11%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33521	NORTH FORK SHEEDS CREEK	1.13		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
335601	SAWMILL FIRE	0.99	0.16	16%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
335602	TRAIL TREE	0.68		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
33691	SOUTH FORK SHEEDS CREEK	1.50	0.04	3%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
33695	SHEEDS CR. WEST RIDGE	0.79		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
3371	CONASAUGA RIV. TRAILHEAD	0.09	0.01	11%	OPEN	C3	AGG-CRUSHED AGGREGATE	
33711	WEST GRAHAM BRANCH	0.30		0%	CLOSED	E1	NAT-NATIVE MATERIAL	
33732	CABINS 8-11	0.11		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
33733	CABIN 7	0.08		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
33734	CABIN 12A	0.08		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
33735	CABINS 5-6	0.13		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
33741	INDIAN-BAKERS DIVIDE	0.63		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	ACCESSES PVT, lwlo
33742	KING SLOUGH	0.10		0%	OPEN	C3	AGG-CRUSHED AGGREGATE	
367	MAC POINT REC. AREA	0.06		0%	SEASONAL	A5	AC- ASPHALT	
368	BOAT RAMP OVERFLOW	0.14		0%	OPEN	B4	AGG-CRUSHED AGGREGATE	
370	PARKSVILLE BEACH	0.13		0%	SEASONAL	A5	AC- ASPHALT	
371	EAST PARKSVILLE BOAT RAMP	0.17		0%	OPEN	A5	AC- ASPHALT	
372	OCOEE RIFLE RANGE	0.07		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
373	OCOEE RANGER OFFICE	0.09		0%	OPEN	A5	AC- ASPHALT	

TABLE 1. CONASAUGA RIVER LOWER OCOEE WATERSHED - CURRENT TRANSPORTATION STATUS

ID	NAME	APPROX. MILES IN WATERSHED	APPROX. MILES WITHIN 100' OF STREAM	% WITHIN 100' OF STREAM	STATUS (as defined by Travel Management Rule)	RMO	SURFACE TYPE	REMARKS
373A	O.R.O. CONNECTOR	0.04	0.02	55%	OPEN	A5	AC- ASPHALT	
5046	SIMMONS GAP	0.96		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo, access to spot openings
55	BAKER CREEK	5.41	1.86	34%	OPEN	C3	AGG-CRUSHED AGGREGATE	ACCESSES PVT
55A	SUGARLOAF	0.09		0%	OPEN	C3	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
55A	SUGARLOAF	1.06		0%	SEASONAL	C3	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
55B	CARD SPUR	0.52		0%	CLOSED	D2-HC	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
55C	UPPER BAKER CREEK	0.03		0%	OPEN	D2-HC	NAT-NATIVE MATERIAL	ACCESSES PVT
55D	DEVIL POINT	0.24		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	
55E	BAKER CREEK SPUR	1.54		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
55F	WASSON CAMP	0.26		0%	CLOSED	C3	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
55G	CAMP OCOEE	0.49		0%	CLOSED	C3	AGG-CRUSHED AGGREGATE	SPECIAL USE ACCESS
55L	GREEN CEMETERY	0.35		0%	OPEN	D2-HC	NAT-NATIVE MATERIAL	
62	BIG FROG	9.62	0.31	3%	OPEN	C3/D2-HC	AGG-CRUSHED AGGREGATE	Heavy hunter use, NWTF spent superfund money in this area to rehab openings
67	SINA BRANCH	8.97	2.6	29%	OPEN	C3	AGG-CRUSHED AGGREGATE	ACCESSES PVT, Heavy hunter use, NWTF spent superfund money in this area to rehab openings
77	OSWALD	4.01	0.51	13%	OPEN	B4	AC- ASPHALT	SPECIAL USE ACCESS
99	BLUE RIDGE	5.46		0%	OPEN	C3	AC- ASPHALT	Access to lwlo
99A	VALLEY DIVIDE	0.78		0%	CLOSED	D2-FS	NAT-NATIVE MATERIAL	lwlo
TOTALS:		102.44	3.42					

TABLE 1. CONASAUGA RIVER LOWER OCOEE WATERSHED - CURRENT TRANSPORTATION STATUS

ID	NAME	APPROX. MILES IN WATERSHED	APPROX. MILES WITHIN 100' OF STREAM	% WITHIN 100' OF STREAM	STATUS (as defined by Travel Management Rule)	RMO	SURFACE TYPE	REMARKS
UNAUTHORIZED ROADS								
C-1		0.05	0.05	100%				Off of #67; access dispersed camping area
ROADS UNDER PRIVATE JURISDICTION								
33741	INDIAN-BAKERS DIVIDE	0.30			CLOSED	D2-HC		MP 0.7 to 1.03
55C	UPPER BAKER CREEK	0.34	0.28	83%	CLOSED	D2-HC		MP 0.06 to 0.8
COUNTY ROADS								
221	PEAVINE SHEEDS CR.	3.88						
55	BAKER CREEK	0.46						
55A	SUGARLOAF	0.16						
STATE ROADS								
TN314	MATLOCK VALLEY FH304	4.35						
US64	OLD COPPER RD. FH306	6.94	0.57					

TABLE 1. MIDDLE OCOEE/SYLCO WATERSHED - CURRENT TRANSPORTATION STATUS									
ROAD #	ROAD NAME	APPROX. MILES OF ROAD IN WATERSHED	APPROX. MILES OF ROAD WITHIN 100' OF STREAM	% OF ROAD MILEAGE WITHIN 100' OF STREAM	RMO	STATUS (as defined by Travel Management Rule)	SURFACE_TYPE	REMARKS	HUA
NATIONAL FOREST SYSTEM ROADS (NFSR)									
101	JAKE BRANCH ORV	1.38		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	Fords Sylco Cr.	Sylco Creek
102	SYLCO CREEK	0.85	0.31	36%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
1315	BROCK MOUNTAIN	3.46	0.15	4%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
1330	LOWER ROUGH CREEK	1.52	0.03	2%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
1330A	LOWER ROUGH CR.SPUR	0.27		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
1333	EAST SYLCO RIDGE	3.99		0%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
1378	WEST HOGBACK LEAD	1.24		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
186	GOFORTH	0.84	0.78	93%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	accesses graves?	Middle Ocoee River
187A	LITTLE CANEY	0.80	0.01	1%	E1	Closed	NAT-NATIVE MATERIAL		Middle Ocoee River
221	PEAVINE SHEEDS CR.	1.47	0.14	10%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
221H	DUTCH FIELD	2.31		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
221T	TVA RD 221T	0.49		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access	Middle Ocoee River
221U	TVA RD 221U	0.07		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access	Middle Ocoee River
221V	TVA RD 221V	0.16		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access	Middle Ocoee River
221W	TVA RD 221W	0.10		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access	Middle Ocoee River
302	INDIAN CREEK	0.71	0.08	11%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL	Special use access	Sylco Creek
302A	BAPTIST CAMP SPUR	0.32	0.04	13%	D2-HC	Open	IMP-IMPROVED NATIVE MATERIAL	Special use access	Sylco Creek
302A	BAPTIST CAMP SPUR	0.64		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
331301	LITTLE BEECHBOTTOM	0.28		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33132	UPPER CANEY CREEK	0.76	0.02	3%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33133	FAIRVIEW GORGE	1.23		0%	E1	Closed	NAT-NATIVE MATERIAL		Middle Ocoee River
331501	UPPER GOFORTH	0.46	0.09	20%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
331503	BROCK MTN SOUTH	0.32		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33161	ROGERS BRANCH	0.57		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
331701	DEEP GAP KNOB	0.49		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33172	DEEP GAP	5.18	0.24	5%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access	Middle Ocoee River
332001	WASTE AREA	0.71	0.03	4%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33291	SHORT CREEK	0.29	0.01	3%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33292	SHORT CREEK RIDGE	0.32		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33293	EAST SHORT CREEK	0.71		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33311	SYLCO INLET	0.84	0.14	17%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	Fords Sylco Cr. & fords trib.	Sylco Creek
3334	SOUTH FALLS BR.	1.85	0.15	8%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
334	OCOEE NO.3 DAM	1.28	0.05	4%	B4	Open	NAT-NATIVE MATERIAL	TVA access; special use access	Middle Ocoee River

TABLE 1. MIDDLE OCOEE/SYLCO WATERSHED - CURRENT TRANSPORTATION STATUS

ROAD #	ROAD NAME	APPROX. MILES OF ROAD IN WATERSHED	APPROX. MILES OF ROAD WITHIN 100' OF STREAM	% OF ROAD MILEAGE WITHIN 100' OF STREAM	RMO	STATUS (as defined by Travel Management Rule)	SURFACE TYPE	REMARKS	HUA
334301	DUTCH FIELD SPUR SOUTH	1.20	0.66	55%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
334302	DUTCH FIELD SPUR NORTH	0.73	0.05	7%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
33431	DUTCH CREEK	0.46	0.04	9%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
33432	BLUE RIDGE GAP	0.26		0%	E1	Closed	NAT-NATIVE MATERIAL		Sylco Creek
33434	UPPER SYLCO	0.28		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Sylco Creek
335901	LOWER GOFORTH	0.63	0.1	16%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
33641	HORSEBONE BRANCH	1.23		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access?	Middle Ocoee River
337601	INDIAN FLATS SPUR 2	0.53		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
337602	INDIAN FLATS SPUR 3	0.32		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
337707	PARKS LEAD	0.25	0.04	16%	E1	Closed	NAT-NATIVE MATERIAL		Middle Ocoee River
338	BOYD GAP OBS. SITE	0.33		0%	A5	Open	AC- ASPHALT		Middle Ocoee River
366C	MADDEN BRANCH SPUR C	0.63		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
374	FALLS BRANCH	2.34		0%	C3	Seasonal	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
375	OCOEE WHITEWATER CENTER	0.81	0.08	10%	A5	Open	AC- ASPHALT		Middle Ocoee River
375A	O.W.C. SPUR	0.15		0%	B4	Open	AC- ASPHALT		Middle Ocoee River
377	OCOEE NO. 2 DAM FS PARKING	0.30		0%	A5	Open	AC- ASPHALT	special use access	Middle Ocoee River
45	LITTLE GASSAWAY	2.64	0.39	15%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL	TVA access	Middle Ocoee River
45B	THUNDER ROCK	0.32	0.02	6%	C3	Seasonal	AC- ASPHALT		Middle Ocoee River
5054	TOLLIVER SHANTY	1.05		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	TVA access?	Middle Ocoee River
5056	WEST GOFORTH	2.67	0.39	15%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL	Accesses Parker(Parks?) Cem. Illegal vehicle use around gate?	Middle Ocoee River
5056-1	NORTH GOFORTH	0.38		0%	D2-FS	Closed	IMP-IMPROVED NATIVE MATERIAL		Middle Ocoee River
55	BAKER CREEK	2.01	0.09	4%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
55J	SYLCO CAMPGROUND W	0.15	0.07	47%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
55K	SYLCO CAMPGROUND E	0.07		0%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL		Sylco Creek
68	KIMSEY HIGHWAY	0.76		0%	C3	Open	AGG-CRUSHED AGGREGATE OR GRAVEL	TVA access	Middle Ocoee River
		56.40	4.2	7%					

UNAUTHORIZED ROADS									
MO-1									Off #5056; Ali has GPS info.
		0.00							

STEP 4 ASSESSING BENEFITS, PROBLEMS, AND RISK

PURPOSE AND PRODUCTS

The purpose of this step is to:

- Assess the various benefits, problems, and risks of the current transportation system and whether the objectives of Forest Service policy and forest plans are being met.

The products of this step are:

- A synthesis of the benefits, problems, and risks of the current transportation system,
- An assessment of the risks and benefits of entering any unroaded areas, and
- An assessment of the ability of the transportation system to meet management objectives.

CURRENT ROAD SYSTEM BENEFITS, PROBLEMS, AND RISKS

The following section is a series of questions and answers that assess benefits, problems, and risks of the current transportation system and its ability to meet the objectives stated in the Forest Land Management Plan. The questions are from Forest Service publication FS-643, *Road Analysis: Informing Decisions About Managing the National Forest Transportation System*.

Although the questions specifically address the road system, in answering the questions, the transportation system was considered. *Table 2* provides documentation for this section of the travel analysis process.

Table 2. Documentation for Conasauga River and Lower Ocoee Travel Analysis Process Step 4.

Assigned to Specialist	Question Number	Addressed in Analysis?	*Rationale For Questions Not Addressed
Mark Pistrang / Laura Morris	EF (1)	Y	
	EF (2)	N	Addressed in Forest TAP
	EF (3)	N	Addressed in Forest TAP
	EF (4)	Y	
	EF (5)	Y	
Ali Reddington	AQ (1)	Y	
	AQ (2)	Y	
	AQ (3)	Y	
	AQ (4)	Y	
	AQ (5)	Y	
	AQ (6)	Y	
	AQ (7)	Y	
	AQ (8)	Y	
	AQ (9)	Y	
Jim Herrig	AQ (10)	Y	
	AQ (11)	Y	
	AQ (12)	Y	
	AQ (13)	Y	
	AQ (14)	Y	
Laura Morris	TW (1)	Y	
	TW (2)	Y	

Table 2. Documentation for Conasauga River and Lower Ocoee Travel Analysis Process Step 4.

Assigned to Specialist	Question Number	Addressed in Analysis?	*Rationale For Questions Not Addressed
	TW (3)	Y	
	TW (4)	Y	
Gary Hubbard	EC (1)		
Gary Hubbard	EC (2)		
Gary Hubbard	EC (3)		
Eric Taylor	TM (1)		
	TM (2)		
	TM (3)		
	MM (1)	N	Addressed in Forest TAP
	RM (1)	N	Addressed in Forest TAP
Ali Reddington	WP (1)	Y	
	WP (2)	Y	
	WP (3)	Y	
Laura Morris / Mark Pistrang	SP (1)	N	Addressed in Forest TAP
	SU (1)		
Gary Hubbard	GT (1)		
	GT (2)		
	GT (3)		
	GT (4)		
	AU (1)	N	Addressed in Forest TAP
	AU (2)		
Steve Carlson	PT (1)	Y	
	PT (2)	Y	
	PT (3)	Y	
	PT (4)	Y	
Matt Henry	UR (1)	Y	
	UR (2)	Y	
	UR (3)	Y	
	UR (4)	Y	
	UR (5)	Y	
Matt Henry	RR (1)	Y	
	RR (2)	Y	
	RR (3)	Y	
	RR (4)	Y	
	RR (5)	Y	
Laura Morris / Mark Pistrang	PV (1)	Y	
Quentin Bass / Chris Bassett	PV (2)		
	PV (3)		
Matt Henry	PV (4)		
Matt Henry	SI (1)		
	SI (2)		
Quentin Bass / Chris Bassett	SI (3)		
	SI (4)		
	SI (5)		
Matt Henry	SI (6)		
	SI (7)		
	SI (8)		
Laura Morris / Mark Pistrang	SI (9)	No	Addressed in Forest TAP
Matt Henry	SI (10)		

Table 2. Documentation for Conasauga River and Lower Ocoee Travel Analysis Process Step 4.

Assigned to Specialist	Question Number	Addressed in Analysis?	*Rationale For Questions Not Addressed
	CR (1)	N	Addressed in Forest TAP

Ecosystem Functions and Processes (EF)

EF (1): What ecological attributes, particularly those unique to the region, would be affected by roading of currently unroaded areas? Roughly a third of the Conasauga and Lower Ocoee watersheds fall outside of Forest Service lands. The Middle Ocoee and Conasauga watersheds both harbor unique levels of biological diversity associated specifically with the Ocoee River Gorge and Conasauga River, though both currently have existing roads within these areas of high biological diversity. These watersheds do not contain large unroaded areas, and aside from the previous mentioned hot-spots of diversity, ecological attributes found within these watersheds are similar to other watersheds on the Forest. Effects of additional roading in most of this area would be similar to effects described in the forest-wide RAP, though any additional roading immediately along the Conasauga River and Ocoee River Gorge could have dramatic impacts to biological diversity (See Corridor K DEIS).

EF (2): To what degree do the presence, type, and location of roads increase the introduction and spread of exotic plant and animal species, insects, diseases, and parasites? What are the potential effects of such introductions to plant and animal species and ecosystem function in the area? Roads are known vectors for the spread of exotic species. Effects are the same across the forest.

EF (3): To what degree do the presence, type, and location of roads contribute to the control of insects, diseases, and parasites? Effects are the same across the forest.

EF (4): How does the road system affect ecological disturbance regimes in the area? Some natural ecological disturbance regimes (fire) may be limited to a very local level in areas where road densities are high, while others (wind, native insect outbreaks) may not be affected by roads at all. While the existing road system may provide corridors for the movement of some animals and plant species, it also has the potential to limit the movement of other species. Natural disturbance regimes are likely most influential in large unroaded landscapes such as congressional wilderness and wilderness study areas where the effects of roads on the landscape are minimized, however no such areas exist within these watersheds.

EF (5): What are the adverse effects of noise caused by developing, using, and maintaining roads?

There could be a short-term disturbance to various species that inhabit the area until forest management activities are completed. Some species are not affected by noise.

Aquatic, Riparian Zone, and Water Quality (AQ)

AQ (1): How and where does the road system modify the surface and subsurface hydrology of the area? Surface and subsurface flows are intercepted by the road when water is moving down adjacent hill slopes. Water can be concentrated either on the road surface or in adjacent ditches, and in places, is rerouted from pathways it would otherwise take if the road were not present. By intercepting surface and subsurface water flow, and diverting it into ditches and channels, roads effectively increase the density of streams on the landscape. As a result, water infiltration decreases, the timing of flood flows is quickened, and the peak of flood flows is increased. The magnitude of this effect is dependent on the density of roads, gradient of road, and its location in the watershed. These effects are particularly pronounced in association with roads located along drainages or with multiple stream crossings.

Many roads within the analysis area are ridge-top/upper side-slope road locations with reduced connectivity to surface and subsurface water. The majority of these roads are out-sloped with dips providing drainage or in-sloped with ditches and cross drains providing water drainage.

Paved portions roads affect subsurface hydrology by decreasing infiltration. Native and aggregate surfaced roads interfere with hydrologic function. Roads in riparian areas are particularly disruptive.

AQ (2): How and where does the road system generate surface erosion?

All native and aggregate surfaced roads generate some surface erosion. The amount depends on factors such as soil type, road surface type, road gradient, road prism, the spacing and effectiveness of drainage structures, traffic use, and maintenance activity. The extent of surface erosion occurring on road cut-banks depends on the steepness, slope length, soil type, and vegetative cover. Road ditches concentrate water flow which generates surface erosion and also increases sediment delivery to streams from road surfaces and road cut-banks.

Surface erosion is particularly problematic when roads are located immediately adjacent to drainages and/or have multiple perennial/intermittent stream crossings:

AQ (3): How and where does the road system affect mass wasting?

Small slides and slumps are possible below culvert outfalls, along fill slopes where road drainage is concentrated, and on road cutbanks. Inadequately sized culverts or plugged culverts may blowout during high flow periods and initiate soil slides. Proper sizing and location of drainage culverts can reduce this potential, as well as, armoring the outfall areas associated with drainage structures, as needed. Road cutbanks pose a problem in steep areas where soils are coarse in texture, shallow, and where unstable colluvium material occurs.

AQ (4): How and where do road-stream crossings influence local stream channels and water quality?

Road-stream crossings serve as a primary conduit for road-related erosion and storm drainage to reach streams. Accelerated sediment delivery to affected streams occurs at these points, and can affect water quality and substrate condition. In most cases culverts have more of an influence on stream channels and water quality than do bridges or bottomless culverts. Culverts concentrate and accelerate water flow causing soil displacement to occur at the outfalls and cause stream banks to undercut. Over time the stream channel adjusts to the change in flow by becoming deeper and/or wider for a short distance below the culvert. Piping occurring under or around culverts is usually a minor source of sediment; however, high sediment loading can occur from a culvert blowout due to piping. Blowouts can also occur from plugged culverts. Road surfacing,

eroded materials and pollutants are usually deposited into steams by ditches that empty directly into streams at road-stream crossings. Several culverts in the study area are in need of replacement.

AQ (5): How and where does the road system create potential for pollutants, such as chemical spills, oils, deicing salts, or herbicides, to enter surface waters?

Due to the nature and location of the roads within this analysis area, there is little potential for chemical pollution of streams related to Forest Service roads. If roads were used to transport chemicals such as herbicide, the greatest potential for spills affecting aquatic resources would be at stream crossings or road segments located adjacent to streams. Roads in the Lower Hiwassee and Smith Creek watersheds are not heavily traveled by vehicles carrying chemicals. Some risk may be associated with delivery/disposal of chemicals used at the TVA Apalachia Powerhouse and with transport/application of herbicides along the powerline corridors emanating from that powerhouse. Oil, fuel, and raw sewage carried by campers/RVs are potential water pollutants. Due to their impervious nature paved roads have the potential to deliver more pollutants such as oils and deicing salts. However, the potential contaminant transport is outweighed by the benefit of reduced sedimentation as compared to a gravel road. Consider using porous pavement for new paving. Allowing road contaminants to infiltrate through the subgrade/soil would promote contaminant degradation/adsorbtion prior to entering groundwater or surface water.

AQ (6): How and where is the road system "hydrologically connected" to the stream system? How do the connections affect water quality and quantity?

The road system in the analysis area is connected to streams primarily at stream crossings. Generally, the hydrologic connection is made where ditchlines empty into streams or drainages. Road surfacing and other eroded materials are usually deposited into steams by ditches that empty directly into streams. Without proper ditch turnouts, surface runoff enters the stream channel carrying eroded materials and pollutants. If this water moves directly to stream channels, peakflows and hydrograph timing can be somewhat altered from the condition associated with an unroaded watershed. The majority of road mileage within this analysis area is located along ridge-tops or upper/middle side-slopes. However, stream crossings can also be problematic with these roads. Hydrologic connectivity is generally reduced when roads are properly located.

Recommendations- Create ditch turnouts so that ditchlines do not empty directly into stream channel. Determine roads where ditchlines may be eliminated and other types of water control structures such as rolling dips may be used.

AQ (7): What downstream beneficial uses of water exist in the area? What changes in uses and demand are expected over time? How are they affected or put at risk by road-derived pollutants?

As outlined in the Rules of Tennessee Department of Environment and Conservation, Division of Water Pollution Control Amendments, Chapter 1200-4-4, Use Classifications for Surface Waters beneficial uses of water bodies in or immediately downstream from the analysis area are as follows:

Stream	Description	Designated Beneficial Uses									
		DOM	IWS	FAL	REC	LWW	IRR	NAV	TS	NRTS	

Ocoee River	Benton Station Bridge to Mile 17	X	X	X	X	X	X	
Sylco Creek	Mile 0.0 – Origin			X	X	X	X	X
Dutch Creek	Mile 0.0 – Origin			X	X	X	X	X
Ocoee River	Mile 17 to Ocoee #3 Powerhouse		X	X	X	X	X	
Goforth Creek	Mile 0.0 – Origin			X	X	X	X	X
Ocoee River	Ocoee #3 Powerhouse to Rock Creek		X	X	X	X	X	X
Rock Creek	Mile 0.0 – Origin			X	X	X	X	X
Ocoee River	Rock Creek to mile 37.9 (GA-TN State Line)		X	X	X	X	X	X
Hiwassee River	(Mile 0.0-23.9)	X	X	X	X	X	X	X
All other surface waters named and unnamed in the Lower Tennessee River Basin, with the exception of wet weather conveyances, which have not been specifically noted				X	X	X	X	
<p>Definitions:</p> <ul style="list-style-type: none"> DOM - Domestic Water Supply IWS - Industrial Water Supply FAL - Fish and Aquatic Life REC - Recreation LWW - Livestock Watering and Wildlife IRR - Irrigation NAV Navigation TS - Trout Stream NRTS - Naturally Reproducing Trout Stream 								

All waters within National Forests are Exceptional Tennessee Waters (Tennessee Department of Environment and Conservation, Division of Water Pollution Control, Chapter 1200-04-03-.06(4)) and consequently no degradation that threatens the designated uses of these waters are permitted.

The 2014 TDEC Stream/Waterbody Assessments revealed that all assessed streams in the analysis area are supporting their designated uses with the following exceptions:

- The portion of the Hiwassee River within the analysis area is not supporting its designated uses. The 2012 303(d) list indicates that Hiwassee River is impaired with respect to water temperature and low flow alterations. These impacts result from Hydrostructure Flow Regulation/modification associated with the Apalachia Dam and associated power generation infrastructure/management.
- Parksville Reservoir, Ocoee #3 Reservoir and the unimpounded reaches of the Ocoee River in the analysis area are impaired by metals and sediment. The source of the metals and sediment is historic mining and ore processing operations in the Great Copper Basin. Additionally, the unimpounded reaches of the Ocoee river are impaired with respect to low flow alterations associated with Ocoee Dams #2 and 3. No TMDLs have been developed for this waterbody (TDEC 2014, EPA 2014).

Over time, excessive sedimentation could compromise the storage capacity of reservoirs along the Ocoee, Hiwassee and Tennessee Rivers. However, the relative contribution of sediment originating from Forest Service roads is extremely small compared to the contribution of sediment originating from privately managed lands. The impact of this small amount of sediment on downstream designated uses is negligible and is likely to remain so.

AQ (8): How and where does the road system affect wetlands?

Road systems may affect wetland hydrology by altering surface and subsurface drainage patterns. This change has the potential to modify the wetland moisture regime. Roads crossing at wetlands may restrict natural water flow quantity, timing, and routing. Sediment from roads can fill in wetlands over time. Based on a review of the National Wetlands Inventory and forest roads GIS data, no specific locations were identified where the road system is negatively affecting wetland hydrology.

AQ (9): How does the road system alter physical channel dynamics, including isolation of floodplains, constraints on channel migration, and the movement of large wood, fine organic matter, and sediment?

The road system can alter physical channel dynamics by increasing runoff and sediment delivery to affected streams. Sediment entering streams can reduce pool depths and contribute to changes in channel substrate (i.e. embededness). Stream crossings can retard or prohibit the movement of large woody debris, fine organic matter, and sediment. Areas located within the riparian corridor tend to isolate the floodplain associated with streams and impede or prevent natural channel migration.

Citations:

Tennessee Department of Environment and Conservation (TDEC). 2014. TDEC Assessment Interactive Mapper. <http://tnmap.tn.gov/wpc/>. [Accessed 9/26/2014]

Conasauga River, Lower/Middle Ocoee River, & Sylco Creek Travel Analysis Process - 28

AQ(10): How and where does the road system restrict the migration and movement of aquatic organisms? What aquatic species (i.e. fish and amphibians) are affected and to what extent?

Restrictions to migration for aquatic species primarily occur at stream crossings. There are 238 perennial stream crossings along the road system in this project area; 9 are bridges, and 227 are culverts; and 2 are fords. All of the culverts are potential barriers to fish, amphibians, or macroinvertebrates.

Fifty-one of fifty-eight stream reaches capable of supporting fish in the analysis area have been surveyed. The unsurveyed stream reaches are unlikely to support any new or rare species.

Eighty species of fish have been documented in these streams including: one threatened, one endangered, five sensitive, and one locally rare fish. Other rare aquatic species present in this watershed include: two threatened, eight endangered, and three sensitive mussels.

The culverts are not migration barriers for any of the endangered species, but could present barriers to blue shiners, mountain brook lampreys, Tennessee dace, southern brook lampreys and to other more common aquatic species.

Recommendation – Determine which culverts are acting as migration barriers and give these priority for replacement.

AQ(11): How does the road system affect shading, litterfall, and riparian plant communities?

Of the 175 miles of roads in this project area, only 8 (5%) are within the riparian corridor; 6.8 of which are administered by the Forest Service. Shading, litterfall and riparian plant communities are minimally impacted by these roads because the canopy remains closed. Nine roads or segments of roads contribute sediment to the watershed and are of no apparent use (mileages are approximates):

No.	Name	Miles	Reason
101	Jake Branch ORV	1.55	MA 7 decom from Baptist Camp to where it leaves MA 7
102	Sylco Creek	0.67	Poor location; allow W/L opening maint.
186	Goforth	0.07	After jct. with 335901; poor location and unneeded
33102	Mac Point	1.08	In MA7; not needed as a road
33132	Upper Caney Creek	0.02	Last segment in Riparian Zone
331501	Upper Goforth	0.20	Last segment in Riparian Zone
33311	Syco Inlet	0.84	Poor location; 2 fords
334301	Dutch Field Spur So.	1.20	Poor location; in Riparian Zone; Access is provided to the same area by 221H
335901	Lower Goforth	0.63	In MA7; not needed as a road; allow W/L opening maintenance

Recommendation – Decommission approximately 6.26 miles of roads listed above.

AQ(12): How and where does the road system contribute to fishing, poaching, or direct habitat loss for at-risk species?

Fishing and poaching could occur for Alabama, redeye, spotted, largemouth, smallmouth shadow, rock and striped bass; brook, rainbow and brown trout; bluegill, warmouth, green, longear, redbreast, redear, and spotted sunfish; channel catfish; and longnose gar and in this analysis area. The “at-risk” species (TESLR) are not subject to fishing or poaching. Direct habitat loss from the road system is unlikely because the riparian corridor will be protected.

Recommendation – Protect the riparian corridor.

AQ(13): How and where does the road system facilitate the introduction of non-native aquatic species?

see Forest Wide discussion

Recommendation – None

AQ(14): To what extent does the road system overlap with areas of exceptionally high aquatic diversity or productivity or areas containing rare or unique aquatic species or species of interest?

There are twelve stream reaches in this TAP that have exceptionally high fish diversity for their respective sizes: Conasauga River Reach #1 - 50 fish species with two federally listed fish, twelve federally listed mussels, three Sensitive fish, three Sensitive mussels, and one Locally Rare fish; Jack River – 43 fish species with two federally listed fish, three Sensitive fish, and one Locally Rare fish; Conasauga River Reach #2 - 33 fish species with one federally listed fish, and three Sensitive fish; Ocoee River Reach #1 – 31 fish species with one Locally Rare fish species; Sylco creek – 22 species of fish; Baker Creek Reach #1 – 21 species of fish; Indian Creek Reach #1 – 16 with one Sensitive species; Mooneyham Branch – 16 species of fish; Ocoee River Reach #2 – 15 species of fish; Davis Branch – 13 species of fish; Sawmill Branch – 13 species of fish; and Sheeds Creek - 13 species of fish. Salamanders are diverse and common in all of these systems. Their movements may be impacted by culvert barriers.

Recommendation – Replace culverts to provide Aquatic Organism Passage when roads are being improved.

Terrestrial Wildlife (TW)

TW (1): What are the direct effects of the road system on terrestrial species habitat?

Effects are dependent upon the type of road and amount of traffic. Roads can be barriers to movement and dispersal of species including small mammals, amphibians and reptiles. However, roads, especially forested roads, serve as flight corridors for bats. Roads can also provide dispersal corridors for larger mammals. Vegetation along roads can provide nesting areas and forage. However, open road use may disturb animals during breeding and/or nesting season. Road systems fragment habitat; particularly detrimental for interior stand species or wide-ranging isolationist species. The road system in this area is not expected to contribute significantly to habitat fragmentation or invasion of nest parasites such as the brown-headed cowbird due to the large expanse of forested habitat within the Cherokee National Forest. The

only large terrestrial animal within the analysis areas that may be sensitive to road density is the black bear. Roads can also provide habitat and mechanisms for the spread of some non-native, invasive plant species. Non-native, invasive plants can out-compete the more beneficial native plants important to wildlife habitat and forage. Effects are the same across the forest.

TW (2): How does the road system facilitate human activities that affect habitat?

Roads may facilitate human activities that result in habitat disturbances. Disturbances may include loss of habitat or habitat removal in the forms of direct loss (from trampling in campgrounds and other direct disturbances), loss to fire (from increased incidence of human – caused ignitions), removal of forest products, or removing structures (reduction in density of snags and logs due to removal near roads). Roads near adjacent private land owners may allow for illegal OHV user created trails to private property and therefore, potentially affecting habitat.

The road system facilitates management activities such as timber harvest and wildlife habitat improvement. These activities may positively or negatively affect habitat depending on the wildlife species in question.

TW (3): How does the road system affect legal and illegal human activities (including trapping, hunting, poaching, harassment, road kill, or illegal kill levels)? What are the effects on wildlife species?

The road system provides access and opportunity for wildlife viewing, camping, hiking, and hunting. These activities may temporarily disturb wildlife. Disturbance during nesting or early rearing periods may result in nest failure or abandonment of young. Access provides opportunities for illegal activities such as dumping, poaching, collection of live animals for human use, and increased road mortality. Access also provides for the dispersal of exotics and pests that impact wildlife populations.

TW (4): How does the road system directly affect unique communities or special features in the area?

The Ocoee River Gorge in the Middle Ocoee Watershed is one of two known locations in the world for the federally endangered Ruth's golden aster, and also harbors a myriad of other rare plants and animals as well as a newly described globally rare plant community. Likewise, the Conasauga River is renowned for its aquatic diversity and one of two known locations for white fringeless orchid (a candidate for federal listing) also occurs within the Conasauga Watershed. Existing road systems provide easy access into these areas which certainly has the potential to create a variety of effects to these important resources. The most likely effects are trampling or poaching of rare plants by visitors and possible effects from toxic spills and emissions from vehicles.

Economics (EC)

EC (1): How does the road system affect the agency's direct costs and revenues? What, if any, changes in the road system will increase net revenue to the agency by reducing cost, increasing revenue, or both?

See table 3 for the average maintenance costs for each road.

COSTS/REVENUES

Direct costs to the agency include road maintenance costs due to motor vehicle use and any needed restoration or protection costs to stabilize roads near resources such as streams.

Road maintenance costs fit into two categories:

- **Annual Maintenance.** Work performed to maintain serviceability, or repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur. Unscheduled or catastrophic failures of components or assets may need to be repaired as a part of annual maintenance.

This amount will vary depending on the road's operational maintenance level which is the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. It defines the level to which the road is currently being maintained.

- **Deferred Maintenance.** Maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period. When allowed to accumulate without limits or consideration of useful life, deferred maintenance leads to deterioration of performance, increased costs to repair, and decrease in asset value. Deferred maintenance needs may be categorized as critical or noncritical at any point in time. Continued deferral of noncritical maintenance will normally result in an increase in critical deferred maintenance.

A critical need is a requirement that addresses a serious threat to public health or safety, a natural resource, or the ability to carry out the mission of the organization.

The objective maintenance level is the maintenance level to be assigned at a future date considering future road management objectives, traffic needs, budget constraints, and environmental concerns. The objective maintenance level may be the same as, or higher or lower than, the operational maintenance level.

The operational maintenance level is the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. It defines the level to which the road is currently being maintained.

Expenditures have decreased due to decreased funding. It is hard to predict future funding, but the trend in recent years is a decrease in road maintenance funding.

The need to provide forest visitors with safe and environmentally friendly roads seems to have become an important issue to many legislators. This concern may reverse the recent downward trend.

When funding is below the amount needed, priorities are set concerning which roads will have which maintenance activities (grading, brushing, gravel, etc.) performed.

All the maintenance level 3 roads in the area are graded twice a year and mowed once every two years.

Consideration is given to changing the objective maintenance level if a reduction in funds continues, e.g. maintenance level 3 (suitable for passenger car) is changed to maintenance level 2 (high clearance vehicles). Also, funds other than those specifically designated for road maintenance (CMRD) are often available for road maintenance. These include K-V Trust Fund - Special Legislation (CWK2), Legacy Roads and Trails (CMLG), Vegetation Management (NFVW), Wildlife Management (NFWF), Recreation Fee Revenue Program (FDFD), road maintenance deposits from timber purchasers, road permits that require the user to perform maintenance, and road legacy funds.

The road system provides for potential revenues to the agency in the following ways:

- Timber sales
- Recreation use fees
- Fees for special use and road use permits:
 - Access to timber on private land

Presently, direct costs exceed direct revenues, but many resource management targets could not be met or would cost more to accomplish without the current road system, so reducing the number of roads and/or reducing the amount of maintenance on roads could result in a net decrease in revenue. For example, roads that provide access to areas for prescribed burns which are needed to reduce hazardous fuels.

CHANGES

Changes to the road system that could increase net revenue:

- Manage the suitable timber base that can be accessed by existing roads and/or new roads that are low cost and would not harm resources. Any new system roads would likely have an objective maintenance level of 1 or 2 which reduce the long-term funding needs. New roads would be built to reduce annual maintenance costs. This would be done by the construction features including broad-based dips and the stabilization of the roadbed with gravel or vegetation. Some of the costs associated with this include planning, design, and contract administration. The forest would collect road maintenance deposits from the purchasers and/or the purchaser would perform the necessary maintenance on roads not open to the public. It could also provide an opportunity to perform deferred maintenance work on roads open to the public if the work is also needed to accommodate log trucks. Such work would be done so that long-term impacts of a road to adjacent resources are reduced.
- Close roads to motor vehicle use by the public. This could require the following costs: planning, enforcement, and mitigating unacceptable environmental effects such as sedimentation from roads adjacent to streams. Possible consequences of closure: decreases in revenues from commodities such as timber (if road is no longer used to access timber), recreation fees, and other services such as special-use permits. Reduced maintenance costs and reductions in costs to mitigate unacceptable environmental effects would likely increase in net revenues. Some roads were built prior to FS ownership and were considered “public” access with an established historical use. Changes that prevent

the public from using roads that have feel they have a “right” to use could increase costs to the agency due to the need for enforcement of the closure and an increase in the amount of time spent responding to complaints.

- Decommissioning is the demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded road, including necessary cleanup work. Decommissioning would be done so that the road no longer needs maintenance. Costs include planning, monitoring, repairing or mitigating any unacceptable impacts to resources, and the actual decommissioning work. Possible consequences include decreases in revenues from commodities such as timber, recreation fees, and other services such as special-use permits. This work would reduce maintenance costs and reduce costs to mitigate any unacceptable impacts to resources. This work could make some areas harder to access for resource management which could increase costs.
- Encourage individuals who use Forest Service roads to access private land to form homeowner associations and/or to approach the county road department to maintain those roads. This would reduce the agency’s road maintenance costs.
- Maintain some or all of the maintenance level 3 or 4 roads as maintenance level 2 roads. The maintenance level 3, 4, & 5 roads in this area are:
 - ML 5:
 - Parksville Boat Ramp, #299
 - Mac Point Recreation Area, #367
 - Parksville Beach, #370
 - Ocoee Ranger Office, #373
 - Ocoee Ranger Office Connector, #373A
 - Boyd Gap Observation Site, 338
 - Ocoee Whitewater Center, #375
 - Ocoee Dam #2 FS Parking, #377
 - ML 4:
 - Boat Ramp Overflow, #368
 - Oswald, #77
 - Ocoee No. 3 Dam, #334
 - O.W.C. Spur, #375A
 - ML3:
 - Peavine-Sheeds, #221
 - Indian Creek, #302
 - Conasauga River Trailhead, #3371
 - King Slough, #33742
 - Baker Creek, #55
 - Sugarloaf, #55A
 - Wasson Camp, #55F
 - Camp Ocoee, #55G
 - Big Frog, #62
 - Sina Branch, #67
 - Blue Ridge, #99

- East Sylco Ridge, #1333
- Falls Branch, #374
- Little Gassaway, #45
- Thunder Rock, #45B
- Sylco Campground W, #55J
- Sylco Campground E, #55K
- Kimsey Highway, #68

EC (2): How does the road system affect priced and non-priced consequences included in economic efficiency analysis used to assess net benefits to society?

The management of the road system involves decisions to build new roads, reconstruct roads, perform maintenance on some roads and not others, decommission roads, or temporarily close them if they are no longer needed or are causing resource damage.

Construction of new roads, although improving access to the area (a benefit to some), may diminish the desired natural and remote character associated with the area and would reduce its passive use value to some visitors.

Passive use values include features society values simply because they exist without actually using them or they expect them to be preserved for others to use and enjoy (a scenic landscape, wilderness, or an endangered plant or animal). They are also features valued for preservation (cultural resources and historic sites).

Decommissioning, closing, or changing the maintenance level of roads may be necessary to meet budget and funding constraints or to prevent resource damage, but may diminish access to areas that are important to certain users of forest resources. People with a strong attachment to a place, activity, or road may consider it a loss in value unless they are willing and able to find, and adapt, to substitute experiences.

The road users that contribute the most significant economic benefits are those who visit the area for recreation-related activities such as:

Driving for pleasure:

Roads #221, #302, #55, #62, #67, #77, #99, #45, & #68 are through roads that are part of a network of roads that is very popular with sightseers.

Roads #221 & #62 provide access to the Chattahoochee National Forest.

Camping - the following roads provide access to camping as indicated:

- #77: Chilhowee Recreation Area
- #55 & #221: Sylco Campground
- #45: Thunder Rock Campground
- #221: Cottonwood Patch Horse Camp (in Georgia)
- These roads provide access to dispersed camping areas:
 - #221
 - #302
 - #55

- #62
- #67
- #99
- #45
- #374
- #68

Hunting - the open roads provide access and closed roads make game retrieval easier.

Fishing:

- Road #221 provides access to Conasauga River, Jacks River, Sylco Cr., & Sheeds Cr.
- Road #55 provides access to Baker Cr., Indian Cr., & Sylco Cr.,
- Road #302 provides access to Parksville Lake, Indian Cr., & Haskins Cr.
- Road #67 provides access to Sawmill Br., Davis Br., Sina Br., Devils Br., Grays Br., & Cookson Br.
- Roads #33742, #299, #370, & #371 provide access to Parksville Lake.
- Road #186 provides access to Goforth Creek (stocked by TWRA)

Hiking - the following roads provide access to the trails indicated:

- #221:
 - #61
 - #66
 - #13 (in Georgia)
- #62:
 - #304
 - #145
- #99 & #221:
 - #62
- #221, #302, & #55:
 - #75
- #102, #374, & #33311:
 - #75
- #68, #45, & #45B:
 - #2

Foot travel is permitted on many roads closed to the public for motor vehicle use.

Road #221 provides access to areas traveled by horseback riders.

Wilderness Areas – roads #221 & #62 provide access to Big Frog & Cohutta (in Georgia) wilderness areas

Wildlife viewing - the open roads are used by visitors for this activity.

Other:

- Road #221 provides access to the Conasauga River snorkeling site
- Roads #375 & #375A provide access to the Ocoee Whitewater Center
- Roads #334 & #377 provide access to rafting on the Ocoee River
- Roads #299, #367, #368, #370, #371 & #33742, provide access to recreation activities on Parksville Lake such as swimming, picnicking, and boating.
- Roads #55, #55L, #302, & #5056 provide access to four different grave sites.

Portions of roads #101, #1324, #221, #299, #302, #33080, #333202, #334201, #33502, #335601, #3371, #373A, #55, #67, #77, #102, #186, #302, #302A, #331501, #33311, #334301, #337707, #375, #45, #5056, & #55J are in riparian areas which could be considered a net cost to society because of the roads' impact on water quality.

Road #101 is a through road that is not open to the public.

Based on the activities that the road system accommodates, the following consequences are realized:

Priced:

- Sale of commodities such as timber (on Forest Service and private land)
- Less cost due to convenient access for research, inventory, and monitoring
- Road development and maintenance
- Liability
- Maintenance of trails and recreation-related sites
- Fire suppression
- Resource management
- Control of invasive species
- Mitigation of resource damage from roads

Non-priced:

- Resource protection such as fire suppression, wildlife and watershed management to preserve the "passive" value that the public assigns to natural resources.
- Access to public land and its resources
- Noise and air pollution
- Water quality
- Fish habitat
- Effect of road density on wildlife
- Litter

Typically, the transportation system increases the value of both priced and non-priced commodities, because without access these items have less value or cost more to obtain. The most notable exception to this is commodities that have an intrinsic value because they are difficult to access, such as a wilderness or areas with low road densities.

The type of experience society desires in the study area and its associated value depends in large part on whether or not there are roads, their density, their condition, and whether or not they are

open to motor vehicle use. The consequence may be a net benefit or a cost depending on what value the public assigns to the type of experience they desire.

Road management activities that benefit some members of society by enhancing their quality of life, may negatively impact resources that other members value for their quality of life. These may include impacts to resources such as soil, water, habitat, scenic beauty, or a reduction in value that people assign to an area such as limited accessibility or solitude. Public input is needed to provide information to evaluate the tradeoffs being considered and will help assign “value” to non-priced consequences.

EC (3): How does the road system affect the distribution of benefits and cost among affected people?

The accessibility to resources in the study area is important to the local economy, and commerce associated with forest visitors also has an economic influence on Blount, McMinn, and Monroe Counties and the communities of Etowah, Athens, Madisonville, Sweetwater, Vonore, and Tellico Plains in Tennessee and Graham County, North Carolina. Since counties do not collect property taxes on federal land, activities that generate other tax revenue such as sales tax are beneficial to the community.

Forest roads are the primary means of access to forest resources. Changes to the road system and/or in road management can affect long-established access and use patterns, lifestyles, recreation activities, forest resource-related businesses, the collection of forest products, fire suppression, and the distribution of recreational opportunities available to users. These effects can change the distribution benefits and costs for all users.

Construction, maintenance, or decommissioning of roads in the area is not likely to have a significant long-term impact on the economic benefits derived from recreation activities unless there is a significant reduction in the total mileage of roads that provide access for this use.

The road system distributes the following economic benefits to businesses of various sizes as well as individuals:

- Income from the sale of gas, food, lodging, supplies, and souvenirs.
- Employment under Government contracts for:
 - road maintenance
 - control of invasive species
 - maintenance of wildlife openings
 - vegetation management
 - trail maintenance
 - watershed management
 - fire suppression
 - maintenance of recreation sites

The road system creates different benefits and costs to people who use vehicles for travel within the area than to visitors who travel on foot or by other non-motorized methods. For those who

choose non-motorized forms of transportation, the economics of the road system may cost more in terms of aesthetic values, air and noise pollution, and conflicts with motorized vehicle use.

Reduced road mileage and/or maintenance can lead to unbalanced recreation opportunities among users and directly affect the distribution of economic benefits and costs to the region. Closing roads would limit or eliminate access to those who are unable or unwilling to walk long distances and could increase the cost of resource removal, which usually requires mechanized equipment. This could have economic impacts for the local communities, which may depend on convenient access for employment opportunities.

In contrast, improved road access can increase the efficiency and effectiveness of fire-suppression activities, but can also contribute to an increase in the number of human-caused fires in the area. Closing or restricting roads to minimize traffic could be a benefit by reducing fires and keeping the road in a condition that facilitates use by fire fighting equipment.

State and county roads between communities affect how the benefits and costs associated with use of the area are distributed beyond the immediate communities.

As stated in EC (2), the type of experiences and their associated values are dependent upon whether or not there are roads, how the roads are managed, and the desires of the user groups or individual. This may be a benefit or a cost depending on what value the public assigns to the type of experience they desire.

Commodity Production - Timber management (TM)

TM (1): How does road spacing and location affect logging system feasibility?

In general:

Road access is one of the deciding factors whether or not areas are managed for vegetation. If there is no existing access to an area needing vegetation management the area must produce a value worth creating an access or be included with other areas that will combine to offset the cost of creating an access. Likewise, if an area is not immediately accessible (access adjacent to the area) then the closer the access the less cost to actively manage that area. If an access is available the next issue to consider is its ability for use. An access that can be used anytime of the year is more beneficial than a road that is limited in its usage due to weather. The factor most effecting the time, or season, of the year that it can be used is its ability to drain water. Roads with proper drainage construction, and on or along ridges, and on south or west facing slopes are best suited for year-around usage, and therefore, are most beneficial for vegetation management.

Other factors contributing to access availability are the following: a road system that has the least amount of erosion control issues, a grade, or steepness, that can be maneuvered by heavy loads, and one with as few as possible sharp turns for vehicles longer and wider than a car or pickup truck.

A well planned and maintained road system is essential for an effective land management program to be successful.

Specifically:

The Lower Ocoee Watershed consists of several Management Prescriptions: 1A Designated Wilderness; 1B Proposed Wilderness; 5A Administrative Sites; 7A Scenic Byway; 9H Management, Maintenance, and Restoration of Plant Associations to their Ecological Potential; 8C Black Bear Habitat, and private lands. Some of the main access routes in this watershed are the following Forest Service Roads (FSR): 55, 67, 77, 99, 302, and 1308. Much of this watershed can be accessed via these existing roads or spur roads off them. There are a few sections that would need extensions of existing roads for access, but due to steep ground and unsuitable prescription areas these few sections are not likely to be managed for vegetation.

The Conasauga Watershed consists of less Management Prescriptions. They are primarily: 1A Designated Wilderness; 2.B.1 Eligible Wild River; and 8C Black Bear Habitat. Some of the primary access routes are the following Forest Service Roads (FSR): 62, 67, 99, and 221. Much of the southern portion of this watershed is not suitable for management due to Big Frog Wilderness in the southeast corner, MP 2.B.1 Eligible Wild River corridor along the Conasauga River itself, and some private land in the middle of the two unsuitable areas.

Specifically:

The Middle Ocoee Watershed consists of several Management Prescriptions: 7A Scenic Byway; 9H Management, Maintenance, and Restoration of Plant Associations to their Ecological Potential; 1A Designated Wilderness; 1B Proposed Wilderness; 8C Black Bear Habitat, and private lands. Some of the main access routes in this watershed are the following Forest Service Roads (FSR): 221, 1315, 5054, 5056, and 33172. Much of this watershed can be accessed via these existing roads or spur roads off them. There are a few sections that would need extensions of existing roads for access, and they are the following: portions of Brock Mountain, Gassaway Creek and Goforth Creek.

Sylco Watershed consists of the following Management Prescriptions: 5A Administrative Sites, 7A Scenic Byway, and 8C Black Bear Habitat. Some of the main access routes in this watershed are the following Forest Service Roads (FSR): 55, 221, 374, and 1333. Most of this watershed can be accessed via these existing roads. There are a couple of areas that would be better accessed by temporary spur roads being constructed off FSR 221 and FSR 374.

TM (2): How does the road system affect managing the suitable timber base and other lands?

In general:

A well planned and maintained road system affects the managing of suitable lands by allowing better access for a wider variety of vehicle types and in a wider variety of weather conditions. If areas can be accessed at all times of the year then the ability to manage an area for a variety of purposes is possible, and contributes greatly to maintaining a successful land management program.

Specifically:

The Lower Ocoee Watershed has much of its area north of Parksville Lake (also known as Lake Ocoee) in unsuitable prescriptions for management. Much of the south side of Parksville Lake is

in a Black Bear reserve and suitable for vegetation management with a plan direction of 4-8% of the area in early-successional habitat. Most of this watershed that is suitable for vegetation management has sufficient access or can be accessed with minor road extensions.

The Conasauga Watershed has much of the southern portion in an unsuitable prescription for management and a small section is private land while the northern portion connects with the Black Bear Reserve which has an early-successional habitat requirement of 4-8% of the area. Of the suitable prescription area there is a section of land that is not very accessible. Part of the reason is much of it is 'blocked' by private land. This area is around the Sylco Ridge area of Sheeds Creek.

Middle Ocoee Watershed has approx. one-half of its acres in suitable timber base. The other acres are a mix between private, 7A Scenic Byway, 1A Designated Wilderness, and 1B Proposed Wilderness. In addition, this watershed is bisected by the Ocoee River Gorge which not only causes some of the land base to be in Management Prescription 7A but also involves some steep graded land which leads to access issues for that area of this watershed.

The Sylco Watershed is mostly a part of the 8C Black Bear Habitat Management Prescription which has assigned to it a minimum early successional habitat of 4-8% of the landbase. There is just a small portion of this area which outlines the Sylco Inlet that is in the 7A Scenic Byway Management Prescription (MP). The Scenic Byway MP is unsuitable for timber management.

TM (3): How does the road system affect access to timber stands needing silvicultural treatment?

In general:

Stands in need of silvicultural treatment that are well accessed are more likely to be effectively managed and monitored throughout the different stages of growth and development of the vegetation, i.e., from planning of vegetation management to implementation of management to monitoring effects of management. To describe an area as "well accessed" it should be available by as many different types of vehicles as possible, i.e., 4-wheel drive, high clearance, 2-wheel drive, and/or even passenger car. This not only aids in the type of equipment that can be used to access the area but also does not limit the time of year it can be accessed. Therefore, a well-planned and maintained road system greatly contributes to the success of the vegetation management of an area.

Specifically:

The Lower Ocoee Watershed north of Hwy 68 is limited in the area that is in a suitable management prescription, mostly due to visual aspects along scenic byways. There is also some steep ground which greatly limits access and ability to build roads. The main access route, FSR #77, is paved that bisects the northern portion of this watershed. Almost all roads in the southern portion of the watershed are gravel-based roads, and therefore, could pose some limitations during wet and/or cold weather. There are some gated roads that could need some reconstruction activities such as curve widening before use by long truck traffic.

The Conasauga Watershed has some limitations to management in the southern most portion due to unsuitable management prescription types (wilderness and scenic river corridor). There is also some private land. The vast majority of the road surfaces of existing roads is gravel and could

cause limitations of use during wet and/or cold weather. There are some gated roads which could need some reconstruction activities such as curve widening before being able to accommodate long truck traffic.

The Middle Ocoee Watershed has some limitations across the area due to suitable land base Management Prescriptions and private land. The roads consist of paved, grave-based, and gated FS roads. There could, therefore, be some limitation during wet weather. There are some steep sections that could be limiting as well. There are also areas that could need reconstruction such as curve widening due to the need for long truck traffic.

Sylco Watershed mostly contains suitable land base. The roads accessing the timber are a variety of mostly gravel-based and gated FS roads. There could, therefore, be some limitation during wet weather. There are some steep sections that could be limiting as well. There are also areas that could need reconstruction such as curve widening due to the need for long truck traffic.

Commodity Production - Minerals Management (MM)

MM (1): How does the road system affect access to locatable, leasable, and salable minerals?

Addressed in Forest TAP

Commodity Production - Range Management (RM)

RM (1): How does the road system affect access to range allotments?

N/A. No range allotments.

Commodity Production - Water Production (WP)

WP (1): How does the road system affect access, constructing, maintaining, monitoring, and operating water diversions, impoundments, and distribution canals or pipes?

There are no known water diversions, impoundments, or distribution canals in this watershed.

WP (2): How does road development and use affect water quality in municipal watersheds?

See question AQ(7) in previous section, about how roads in this watershed may affect water quality for municipal water source.

WP (3): How does the road system affect access to hydroelectric power generation?

Several roads access the TVA Apalachia Powerhouse and the associated transmission lines, as well as the infrastructure associated with Ocoee Dams #1 and #2.

Commodity Production - Special Forest Products (SP)

SP (1): How does the road system affect access for collecting special forest products?

Roads across the forest are used to access sites for the collection of a variety of special forest products. There is nothing unique in regards to this relative to these four watersheds. Effects would be the same as those analyzed in the forest-wide TAP.

Special-Use Permits (SU)

SU (1): How does this road system affect managing special-use permit sites (concessionaires, communication sites, utility corridors, and so on)?

Easements and/or special-use permits have been issued for the following roads:

#221
#55
#55C
#67
#62
#68
#302
#77
#302
#302A
#334
#338
#5056
#101
#187A
#33080
#33172
#33502
#33732
#33733
#33734
#33735
#33741
#55A
#55B
#55C
#55F
#55G
#187A
#221T
#221U
#221V
#221W

#33172
#336C
#5056

Existing Polk County road easements include_____.

Other Polk County roads are managed in accordance with the Forest Development Road Cooperative Agreement dated 8/2/79 and 5/21/80. The most recent revision to the schedule of designated roads for this agreement appears to be dated March 2008.

It is not anticipated that the proposed road system would affect the known special use areas. The proposed road system could affect future special use requests, however, each request is analyzed on its own merits and alternatives could be negotiated in the event the road system became inadequate.

Although no outstanding rights to public roads are known to exist in the area, care should be taken to ensure that such rights, if applicable, are identified and extinguished prior to closing any old open road that accesses or abuts private land, particularly if the road appears to be well travelled and the agency cannot determine the origin of the road.

General Public Transportation (GT)

GT (1): How does this road system connect to public roads and provide primary access to communities?

There are no specific communities accessed solely by Forest Service roads in the study area. The NFSRs in the study area connect to state and county roads that lead to the community of Old Fort, TN. The collector road system within the study area is mainly State Highways and county roads but includes all or parts of the following Forest Service collector roads:

<u>Road No.</u>	<u>Road Name</u>
221	Peavine-Sheeds
302	Indian Creek
374	Falls Branch
45	Little Gassaway
55	Baker Cr.
67	Sina Br.
68	Kimsey Highway
77	Oswald
99	Blue Ridge

GT (2): How does the road system connect large blocks of land in other ownership to public roads (ad hoc communities, subdivisions, in holdings, and so on)?

There are numerous private land inholdings in the study area that are accessed by roads described in GT (1) plus some additional local roads that provide access through easement or

special use permit. In addition to the roads in GT (1), the following roads provide access to private land:

Local roads open to the public that provide access to in-holdings or permitted uses:

<u>Road No.</u>	<u>Road Name</u>
#221	Peavine-Sheeds
#55	Baker Cr.
#55C	Upper Baker Cr.
#67	Sina Br.
#62	Big Frog
#68	Kimsey Highway
#302	Indian Cr.
#77	Oswald
#302	Indian Cr.
#302A	Baptist Camp Spur
#334	Ocoee Dam No. 3
#338	Boyd Gap Obs. Site
#5056	West Goforth

Local roads not usually open to the public that provide access to in-holdings or permitted uses:

<u>Road No.</u>	<u>Road Name</u>
#101	Jake Br. ORV
#187A	Little Caney
#33080	Cabin 14
#33172	Deep Gap
#33502	Taylor Br.
#33732	Cabins 8-11
#33733	Cabin 7
#33734	Cabin 12A
#33735	Cabin 5-6
#33741	Indian-Baker Divide
#55A	Sugarloaf
#55B	Card Spur
#55C	Devil Point
#55F	Wasson Camp
#55G	Camp Ocoee
#187A	Little Caney
#221T	TVA Rd 221T
#221U	TVA Rd 221U
#221V	TVA Rd 221V
#221W	TVA Rd 221W
#33172	Deep Gap
#336C	Madden Br. Spur C
#5056	West Goforth

GT (3): How does the road system affect managing roads with shared ownership or with limited jurisdiction (RS 2477, cost-share, prescriptive rights, FLPMA easements, FRTA easements, DOT easements)?

There are no shared ownership (cost-share) roads on the Forest. The FS has a co-operative agreement with Polk County for sharing various types of roadwork from planning to maintenance on roads of common interest to the FS and to the county.

GT (4): How does the road system address the safety of road users?

There are several open FS roads in the study area that are objective maintenance level 3, 4, or 5 (suitable for passenger cars). Since they are subject to the Highway Safety Act, safety of road users is a concern. Because they are designed for low speed and low volume, safety is usually not a major issue, but as private land has been subdivided, the number of land owners has increased and has caused in an increase in traffic. There may be a need to work with the counties to accept responsibility for the maintenance of some roads.

The objective maintenance level 3, 4, & 5 roads receive routine maintenance which normally consists of blading graveled surface twice a year and roadside mowing every two years. Other maintenance activities that are done on an as-needed basis include gravel placement, hazard tree removal, slide repair, pothole repair, etc.

Most of the other roads (ML's 1 & 2) in the area are not usually open to the public and are used only when needed for specific purposes or managed for other uses, such as hunter access, horse trails, or timber sales. Safety is not as much of a concern on those roads since there is generally single use and very little traffic.

Recommendations

Actions to Be Considered (all mileages are approximate):

-Add following unauthorized route to the transportation system:

- MO-2 (extension of #366C): 0.14 mi.

-Decommission the following unauthorized routes:

- MO-1: 0.06 mi.
- C-1: 0.05 mi.

-Decommission the following system roads:

- #101:
 - from intersection w/ #302A to where road leaves prescription area 7A: 1.3 mi.
 - North of intersection with #302A; 0.8 mi.
- #102 (from last wildlife field to end of road): 0.4 mi.
- #1330 (convert to trail per district recreation program manager): 1.5 mi.
- #1330A (convert to trail per district recreation program manager): 0.27 mi.
- #186 (from intersection w/ #335901 to end of road): 0.07 mi.
- #33101 (per aquatic biologist): 1.3 mi.
- #33102 (per aquatic biologist): 1.08 mi.
- #33132 (last 0.2 mi.): 0.2 mi.
- #331501: 0.46 mi.
- #332401: 0.27 mi.
- #33291: 0.29 mi.
- #33293 (section of road in prescription7A): 0.08 mi.
- #33311: 0.84 mi.
- #333202: 0.10 mi.
- #333203: 0.15 mi.
- #333205: 0.13 mi.
- #334201: 1.10 mi.
- #334301: 1.2 mi.
- #33431: 0.46 mi.
- #33432: 0.26 mi.
- #334801: 0.29 mi.
- #335901: 0.63 mi.
- #337707: 0.25 mi.
- #372: 0.07 mi.
- #55D: 0.24 mi.
- #55J: .015 mi.
- #55K: 0.07 mi.

-Implement seasonal closures on the following roads:

- #67 (between #1340 & near Parks Hollow): 2.36 mi.

Administrative Uses (AU)

AU (1): How does the road system affect access needed for research, inventory, and monitoring?

Addressed in Forest TAP.

AU (2): How does the road system affect investigative or enforcement activities?

All the roads in the area provide access for investigative and enforcement activities. The following roads that are open to the public are used the most:

- Peavine-Sheeds Cr., #221
- Indian Cr., #302
- Big Frog, #62
- Sina Br., #67
- Oswald, #77
- Blue Ridge, #99

The roads that are closed to the public do not add to the need for investigative and enforcement activities.

The construction of new roads or adding unauthorized roads to the transportation system would not adversely affect these activities if the roads are adequately closed to public motor vehicle use.

Protection (PT)

PT (1): How does the road system affect fuels management?

Roads are a key element in planning and implementing a fuels management program. Existing roads are used as control features for most of the prescribed burns that are implemented on the forest. Roads are preferred control features because they allow lines to be easily patrolled, rapid response to spot fires, and minimal ground disturbance is required. The current forest road system has been adequate to meet the needs of the fuels management program. It has not been necessary to propose road construction strictly for fuels management. In general, decommissioning roads will restrict access during prescribed burns. Limited access may lead to larger or smaller, unfavorable burns. In the absence of an existing road, natural features such as ridge tops, coves or streams are used. However, using these types of features may also increase the need for additional ground disturbing activities to create an adequate control line. Most roads serve as an additional control feature that allows managers more flexibility when planning burn units. Decommissioning roads could also increase the probability of escape due to limited patrolling opportunities and the inability to respond to spot fires, outside control lines, with fire suppression equipment.

PT (2): How does the road system affect the capacity of the Forest Service and cooperators to suppress wildfires?

The current road system has not presented any problems in the Forests' ability to suppress wildfires. There have not been any critical areas identified that need roads specifically for wildfire suppression purposes. The forest continues to utilize all roads to the fullest extent possible during wildfire suppression efforts.

In general, decommissioning roads will restrict access of wildfire personnel and equipment. These restrictions may lead to increased fire size and a heightened probability that severe resource damage may occur. Most roads serve as excellent control features as well as escape routes for fire suppression personnel. Conversely, road construction may increase accessibility of wildfire personnel and equipment, limit fire size, and provide additional safety during wildfire suppression.

PT (3): How does the road system affect risk to firefighters and to public safety?

Roads serve two main functions during wildfire suppression efforts. First, they serve as access routes to the fire. Second, they serve as excellent escape routes for firefighters as well as the public. In the wildland/urban interface (WUI), roads should be designed, or upgraded, to allow for the access and egress of large structure protection equipment. Most other forest roads are able to accommodate the smaller, brush-type engines used by the forest and the cooperating state agency. Although roads can greatly increase the safety of firefighters, firefighters should not engage in suppression activities if the proper safety precautions have not been met.

PT (4): How does the road system contribute to airborne dust emissions resulting in reduced visibility and human health concerns?

This is of minor relevance to our Forest. Dust causes some temporary, localized problems of visibility during periods of low rainfall.

Recreation – Unroaded Recreation (UR) Conasauga River – Lower Ocoee

UR (1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

In addition to the UR(1)/RR(1) discussion in the Forest RAP, there is a demand for unroaded recreation opportunities outside of congressionally designated Wilderness. Nearby Big Frog Wilderness cannot meet the demand for large organized groups such as the Boy Scouts that seek backcountry overnight or day hiking opportunities. Within designated Wilderness, trail maintenance equipment is restricted to only traditional, primitive tools and group sizes are regulated. There may be an opportunity to construct a new multi-use trail system outside of designated Big Frog Wilderness would accommodate equestrian use, though the sustainability and suitability should be evaluated against other nearby equestrian opportunities, namely that in the Starr Mountain and Citico Creek areas. Additionally, the use of the Beech Bottoms Trailhead off NFSR 62 provides the easiest access to the popular Beech Bottoms/Jacks River Falls in the Cohutta Wilderness. In recent years, a Limits of Acceptable Change process has

been implemented to mitigate the impacts to the wilderness resource, though continued efforts of education and enforced have been necessary for further mitigation.

UR (2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities?

Before making changes to the road system, consideration should be given to potentially affected trail networks that provide unroaded recreation opportunities. Trail systems to consider include Horse Trail System based out of Cottonwood Patch Horse Camp in cooperation with the Chattahoochee National Forest. There may be opportunities to expand or enhance trail opportunities by converting existing roads to trails. In addition, there may be an opportunity to further protect the Beech Bottoms/Jacks River Falls area in the Cohutta Wilderness by changing the maintenance of Big Frog Loop Road (NFRS 62).

UR (3): What are the adverse effects of noise and other disturbance caused by developing, using, and maintaining roads, on the quantity, quality, and type of unroaded recreation opportunities?

See discussion in Forest RAP

UR (4): Who participates in unroaded recreation in the areas affected by building, maintaining, and decommissioning roads?

Visitors participate in a variety of recreation activities within unroaded portions of the assessment area including hunting, fishing, dispersed camping, developed swim beaches, boat ramps, day hiking, horse riding, snorkeling, and biking on forest roads. NFRS 77, Mac Point & Parksville Beach, Kings Slough, and the Parksville Boating Complex, the Conasauga Blue Hole, Conasauga River Campground, the nearby Cottonwood Patch Horse Camp, Big Frog and Cohutta Wilderness, and a series of Forest Roads and trails support these activities.

UR (5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

The following organizations have a sense of attachment to the resources that support their desired recreation activity – Southern Appalachian Backcountry Horsemen, North Georgia Backcountry Horsemen, National Wild Turkey Federation, local bass fishing clubs, Conasauga River Alliance, Southeast Tennessee Resource Conservation Development Council, and the Tennessee Aquarium. Alternative opportunities and locations for these activities are limited due to surrounding private lands.

Recreation – Unroaded Recreation (UR) Middle Ocoee Sylco Creek

UR (1): Is there now or will there be in the future excess supply or excess demand for unroaded recreation opportunities?

In addition to the UR(1)/RR(1) discussion in the Forest RAP, there is a demand for unroaded recreation opportunities outside congressionally Wilderness. The Little Frog Mountain Wilderness and nearby Big Frog Wilderness cannot meet the demand for large organized groups such as the Boy Scouts that seek backcountry overnight or day hiking opportunities. Connecting a new multi-use trail/trail system outside of wilderness between the Tanasi Trail System and Chilhowee Trails System could accommodate the increasing demand of long distance mountain biking and trail running opportunities.

Due to Highway 64 providing primary access through the middle of the Ocoee River Zone, this zone is easily accessible to the urban populations of Chattanooga, Knoxville, Asheville, and Atlanta. The Ocoee River Zone is only one of two recreational zones on the Cherokee National Forest that emphasizes mountain bike use. Currently, there are two mountain biking systems in this zone, including the Tanasi and Chilhowee Trails Systems. These systems, with campground facilities attached, are destinations for non-local users. In addition to this, the demand for longer distance mountain biking opportunities is increasing. To meet this demand, users are expanding outside the mostly single track trails in the Tanasi System to open and closed roads. Continued opportunities to convert roads to trails should be evaluated to meet the future needs of the mountain biking community to reduce potential vehicular/mountain bike conflicts along system roads.

The Big Frog Zone, in contrast to the Ocoee River Zone, emphasizes primitive backcountry recreational opportunities and cooperative equestrian use with adjoining Chattahoochee National Forest equestrian facilities. Big Frog Wilderness connects with Cohutta Wilderness to provide for overnight equestrian opportunities. Outside of the Wilderness, the existing Sylco Trail provides a day loop opportunity for equestrian use, with additional looping opportunities using open and closed roads. Continued opportunities to convert roads to trails should be evaluated to meet the future needs of the equestrian community to reduce potential vehicular/horse conflicts along system roads.

UR (2): Is developing new roads into unroaded areas, decommissioning of existing roads, or changing the maintenance of existing roads causing substantial changes in the quantity, quality, or type of unroaded recreation opportunities?

Before making changes to the road system, consideration should be given to potentially affected trail networks that provide unroaded recreation opportunities. Trail systems to consider include the Tanasi Mountain Bike Trail System, the long-distance Benton MacKaye Trail, and potentially expanding equestrian opportunities from the Sylco Trail. There may be opportunities to expand or enhance these trail opportunities by converting existing roads to trails and constructing connector trails. In addition, the opportunity to connect the Tanasi and Chilhowee Trails systems may exist in this area.

UR (3): What are the adverse effects of noise and other disturbance caused by developing, using, and maintaining roads, on the quantity, quality, and type of unroaded recreation opportunities?

See discussion in Forest RAP

UR (4): Who participates in unroaded recreation in the areas affected by building, maintaining, and decommissioning roads?

Visitors participate in a variety of recreation activities within unroaded portions of the assessment area including sightseeing, hunting, fishing, dispersed camping, day hiking, backpacking, horse riding, white water rafting and kayaking, and mountain biking. The Rhododendron Trail, Old Copper Road Trail, Tanasi Trails System, Benton MacKaye Trail, Sylco Trail, and Rock Creek Trail are among those that support these activities. Roads within the Middle Ocoee/Sylco watershed provide key access to the recreation facilities along the Ocoee River to support the commercial and noncommercial whitewater rafting activities.

UR (5): What are these participants' attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

The majority of visitors to the assessment area are non-locals who come to the National Forest for premiere white water rafting and mountain biking opportunities. However, there are various local stakeholders in the surrounding communities. Many residents and stakeholder groups consider the national forest their own backyard, so there is a sense of ownership and entitlement. In addition, the premiere and world class recreational opportunities in the assessment area facilitate an imperative economic driver for the surrounding communities.

The following organizations are among those that have a sense of attachment to the resources that support their desired recreation activity – International Mountain Biking Association/Southern Off Road Biking Association Southern Appalachian Back Country Horsemen, Benton MacKaye Trail Association, Tennessee Overhill Heritage Association, numerous rafting outfitter and guide companies, and National Wild Turkey Federation. These groups and others volunteer to help conserve or improve the affected resources and have a sense of ownership. Alternative opportunities and locations for these activities are limited due to surrounding private lands.

Recreation - Road Related Recreation (RR) Conasauga River – Lower Ocoee

RR (1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

In addition to the UR(1)/RR(1) discussion in the Forest RAP, and the discussion in UR (1) above, the existing use of National Forest System Roads as well as designated and undesignated equestrian will likely continue. Continued opportunities to convert roads to trails should be evaluated to meet the future needs of the equestrian community to reduce potential vehicular/horse conflicts along system roads.

RR (2): Is developing new roads into unroaded areas, decommissioning existing roads, or changing maintenance of existing roads causing significant changes in the quantity, quality, or type of roaded recreation opportunities?

Same as discussions under UR (2): Before making changes to the road system, consideration should be given to potentially affected trail networks that provide unroaded recreation opportunities.

RR (3): What are the adverse effects of noise and other disturbances caused by building, using, and maintaining roads on the quantity, quality, or type of roaded recreation opportunities?

See discussion in Forest RAP.

RR (4): Who participates in road-related recreation in the areas affected by road building, changes in road maintenance, or road decommissioning?

In addition to the UR(1)/RR(1) discussion in the Forest RAP, and the discussion in UR (4) above, nearly all of the recreation residents and some of the organizational camps fall within the assessment area.

RR (5): What are these participants attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

The majority of participants in the activities mentioned in RR (4) reside in the surrounding communities. Many residents consider the national forest as part of their community or backyard, so there is a sense of ownership and entitlement. There may be other areas available to provide roaded recreation opportunities, but not on public lands close to the local populations.

Recreation - Road Related Recreation (RR) Middle Ocoee Sylco Creek

RR (1): Is there now or will there be in the future excess supply or excess demand for roaded recreation opportunities?

Same as discussion in UR (1)

RR (2): Is developing new roads into unroaded areas, decommissioning existing roads, or changing maintenance of existing roads causing significant changes in the quantity, quality, or type of roaded recreation opportunities?

Same as discussions under UR (2): Before making changes to the road system, consideration should be given to potentially affected trail networks that provide unroaded recreation opportunities. Trail systems to consider include Sylco Trail, Tanasi Trails System, and Benton MacKaye Trail. There may be opportunities to expand or enhance trail opportunities by converting existing roads to trails.

RR (3): What are the adverse effects of noise and other disturbances caused by building, using, and maintaining roads on the quantity, quality, or type of roaded recreation opportunities?

See discussion in Forest RAP.

RR (4): Who participates in road-related recreation in the areas affected by road building, changes in road maintenance, or road decommissioning?

Visitors participate in a variety of recreation activities within unroaded portions of the assessment area including sightseeing, camping, hunting, fishing, dispersed camping, day hiking, backpacking, horse riding, white water rafting and kayaking, and mountain biking.

Visitors primarily participate in dispersed recreation activities within the assessment area. Roads are used to access, developed recreation sites, boat ramps, trails, dispersed campsites, creeks, and driving for pleasure.

RR (5): What are these participants attachments to the area, how strong are their feelings, and are alternative opportunities and locations available?

Same as discussions under UR(5)

Passive-Use Value (PV)

PV (1): Do areas planned for road entry, closure, or decommissioning have unique physical or biological characteristics, such as unique natural features and threatened or endangered species?

See TW (4). The Ocoee River gorge harbors unique plant communities and several globally rare plant and animal species including the federally endangered Ruth's golden aster. This area falls within the planned alignment for one of the alternatives for new highway construction as part of TDOT's Corridor K Project. Detailed surveys have not been conducted within all portions of these four watersheds. If other areas planned for road entry are found to have unique features then they will be considered during the planning process for those projects.

PV (2): Do areas planned for road construction, closure, or decommissioning have unique cultural, traditional, symbolic, sacred, spiritual, or religious significance?

None of the areas planned for road construction, closure, or decommissioning have any known unique cultural, traditional, symbolic, sacred, spiritual, or religious significance.

PV (3): What, if any, groups of people (ethnic groups, subcultures, and so on) hold cultural, symbolic, spiritual, sacred, traditional, or religious values for unroaded areas planned for road entry or road closure?

No known groups of people hold cultural, symbolic, spiritual, sacred, traditional, or religious values for unroaded areas planned for road entry or road closure.

PV (4): Will road construction, closure, or decommissioning significantly affect passive-use value?

In addition to the discussion in the Forest-wide RAP, passive values to consider would include the designated Wilderness and remote backcountry resources; and scenic viewsheds managed for high and very high scenic integrity.

Social Issues (SI)

SI (1): What are people's perceived needs and values for roads? How does road management affect people's dependence on, need for, and desire for roads?

See discussion in Forest RAP.

SI (2): What are people's perceived needs and values for access? How does road management affect people's dependence on, need for, and desire for access?

See discussion in Forest RAP.

SI (3): How does the road system affect access to paleontological, archaeological, and historical sites?

The road system does not have any known affect on access to paleontological, archaeological, and historic sites.

SI (4): How does the road system affect cultural and traditional uses (such as plant gathering, and access to traditional and cultural sites) and American Indian treaty rights?

The present road system does not have any known affects on cultural and traditional uses and American Indian treaty rights.

SI (5): How are roads that are historic sites affected by road management?

No historic roads or transportation routes will be affected by road management.

SI (6): How is community social and economic health affected by road management (for example, lifestyles, businesses, tourism industry, infrastructure maintenance)?

US Highway 64/74 is a vital component of the regional tourism industry bringing visitors to the communities of Polk County, Tennessee. These communities provide the needed support services and host festivals and events to increase business and tourism opportunities. Managing roaded access to the natural, cultural and recreational resources within the Cherokee National Forest provides visitors with a diversity of destinations and opportunities.

SI (7): What is the perceived social and economic dependency of a community on an unroaded area versus the value of that unroaded area for its intrinsic existence and symbolic values?

The surrounding communities' recognition of recreational opportunities as an attraction and potential economic resource has increased over the years. Recreation opportunities linked to the unroaded areas have been advertised by the Tennessee Overhill Heritage Association (non-profit organization) in various media outlets including *Backpacker* magazine.
<http://www.tennesseeoverhill.com>

SI (8): How does road management affect wilderness attributes, including natural integrity, natural appearance, opportunities for solitude, and opportunities for primitive recreation?

In general paved roads provide visitors with a low risk, low challenge traveling experience. Graveled and/or native surfaced roads offer a more challenging, risky experience. Road management in the assessment area presently offers a desirable progression of road conditions aligned with the desired recreation opportunity spectrum (ROS).

As a visitor travels off and further away from paved access, roads become graveled and are less suitable for passenger cars and create opportunities for traveling in a sport utility vehicle or truck, thus creating the desired experience of remoteness and primitiveness related to dispersed recreation.

Roads within the assessment area provide access to trailheads for both the Big Frog and Cohutta Wilderness Areas (Chattahoochee NF). Specifically NFSR 62 (Big Frog Loop Rd) facilitates the easiest access to the popular Beech Bottoms/Jacks River Falls area in the Cohutta Wilderness via the Beech Bottoms Trailhead. This easy access may directly or indirectly be leading to use patterns exceeding the existing Limits of Acceptable change established for the area. Any decisions about this road should also consider the wilderness resource.

US Highway 65/74 offers visitors safe, low risk sightseeing opportunities through the Ocoee River Gorge, as well as primary access to recreation facilities and trailheads that access unroaded areas. Roads within the assessment area provide access to trailheads for both the Big Frog and Little Frog Mountain Wilderness Areas. As a visitor travels off and further away from US Highway 64/74, roads become graveled and are less suitable for passenger cars and create opportunities for traveling in a sport utility vehicle or truck, thus creating the desired experience of remoteness and primitiveness related to dispersed recreation.

SI (9): What are the traditional uses of animal and plant species within the area of analysis?

The area of analysis does not contain any specific places that are unique for the forest in terms of traditional uses of animals and plants. Hunting, fishing and plant collecting occurs in many places throughout the four watersheds. Typical plant species sought by collectors include ramps,

ginseng, flowering shrubs for transplant, and numerous species of medicinal herbs. Information would be similar to that described in the forest-wide TAP.

SI (10): How does road management affect people's sense of place?

As stated for SI 8, the traffic surface level and maintenance levels of roads leading to backcountry and primitive recreation areas should be appropriate for the desired ROS setting. Reference the revised Forest Plan to determine the ROS class emphasized in each prescription area. The type and frequency of recreation guide signs also contribute to a visitor's sense of place.

Civil Rights and Environmental Justice (CR)

CR (1): How does the road system, or its management, affect certain groups of people (minority, ethnic, cultural, racial, disabled, and low-income groups)?

Road system management has no known affects for minority, ethnic, cultural, racial, disabled, and low-income groups.

ABILITY OF THE ROAD SYSTEM TO MEET OBJECTIVES

To meet the objective of determining needed and unneeded roads (minimum road system needed), each road segment was examined to determine its uses. These uses are displayed in Table 4

- Recreation/Heritage Access
- Vegetation Management Access
- Access to Private Land/Special Uses
- Wildlife/Fish Management
- Fire Management

Based on these uses, the needed transportation system, as well as unneeded roads, were identified. These are displayed on Map 1.

STEP 5 DESCRIBING OPPORTUNITIES AND SETTING PRIORITIES

PURPOSE AND PRODUCTS

The purpose of this step is to:

- compare the current road system with what is desirable or acceptable, and
- describe options for modifying the road system that would achieve desirable or acceptable conditions.

The products of this step are:

- a map and descriptive ranking of the problems and risks posed by the current road system,
- a map and list of opportunities, by priority, for addressing important problems and risks, and
- a prioritized list of specific actions, projects, or forest plan adjustments requiring NEPA analysis.

PROBLEMS AND RISKS POSED BY THE CURRENT TRANSPORTATION SYSTEM

Overall Priorities for Conasauga River and Lower Ocoee Ecosystem Assessment Area

The priorities listed below in the table and in the site-specific descriptions are prioritized by resource area. The Team analyzed the individual resource priorities in order to develop larger, overall priorities for the assessment area. These priorities are:

- Recreation/Heritage Access
- Vegetation Management Access
- Access to Private Land/Special Uses
- Wildlife/Fish Management
- Fire Management.

Road Maintenance Needs

During the course of completing condition surveys of the Forest Service roads within this assessment area, data was gathered on maintenance needs on the FS roads open to motor vehicle use. Data on roads closed to motor vehicle use is based on random sampling. The table 3 lists the work needed.

TABLE 3. CONASAUGA RIVER LOWER OCOEE - ROAD MAINTENANCE NEEDED ON NATIONAL FOREST SERVICE SYSTEM ROADS

ROAD#	ROAD NAME	LENGTH	ANNUAL COSTS	DEFERRED COSTS	RMO	MACHINE GRADING	GRAVEL	DITCH CLEANING	PAVE	BRUSH	BRIDGE MAINT.	CULVERTS	REMARKS
101	JAKE BRANCH ORV	2.60	\$489	\$11,648	D2-FS								
1024	JAKE ROAD	0.61	\$114	\$2,725	D2-FS								
1308	PRINCE GAP	1.65	\$310	\$7,393	D2-FS							X	
1310	BENCH	0.73	\$138	\$3,278	D2-FS								
1324	ISLAND CREEK	1.41	\$265	\$6,307	D2-FS								
1340	MINNEWAUGA CREEK	3.88	\$730	\$17,394	D2-FS								
1351	EDWARDS BRANCH	0.65	\$122	\$2,913	D2-FS								
1351-1	EDWARDS BRANCH EAST	0.50	\$95	\$2,256	D2-FS								
1370	GUNTERPOLE	1.34	\$252	\$6,003	D2-FS								
1370A	GUNTERPOLE SPUR-A	0.53	\$99	\$2,370	D2-FS								
1372	JACK BRANCH	3.16	\$593	\$14,135	D2-FS								
221	PEAVINE SHEEDS CR.	11.05	\$9,879	\$106,688	C3	X	X	X	X	X	X	X	
299	PARKSVILLE BOAT RAMP	0.20	\$2,573	\$6,087	A5				X	X			
302	INDIAN CREEK	10.33	\$9,235	\$99,736	C3	X	X	X	X	X		X	
33080	CABIN 14	0.24	\$44	\$1,054	D2-HC								
33101	THORNBURG	1.30	\$244	\$5,826	D2-FS								
33102	MAC POINT	1.08	\$203	\$4,838	D2-FS								
33231	INDIAN-HASKINS DIVIDE	1.05	\$0	\$0	E1								
332401	HASKINS CREEK	0.27	\$50	\$1,197	D2-FS								
33242	WEST SYLCO RIDGE	0.86	\$161	\$3,834	D2-FS								
333201	DEVILS BRANCH	0.19	\$35	\$844	D2-FS								
333202	GRAYS BRANCH	0.10	\$0	\$0	E1								
333203	WEST FIELD	0.20	\$38	\$906	D2-FS								
333204	COOKSON BRANCH	0.60	\$113	\$2,700	D2-FS								
333205	COOKSON BRANCH SPUR	0.13	\$24	\$566	D2-FS								
33331	UPPER HAWKINS BRANCH	1.97	\$371	\$8,830	D2-FS								
33331A	UPPER HAWKINS BRANCH SPUR	0.00	\$0	\$0	D2-FS								
33411	HUNTERS LAST	0.83	\$157	\$3,738	D2-FS								
334201	THOMAS BRANCH	1.10	\$207	\$4,922	D2-FS								
33422	SUNNY RIDGE	0.30	\$56	\$1,330	D2-FS								
334801	DAVIS BRANCH	0.29	\$54	\$1,286	D2-FS								
33493	WEST HALFWAY BR.	1.10	\$207	\$4,933	D2-FS								
33501	EAST HALFWAY BR.	0.93	\$175	\$4,166	D2-FS								
33502	TAYLOR BRANCH	2.05	\$385	\$9,185	D2-FS								
33521	NORTH FORK SHEEDS CREEK	1.13	\$212	\$5,043	D2-FS								
335601	SAWMILL FIRE	0.99	\$186	\$4,428	D2-FS								
335602	TRAIL TREE	0.68	\$127	\$3,037	D2-FS								
33691	SOUTH FORK SHEEDS CREEK	1.50	\$282	\$6,730	D2-FS								
33695	SHEEDS CR. WEST RIDGE	0.79	\$148	\$3,517	D2-FS								
3371	CONASAUGA RIV. TRAILHEAD	0.09	\$82	\$884	C3	X	X			X			
33711	WEST GRAHAM BRANCH	0.30	\$0	\$0	E1								
33732	CABINS 8-11	0.11	\$21	\$499	D2-HC								
33733	CABIN 7	0.08	\$16	\$370	D2-HC								
33734	CABIN 12A	0.08	\$15	\$361	D2-HC								

TABLE 3. CONASAUGA RIVER LOWER OCOEE - ROAD MAINTENANCE NEEDED ON NATIONAL FOREST SERVICE SYSTEM ROADS

ROAD #	ROAD NAME	LENGTH	ANNUAL COSTS	DEFERRED COSTS	RMO	MACHINE GRADING	GRAVEL	DITCH CLEANING	PAVE	BRUSH	BRIDGE MAINT.	CULVERTS	REMARKS
33735	CABINS 5-6	0.13	\$25	\$599	D2-HC								
33741	INDIAN-BAKERS DIVIDE	0.63	\$118	\$2,815	D2-HC								
33742	KING SLOUGH	0.10	\$91	\$987	C3	X	X						
367	MAC POINT REC.AREA	0.06	\$764	\$1,807	A5								
368	BOAT RAMP OVERFLOW	0.14	\$952	\$1,333	B4				X				
370	PARKSVILLE BEACH	0.13	\$1,714	\$4,055	A5				X				
371	EAST PARKSVILLE BOAT RAMP	0.17	\$2,189	\$5,179	A5				X				
372	OCOEE RIFLE RANGE	0.07	\$14	\$333	D2-FS								
373	OCOEE RANGER OFFICE	0.09	\$1,144	\$2,708	A5				X				
373A	O.R.O. CONNECTOR	0.04	\$461	\$1,090	A5				X				
5046	SIMMONS GAP	0.96	\$180	\$4,279	D2-FS								
55	BAKER CREEK	5.41	\$4,841	\$52,278	C3	X	X	X		X		X	
55A	SUGARLOAF	1.15	\$1,028	\$11,103	C3	X	X						
55B	CARD SPUR	0.52	\$99	\$2,350	D2-HC								
55C	UPPER BAKER CREEK	0.03	\$5	\$123	D2-HC								
55D	DEVIL POINT	0.24	\$46	\$1,085	D2-FS								
55E	BAKER CREEK SPUR	1.54	\$289	\$6,890	D2-FS								
55F	WASSON CAMP	0.26	\$236	\$2,546	C3				X	X			MAINTAINED BY PERTMITEES
55G	CAMP OCOEE	0.49	\$435	\$4,697	C3				X	X			MAINTAINED BY PERTMITEES
55L	GREEN CEMETERY	0.35	\$65	\$1,550	D2-HC								
62	BIG FROG	9.62	\$8,600	\$92,881	C3/D2-HC	X	X	X		X	X	X	
67	SINA BRANCH	8.97	\$8,019	\$86,605	C3	X	X	X		X	X	X	
77	OSWALD	4.01	\$27,627	\$38,695	B4			X	X	X		X	
99	BLUE RIDGE	5.46	\$4,881	\$52,716	C3	X	X	X		X		X	
99A	VALLEY DIVIDE	0.78	\$146	\$3,481	D2-FS								

TABLE 3. MIDDLE OCOEE/SYLCO - ROAD MAINTENANCE NEEDED ON NATIONAL FOREST SERVICE SYSTEM ROADS

ROAD #	ROAD NAME	LENGTH	ANNUAL COSTS	DEFERRED COSTS	RMO	MACHINE GRADING	GRAVEL	DITCH CLEANING	PAVE	BRUSH	BRIDGE MAINT.	CULVERTS	REMARKS
101	JAKE BRANCH ORV	1.38	\$259	\$6,182	D2-FS					X			
102	SYLCO CREEK	0.85	\$161	\$3,829	D2-FS					X			
1315	BROCK MOUNTAIN	3.46	\$650	\$15,500	D2-FS					X		X	
1330	LOWER ROUGH CREEK	1.52	\$287	\$6,829	D2-FS					X			
1330A	LOWER ROUGH CR.SPUR	0.27	\$50	\$1,188	D2-FS					X			
1333	EAST SYLCO RIDGE	3.99	\$3,566	\$38,511	C3	X	X			X		X	
1378	WEST HOGBACK LEAD	1.24	\$233	\$5,551	D2-FS					X			
186	GOFORTH	0.84	\$158	\$3,763	D2-FS					X			
187A	LITTLE CANEY	0.80	\$0	\$0	E1					X			
221	PEAVINE SHEEDS CR.	1.47	\$1,314	\$14,186	C3	X	X	X		X		X	
221H	DUTCH FIELD	2.31	\$434	\$10,349	D2-FS					X			
221T	TVA RD 221T	0.49	\$93	\$2,211	D2-FS					X			
221U	TVA RD 221U	0.07	\$13	\$312	D2-FS					X			
221V	TVA RD 221V	0.16	\$30	\$715	D2-FS					X			
221W	TVA RD 221W	0.10	\$20	\$468	D2-FS					X			
302	INDIAN CREEK	0.71	\$632	\$6,825	C3	X	X	X		X	X	X	
302A	BAPTIST CAMP SPUR	0.96	\$180	\$4,301	D2-HC	X	X			X			
331301	LITTLE BEECHBOTTOM	0.28	\$52	\$1,239	D2-FS					X			
33132	UPPER CANEY CREEK	0.76	\$143	\$3,397	D2-FS					X			
33133	FAIRVIEW GORGE	1.23	\$0	\$0	E1					X			
331501	UPPER GOFORTH	0.46	\$87	\$2,063	D2-FS					X			
331503	BROCK MTN SOUTH	0.32	\$60	\$1,424	D2-FS					X			
33161	ROGERS BRANCH	0.57	\$107	\$2,542	D2-FS					X			
331701	DEEP GAP KNOB	0.49	\$93	\$2,208	D2-FS					X			
33172	DEEP GAP	5.18	\$973	\$23,194	D2-FS					X			
332001	WASTE AREA	0.71	\$134	\$3,192	D2-FS					X			
33291	SHORT CREEK	0.29	\$54	\$1,287	D2-FS					X			
33292	SHORT CREEK RIDGE	0.32	\$60	\$1,428	D2-FS					X			
33293	EAST SHORT CREEK	0.71	\$134	\$3,199	D2-FS					X			
33311	SYLCO INLET	0.84	\$157	\$3,752	D2-FS					X			
3334	SOUTH FALLS BR.	1.85	\$348	\$8,289	D2-FS					X			
334	OCOEE NO.3 DAM	1.28	\$8,801	\$12,327	B4			X	X	X		X	

TABLE 3. MIDDLE OCOEE/SYLCO - ROAD MAINTENANCE NEEDED ON NATIONAL FOREST SERVICE SYSTEM ROADS

ROAD #	ROAD NAME	LENGTH	ANNUAL COSTS	DEFERRED COSTS	RMO	MACHINE GRADING	GRAVEL	DITCH CLEANING	PAVE	BRUSH	BRIDGE MAINT.	CULVERTS	REMARKS
334301	DUTCH FIELD SPUR SOUTH	1.20	\$225	\$5,355	D2-FS					X			
334302	DUTCH FIELD SPUR NORTH	0.73	\$138	\$3,281	D2-FS					X			
33431	DUTCH CREEK	0.46	\$87	\$2,083	D2-FS					X			
33432	BLUE RIDGE GAP	0.26	\$0	\$0	E1					X			
33434	UPPER SYLCO	0.28	\$52	\$1,244	D2-FS					X			
335901	LOWER GOFORTH	0.63	\$118	\$2,824	D2-FS					X			
33641	HORSEBONE BRANCH	1.23	\$231	\$5,495	D2-FS					X			
337601	INDIAN FLATS SPUR 2	0.53	\$99	\$2,357	D2-FS					X			
337602	INDIAN FLATS SPUR 3	0.32	\$60	\$1,425	D2-FS					X			
337707	PARKS LEAD	0.25	\$0	\$0	E1					X			
338	BOYD GAP OBS. SITE	0.33	\$4,241	\$10,034	A5			X	X				
366C	MADDEN BRANCH SPUR C	0.63	\$118	\$2,818	D2-FS					X			
374	FALLS BRANCH	2.34	\$2,092	\$22,593	C3	X	X	X		X		X	
375	OCOEE WHITEWATER CENTER	0.81	\$10,370	\$24,536	A5				X		X		
375A	O.W.C. SPUR	0.15	\$1,012	\$1,418	B4					X			
377	OCOEE NO. 2 DAM FS PARKING	0.30	\$3,825	\$9,050	A5				X	X			
45	LITTLE GASSAWAY	2.64	\$2,357	\$25,451	C3	X	X	X		X		X	
45B	THUNDER ROCK	0.32	\$286	\$3,090	C3				X	X			
5054	TOLLIVER SHANTY	1.05	\$198	\$4,725	D2-FS					X			
5056	WEST GOFORTH	2.67	\$501	\$11,948	D2-FS					X			
5056-1	NORTH GOFORTH	0.38	\$71	\$1,700	D2-FS					X			
55	BAKER CREEK	2.01	\$1,800	\$19,435	C3	X	X	X		X	X	X	
55J	SYLCO CAMPGROUND W	0.15	\$132	\$1,423	C3					X			
55K	SYLCO CAMPGROUND E	0.07	\$62	\$668	C3					X			
68	KIMSEY HIGHWAY	0.76	\$683	\$7,375	C3	X	X	X		X		X	

OPPORTUNITIES FOR TRAVEL MANAGEMENT

Table 4 summarizes recommendations in response to the issues identified in Step 3 and the questions answered in Step 4. A more detailed narrative follows the table, and priorities are listed above. Maps are included in Appendix A to assist in tracking the recommendations. Each specialist identified recommendations based on how the transportation system affected their resource; therefore, conflicting recommendations may exist between resource areas due to differing needs.

Aquatics

Road surfaces and ditches are properly aligned and graded to minimize sediment runoff.

As road improvements are made, culverts are replaced to allow aquatic species passage.

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
NATIONAL FOREST SYSTEM ROADS (NFSR)										
101	JAKE BRANCH ORV	2.60	no	yes	no	no	yes	*TBD - see note		Decommission approx. 1.3 mi. (portion that crosses into 7A). *Evaluate impact to stream in area that's within 100' of stream. Remaining section: manage as is. A portion of the road outside the watershed provides access for special use (Church Camp)
1024	JAKE ROAD	0.61	no	yes	no	no	yes	1		Manage as is.
1308	PRINCE GAP	1.65	no	yes	no	yes	yes	2	kudzu	Manage as is.
1310	BENCH	0.73	no	yes	no	yes	yes	1		Manage as is.
1324	ISLAND CREEK	1.41	no	yes	no	no	yes	2		Manage as is.
1340	MINNEWAUGA CREEK	3.88	no	yes	no	yes	yes	1		Manage as is.
1351	EDWARDS BRANCH	0.65	no	yes	no	yes	yes	1		Manage as is.
1351-1	EDWARDS BRANCH EAST	0.50	no	yes	no	yes	yes	1		Manage as is.
1370	GUNTERPOLE	1.34	no	yes	no	yes	yes	1		Manage as is.
1370A	GUNTERPOLE SPUR-A	0.53	no	yes	no	yes	yes	1		Manage as is.
1372	JACK BRANCH	3.16	no	yes	no	yes	yes	1		Manage as is.
221	PEAVINE SHEEDS CR.	11.05	yes	yes	yes	yes	yes	3		Manage as is.
299	PARKSVILLE BOAT RAMP	0.20	no	no	yes	no	no	2		Manage as is.
302	INDIAN CREEK	10.33	yes	yes	yes	yes	yes	2		Manage as is.
33080	CABIN 14	0.24	yes	yes	yes	no	no	3		Manage as is.
33101	THORNBURG	1.30	no	yes	no	no	no	3		Manage as is. Aquatic biologist recommends decommission.

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
33102	MAC POINT	1.08	no	yes	no	yes	yes	2		Manage as is. Aquatic biologist recommends decommission .
33231	INDIAN-HASKINS DIVIDE	1.05	no	yes	no	no	yes	1		Manage as is.
332401	HASKINS CREEK	0.27	no	no	no	yes	yes	1		Decommission . Convert to linear wildlife opening (LWO).
33242	WEST SYLCO RIDGE	0.86	no	yes	no	yes	yes	1		Manage as is.
333201	DEVILS BRANCH	0.19	no	yes	no	yes	yes	1		Manage as is.
333202	GRAYS BRANCH	0.10	no	no	no	yes	yes	1		Decommission .
333203	WEST FIELD	0.20	no	yes	no	yes	yes	1		Decommission approx. 0.15 mi. Convert to LWO. first 0.05 mi. is needed to access Southwest ridgeline.
333204	COOKSON BRANCH	0.60	no	yes	no	yes	yes	1		Manage as is.
333205	COOKSON BRANCH SPUR	0.13	no	no	no	yes	yes	1		Decommission . Convert to LWO.
33331	UPPER HAWKINS BRANCH	1.97	no	yes	no	yes	yes	2		Manage as is.
33331A	UPPER HAWKINS BRANCH SPUR	0.00	no	no	no	yes	yes	1		Manage as is.
33411	HUNTERS LAST	0.83	no	yes	no	yes	yes	1		Manage as is.
334201	THOMAS BRANCH	1.10	no	no	no	no	no	4		Decommission .
33422	SUNNY RIDGE	0.30	no	yes	no	no	yes	1		Manage as is.

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
334801	DAVIS BRANCH	0.29	no	yes	no	yes	yes	1		Decommission.
33493	WEST HALFWAY BR.	1.10	no	yes	no	yes	yes	1		Manage as is.
33501	EAST HALFWAY BR.	0.93	no	yes	no	yes	yes	1		Manage as is.
33502	TAYLOR BRANCH	2.05	yes	yes	no	yes	yes	1		Manage as is.
33521	NORTH FORK SHEEDS CREEK	1.13	no	yes	no	no	yes	3+?	Acid draining rock	Manage as is. Field verify acid draining rock.
335601	SAWMILL FIRE	0.99	no	yes	no	yes	yes	2		Manage as is.
335602	TRAIL TREE	0.68	no	yes	no	yes	yes	1		Manage as is.
33691	SOUTH FORK SHEEDS CREEK	1.50	no	yes	no	yes	yes	3		Manage as is.
33695	SHEEDS CR. WEST RIDGE	0.79	no	yes	no	yes	yes	1		Manage as is.
3371	CONASAUGA RIV. TRAILHEAD	0.09	no	no	yes	no	no	3		Manage as is. Relocate parking area away from stream.
33711	WEST GRAHAM BRANCH	0.30	no	yes	no	no	yes	1		Manage as is.
33732	CABINS 8-11	0.11	yes	no	yes	no	no	1		Manage as is
33733	CABIN 7	0.08	yes	no	yes	no	no	1		Manage as is
33734	CABIN 12A	0.08	yes	no	yes	no	no	1		Manage as is
33735	CABINS 5-6	0.13	yes	no	yes	no	no	1		Manage as is
33741	INDIAN-BAKERS DIVIDE	0.63	yes	yes	no	yes	yes	1		Manage as is. FS trying to acquire tract that road accesses

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
33742	KING SLOUGH	0.10	no	no	yes	no	no	2		Manage as is.
367	MAC POINT REC.AREA	0.06	no	no	yes	no	no	1		Manage as is.
368	BOAT RAMP OVERFLOW	0.14	no	no	yes	no	no	1		Manage as is.
370	PARKSVILLE BEACH	0.13	no	no	yes	no	no	1		Manage as is.
371	EAST PARKSVILLE BOAT RAMP	0.17	no	no	yes	no	no	2		Manage as is.
372	OCOEE RIFLE RANGE	0.07	no	no	no	no	no	1		Closed to the public. Decommission when shooting range is obliterated.
373	OCOEE RANGER OFFICE	0.09	no	no	no	no	no	1		Manage as is.
373A	O.R.O. CONNECTOR	0.04	no	no	yes	no	no	1		Manage as is.
5046	SIMMONS GAP	0.96	no	yes	no	yes	yes	1		Manage as is.
55	BAKER CREEK	5.41	yes	yes	yes	yes	yes	3		Manage as is.
55A	SUGARLOAF	1.15	yes	yes	yes	no	no	2		Manage as is.
55B	CARD SPUR	0.52	yes	yes	yes	no	no	3		Manage as is.
55C	UPPER BAKER CREEK	0.03	yes	yes	no	no	no	4		Manage as is.
55D	DEVIL POINT	0.24	yes	no	no	no	no	2		Decommission at boundary line.
55E	BAKER CREEK SPUR	1.54	no	yes	no	yes	yes	1		Manage as is.
55F	WASSON CAMP	0.26	yes	yes	yes	no	no	1		Manage as is.
55G	CAMP OCOEE	0.49	yes	yes	yes	no	no	1		Manage as is.

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
55L	GREEN CEMETERY	0.35	no	yes	no	no	no	1		Graves are on private land; #55L is the only vehicle access.
62	BIG FROG	9.62	yes	yes	yes	yes	yes	2		Manage as is. Consider options for seasonal closure(s). Chatt-Oconee NF will support Cherokee's management decision
67	SINA BRANCH	8.97	no	yes	yes	yes	yes	4		Seasonal closure or FS admin. only use on middle section (between #1340 and near Parks Hollow); 2.36 mi. Can't decommission - need vehicle access to treat hemlock. Consider relocating several sections of road within 100' of streams near #55. South of #1340 & North of Parks Hollow: manage as is
77	OSWALD	4.01	yes	yes	yes	yes	yes	2		
99	BLUE RIDGE	5.46	no	yes	yes	yes	yes	1		Manage as is. Consider options for seasonal closure(s).
99A	VALLEY DIVIDE	0.78	no	yes	no	yes	yes	1		Manage as is.
UNAUTHORIZED ROADS										
C-1		0.05	no	no	yes	no	no	3		decommission; leave parking area at main road.

*1=LOW, 2=MEDIUM, 3=HIGH, 4=VERY HIGH, 5=SEVERE

TABLE 4. CONASAUGA RIVER LOWER OCOEE - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED - 4/14/14

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION/HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	IMPACT TO STREAMS*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
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Miles of system routes to be considered for decommissioning:
 Roads: 6.03
 Trails: 0.00
 Total: 6.03

Miles of unauthorized routes to be decommissioned:
 0.05

Total miles of all routes to be decommissioned:
 6.08

Miles of unauthorized routes to consider adding to system:
 Roads: 0.00
 Trails: 0.00
 Total: 0.00

Net change to transportation system mileage:
 Roads: -6.03
 Trails: 0.00
 Total: -6.03

TABLE 4. MIDDLE OCOEE/SYLCO WATERSHED - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION /HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	HDC – Hydrologic Disturbance Class*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
101	JAKE BRANCH ORV	1.38	Yes	Yes	No	No	probably not	1	No	Private access to intersection with #302A. Decommission from #302A North; approx. 0.8 mi.
102	SYLCO CREEK	0.85	No	Yes	No	Yes	No	5	No	Manage as is to last wildlife opening. Decommission remainder; approx. 0.4 mi.
1315	BROCK MOUNTAIN	3.46	No	Yes	No	Yes	Yes	TBD	Yes - APR likely	check periodically for presence of acid draining rock; if no acid runoff, manage as is, otherwise; Decommission (mileage not included in total)
1330	LOWER ROUGH CREEK	1.52	No	Yes	No	No	Yes	2	No	Manage as is. Recreation recommends decommissioning to trail.
1330A	LOWER ROUGH CR.SPUR	0.27	No	Yes	No	No	Yes	1	No	Manage as is. Recreation recommends decommissioning to trail.
1333	EAST SYLCO RIDGE	3.99	No	Yes	No	Yes	Yes	3	No	Manage as is. Still needed as a thru road.
1378	WEST HOGBACK LEAD	1.24	No	Yes	No	Yes	Yes	2	No	Manage as is.
186	GOFORTH	0.84	No	Yes	Yes	Yes	No	4	No	Decommission beyond intersection with #335901; approx. 0.07 mi.
187A	LITTLE CANEY	0.80	Yes	Yes	No	No	Yes	2	No	Manage as is.
221	PEAVINE SHEEDS CR.	1.47	No	Yes	Yes	Yes	Yes	2	No	Manage as is.
221H	DUTCH FIELD	2.31	No	Yes	No	Yes	Yes	1	No	Linear opening. Manage as is.
221T	TVA RD 221T	0.49	Yes	No	No	No	No	1	No	Manage as is while TVA needs it.
221U	TVA RD 221U	0.07	Yes	Yes	No	No	Yes	1	No	Manage as is.
221V	TVA RD 221V	0.16	Yes	No	No	No	No	1	No	Manage as is while TVA needs it.
221W	TVA RD 221W	0.10	Yes	No	No	No	No	1	No	Manage as is while TVA needs it.
302	INDIAN CREEK	0.71	Yes	Yes	Yes	Yes	Yes	2	No	Manage as is.
302A	BAPTIST CAMP SPUR	0.96	Yes	Yes	No	No	No	2	No	Look at Church Camp's Master Plan to determine need for multiple roads.
331301	LITTLE BEECHBOTTOM	0.28	No	Yes	No	Yes	Yes	1	No	Manage as is. LWO.

TABLE 4. MIDDLE OCOEE/SYLCO WATERSHED - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED										
ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION /HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	HDC – Hydrologic Disturbance Class*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
33132	UPPER CANEY CREEK	0.76	No	Yes	No	No	Yes	2	No	Decommission last approx. 0.2 mi where it drops down to the creek.
33133	FAIRVIEW GORGE	1.23	No	Yes	No	No	Yes	1	Yes - Illegal OHV use	Manage as is.
331501	UPPER GOFORTH	0.46	No	Yes	No	Yes	No	3	No	Decommission. Manage as LWO.
331503	BROCK MTN SOUTH	0.32	No	Yes	No	No	No	TBD		check periodically for presence of acid draining rock; if no acid runoff, manage as is, otherwise; Decommission (mileage not included in total)
33161	ROGERS BRANCH	0.57	No	Yes	No	No	No	TBD		check periodically for presence of acid draining rock; if no acid runoff, manage as is, otherwise; Decommission (mileage not included in total)
331701	DEEP GAP KNOB	0.49	No	Yes	No	Yes	Yes	1	No	Manage as is.
33172	DEEP GAP	5.18	Yes	Yes	No	Yes	Yes	3	No	Manage as is.
332001	WASTE AREA	0.71	No	Yes	Yes	No	Yes	TBD	Yes - use of the road	TVA access? If so, manage as is. If not, Decommission (mileage not included in total)
33291	SHORT CREEK	0.29	No	No	No	No	No	2	No	Decommission.
33292	SHORT CREEK RIDGE	0.32	No	Yes	No	No	Yes	1	No	Manage as is. Check with TVA for access needs.
33293	EAST SHORT CREEK	0.71	No	Yes	No	No	Yes	1	No	Decommission section in RX 7a; approx. 0.08 mi.
33311	SYLCO INLET	0.84	No	Yes	No	Yes	No	3	No	Decommission. Manage as trail and LWO.
3334	SOUTH FALLS BR.	1.85	No	Yes	No	Yes	Yes	3	No	Manage as is.
334	OCOEE NO.3 DAM	1.28	Yes	Yes	Yes	No	Yes	1	No	Manage as is.
334301	DUTCH FIELD SPUR SOUTH	1.20	No	Yes	No	Yes	Yes - first sect	4	No	Decommission. Manage as LWO.
334302	DUTCH FIELD SPUR NORTH	0.73	No	Yes	No	Yes	Yes	2	No	Manage as is.
33431	DUTCH CREEK	0.46	No	No	No	No	No	1	No	Decommission.
33432	BLUE RIDGE GAP	0.26	No	No	No	No	could use	2	No	Decommission. Use a temp road if needed. Verify presence/absence of culverts.
33434	UPPER SYLCO	0.28	No	Yes	No	No	Yes	2	No	Manage as is.
335901	LOWER GOFORTH	0.63	No	Yes	No	Yes	No	3	No	Decommission and convert to LWO.
33641	HORSEBONE BRANCH	1.23	No	Yes	No	No	Yes	2	No	Manage as is. Compare GIS data with NRM database. Confirm TVA access.
337601	INDIAN FLATS SPUR 2	0.53	No	Yes	No	Yes	Yes	1	No	Manage as is.
337602	INDIAN FLATS SPUR 3	0.32	No	Yes	No	Yes	Yes	1	No	Manage as is.
337707	PARKS LEAD	0.25	No	Yes	No	No	Yes	1	No	Decommission.

TABLE 4. MIDDLE OCOEE/SYLCO WATERSHED - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION /HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	HDC – Hydrologic Disturbance Class*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
338	BOYD GAP OBS. SITE	0.33	Yes	Yes	Yes	No	Probably not	1	No	Manage as is.
366C	MADDEN BRANCH SPUR C	0.63	Yes	Yes	No	Yes	Yes	1	No	Manage as is.
374	FALLS BRANCH	2.34	No	Yes	No	Yes	Yes	2	No	Manage as is. Possible seasonal closure(s).
375	OCOEE WHITEWATER CENTER	0.81	No	No	Yes	No	No	2	No	Manage as is.
375A	O.W.C. SPUR	0.15	No	No	Yes	No	No	2	No	Manage as is.
377	OCOEE NO. 2 DAM FS PARKING	0.30	No	No	Yes	No	No	3	No	Manage as is.
45	LITTLE GASSAWAY	2.64	No	Yes	Yes	Yes	Yes	4	Yes - Structure in creek near powerhouse	Manage as is.
45B	THUNDER ROCK	0.32	No	No	Yes	No	No	2	No	Manage as is.
5054	TOLLIVER SHANTY	1.05	No	Yes	No	Yes	Yes	2	No	Manage as is.
5056	WEST GOFORTH	2.67	Yes	Yes	No	No	Yes	3	Yes - OHVs going around gate.	Manage as is.
5056-1	NORTH GOFORTH	0.38	No	Yes	No	No	Yes	1	No	Manage as is.
55	BAKER CREEK	2.01	No	Yes	Yes	Yes	Yes	2	No	Manage as is.
55J	SYLCO CAMPGROUND W	0.15	No	No	Yes	No	No	5	No	Reconstruct according to Rec Re-Alignment. Decommission per Rec Re-Alignment.
55K	SYLCO CAMPGROUND E	0.07	No	No	Yes	No	No	5	No	Reconstruct according to Rec Re-Alignment. Decommission per Rec Re-Alignment.
68	KIMSEY HIGHWAY	0.76	Yes	Yes	Yes	Yes	Yes	1	No	Manage as is.
UNAUTHORIZED ROADS										
MO-1	off of #5056 on left	0.06	Yes	No	No	No	No	3	No	Decommission; other access to pvt is available
MO-2	at the end of #366C	0.14	Yes	No	No	No	No	2	No	Add to system as extension of #366C

*1 = LOW, 2 = MEDIUM, 3 = HIGH, 4 = VERY HIGH, 5 = SEVERE

TABLE 4. MIDDLE OCOEE/SYLCO WATERSHED - SUMMARY OF RECOMMENDATIONS TO BE CONSIDERED

ROAD #	ROAD NAME	APPROX. MILES IN WATERSHED	PRIVATE ACCESS	WILDFIRE SUPPRESSION USE	RECREATION /HERITAGE USE	WILDLIFE USE	VEGETATION MANAGEMENT	HDC – Hydrologic Disturbance Class*	ENVIRONMENTAL RISK	RECOMMENDATIONS TO BE CONSIDERED
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Miles of system routes to be considered for decommissioning:
 Roads: 7.95
 Trails: 0.00
 Total: 7.95

Miles of unauthorized routes to be decommissioned:
 0.06

Total miles of all routes to be decommissioned:
 8.01

Miles of unauthorized routes to consider adding to system:
 Roads: 0.14
 Trails: 0.00
 Total: 0.14

Net change to transportation system mileage:
 Roads: -7.81
 Trails: 0.00
 Total: -7.81

RECOMMENDATIONS FOR FURTHER CONSIDERATION

Non-native Invasive Plants

Non-native invasive plants are a problem across the forest and are commonly encountered along forest roads. Discreet populations of non-native invasive plants should be reported to the Forest Botanist using the appropriate site documentation forms. All reported sites are input into the NRIS reporting system and catalogued for future treatment. It is important that future road maintenance, construction, or decommissioning projects recognize the existence of these species and provide opportunities to reduce their spread rather than exacerbate the situation.

NEPA ANALYSIS NEEDS

Many opportunities identified in this report can be incorporated into the Conasauga River and Lower Ocoee EA process. If there are some opportunities identified that will not be incorporated into the EA, they will require a site-specific NEPA analysis in the future when the decision is made to implement them (activities other than maintenance and administrative decisions).

STEP 6 REPORTING

PURPOSE AND PRODUCTS

The purpose of this step is to:

- report the key findings of the analysis.

The products of this step are:

- a report including maps, analyses, and test documentation of the travel analysis, and
- maps that show the data and information used in the analysis, and the opportunities identified during the analysis.

REPORT

This report will be reviewed by the Cherokee NF, and shared with other offices in the Forest Service that are also working on roads analysis. This report is available to the public if requested, and will be part of the Conasauga River and Lower Ocoess Assessment project file

MAPS

All maps used for this report are included in Appendix A.

REFERENCES

Recreation

USDA Forest Service. 2004. Revised Cherokee National Forest Land and Resource Management Plan 2004. Cleveland, TN.

USDA Forest Service. 2004. Recreation Sites Facility Master Plan, Cleveland, TN

USDA Forest Service. 2006. Cherokee National Forest Strategic Trails Analysis DRAFT. Cleveland, TN

USDA Forest Service (2009), Cherokee NF, GIS Data Base.

Attachment 1

Road Classifications in Current Use

Functional Class	Traffic Service Level	Maintenance Level
<p>Arterial: Provides service to large land areas. Connects with other arterials or public highways.</p> <p>Collector: Serves smaller land areas than arterials. Connects arterials to local roads or terminal facilities.</p> <p>Local: Single purpose road. Connects terminal facilities with collectors or arterials.</p>	<p>A: Free flowing, mixed traffic; stable, smooth surface; provides safe service to all traffic.</p> <p>B: Congested during heavy traffic, slower speeds and periodic dust; accommodates any legal-size load or vehicle.</p> <p>C: Interrupted traffic flow, limited passing facilities, may not accommodate some vehicles. Low design speeds. Unstable surface under certain traffic or weather.</p> <p>D: Traffic flow is slow and may be blocked by management activities. Two-way traffic is difficult, backing may be required. Rough and irregular surface. Accommodates high clearance vehicles. Single purpose facility.</p>	<p>Level 1 Closed more than 1 year.</p> <p>Level 2 High-clearance vehicles.</p> <p>Level 3 Passenger vehicles— surface not smooth.</p> <p>Level 4 Passenger vehicles— smooth surface.</p> <p>Level 5 Passenger vehicles—dust free; possibly paved.</p>

Road Management Objectives are to:

- Establish the specific intended purpose of a road based on management needs as determined through land and resource management planning;
- Contain operation and maintenance criteria for existing roads; and
- Contain design criteria and operation and maintenance criteria for new roads.

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
D1

Intended Purpose of Road

The purpose of this road is to provide access for various resource activities on an intermittent basis. There currently is no management activity that requires vehicular access. The road is physically blocked to prevent all vehicular traffic. It will be opened when there is a management need for vehicular traffic. A different Road Management Objective will be in effect during the period of use.

Design, Operation and Maintenance Criteria

Traffic Service Level	D
Maintenance Level	1
Functional Classification	Local
Traffic Volume	Zero
Traffic Classification	Timber 0%, Recreation 0%, Administrative 0%
Traffic Management	Closed to all vehicular traffic
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle	
<ul style="list-style-type: none"> •For curve widening •For surfacing •For grade •For travel way width •For sight distance 	<ul style="list-style-type: none"> •Depends on next management activity •Same •Same •Same •Pickup/SUV
Critical Vehicle	Depends on next management activity
Subject to Highway Safety Act	No

Design, Operation and Maintenance Standards

Width	10-15 feet
Turnouts	Not necessarily intervisible
Surfacing	May have been spot surfaced; currently grassed or trees growing
ADT	0
Design Speed	5 mph
Highway Safety Act	Does not apply
Maintenance Level 1 requirements	<ul style="list-style-type: none"> •Do annual inspection (condition survey) •Repair only where damage is occurring to adjacent resources •Allow grass, brush to grow up

Recommended: Gary Watson	Date: February 2009
Approved: _____ Ranger	District _____ Date: _____

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
D2-HC

126,

Intended Purpose of Road		
The purpose of this road is to provide access for the recreation use of 4WD and high clearance vehicles.		
Design, Operation and Maintenance Criteria		
Traffic Service Level	D	
Maintenance Level	2	
Functional Classification	Local	
Traffic Volume	Low	
Traffic Classification	Timber 0%, Recreation 100%, Administrative 0%	
Traffic Management	Limited to 4WD/high clearance vehicles	
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils	
Design Vehicle	<ul style="list-style-type: none"> •For curve widening •For surfacing •For grade •For travel way width •For sight distance 	<ul style="list-style-type: none"> •N/A •Same •Same •Same •Same
Critical Vehicle	N/A	
Subject to Highway Safety Act	No	
Design, Operation and Maintenance Standards		
Width	10-15 feet	
Turnouts	Not necessarily intervisible	
Surfacing	May have been spot surfaced; currently probably native	
ADT	Low	
Design Speed	5 mph	
Highway Safety Act	Does not apply	
Maintenance Level 2 requirements	<ul style="list-style-type: none"> •Do annual inspection (condition survey) •Repair where damage is occurring to adjacent resources •No scheduled blading, drainage, surfacing work •Clear out blowdown as needed for access and mow every 5 years 	
Recommended:	Date:	
Approved: Ranger	District Date:	

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
D2-WL

Intended Purpose of Road

The purpose of this road is to provide access for various resource activities on an as-needed basis. In the meantime it serves as a linear wildlife opening. Public traffic is restricted by means of a gate or similar device and access is limited to administrative traffic including contract wildlife maintenance traffic.

Design, Operation and Maintenance Criteria

Traffic Service Level	D
Maintenance Level	2
Functional Classification	Local
Traffic Volume	Low
Traffic Classification	Timber 0%, Recreation 0%, Administrative 100%
Traffic Management	Limited to administrative traffic
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle •For curve widening •For surfacing •For grade •For travel way width •For sight distance	•Depends on next management activity •Same •Same •Same •Pickup/SUV
Critical Vehicle	Depends on next management activity
Subject to Highway Safety Act	No

Design, Operation and Maintenance Standards

Width	10-15 feet
Turnouts	Not necessarily intervisible
Surfacing	May have been spot surfaced; currently grassed - wildlife mixture
ADT	Low
Design Speed	5 mph
Highway Safety Act	Does not apply
Maintenance Level 2 requirements	•Do annual inspection (condition survey) •Repair where damage is occurring to adjacent resources •No scheduled blading or drainage work •Clear out blowdown as needed for access and mow annually

Recommended:		Date:
Approved: Ranger	District	Date:

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
D2-FS

5003

Intended Purpose of Road	
The purpose of this road is to provide access for various resource activities on an as-needed basis. Public traffic is restricted by means of a gate or similar device and access is limited to administrative traffic including Forest Service, Special Use/Road Easement or other authorized traffic. Road may be open seasonally during certain hunting seasons.	
Design, Operation and Maintenance Criteria	
Traffic Service Level	D
Maintenance Level	2
Functional Classification	Local
Traffic Volume	Low
Traffic Classification	Timber 0%, Recreation low%, Administrative high%
Traffic Management	Limited to administrative traffic (FS, SU, etc.)
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle •For curve widening •For surfacing •For grade •For travel way width •For sight distance	•Depends on next management activity •Same •Same •Same •Pickup/SUV
Critical Vehicle	Depends on next management activity
Subject to Highway Safety Act	No
Design, Operation and Maintenance Standards	
Width	10-15 feet
Turnouts	Not necessarily intervisible
Surfacing	May have been spot surfaced; could be grassed or other vegetation
ADT	Low
Design Speed	5 mph
Highway Safety Act	Does not apply
Maintenance Level 2 requirements	•Do annual inspection (condition survey) •Repair where damage is occurring to adjacent resources •No scheduled blading or drainage work •Clear out blowdown as needed for access and mow every three years
Recommended:	Date:
Approved: Ranger	District Date:

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
D2-TRL

Intended Purpose of Road

The purpose of this road is to provide access for various resource activities on an as-needed basis. Public traffic is restricted by means of a gate or similar device and access is limited to administrative traffic including Forest Service, Special Use/Road Easement or other authorized traffic. Road may be open seasonally during certain hunting seasons.

Design, Operation and Maintenance Criteria

Traffic Service Level	D
Maintenance Level	2
Functional Classification	Local
Traffic Volume	Low
Traffic Classification	Timber 0%, Recreation low%, Administrative high%
Traffic Management	Limited to administrative traffic (FS, SU, etc.)
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle •For curve widening •For surfacing •For grade •For travel way width •For sight distance	•Depends on next management activity •Same •Same •Same •Pickup/SUV
Critical Vehicle	Depends on next management activity
Subject to Highway Safety Act	No

Design, Operation and Maintenance Standards

Width	10-15 feet
Turnouts	Not necessarily intervisible
Surfacing	May have been spot surfaced; could be grassed or other vegetation
ADT	Low
Design Speed	5 mph
Highway Safety Act	Does not apply
Maintenance Level 2 requirements	•Do annual inspection (condition survey) •Repair where damage is occurring to adjacent resources •No scheduled blading or drainage work •Clear out blowdown as needed for access and mow every three years

Recommended:		Date:
Approved: Ranger	District	Date:

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
C3

284

Intended Purpose of Road	
The purpose of this road is to provide access for various resource activities . The road is open to public traffic in standard 4-wheel passenger cars and, thus, is subject to the Highway Safety Act. Road may be closed seasonally or for periods of freeze-thaw conditions.	
Design, Operation and Maintenance Criteria	
Traffic Service Level	C
Maintenance Level	3 (or 4)
Functional Classification	Collector
Traffic Volume	Moderate - High
Traffic Classification	Timber Moderate%, Recreation high%, Administrative low%
Traffic Management	Open to all legal traffic (commercial traffic by permit only)
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle	<ul style="list-style-type: none"> •Generally tractor trailer
•For curve widening	•Same
•For surfacing	•Same
•For grade	•Same
•For travel way width	•Same
•For sight distance	•Pickup/SUV
Critical Vehicle	Low boy
Subject to Highway Safety Act	Yes
Design, Operation and Maintenance Standards	
Width	12 - 16 feet plus curve widening
Turnouts	Intervisible
Surfacing	Fully surfaced with approximately 4 inches crushed aggregate
ADT	Moderate - High
Design Speed	10 - 15 mph
Highway Safety Act	Signed to meet MUTCD
Maintenance Level 3 requirements	<ul style="list-style-type: none"> •Do annual inspection (condition survey) •Make repairs as soon as need is recognized •Scheduled blading 2 times per year; dips and/or ditches/culvert inlets cleaned once per year •Clear out blowdown as it occurs and mow every year to maintain safe sight distance •Maintain 4 inches of crushed aggregate •Maintain signs and other safety considerations
Recommended:	Date:
Approved: Ranger	District Date:

ROAD MANAGEMENT OBJECTIVE

Cherokee National Forest

B4

217E

Intended Purpose of Road	
The purpose of this road is to provide access for various resource activities . The road is open to public traffic in standard 4-wheel passenger cars and, thus, is subject to the Highway Safety Act. User convenience is more of a concern than for TSL C roads. Road may be closed seasonally or for periods of freeze-thaw conditions.	
Design, Operation and Maintenance Criteria	
Traffic Service Level	B
Maintenance Level	4 (or 5)
Functional Classification	Collector (or local)
Traffic Volume	Moderate - High
Traffic Classification	Timber Low%, Recreation high%, Administrative low%
Traffic Management	Open to all legal traffic (commercial traffic by permit only)
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle	<ul style="list-style-type: none"> •Generally tractor trailer
•For curve widening	•Same
•For surfacing	•Same
•For grade	•Same
•For travel way width	•Same
•For sight distance	•Pickup/SUV
Critical Vehicle	Low boy
Subject to Highway Safety Act	Yes
Design, Operation and Maintenance Standards	
Width	Generally 16 - 18 feet plus curve widening
Turnouts	Intervisible, if needed
Surfacing	Fully surfaced - approximately 6 inches crushed aggregate (or paved)
ADT	Moderate - High
Design Speed	10 - 15 mph
Highway Safety Act	Signed to meet MUTCD
Maintenance Level 4 requirements	<ul style="list-style-type: none"> •Do annual inspection (condition survey) •Make repairs as soon as need is recognized •Scheduled blading 3 times per year (or pavement repair as needed); ditches/culvert inlets cleaned annually •Clear out blowdown as it occurs and mow every year to maintain safe sight distance •Maintain 6 inches of crushed aggregate (or repave on a 10-12 year cycle) •Maintain signs and other safety considerations
Recommended:	Date:
Approved: Ranger	District Date:

ROAD MANAGEMENT OBJECTIVE
Cherokee National Forest
A5

4042

Intended Purpose of Road	
The purpose of this road is to provide access for various resource activities . The road is open to public traffic in standard 4-wheel passenger cars and, thus, is subject to the Highway Safety Act. User convenience is more of a concern than for TSL C roads. Usually paved. Road may be closed seasonally or for periods of freeze-thaw conditions.	
Design, Operation and Maintenance Criteria	
Traffic Service Level	A
Maintenance Level	5
Functional Classification	Arterial (or collector or local)
Traffic Volume	Moderate - High
Traffic Classification	Timber Low%, Recreation high%, Administrative low%
Traffic Management	Open to all legal traffic (commercial traffic by permit only)
Environmental Consideration	May or may not be adjacent to streams and/or have erosive soils
Design Vehicle •For curve widening •For surfacing •For grade •For travel way width •For sight distance	•Generally tractor trailer •Same •Same •Same •Pickup/SUV
Critical Vehicle	Low boy
Subject to Highway Safety Act	Yes
Design, Operation and Maintenance Standards	
Width	Generally 18 feet plus curve widening
Turnouts	N/A
Surfacing	Paved
ADT	Moderate - High
Design Speed	10 - 15 mph
Highway Safety Act	Signed to meet MUTCD
Maintenance Level 5 requirements	<ul style="list-style-type: none"> •Do annual inspection (condition survey) •Make repairs as soon as need is recognized •Pavement repairs as needed; ditches/culvert inlets cleaned annually •Clear out blowdown as it occurs and mow every year to maintain safe sight distance •Repave on a 10-12 year cycle) •Maintain signs and other safety considerations
Recommended:	Date:
Approved: Ranger	District Date: