



United States
Department of
Agriculture
Forest Service

June 2005

Restoration Strategy

for the South Zone

of the Cherokee National Forest

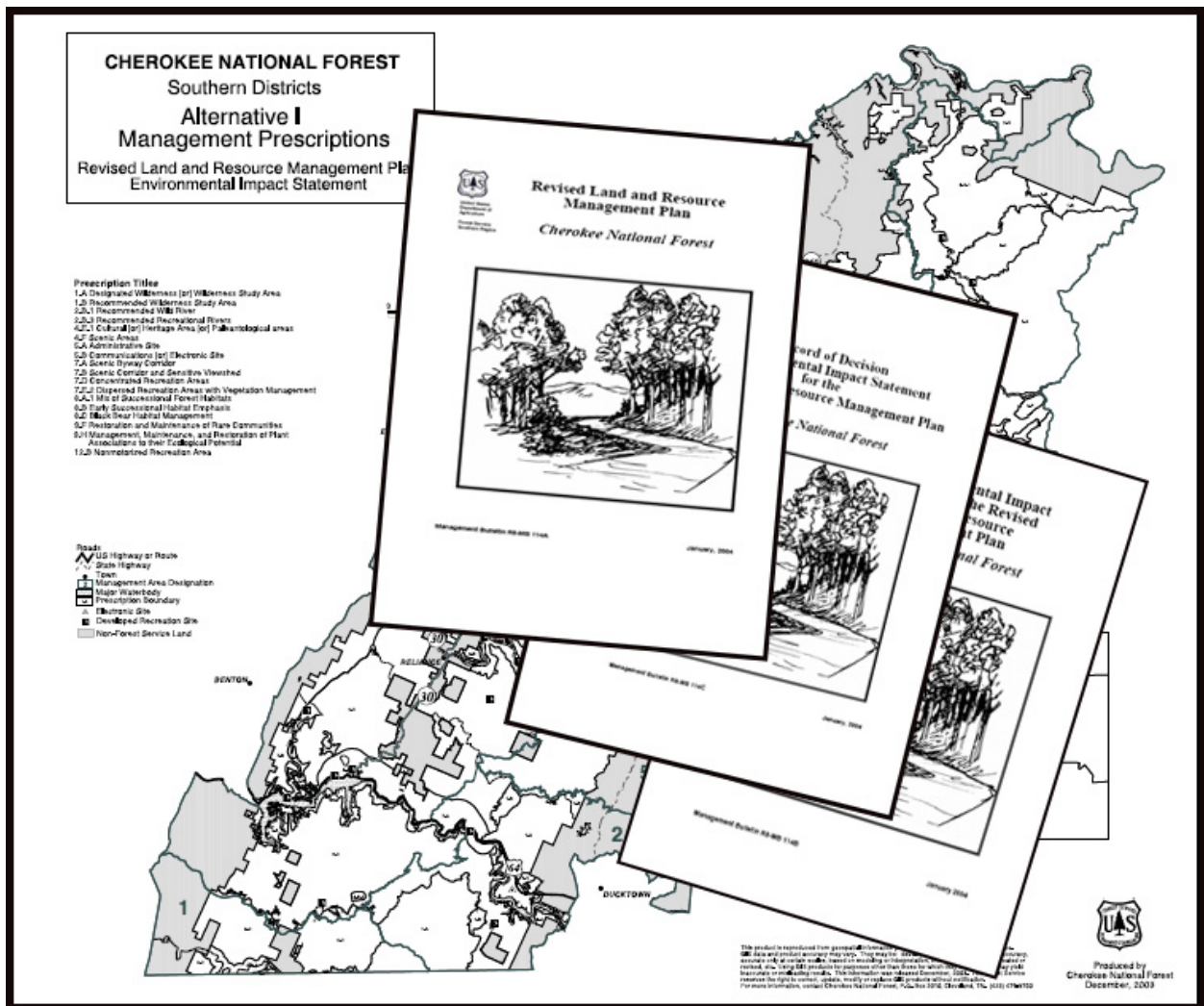


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Introduction

A new direction for management of the Cherokee National Forest began with the signing of the Revised Land and Resource Management Plan in January of 2004. The Plan provides broad program level direction for the next 10 to 15 years. However, it does not provide guidance on when, where, or how to accomplish goals and objectives.

The process used to develop this document was intended to bridge between the program level direction of the Plan and ground level actions. It attempts to answer where, when and how to accomplish the goals and objectives. Primary uses of the document include the following:

1. A strategic approach to forest plan implementation. The process provides a road map to implementation of the forest plan.
2. A "Measuring Stick" to evaluate progress in implementing the forest plan. The document provides estimates of accomplishments by certain times. In the years to come, the predictions and actual outputs can be compared, and adjustments can be made to better implement the forest plan.
3. A living document for out year planning for work and budget. The document allows out year planning for preparatory work such as surveys to make analysis and decision making more efficient and comprehensive. Knowledge of out year types of work will allow better estimation of budget needs.

The process included two steps; (1) allocate forest plan objectives between the two zones, (2) create an order of entry and evaluation that implements the forest plan.

In February 2005 the Goals, Objectives, and Standards (GOS) team met to allocate objectives of the 2004 Forest Plan between the north and south zones of the Forest (The results are listed in Appendix A). Using the GOS report as a starting point, the south zone ID team then determined where and when the "assigned" south zone objectives could be achieved. The following process was used:

1. Determine the appropriate size and consequently the boundaries of analysis units.
2. Spatially integrate objectives by watershed and develop an order of entry.
3. Determine if any important projects would be missed by the order of entry and account for them as NEPA needed in addition to the order of entry or reorder the order of entry.
4. Prepare report.

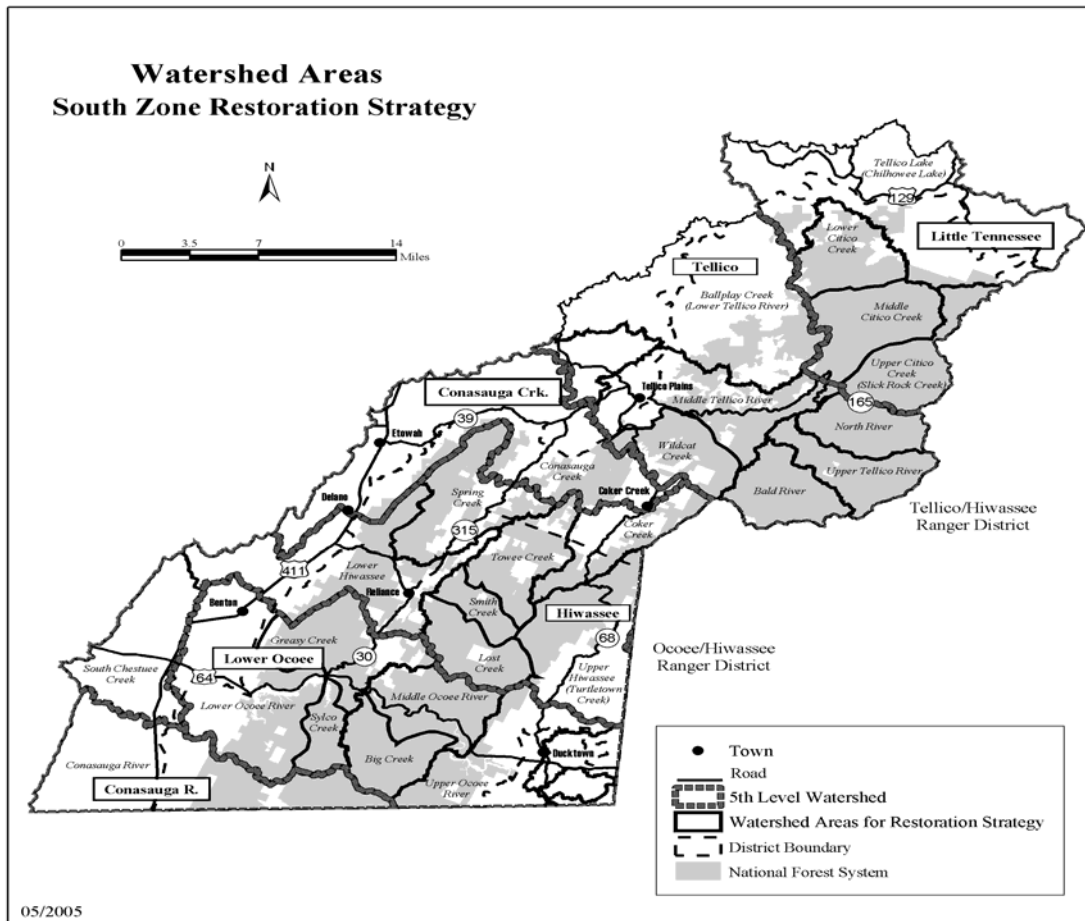
It must be mentioned that this is a working document and can best be used to reflect the relative distribution of outputs rather than precise figures and locations. It is expected that an annual review will take place to incorporate significant changes based on data updates, budget changes, changing environmental conditions, and new emphasis items.

Watersheds Evaluated

Watersheds were chosen by the south zone team as a logical unit to address the objectives (approximately 7,000 to 15,000 acres in size). This is partly because analysis had been completed during the forest planning process by watersheds. As well as watersheds have been used during the "watershed assessment" process the past several years on the Cherokee. Watershed could also be ranked in order of how many objectives could be achieved. Twenty-five watersheds were delineated using 6th code as a base, but with some combining of watersheds when the watershed contain minor amounts of National Forest System land.

Figure 1 displays the watershed areas determined by the south zone team.

Figure 1. Watershed Areas

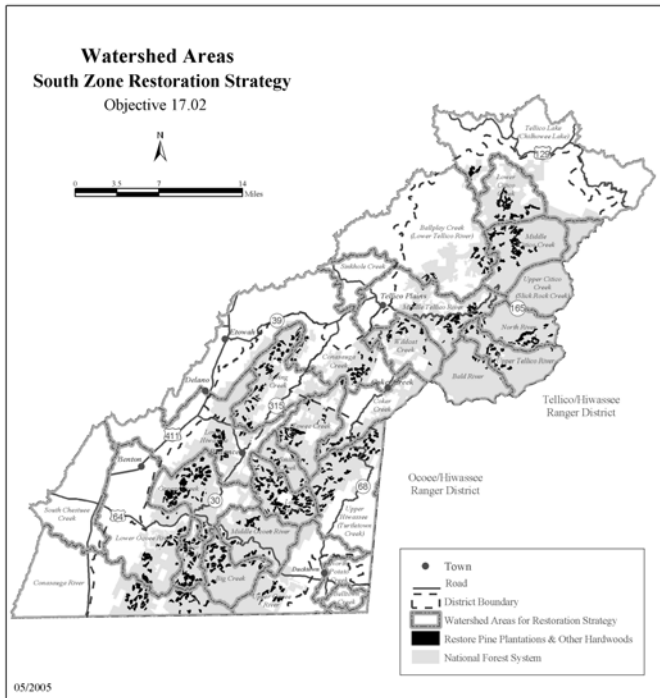


Summary of Objectives

As stated in the Introduction, the GOS Team assigned objective outputs to the south zone. Table 1 summarizes the outputs, for **quantifiable objectives**, that were determined by the GOS Team as achievable on the south zone. The figures displayed are based on geospatial queries performed on 1992 CISC data. More detailed descriptions of these objectives follow Table 1. Also displayed, if available, for each objective is a map representing distribution of the pool acres.

Table 1: Total Outputs for the South Zone

OBJECTIVE 12.01 High elevation openings Acres	OBJECTIVE 12.02 Small canopy gaps Acres	OBJECTIVE 17.01 Diversify white pine plantations Acres	OBJECTIVE 17.02 Restore oak/oak-pine Acres
200	166	2250	7200
OBJECTIVE 17.03 Restore pine forests Acres	OBJECTIVE 17.04 Diversity loblolly plantations Acres	OBJECTIVE 17.05 Reduce Virginia Pine Acres	OBJECTIVE 17.06 Restore Savannas Acres
8000	300	23250	3705
OBJECTIVE 17.08 Thin pine forests Acres	OBJECTIVE 19.01 Sawtimber provided (MCF)	OBJECTIVE 19.02 Pulpwood provided (MCF)	OBJECTIVE 21.01 Burn pine forests Acres
920	20236	3745	8800
OBJECTIVE 21.02 Burn oak/oak- pine forests Acres	OBJECTIVE 21.03 Burn open woodlands Acres	OBJECTIVE 21.04 Burn pine- oak forests Acres	0-10 year age class Acres
28600	1040	10200	15683



FOREST OBJECTIVE 17.02

Over the 10-year period, restore oak or oak-pine forests on at least 9,000 acres of appropriate sites currently occupied by pine plantations or other sites with minimal diversity.

ZONE OBJECTIVE

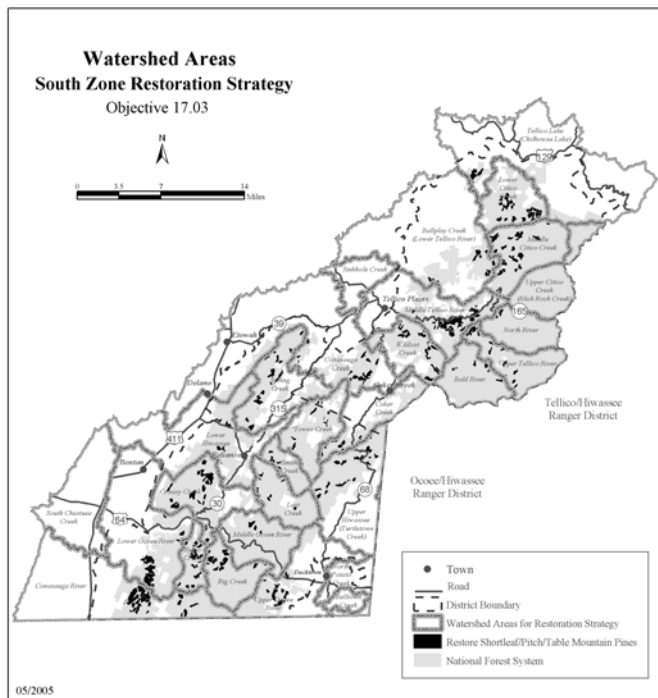
Approximately 7200 acres assigned to the south zone.

FOREST OBJECTIVE 17.03

Over the 10-year period, restore at least 10,000 acres of shortleaf/pitch/table-mountain pine forests.

ZONE OBJECTIVE

Approximately 8000 acres assigned to the south zone.





FOREST OBJECTIVE 17.04

Over the 10-year period, restore at least 300 acres to appropriate native communities currently occupied by loblolly pine plantations.

ZONE OBJECTIVE

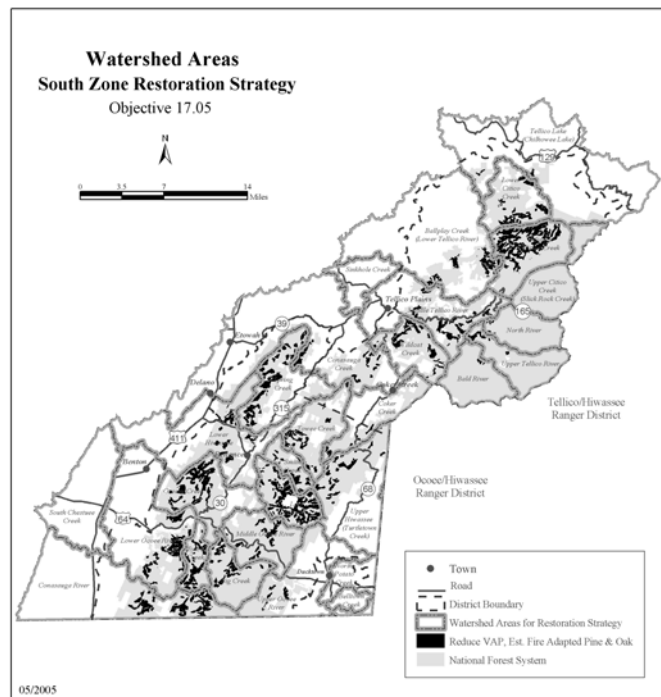
Approximately 300 acres assigned to the south zone.

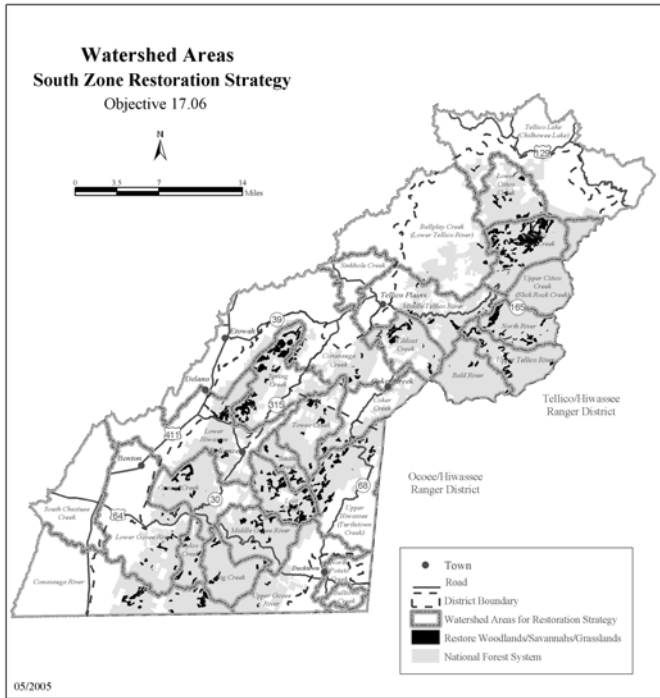
FOREST OBJECTIVE 17.05

Over the 10-year period, reduce the acreage of Virginia pine forest by at least 25,000 acres, through restoration of fire-adapted pine or oak communities.

ZONE OBJECTIVE

Approximately 23,250 acres assigned to the south zone.





FOREST OBJECTIVE 17.06

Restore at least 5,700 acres in dry and xeric oak and pine-oak forests to open woodlands, savannas, and grasslands over a 10-year period.

ZONE OBJECTIVE

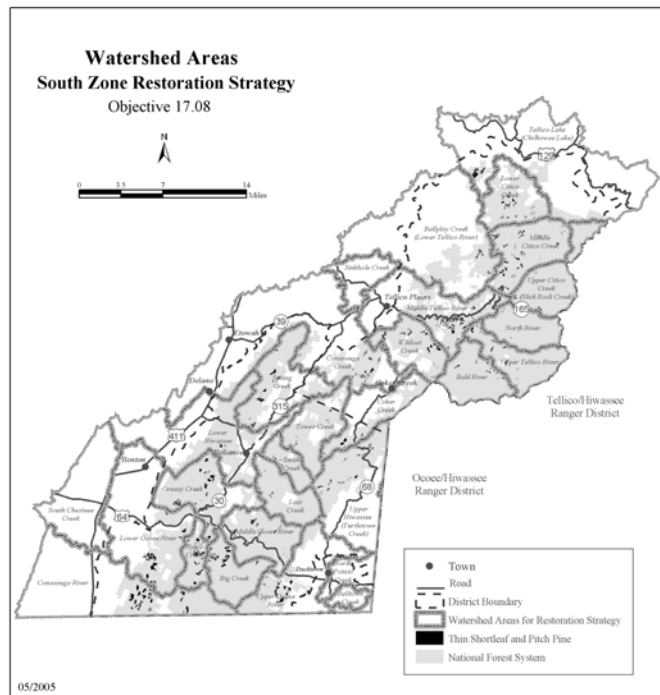
Approximately 3705 acres assigned to the south zone.

FOREST OBJECTIVE 17.08

Thin an average of at least 100 acres per year of shortleaf/pitch pine forest, in an effort to maintain a target basal area of approximately 60-80 square feet per acre.

ZONE OBJECTIVE

Approximately 920 acres assigned to the south zone.



GOAL 21

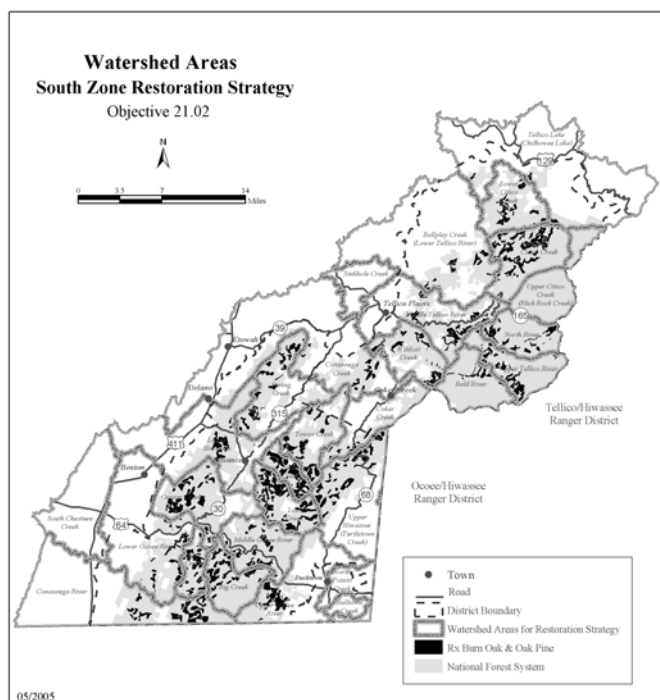
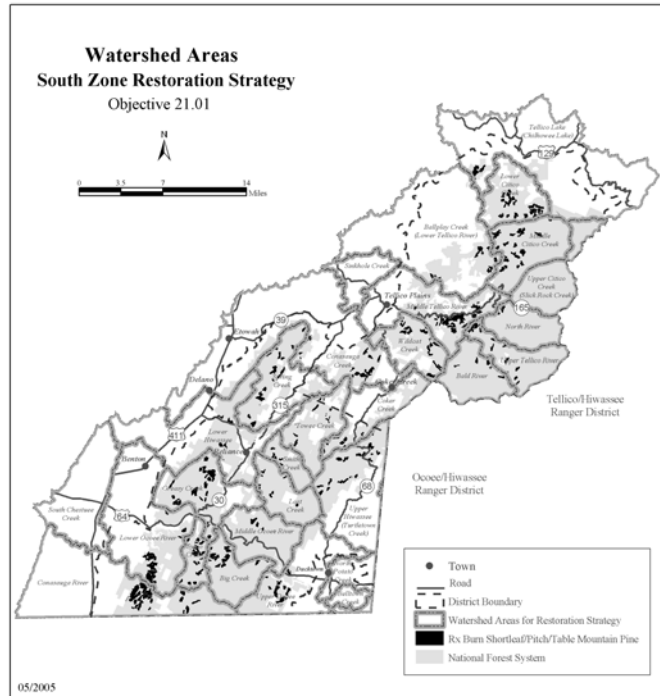
Use fire during dormant and growing seasons to achieve ecological sustainability, rehabilitation, and restoration of fire dependant and associated communities. Identify and establish appropriate "burning blocks" that facilitate the use of prescribed fire to maintain and restore fire dependant and associated communities

FOREST OBJECTIVE 21.01

Prescribe burn an average of at least 1,100 acres per year of shortleaf/pitch/table-mountain pine forest, in an effort to maintain a fire return cycle of 4-12 years.

ZONE OBJECTIVE

Approximately 8800 acres assigned to the south zone.



FOREST OBJECTIVE 21.02

Prescribe burn an average of at least 5,200 acres per year of oak and oak-pine forests in an effort to maintain a 4-12 year fire return cycle.

ZONE OBJECTIVE

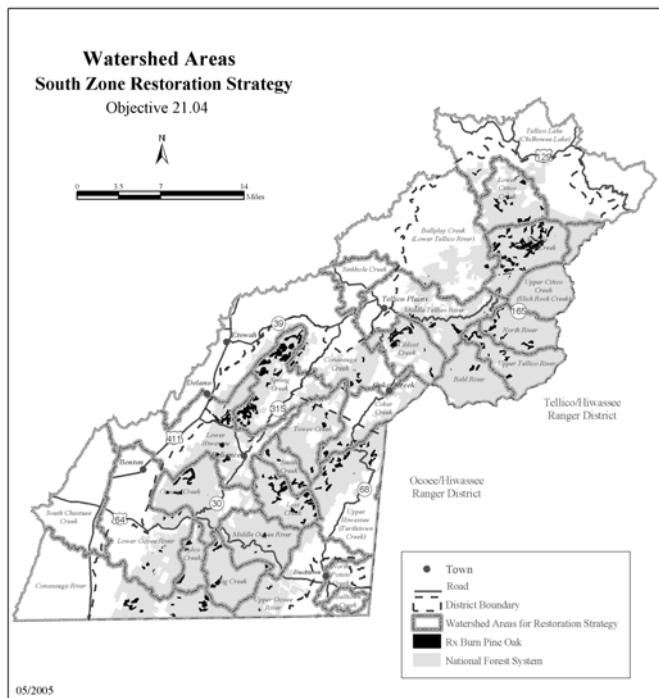
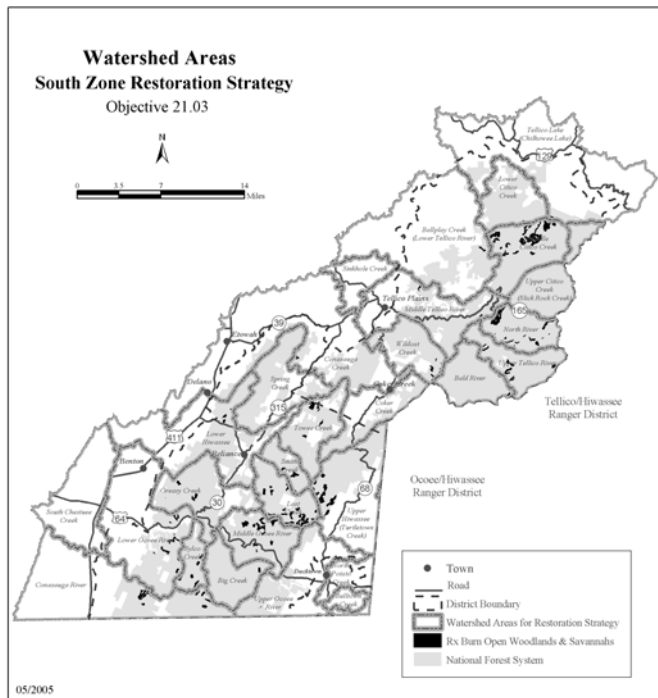
Approximately 28,600 acres assigned to the south zone.

FOREST OBJECTIVE 21.03

Prescribe burn an average of 2,600 acres per year [decade] of open woodlands, savannas, and grasslands, in an effort to maintain a fire return cycle of 4-12 years in dry and xeric oak forests, woodland, grasslands, and savannas.

ZONE OBJECTIVE

Approximately 1040 acres assigned to the south zone.



FOREST OBJECTIVE 21.04

Prescribe burn an average of at least 1,200 acres per year of pine-oak forests, in an effort to maintain a fire return cycle of 4-12 years.

ZONE OBJECTIVE

Approximately 10,200 acres assigned to the south zone.

10 Year Action Plan

Key goals for this document were to determine the order watersheds would be assessed for possible Plan implementation and what is the expected output of each watershed. Table 2 displays the watershed/project order of entry, based on date of NEPA documentation completion. This table indicates each watershed will be assessed for Plan implementation during the 10 to 15 year life of the Plan. Table 3 displays the potential outputs for each watershed/project. Note that this entry schedule and outputs assume appropriate funding and personnel are available and targets assigned. Because the outputs were equitably divided among the pool acres in each watershed the total acres achieved for each objective closely match the assigned acres displayed in Table 1 (page 5).

Table 2. Order of Entry

Year of NEPA Completion	Watershed (see map page 2)
2006	Towee Lost Creek RGA Noxious Weeds
2007	Upper Hiwassee/Coker Creek Game Habitat Improvement Project
2008	Greasy Creek Spring Creek
2009	Middle Citico/Upper Citico Conasauga River
2010	Middle Tellico Upper Tellico
2011	Conasauga Creek Wildcat Creek
2012	Lower Ocoee North River
2013	Lower Citico Big Creek
2014	Sylco Creek Ballplay Creek
2015	Middle Ocoee Upper Ocoee
2016	Bald River Tellico Lake
2017	Lower Hiwassee Smith Creek

Table 3. Potential Outputs

	Watershed or Project	19.01 Sawtimber Provided	0-10 Age Class Acres (multiple Obj)	12.01 High Elev Open	12.02 Small Canopy gaps	17.01 Restore White Pine Plantations	17.02 Restore Oak/Oak Pine	17.03 Restore Pine Forests	17.04 Diversity Loblolly Plantations	17.05 Reduce Virginia Pine	17.06 Restore Savannas	17.08 Thin Pine Forests	21.01 Burn Pine Forests	21.02 Burn oak/loak-pine forests	21.03 Burn Open Woodlands	21.04 Burn Pine-Oak Forests
		CCF	ac	ac	ac	ac	ac	ac	ac	ac	ac	ac	ac	ac	ac	ac
2006	Towee	21,033	1,416	0	8	149	243	154	17	670	105	13	168	1,570	46	211
	Lost Creek	12,591	784	30	5	202	692	173	0	2,460	394	15	188	2,969	153	881
	RGA Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nox Weed Project	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Year Total	33,624	2,200	30	13	351	935	327	17	3,130	499	28	356	4,539	199	1,092
2007	Upper Hiwassee	13,544	834	30	15	233	519	367	27	850	291	28	401	2,011	119	625
	Coker Creek	8,545	563	0	5	82	129	134	59	305	51	15	147	502	0	209
	GHI Project	5,639	370	0	0	58	429	355	0	1,073	85	54	388	1,437	24	232
	Year Total	27,728	1,767	30	20	373	1,077	856	86	2,228	427	97	936	3,950	143	1,066
	Running Total	61,352	3,967	60	33	724	2,012	1,183	103	5,358	926	125	1,292	8,489	342	2,158
2008	Greasy Creek	11,102	770	0	21	40	600	613	0	1,750	121	69	668	1,731	20	409
	Spring Creek	20,312	1,193	0	13	450	541	445	85	1,990	502	35	486	1,163	1	2,084
	Year Total	31,414	1,963	0	34	490	1,141	1,058	85	3,740	623	104	1,154	2,894	21	2,493
	Running Total	92,766	5,930	60	67	1,214	3,153	2,241	188	9,098	1,549	229	2,446	11,383	363	4,651
2009	Upper Citico	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0
	Middle Citico	12,202	856	5	1	0	380	530	0	2,963	556	69	580	2,188	172	1,464
	Conasauga River	9,002	604	0	7	68	419	836	22	1,652	188	91	912	1,283	50	534
	Year Total	21,204	1,460	5	8	68	799	1,366	22	4,615	744	178	1,492	3,471	222	1,998
	Running Total	113,970	7,390	65	75	1,282	3,952	3,607	210	13,713	2,293	407	3,938	14,854	585	6,649
2010	Middle Tellico	12,798	892	0	0	37	278	618	0	1,002	65	84	674	1,043	8	233
	Upper Tellico	1,011	19	10	7	93	242	466	0	305	177	33	508	1,505	66	405
	Year Total	13,809	911	10	7	130	520	1,084	0	1,307	242	117	1,182	2,548	74	638
	Running Total	127,779	8,301	75	82	1,412	4,472	4,691	210	15,020	2,535	524	5,120	17,402	659	7,287
2011	Conasauga Creek	16,502	1,052	0	12	222	269	322	21	764	107	29	352	500	9	403
	Wildcat Creek	16,910	1,188	1	1	34	164	403	0	887	139	46	440	944	37	397
	Year Total	33,412	2,240	1	13	256	433	725	21	1,651	246	75	792	1,444	46	800
	Running Total	161,191	10,541	76	95	1,668	4,905	5,416	231	16,671	2,781	599	5,912	18,846	705	8,087
2012	Lower Ocoee	7,943	544	0	3	40	282	527	22	1,387	75	66	575	775	37	125
	North River	1,263	68	116	33	40	280	54	0	151	189	11	59	825	91	338
	Year Total	9,206	612	116	36	80	562	581	22	1,538	264	77	634	1,600	128	463
	Running Total	170,397	11,153	192	131	1,748	5,467	5,997	253	18,209	3,045	676	6,546	20,446	833	8,550
2013	Lower Citico	12,106	767	0	1	169	257	485	0	921	109	29	519	870	9	406
	Big Creek	2,960	198	0	11	24	210	192	0	456	30	30	210	828	5	113
	Year Total	15,066	965	0	12	193	467	677	0	1,377	139	59	729	1,698	14	519
	Running Total	185,463	12,118	192	143	1,941	5,934	6,674	253	19,586	3,184	735	7,275	22,144	847	9,069
2014	Sylco Creek	2,680	172	0	1	34	220	163	17	618	55	23	178	610	22	119
	Ballplay Creek	18,641	1,276	0	2	97	206	252	0	899	26	20	274	457	4	87
	Year Total	21,321	1,448	0	3	131	426	415	17	1,517	81	43	452	1,067	26	206
	Running Total	206,784	13,566	192	146	2,072	6,360	7,089	270	21,103	3,265	778	7,727	23,211	873	9,275
2015	Middle Ocoee	5,385	385	0	13	0	234	115	0	552	110	33	126	948	85	40
	Upper Ocoee	3,076	213	0	0	10	102	253	0	161	16	45	276	896	7	32
	Year Total	8,461	598	0	13	10	336	368	0	713	126	78	402	1,844	92	72
	Running Total	215,245	14,164	192	159	2,082	6,696	7,457	270	21,816	3,391	856	8,129	25,055	965	9,347
2016	Bald River	111	8	5	1	0	61	142	0	73	42	26	154	543	13	112
	Tellico Lake	3,207	229	3	0	0	72	162	0	124	42	31	177	368	24	56
	Year Total	3,318	237	8	1	0	133	304	0	197	84	57	331	911	37	168
	Running Total	218,563	14,401	200	160	2,082	6,829	7,761	270	22,013	3,475	913	8,460	25,966	1,002	9,515
2017	Lower Hiwassee	9,367	589	0	0	140	219	122	56	672	110	7	133	704	8	421
	Smith Creek	4,666	318	0	5	26	116	87	21	599	93	9	94	1,735	37	205
	Year Total	14,033	907	0	5	166	335	209	77	1,271	203	16	227	2,439	45	626
	Grand Total	232,596	15,308	200	165	2,248	7,164	7,970	347	23,284	3,678	929	8,687	28,405	1,047	10,141

Notes

- 1) All numbers are based on 1992 data and substantial errors may exist in projected potential outputs.
- 2) Volume projections should be divided in half for planning purposes until a track record has been established.
- 3) Most useful aspect is the "relative" distribution of outputs rather than the absolute number.

The following **assumptions** were used in determining achievable outputs for the south zone:

Objective 12.01, because of the limited existing acres, was determined by using the current existing habitat.

Management Prescription specific 0 to 10 age class was calculated by determining the acres of MP in each watershed and then multiplying the appropriate acreage by a midrange percentage (i.e. for MP 8.A.1 - 4-10%, 7% was chosen as midrange).

Volume figures were only calculated for Objective 17.01 (thinning) and the 0-10 objective. The harvesting of any stand for any particular objective could overlap with several other objectives. Adding the volume output from each objective could therefore overestimate the total volume output. Therefore, the 0-10 objective and thinning were chosen as the sole outputs of volume. Acreages by 0-10 and 17.01 were multiplied by an average volume per acre figure (14 CCF and 8 CCF respectively) to determine total output.

High Priority Projects and Unique Opportunities

There are many Forest Plan objectives that can be achieved over the next 10-15 year planning period following the watershed by watershed approach. However, many objectives can only be accomplished on a smaller scale based on availability of the forest/habitat types on the south zone, need to be accomplished over numerous watersheds at the same time, or are based on natural occurrences. Following is an incomplete list of those objectives that need to be evaluated separately from the watershed process.

- 1) Ruth's golden aster – Control encroaching vegetation by herbicide
- 2) Noxious Weeds Analysis and Action Plan
- 3) Rhododendron thinning along streams for brook trout.
- 4) Hiwassee River bank stabilization and dump cleanup along Polk County Road 37
- 5) Cerulean warbler – Objective 12.02 – Create small canopy gaps in mid and late successional mesic deciduous forests
- 6) Golden winged warbler – Objective 12.01 – Create and maintain open areas in high elevation areas
- 7) Native grasses – Objective 17.09 – Convert fescue openings to native vegetation
- 8) Invasive exotics – Treat invasives (plants and otherwise)
- 9) Creating open areas – Create open areas dominated by grasses and other herbs needed for habitat needs of suite of species. This could be related to several objectives and achieved by tree harvest and/or burning after insect event, wildfire, etc (Objectives 17.60, 21.03)
- 10) Soil and water improvement needs (Objective 1.01)
- 11) Restore and maintain table mountain pine forest (Objective 9.F-1.04 and 1.05)
- 12) Consider restoration of montane spruce-fir forest (Objective 9.F-4.01)
- 13) Forest Health Projects - Countering disease or insect outbreaks that threaten forest health. This may also be intermediate stand treatments such as release, thinning or non commercial thinning that are needed for the survival of certain tree species.
- 14) Salvage Projects - Following insect, disease, fire or weather event. Recovers value, prepares site for restoration and reduces fire hazard.
- 15) Restoration Projects - Returning an area to its ecologically appropriate forest community in the aftermath of SPB, fire, etc. The restoration of SPB stands is the most pressing vegetation management activity at this time.

Watershed Descriptions

Conasauga River Watershed

The headwaters of the Conasauga River are in Georgia, where much of the watershed is associated with the Cohutta Wilderness. The river leaves Georgia and flows through a small portion of Tennessee before returning to Georgia further downstream.

The Conasauga River is widely recognized for the remarkable diversity of life within and outside of its banks. The watershed contains 12 species of aquatic animals that are considered to be threatened or endangered. Three of these species are fish and nine of the species are mussels. The watershed is considered to be critical for protecting freshwater diversity. The Nature Conservancy has listed it as a “hot spot” with 10 or more at-risk freshwater fish and mussel species and as a critical watershed to conserve at-risk fish and mussel species. The river, within the Cherokee National Forest, was nominated as an Outstanding National Resource Water by the Tennessee Department of Environment and Conservation, but this status was never granted.

Table 4. Conasauga River Watershed Potential Outputs

Watershed	17.01 Acres Volume(CCF)		17.02 Acres	17.03 Acres	17.04 Acres	17.05 Acres	17.06 Acres	17.08 Acres
Conasauga River 13,059	68	540	419	836	22	1652	188	91

Watershed	12.01 Acres	12.02 Acres	21.01 Acres	21.02 Acres	21.03 Acres	21.04 Acres	0-10 Acres Volume (CCF)	
Conasauga River 13,059	0	7	912	1283	50	534	604	8462

Conasauga River - 13,000 acres (29% ownership)

Key Elements

- See Forest Plan watershed assessment
- State reference stream (Sheeds Creek) (acquire reference data for other Blue ridge streams)
- 41 miles of Forest Roads
- 3 fish and 9 mussels federally listed
- 12 rare species: 9 plant species (3 sensitive, 6 locally rare) representing 26 sites. 3 animal species (all locally rare) representing 4 sites.

Opportunities/Risks

- Wild/Scenic River
- Conasauga River Alliance
- Rare Plant active management/monitoring White Fringeless Orchid, Trillium
- Aquatic invasive species (red shiner)
- Invasive Species (see one list) esp. in floodplain area - bottomland hardwood restoration?
- Sharp decline in mussel populations

- Objectives 17.01, 17.02, 17.03, 17.04 (loblolly), 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04 No 12.01 or 9.F
- No WUI or fire occurrence drivers for fuels reduction/wildfire prevention activities
- Illegal OHV/horse use
- See plan for road opportunities
- Dispersed recreation
- Designated watchable wildlife area (aquatic)
- Used (only spot on forest for aquatic) for educational activities (FP Goal 29)
- Loblolly pine plantations-conversion to bottomland hardwoods?
- Hemlock Conservation Area
- The sensitive *silene ovata* is only known from four sites forest wide and this is the only occurrence on the southern portion of the Forest. Consider re-locating and monitoring. Only site for *Trillium decumbens* on the Forest – Roadside! Current monitoring of *Platanthera integrilabia*.

Little Tennessee River Watershed

The Little Tennessee River originates in western North Carolina and flows west until entering the State of Tennessee. The majority of this 5th level watershed is composed of the Citico Creek watershed, that is a large tributary stream to the Little Tennessee River.

Citico Creek is widely recognized for its scenic beauty, and the diversity of life within and outside of its banks. The watershed contains 3 threatened and endangered aquatic animal species and 3 species of sensitive aquatic animals. Citico Creek has been designated as critical habitat for one threatened and endangered species, the Smoky Madtom. In addition, the watershed has extremely unique non-vascular flora. There is a wide diversity of fish species with 59 native species in the watershed within the proclamation boundary. The Little Tennessee River is classified by the State of Tennessee for domestic water supply. The lower Little Tennessee River watershed is considered to be critical for protecting freshwater diversity. The Nature Conservancy has listed it as a “hot spot” with 10 or more at-risk freshwater fish and mussel species and as a critical watershed to conserve at-risk fish and mussel species.

Table 5. Little Tennessee River Watershed Potential Outputs

Watershed	17.01		17.02	17.03	17.04	17.05	17.06	17.08
	Acres	Volume(CCF)						
Middle Citico 18,148	0	0	380	530	0	2963	556	69
Lower Citico 10,949	169	1356	257	485	0	921	109	29
Upper Citico 15,728	0	0	0	0	0	0	0	18
Tellico Lake 5,337	0	0	72	162	0	124	42	31

Watershed	12.01	12.02	21.01	21.02	21.03	21.04	0-10	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Volume (CCF)
Lower Citico 10,949	0	1	519	870	9	406	767	10750
Upper Citico 15,728	0	0	0	0	0	0	0	0
Tellico Lake 5,337	3	0	177	368	24	56	229	3207
Middle Citico 18,148	5	1	580	2188	172	1464	856	12202

Little Tennessee River - 50,200 acres

Citico Creek 41,025 acres:

Middle Citico Creek 18,200 acres (99% ownership)

Key Elements

- Developed and Dispersed Recreation-Indian Boundary
- Invasive Species
- Trout fishery (put & take)
- Bear Reserve
- 54 miles of forest roads Citico Road, Jake Best Loop
- Hemlock Conservation Area, HWA

- 11 rare species: 4 plant species (1 sensitive, 3 locally rare) representing 7 sites. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (all locally rare) representing 24 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.01 (Farr Gap-5 acres), 12.02
- No major WUI issues. T6, T10, and T11 comprise approximately 6,000 ac. These units offer the greatest opportunity for hazardous fuels treatments. Fire occurrence drivers for fuels reduction/wildfire prevention activities in the rest of the watershed are minimal.
- Paving of Citico Road

Lower Citico Creek 11,000 acres (74% ownership)

Key Elements

- Wilderness
- Developed and Dispersed Recreation
- Invasive Species
- Trout fishery (put & take)
- Concentrated horse use
- 28 miles of forest roads Citico Road
- Hemlock Conservation Area, HWA
- 5 rare species: 4 plant species (1 sensitive, 3 locally rare) representing 11 sites. 1 animal species (locally rare) representing 1 site.
- 3 federally listed fish

Opportunities/Risks

- Objectives 12.02, 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.03, 21.02, 21.04
- Not 12.01
- No WUI issues. T1, T2, T3, T5 and T46 comprise approximately 5,400 ac. These units offer the greatest opportunity for hazardous fuels treatments. Fire occurrence drivers for fuels reduction/wildfire prevention activities in the rest of the watershed are minimal.
- Paving of Citico Road

Upper Citico Creek (Slick Rock Creek) 15,700 acres (100% ownership)

Key Elements

- Entirely wilderness
- Trout fishery
- 9.F
- Invasive Species
- Bear Reserve

- 2 miles of forest roads boundary??????
- Anakeesta impacts to 2 streams within wilderness
- Hemlock Conservation Area, HWA
- 21 rare species: 8 plant species (4 sensitive, 4 locally rare) representing 16 sites. Important area for non-vascular plants with many sites not recorded in database. 13 animal species (1 sensitive, 12 locally rare) representing 19 sites.
- One locally rare animal in Slick Rock watershed

Opportunities/Risks

- No WUI or fire occurrence drivers for fuels reduction/wildfire prevention activities

Tellico Lake 5,300 acres (Chilhowee Lake) 5,000 acres add from Tapoco totals approximately 10,000 acres (8% ownership)

Key Elements

- all of Hurricane Branch included
- Red Knobs/Post Oak woodlands rare community
- Ridge and Valley Province
- Unicoi Turnpike National Millennium Trail
- Dumping
- Illegal OHV area
- Grazing trespassing on rare community
- Nature Conservancy MOU with Tapoco lands
- Invasive Species
- 6.5 miles of forest roads
- 8 rare species: 7 plant species (3 sensitive, 4 locally rare) representing 9 sites. Important area for non-vascular plants with many sites not recorded in database. 1 animal species (Endangered) representing 1 site.
- Nesting Bald eagles
- Indiana Bat located 1999

Opportunities/Risks

- Red Knobs/Post Oak woodlands rare community-burning/harvesting opportunity (loblolly, vp)
- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04
- Not 12.01, 12.02
- No WUI or fire occurrence drivers for fuels reduction/wildfire prevention activities
- Indiana Bat located 1999
- Clean up dumps

Tellico River Watershed

The Tellico River emanates in western North Carolina and flows west until entering the State of Tennessee. The portion of the watershed associated with the Cherokee National Forest is located in the Blue Ridge Mountain Province.

The Tellico River is widely recognized for its beauty, and the diversity of life within and outside of its banks. The watershed contains 5 species of sensitive aquatic animals, 2 species of threatened and endangered terrestrial animals, 4 species of sensitive terrestrial animals and 13 species of State rare terrestrial animals. In addition, the watershed has extremely unique non-vascular flora and high elevation plant communities. There is a fairly wide diversity of fish species with 34 native species in the watershed within the proclamation boundary. The river is also the domestic water source for Tellico Plains.

Table 6. Tellico River Watershed Potential Outputs

Watershed	17.01		17.02	17.03	17.04	17.05	17.06	17.08
	Acres	Volume(CCF)						
Middle Tellico 13,589	37	300	278	618	0	1002	65	84
Upper Tellico 13,777	93	744	242	466	0	305	177	33
Wildcat Creek 10,481	34	270	164	403	0	887	139	46
North River 11,915	40	316	280	54	0	151	189	11
Ballplay Creek 9,621	97	777	206	252	0	899	26	20
Bald River 13,630	0	0	61	142	0	73	42	26

Watershed	12.01	12.02	21.01	21.02	21.03	21.04	0-10	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Volume (CCF)
Middle Tellico 13,589	0	0	674	1043	8	233	892	12498
Upper Tellico 13,777	10	7	508	1505	66	405	19	267
Wildcat Creek 10,481	1	1	440	944	37	397	1188	16640
North River 11,915	116	33	59	825	91	338	68	947
Bald River 13,630	5	1	154	543	13	112	8	111
Ballplay Creek 9,621	0	2	274	457	4	88	1276	17864

Tellico River - 73,000 acres

North River 11,900 acres (100% ownership)

Key Elements

- Skyway - Tellico Robbinsville Road
- Haw Knob rare community
- Trout fishery-including brook trout

- Dispersed and developed recreation
- 31 miles of forest roads in FP 217 north river road sediment, 61 Whigg meadow, 2417 Big Cove Road
- North River Bog rare community
- Sugar Cove rare community
- McNabb Creek
- Donley Cabin
- High Elevation
- Invasive Species
- Hemlock Conservation Area, HWA
- Carolina northern flying squirrel
- Small footed bats on skyway bridges
- 36 rare species: 19 plant species (5 sensitive, 14 locally rare) representing 46 sites. Important area for non-vascular plants with many sites not recorded in database. 17 animal species (1 Endangered, 2 sensitive, 14 locally rare) representing 46 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04
- 12.01, 12.02, 9.F
- Fire occurrence driver for fuels reduction approximately T23 Butler Knob and T33 Short Cut along North River short cut
- Rhoddie trimming
- Acid rain monitoring
- Carolina northern flying squirrel
- Highest diversity of rare species of all the south-end watersheds suggests need for sensitive management in this area.

Bald River 13,600 acres (98% ownership)

Key Elements

- MOSTLY Wilderness/Proposed Wilderness
- Developed and Dispersed Recreation
- Trout fishery-including brook trout
- Dispersed and developed recreation
- 13 miles of forest roads in FP 126 Bald River Road
- High Elevation
- Invasive Species
- 15 rare species: 9 plant species (4 sensitive, 5 locally rare) representing 10 sites. Important area for non-vascular plants with many sites not recorded in database. 6 animal species (1 sensitive, 5 locally rare) representing 15 sites.

Opportunities/Risks

- Objectives 12.01 (Waucheesi, Beaverdam Bald), 12.02, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04

- No 12.01 as in proposed wilderness area, No 9.F
- No WUI or fire occurrence drivers for fuels reduction/wildfire prevention activities
- The sensitive *Coreopsis latifolia* is a species dependent upon canopy gaps for flowering. Only six sites known forest wide. Consider re-locating and monitoring.

Upper Tellico River 13,800 acres (99% ownership)

Key Elements

- Trout fishery (put & take) including brook trout
- Dispersed and developed recreation
- Water based recreation
- Illegal OHV use
- Special Use permits (hatchery, recreation cabins)
- Green Cove private ownership
- 33 miles of forest roads in FP 210 Tellico River Rd sediments
- Upper Tellico OHV Area in NC
- Classified as domestic water source
- Wilderness area small portion
- Invasive Species
- Hemlock Conservation Area
- High Elevation
- Carolina northern flying squirrel
- Four federally listed fish being introduced as experimental populations down stream
- 17 rare species: 6 plant species (4 sensitive, 2 locally rare) representing 8 sites. Important area for non-vascular plants with many sites not recorded in database. 11 animal species (3 sensitive, 8 locally rare) representing 17 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04
- 12.01, 12.02
- Fire occurrence driver for fuels reduction approximately T22, T23 Butler Knob and T33 Short Cut and T34 3700 acres
- Carolina northern flying squirrel

Middle Tellico River 13,600 acres (49% ownership)

Key Elements

- Dispersed and recreation
- Illegal OHV use
- 60 miles of forest roads in FP 76, 314
- Upper Tellico OHV Area in NC
- Classified as domestic water source

- Invasive Species
- High Elevation Waucheesi
- montropsis odorata
- Hemlock Conservation Area
- Four federally listed fish being introduced as experimental populations
- 13 rare species: 6 plant species (2 sensitive, 4 locally rare) representing 13 sites. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (2 sensitive, 5 locally rare) representing 13 sites.
- One of few locations of Junaluska salamander (sensitive species)

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04
- 12.01, 12.02
- Significant WUI and high fire occurrence driver for fuels reduction T14, T15, T16, T19, T20, T21, T23, 11,000 acres
- One of few locations of Junaluska salamander (sensitive species)

Wildcat/Lyons Creek 10,500 acres (78% ownership)

Key Elements

- Invasive Species (see one list)
- 35 miles of forest roads
- High Elevation
- 9 rare species: 6 plant species (2 sensitive, 4 locally rare) representing 13 sites. 3 animal species (all locally rare) representing 3 sites.

- Significant *Monotropsis odorata* (sensitive plant) populations
- Anabat recording of Indiana bat

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04
- 12.01, 12.02
- Significant *Monotropsis odorata* (sensitive plant) populations
- Anabat recording of Indiana bat

Ballplay Creek (Lower Tellico River) 9,600 acres (18% ownership)

Key Elements

- Dispersed and developed recreation
- 30 miles of forest roads in FP
- Skyway – Tellico Robbinsville Road
- Dumping
- Invasive Species
- One locally rare plant site.
- Four federally listed fish being introduced as experimental populations upstream
- *Vertigo bollesiana* Delicate vertigo (sensitive snail) found in area

Opportunities/Risks

- Objectives 12.02, 17.01, 17.02, 17.03, 17.05, 17.06, 17.08, 21.01, 21.02, 21.04
- No 9.F, 12.01
- Significant WUI and moderate fire occurrence drivers for fuels reduction/wildfire prevention activities T14, T13 1,300 acres
- Majority 8.B

Hiwassee River Watershed

The Hiwassee River emanates in north Georgia and flows north and west through western North Carolina before entering Tennessee. The portion of the watershed associated with the Cherokee National Forest is located in the Blue Ridge Mountain Province.

The Hiwassee River is widely recognized for its beauty, and the diversity of life within and outside of its banks. The watershed contains 3 species of aquatic animals that are considered to be threatened or endangered, and 8 sensitive species. There is a wide diversity of fish species with 66 native species in the watershed within the proclamation boundary. The river is also a State mussel sanctuary. The watershed is considered to be critical for protecting freshwater diversity. The Nature Conservancy has listed it as a “hot spot” with 10 or more at-risk freshwater fish and mussel species and as a critical watershed to conserve at-risk fish and mussel species. The river, within the Cherokee National Forest, is designated as a State scenic river. The river is also the domestic water source for several downstream communities.

Table 7. Hiwassee River Watershed Potential Outputs

Watershed	17.01		17.02	17.03	17.04	17.05	17.06	17.08
	Acres	Volume(CCF)						
Spring Creek 14,321	450	3602	541	445	85	1990	502	35
Upper Hiwassee 14,024	233	1867	519	367	27	850	291	28
Lost Creek 11,412	202	1614	692	173	0	2460	394	15
Towee 11,837	149	1198	243	154	17	670	105	13
Lower Hiwassee 15,177	140	1123	219	122	56	672	110	7
Smith Creek 5,716	26	208	116	87	21	599	93	9
Coker Creek 7,444	82	661	129	134	59	305	51	15

Watershed	12.01	12.02	21.01	21.02	21.03	21.04	0-10	
							Acres	Acres
Spring Creek 14,321	0	13	486	1163	1	2084	1193	16710
Upper Hiwassee 14,024	30	15	401	2011	119	625	834	11677
Lost Creek 11,412	30	5	188	2969	153	881	784	10977
Towee 11,837	0	8	168	1570	46	211	1416	19835
Lower Hiwassee 15,177	0	0	133	704	8	421	309	4323
Smith Creek 5,716	0	5	94	1735	37	205	318	4458
Coker Creek 7,444	0	5	147	502	0	209	563	7884

Hiwassee River - 79,900

Smith Creek 5,700 acres (97% ownership)

Key Elements

- Dispersed recreation
- 18 miles of forest roads in FP
- State Scenic River
- Trout fishery
- Railroad hazardous materials hauling
- Invasive Species
- TVA powerline
- Water Based recreation
- 12 rare species: 7 plant species (1 sensitive, 6 locally rare) representing 8 sites. 5 animal species (all locally rare) representing 5 sites.
- TES aquatic, snail darter

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.04, 12.02,
- No 9.F, 12.01
- Significant WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities. O11, O12, O13, and O20 comprise approximately 5,600 acres.

Towee Creek 11,800 acres (79% ownership)

Key Elements

- Dispersed recreation
- 40 miles of forest roads
- State Scenic River
- Railroad hazardous materials hauling
- Invasive Species
- TVA powerline
- southern pine beetle impacts
- Partially impaired watershed
- 10 rare species: All plant species (1 Endangered, 2 sensitive, 7 locally rare) representing 18 sites.
- RGA
- TES aquatic, 2 federally listed mussels

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02,
- No 9.F, 12.01
- Significant WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities. O8, O9, and O14 comprise approximately 5,500 acres.
- Habitat management for *Pityopsis ruthii* is high priority.

Lost Creek 11,400 acres (93% ownership)

Key Elements

- Dispersed and developed recreation
- 49 miles of forest roads
- Southern Pine beetle impacts
- Invasive Species
- Trout fishery
- Acid impacts (natural)
- TVA powerline
- Hemlock Conservation Area
- High elevation
- 8 rare species: 3 plant species (all sensitive) representing 6 sites. 5 animal species (1 sensitive, 4 locally rare) representing 7 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.01, 12.02
- Moderate WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities. O29 is approximately 4,300 acres.
- This area supports a large meta-population of *Trillium simile* the extent of which has not been determined

Lower Hiwassee 15,200 acres (40% ownership)

Key Elements

- Dispersed and developed recreation
- 43 miles of forest roads
- Southern Pine beetle impacts
- Invasive Species
- Trout fishery
- Wilderness Gee Creek
- State Scenic River
- Cooperators tourism
- Railroad hazardous materials hauling
- Water based recreation
- Oswald Dome lookout
- TES aquatic, snail darter
- 15 rare species: 11 plant species (3 sensitive, 8 locally rare) representing 18 sites. 4 animal species (all locally rare) representing 4 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04,
- No 12.01, 12.02
- Significant WUI is the primary driver for fuels reduction/wildfire prevention

activities. O7, O10, O18, and O19 comprise approximately 5,400 acres.

- *Isoetes tennesseensis* is a recently described G1 species. Meets current criteria to be on the sensitive list.

Upper Hiwassee River (Turtletown Creek)

14,000 acres (48% ownership)

Key Elements

- Dispersed recreation
- 50 miles of forest roads
- State Scenic River
- State Mussel Sanctuary
- Railroad hazardous materials hauling
- Invasive Species
- Partially impaired watershed
- Hemlock Conservation Area
- 9 rare species: 8 plant species (1 Endangered, 1 sensitive, 6 locally rare) representing 9 sites. 1 locally rare animal site.
- 2 federally listed mussels
- RGA
- 2 federally listed mussels
- Buck Bald
- Dumping

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02, 12.01
- No 9.F
- Significant WUI and high fire occurrence drivers for fuels reduction/wildfire prevention, O14, O15, O17, O24 8500 acres
- Fish viewing site off of Hwy 68
- Bank stabilization/dump cleanup along Polk County Rd 37 (Shuler Creek)
- Habitat management for *Pityopsis ruthii* is high priority

Coker Creek 7,500 acres (48% ownership)

Key Elements

- Dispersed recreation
- 25 miles of forest roads
- Dumping

- Unicoi Turnpike National Millennium Trail
- Coker Creek Scenic Area
- Invasive Species (see one list)
- High elevation
- Doc Rogers fields warm season grasses

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.01, 12.02
- No 9.F
- Significant WUI and high fire occurrence drivers for fuels reduction/wildfire prevention activities
- Waucheesi 12.01 (1 acre)

Spring Creek 14,300 acres (68% ownership)

Key Elements

- Dispersed and developed recreation – horse concentration area
- Bullet Creek Botanical Area
- rare bryophytes (Bullet Creek falls etc...)
- 56 miles of forest roads - Mcfarland
- Southern Pine beetle impacts
- Invasive Species
- Starr Mtn lookout
- 8 rare species: 1 plant species (sensitive) representing 1 site. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (all locally rare) representing 8 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- No 12.01
- Significant WUI and moderate fire occurrence drivers for fuels reduction/wildfire prevention activities O2, O3 and O1, 5,000 acre
- Bullet Creek Botanical Area 9F *Platanthera integrilabia*
- Mostly 9.H

Conasauga Creek Watershed

Conasauga Creek is a large tributary stream of the Hiwassee River. The portion of the watershed associated with the Cherokee National Forest is primarily located in the Blue Ridge Mountain Province.

Conasauga Creek is typical of other tributary streams within the Hiwassee River drainage. The watershed is not known to contain any species of aquatic animals that are considered to be threatened, endangered or sensitive. There is limited diversity of fish species with 5 native species in the watershed within the proclamation boundary. The watershed is a fairly large tributary of the Hiwassee River which is considered to be critical for protecting freshwater diversity. The Nature Conservancy has listed the Hiwassee as a “hot spot” with 10 or more at-risk freshwater fish and mussel species and as a critical watershed to conserve at-risk fish and mussel species. .

Table 8. Conasauga Creek Watershed Potential Outputs

Watershed	17.01		17.02	17.03	17.04	17.05	17.06	17.08
	Acres	Volume(CCF)						
Conasauga Creek 11,490	222	1780	269	322	21	764	107	29

Watershed	12.01	12.02	21.01	21.02	21.03	21.04	0-10	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Volume (CCF)
Conasauga Creek 11,490	0	12	352	500	9	403	1052	14722

Conasauga Creek - 11,500 acres (17% ownership)

Key Elements

- Dispersed recreation
- 41 miles of forest roads from FP -
- Southern Pine beetle impacts
- Dumping
- 6 species of fish limited in certain streams
- Bowater acquired tract
- Invasive Species
- One locally rare plant site

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- No 12.01
- Significant WUI and moderate fire occurrence drivers for fuels reduction/wildfire prevention activities T44, T45 and O3, 5,000 acre
- Fish reintroduction

Ocoee River Watershed

The Ocoee River emanates in Georgia, and flows north-northwest until entering the State of Tennessee. The portion of the Ocoee River watershed associated with the Cherokee National Forest is located in the Blue Ridge Mountain Province. Topography in the watershed is characterized by steep to very steep slopes and narrow ridges that are dissected by fairly steep, narrow valleys.

The Upper Ocoee River watershed in Tennessee was severely impacted by copper mining and smelting during the 19th and part of the 20th centuries. Other influences include historic logging and flow alteration of the river for power generation. These impacts have rendered the mainstem of the Ocoee River as impaired. The river does not meet its designated use classification which is domestic water supply to river mile 17, or the use classification of fish and aquatic life.

Tributary streams on National Forest lands within the Ocoee River watershed are generally in excellent condition, and all meet established State use classifications.

Table 9. Ocoee River Watershed Potential Outputs

Watershed	17.01		17.02	17.03	17.04	17.05	17.06	17.08
	Acres	Volume(CCF)						
Greasy Creek 15,502	40	320	600	613	0	1750	121	69
Lower Ocoee 12,968	40	320	282	527	22	1387	75	66
Big Creek 12,376	47	379	419	385	0	913	61	61
Sylco Creek 6,389	68	545	440	326	17	1235	109	47
Middle Ocoee 14,632	0	0	234	115	0	552	110	33
Upper Ocoee 9,338	10	83	102	253	0	161	16	45

Watershed	12.01	12.02	21.01	21.02	21.03	21.04	0-10	
							Acres	Acres
Greasy Creek 15,502	0	21	668	1731	20	409	770	10782
Lower Ocoee 12,968	0	3	575	775	37	125	544	7623
Big Creek 12,376	0	11	420	1656	5	227	395	5541
Sylco Creek 6,389	0	1	356	1219	44	237	343	4813
Middle Ocoee 14,632	0	13	126	948	85	40	13320	186490
Upper Ocoee 9,338	0	0	276	896	7	32	213	2993

Ocoee River - 71,200 acres

Big Creek 12,400 acres (100% ownership)

Key Elements

- Big Frog Wilderness
- Bear Reserve
- Trout fishery (put and take)
- Dispersed recreation
- 29 miles of forest roads
- Southern Pine beetle impacts
- Invasive Species
- Hemlock Conservation Area
- High elevation
- 15 rare species: 10 plant species (3 sensitive, 7 locally rare) representing 27 sites. 5 animal species (all locally rare) representing 5 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.01, 12.02
- No WUI or fire occurrence issues .
- Stewardship Project
- The sensitive *Coreopsis latifolia* is a species dependent upon canopy gaps for flowering. Only six sites known forest wide. Consider re-locating and monitoring.

Greasy Creek 15,500 acres (77% ownership)

Key Elements

- Dispersed recreation
- Developed recreation Parksville & Chilhowee
- 68 miles of forest roads from FP -
- Southern Pine beetle impacts
- Rock Creek Scenic Area
- Invasive Species (see one list)
- Seed Orchard
- Trout fishery (put and take)
- Scenic Byway (NFSR 77)
- Hemlock Conservation Area
- 14 rare species: 9 plant species (4 sensitive, 5 locally rare) representing 24 sites. 5 animal species (1 sensitive, 4 locally rare) representing 8 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- Significant WUI and high fire occurrence drivers for fuels reduction/wildfire prevention activities O36, 1,100 acre
- Stewardship Project
- Hwy 64 reroute potential
- Conservation strategy for *Sedum nevii* suggests habitat management (removal of woody vines)
- may be necessary along Ocoee Gorge. Sites along Highway 64 for the sensitive species *Lysimachia fraseri* should be monitored and protected from road maintenance activities.

Lower Ocoee River 13,000 acres (33% ownership)

Key Elements

- Developed and dispersed recreation
- Parksville Lake
- Special use permits (Recreation Residences, 2 camps, Ocoee Inn)
- RCW HWA
- Water Based recreation
- 58 miles of forest roads
- Southern Pine beetle impacts
- Invasive Species
- TVA
- Scenic Byway (Hwy 64, NFSR 77)
- Illegal OHV use
- 5 rare species: All are plant species (2 sensitive, 3 locally rare) representing 8 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities. O35, O44, and O54 comprise approximately 5,500 acres.
- Hwy 64 reroute potential
- Conservation strategy for *Sedum nevii* suggests habitat management (removal of woody vines) may be necessary along Ocoee Gorge. Sites along Highway 64 for the sensitive species *Lysimachia fraseri* should be monitored and protected from road maintenance activities.

Middle Ocoee River 14,600 (92% ownership)

Key Elements

- Developed and dispersed recreation
- Water Based recreation
- 48 miles of forest roads from FP -
- Southern Pine beetle impacts
- Invasive Species (see one list)
- TVA powerline
- RGA
- White water Center
- Mountain Bike concentration area
- Scenic Byway (Hwy 64, NFSR 77)
- Whitewater O&G permits
- Impaired watershed
- Little Frog Wilderness
- Anakeesta acid natural
- High elevation
- 10 rare species: 8 plant species (1 Endangered, 3 sensitive, 4 locally rare) representing 30 sites. 2 animal species (locally rare) representing 3 sites.
- 1200 acres missing data in CISC (Compartment 329) hence not included in any queries

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities. O37, O38, O39, O49, O50, O51 comprise approximately 8,300 acres.
- Hwy 64 reroute potential
- TVA powerline relocation
- Stewardship Project
- Conservation strategy for *Sedum nevii* suggests habitat management (removal of woody vines) may be necessary along Ocoee Gorge. Sites along Highway 64 for the sensitive species *Lysimachia fraseri* should be monitored and protected from road maintenance activities.

Upper Ocoee 9,300 acres (39% ownership)

Key Elements

- 22 miles of forest roads
- High elevation
- Little Frog Wilderness
- 5 rare species: 2 plant species (locally rare) representing 2 sites. 3 animal species (locally rare) representing 3 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.01, 12.02
- Significant WUI and high fire occurrence are drivers for fuels reduction/wildfire prevention activities O52, O53, and O65 comprise approximately 2,500 acres.

Sylco Creek 6,400 acres (96% ownership)

Key Elements

- Developed and dispersed recreation
- Water Based recreation
- 26 miles of forest roads
- Southern Pine beetle impacts
- Invasive Species (see one list)
- Heritage resource
- Anakeesta acid natural
- Illegal OHV use
- Hemlock Conservation Area
- 4 rare species: 2 plant species (1 sensitive, 1 locally rare) representing 2 sites. 2 animal species (locally rare) representing 2 sites.

Opportunities/Risks

- Objectives 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.08, 21.01, 21.02, 21.03, 21.04, 12.02
- No WUI or fire occurrence issues .
- Stewardship Project

Team Members

Janan Hay	ID Team Leader
Mark Pistrang	Botanist/Ecologist/ Riparian Resources
Jim Herrig	Aquatic Resources
Mary Dodson	Terrestrial Wildlife
Mike Nicolo	Watershed/Forest Products
Bob Lewis	Forest Health
Marty Bentley	Fuels/Fire Management
Anita Bailey	GIS Specialist

Line Officers

Monte Williams District Ranger Ocoee/Hiwassee RD	Keith Lannom District Ranger Tellico RD
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GOS Team Objective Distribution Of the Quantifiable 2004 Revised Plan Goals & Objectives

2004 Revised Plan Goals & Objectives	North Zone	South Zone
<p>OBJECTIVE 1.01 Soil and water improvement needs (necessary to help restore watershed condition) are prioritized annually based on findings in watershed analyses. Collaborate with adjacent landowners to identify and prioritize watershed improvement projects affecting multiple ownerships.</p>	<p>Determined at districts</p>	<p>Determined at districts</p>
<p>GOAL 9 Consider evaluating opportunities for restoration of canebrakes through watershed assessments.</p>	<p>Will be discussed during Ecosystem Evaluations</p>	<p>Will be discussed during Ecosystem Evaluations</p>
<p>OBJECTIVE 12.01 Maintain at least 1000 acres above 3000 feet elevation in habitats characterized by grassy/herbaceous ground cover. This acreage may be comprised of open woodlands, savannas, and grasslands; old fields; and regenerating forests (0-10 years old).</p>	<p>Approx, 800 ac</p>	<p>Approx, 200 ac</p>
<p>OBJECTIVE 14.01 In cooperation with partners, develop and implement monitoring plans for all T&E species during the next 10-year period. Develop and implement conservation strategies for sensitive species or groups of species.</p>	<p>SO response</p>	<p>SO response</p>
<p>OBJECTIVE 17.01 Over the ten-year period, restore at least 5000 acres of diverse native communities appropriate to sites currently occupied by white pine plantations.</p>	<p>5116.1 Ac (Approx. 55%)</p>	<p>4331.7 Ac (Approx. 45%)</p>
<p>OBJECTIVE 17.02 Over the 10-year period, restore oak or oak-pine forests on at least 9,000 acres of appropriate sites currently occupied by pine plantations or other sites with minimal diversity.</p>	<p>6635.9 Ac (Approx 20%)</p>	<p>22407.3 Ac (Approx 80%)</p>

2004 Revised Plan Goals & Objectives	North Zone	South Zone
OBJECTIVE 17.03 Over the 10-year period, restore at least 10,000 acres of shortleaf/pitch/table-mountain pine forests.	2943.2 Ac (Approx 20%)	12085.6 Ac (Approx 80%)
OBJECTIVE 17.04 Over the 10-year period, restore at least 300 acres to appropriate native communities currently occupied by loblolly pine plantations.	0 Ac 0%	129.2 Ac 100%
OBJECTIVE 17.05 Over the 10-year period, reduce the acreage of Virginia pine forest by at least 25,000 acres, through restoration of fire-adapted pine or oak communities.	2199.9 Ac (Approx 7%)	29900 Ac (Approx 93%)
OBJECTIVE 17.06 Restore at least 5,700 acres in dry and xeric oak and pine-oak forests to open woodlands, savannas, and grasslands over a 10-year period.	11229.6 Ac (Approx 35%)	19371.4 Ac (Approx 65%)
OBJECTIVE 17.08 Thin an average of at least 100 acres per year of shortleaf/pitch pine forest, in an effort to maintain a target basal area of approximately 60-80 square feet per acre.	552.2 Ac (Approx 8%)	6629.6 Ac (Approx 92%)
OBJECTIVE 17.09 Convert fescue fields (140 acres) to native grasses within a 10-year period where practical.	Approx. 70 ac	Approx. 70 ac
OBJECTIVE 19.01 Provide 33,726 MCF of sawtimber per decade.	Approx. 40%	Approx. 60%
OBJECTIVE 19.02 Provide 6,242 MCF of pulpwood per decade.	Approx. 40%	Approx. 60%
OBJECTIVE 21.01 Prescribe burn an average of at least 1,100 acres per year of shortleaf/pitch/table-mountain pine forest, in an effort to maintain a fire return cycle of 4-12 years.	2942 Ac (Approx 20%)	12070.4 Ac (Approx 80%)
OBJECTIVE 21.02 Prescribe burn an average of at least 5,200 acres per year of oak and oak-pine forests in an effort to maintain a 4-12 year fire return cycle.	26026.6 Ac (Approx 45%)	31569.9 Ac (Approx 55%)

2004 Revised Plan Goals & Objectives	North Zone	South Zone
<p>OBJECTIVE 21.03 Prescribe burn an average of 2,600 acres per year of open [<i>dry and xeric oak forests</i>] woodlands, savannas, and grasslands, in an effort to maintain a fire return cycle of 4-12 years in dry and xeric oak forests, woodland, grasslands, and savannas. [<i>two objectives: create, maintain</i>]</p>	<p>In process of creating habitat—unable to achieve as worded</p> <p>8796.5 Ac (Approx 60%)</p>	<p>In process of creating habitat—unable to achieve as worded</p> <p>6526.2 Ac (Approx 40%)</p>
<p>OBJECTIVE 21.04 Prescribe burn an average of at least 1,200 acres per year of pine-oak forests, in an effort to maintain a fire return cycle of 4-12 years.</p>	<p>2269.7 Ac (Approx 15%)</p>	<p>12845.2 Ac (Approx 85%)</p>
<p>OBJECTIVE 24.01 Reduce hazardous fuels between 19,000 and 60,000 acres per year with priority given to areas affected by insects, diseases, storm damage, and along NFS boundaries with high values at risk.</p>	<p>Approx. 50%</p>	<p>Approx. 50%</p>
<p>OBJECTIVE 35.01 Manage at least 75,000 acres outside designated Wilderness for backcountry recreation. (Inclusive but not limited to 12.A, 12.B, and 1.B).</p>	<p>12, 1, + Include 4A, 4F, 4K (130,433 AC –65%)</p>	<p>12, 1, + Include 4F (66,516 AC – 35%)</p>
<p>OBJECTIVE 36.02 Manage approximately 20,000 acres of Recommended Wilderness Study Areas (Rx 1.B) as Wilderness until Congress decides whether or not to include the areas in the National Wilderness Preservation System.</p>	<p>See Map (Alt I)</p>	<p>See Map (Alt I)</p>
<p>OBJECTIVE 38.01 Manage approximately 41 miles of streams in the three different classifications of eligibility. Refer to Appendix D of the EIS for river classifications and their respective Outstandingly Remarkable Values.</p>	<p>Status Quo</p>	<p>Status Quo</p>
<p>OBJECTIVE 38.02 During the 10 year period, complete suitability study on Tellico, Hiwassee, and Elk Rivers and Beaverdam Creek.</p>	<p>Suitability study to be completed on E/B</p>	<p>Suitability study completed on T/H</p>
<p>OBJECTIVE 43.01 Within the 10-year period, preservation/maintenance plans are developed for historic administrative and recreational facilities.</p>	<p>SO (TP)</p>	<p>SO (TP)</p>

2004 Revised Plan Goals & Objectives	North Zone	South Zone
<p>OBJECTIVE 44.01 A minimum of 230 acres of pastures and old fields are maintained through livestock grazing.</p>	<p>Watagua (Frank Lege) 100%</p>	<p>0%</p>
<p>OBJECTIVE 7.C-1.01 Manage forest successional stages to maintain a minimum of 50 percent of forested acres in mid- to late-successional forest, including old growth; a minimum of 20 percent of forested acres in late-successional or old growth forest; and 4 to 10 percent in early-successional forest.</p>	<p>100% N/U</p>	
<p>OBJECTIVE 7.E-1.01 Manage Forest successional stages to maintain a minimum of 50 percent of forested acres in mid- to late- successional forest, including old growth; a minimum of 20 percent of forested acres in late- successional forest, including old growth; and 4 to 10 percent in early- successional forest.</p>	<p>99%</p>	<p>1%</p>
<p>OBJECTIVE 8.A.1-1.01 Manage forest successional stages to maintain a minimum of 50 percent of forested acres in mid- and late-successional forest, including old growth; a minimum of 20 percent of forested acres in late-successional forest, including old growth; and 4 to 10 percent in early successional forest.</p>	<p>9800 Ac Approx 40%</p>	<p>16,400 Ac Approx 60%</p>
<p>OBJECTIVE 8.B-1.01 Manage forest successional stages to maintain a minimum of 20 percent of forested acres in mid- to late-successional forest, including old growth; a minimum of 10 percent of forested acres in late-successional forest including old growth; and 10 to 17 percent of forested acres in early-successional forest.</p>	<p>7250 Ac Approx 15%</p>	<p>49,265 Ac Approx 85%</p>

2004 Revised Plan Goals & Objectives	North Zone	South Zone
<p>OBJECTIVE 8.C-1.01 Strive for a 125-year rotation. Manage forest successional stages to maintain a minimum of 65 percent of forested acres in mid- to late-successional forest, including old growth; a minimum of 20 percent of forested acres in late-successional forest including old growth; and 4 to 8 percent in early-successional forest.</p>	<p>52,850 Ac Approx 55%</p>	<p>42,093Ac Approx 45%</p>
<p>OBJECTIVE 9.F-1.04 Restore at least 500 acres of table-mountain pine forest on lands not currently dominated by table-mountain pine over the next ten-year period.</p>	<p>1309.1 Ac (Approx 96%)</p>	<p>54.9 Ac (Approx 4%)</p>
<p>OBJECTIVE 9.F-1.05 To maintain table-mountain pine forests, prescribe burn an average of 160 acres of this type each year.</p>	<p>100% (Exact #s not available; local knowledge)</p>	<p>0% (Exact #s not available; local knowledge)</p>
<p>OBJECTIVE 9.H-1.01 Manage forest successional stages to maintain a minimum of 50 percent of forested acres in mid- late-successional forest, including old growth; a minimum of 20 percent of forested acres in late-successional forest, including old growth; and 4 to 10 percent in early-successional forest.</p>	<p>1504 Ac Approx 2%</p>	<p>71,164 Ac Approx 98%</p>

Appendix C

Fire Management In CNF South Zone Restoration Strategy

The top 10 watersheds selected for possible analysis contain the following burn blocks identified as high fire return interval areas. This is based on proximity to private land, Wildland Urban Interface (WUI), and historical fire occurrence. Those watersheds containing frequent return burn blocks should be considered an opportunity to be included in the watershed level analysis. These areas are as follows by watershed:

Greasy Creek

- O36 Madden Branch 1120 ac
- Areas outside identified burn blocks have a history of high fire occurrence.
- This watershed has a high level of fire management opportunity

Spring Creek

- O1 New Purchase 921 ac
- O2 Starr Mountain 2980 ac
- O3 Black Mountain 1196 ac
- Total acres = 5,097
- The north end of the watershed along Starr Mountain has been heavily impacted by SPB and is a high risk/opportunity for fire management

Middle Citico

- T6 Bark Camp 691 ac
- T10 Miller Ridge 4191ac
- T11 Flatts Foot Branch 1316ac
- Total Acres = 6,198

Conasauga River

- No identified frequent return burn blocks

Lower Tellico River

- T13 Cane Creek Mountain 272 ac
- T14 Huckleberry 1046 ac
- T15 Flatts Mountain 4868 ac
- T16 Henson Mountain 559 ac
- T19 Buck Branch 1086 ac
- T20 Miller Mine 673 ac
- T21 Turkey Creek 1092 ac
- T23 Butler Knob 1555ac
- Total Acres = 11,151
- This watershed contains the portion of Tellico River prone to high fire occurrence.
- High amounts of WUI are present in this watershed.
- Fire management risk/opportunities are abundant here.

Upper Hiwassee

- O14 Duckett 4263 ac
- O15 Miller Cove 1312 ac
- O17 Brushy Creek 1783 ac
- O24 Stone Pile 1050 ac
- Total Acres = 8,408
- This watershed has a history of high arson activity.
- Fire management risk/opportunities are abundant here.

Lost Creek

- No identified frequent return burn blocks

Upper Tellico River

- T22 Buck Horn 655 ac
- T23 Butler Knob 1555 ac
- T33 Short Cut 524 ac
- T34 Green Cove 1000 ac
- Total Acres = 3,734
- This watershed contains the portion of Tellico River prone to high fire occurrence.
- Fire management risk/opportunities are abundant here.

Upper Citico Creek

- No identified frequent return burn blocks

Bald River

- No identified frequent return burn blocks

All the identified watersheds have some opportunity for general fire management. However, those watersheds containing high frequency burn blocks have the greatest probability of affecting the landscape. Therefore, those watersheds containing these types of blocks should be considered priority from a fire management stand point.

Appendix D

Watershed Name	Scientific Name	Common Name	P/A	TESLR	#	Narrative (fish & mussels excluded)
Bald River	<i>Calamagrostis porteri</i>	Porter's Reedgrass	P	LR	1	<p>15 rare species: 9 plant species (4 sensitive, 5 locally rare) representing 10 sites. Important area for non-vascular plants with many sites not recorded in database. 6 animal species (1 sensitive, 5 locally rare) representing 15 sites.</p> <p>Focal Points: The sensitive <i>Coreopsis latifolia</i> is a species dependent upon canopy gaps for flowering. Only six sites known forest wide. Consider re-locating and monitoring.</p>
Bald River	<i>Carex ruthii</i>	Ruth's Sedge	P	LR	1	
Bald River	<i>Coreopsis latifolia</i>	Broad-leaved Tickseed	P	S	1	
Bald River	<i>Jungermannia fossombronioides</i>	a moss	P	LR	1	
Bald River	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	1	
Bald River	<i>Menziesia pilosa</i>	Minniebush	P	LR	1	
Bald River	<i>Poa palustris</i>	Fowl Bluegrass	P	LR	1	
Bald River	<i>Stachys clingmanii</i>	Clingman's Hedge-nettle	P	S	1	
Bald River	<i>Thermopsis fraxinifolia</i>	Ash-leaved Bush-pea	P	S	2	
Bald River	<i>Dendroica cerulea</i>	Cerulean Warbler	A	LR	3	
Bald River	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1	
Bald River	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	2	
Bald River	<i>Sorex cinereus</i>	Common Shrew	A	LR	4	
Bald River	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	4	
Bald River	<i>Sorex palustris</i>	Water Shrew	A	S	1	
Ballplay Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	1	One locally rare plant site.
Big Creek	<i>Agastache scrophulariifolia</i>	Purple Giant Hyssop	P	LR	4	<p>15 rare species: 10 plant species (3 sensitive, 7 locally rare) representing 27 sites. 5 animal species (all locally rare) representing 5 sites.</p> <p>Focal Points: The sensitive <i>Coreopsis latifolia</i> is a species dependent upon canopy gaps for flowering. Only six sites known forest wide. Consider re-locating and monitoring.</p>
Big Creek	<i>Coreopsis latifolia</i>	Broad-leaved Tickseed	P	S	4	
Big Creek	<i>Diervilla lonicera</i>	Northern Bush-honeysuckle	P	LR	1	
Big Creek	<i>Heracleum maximum</i>	Cow-parsnip	P	LR	1	
Big Creek	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	1	
Big Creek	<i>Lonicera dioica</i>	Mountain Honeysuckle	P	LR	5	
Big Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	3	
Big Creek	<i>Prenanthes roanensis</i>	Mountain Rattlesnake-root	P	S	1	
Big Creek	<i>Prunus virginiana</i>	Choke Cherry	P	LR	1	
Big Creek	<i>Thermopsis fraxinifolia</i>	Ash-leaved Bush-pea	P	S	6	
Big Creek	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1	
Big Creek	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	1	
Big Creek	<i>Sorex cinereus</i>	Common Shrew	A	LR	1	
Big Creek	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	

Big Creek	<i>Sorex longirostris</i>	Southeastern Shrew	A	LR	1	
Conasauga Creek	<i>Trichomanes petersii</i>	Dwarf Filmy-fern	P	LR	1	One locally rare plant site.
Conasauga River	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	10	12 rare species: 9 plant species (3 sensitive, 6 locally rare) representing 26 sites. 3 animal species (all locally rare) representing 4 sites.
Conasauga River	<i>Diervilla sessilifolia</i> var. <i>rivularis</i>	Mountain Bush-honeysuckle	P	S	1	
Conasauga River	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	2	
Conasauga River	<i>Melanthium latifolium</i>	Broadleaf Bunchflower	P	LR	1	
Conasauga River	<i>Nestronia umbellula</i>	Nestronia	P	LR	1	
Conasauga River	<i>Platanthera integrilabia</i>	White Fringeless Orchid	P	S	1	
Conasauga River	<i>Silene ovata</i>	Ovate Catchfly	P	S	1	
Conasauga River	<i>Trillium decumbens</i>	Trailing Trillium	P	LR	1	
Conasauga River	<i>Xerophyllum asphodeloides</i>	Eastern Turkeybeard	P	LR	8	
Conasauga River	<i>Eumeces anthracinus</i>	Coal Skink	A	LR	1	
Conasauga River	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	
Conasauga River	<i>Sorex longirostris</i>	Southeastern Shrew	A	LR	2	
Greasy Creek	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	9	14 rare species: 9 plant species (4 sensitive, 5 locally rare) representing 24 sites. 5 animal species (1 sensitive, 4 locally rare) representing 8 sites.
Greasy Creek	<i>Chrysogonum virginianum</i>	Green-and-gold	P	LR	1	
Greasy Creek	<i>Diervilla sessilifolia</i> var. <i>rivularis</i>	Mountain Bush-honeysuckle	P	S	3	
Greasy Creek	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	1	
Greasy Creek	<i>Lobelia amoena</i>	Southern Lobelia	P	LR	1	
Greasy Creek	<i>Lysimachia fraseri</i>	Fraser's Loosestrife	P	S	2	
Greasy Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	1	
Greasy Creek	<i>Sedum nevii</i>	Nevius' Stonecrop	P	S	5	
Greasy Creek	<i>Trillium rugelii</i>	Southern Nodding Trillium	P	S	1	
Greasy Creek	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	3	
Greasy Creek	<i>Limnothlypis swainsonii</i>	Swainson's Warbler	A	LR	1	
Greasy Creek	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	1	
Greasy Creek	<i>Neotoma floridana haematoreia</i>	Southern Appalachian Woodrat	A	LR	1	
Greasy Creek	<i>Speyeria diana</i>	Diana Fritillary	A	S	2	
Lake Tellico	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	1	8 rare species: 7 plant species (3 sensitive, 4 locally rare) representing 9 sites. Important area for non-vascular plants with many
Lake Tellico	<i>Mnium carolinianum</i>	Carolina Mnium	P	S	1	
Lake Tellico	<i>Panax quinquefolius</i>	American Ginseng	P	LR	3	
Lake Tellico	<i>Porella wataugensis</i>	Watauga Porella	P	S	1	

Lake Tellico	Potamogeton epihydrus	Nuttall's Pondweed	P	LR	1	sites not recorded in database. 1 animal species (Endangered) representing 1 sites.
Lake Tellico	Trichomanes boschianum	Bristle-fern	P	LR	1	
Lake Tellico	Trichomanes petersii	Dwarf Filmy-fern	P	LR	1	
Lake Tellico	Myotis sodalis	Indiana Bat	A	E	1	Focal Points: Endangered bat
Lost Creek	Monotropsis odorata	Sweet Pinesap	P	S	1	8 rare species: 3 plant species (all sensitive) representing 6 sites. 5 animal species (1 sensitive, 4 locally rare) representing 7sites.
Lost Creek	Thermopsis fraxinifolia	Ash-leaved Bush-pea	P	S	2	
Lost Creek	Trillium simile	Sweet White Trillium	P	S	3	
Lost Creek	Cheumatopsyche helma	Helma's Cheumatopsyche Caddisfly	A	S	1	Focal Points: This area supports a large meta-population of <i>Trillium simile</i> the extent of which has not been determined.
Lost Creek	Desmognathus aeneus	Seepage Salamander	A	LR	1	
Lost Creek	Neotoma floridana haematoreia	Southern Appalachian Woodrat	A	LR	1	
Lost Creek	Sorex fumeus	Smoky Shrew	A	LR	1	
Lost Creek	Sorex longirostris	Southeastern Shrew	A	LR	3	
Lower Citico Creek	Juglans cinerea	Butternut	P	S	2	5 rare species: 4 plant species (1 sensitive, 3 locally rare) representing 11 sites. 1 animal species (locally rare) representing 1site.
Lower Citico Creek	Panax quinquefolius	American Ginseng	P	LR	1	
Lower Citico Creek	Symplocos tinctoria	Horse-sugar	P	LR	6	
Lower Citico Creek	Xerophyllum asphodeloides	Eastern Turkeybeard	P	LR	2	
Lower Citico Creek	Cryptobranchus alleganiensis	Hellbender	A	LR	1	
Lower Hiwassee	Amelanchier sanguinea	Roundleaf Shadbush	P	LR	1	15 rare species: 11plant species (3 sensitive, 8 locally rare) representing 18 sites. 4 animal species (all locally rare) representing 4sites.
Lower Hiwassee	Cardamine clematitis	Mountain Bittercress	P	S	1	
Lower Hiwassee	Cardamine flagellifera	Running Bittercress	P	LR	2	
Lower Hiwassee	Coreopsis x delphiniifolia	Larkspur-leaved Coreopsis	P	LR	1	Focal Points: <i>Isoetes tennesseensis</i> is a recently described G1 species. Meets current criteria to be on the sensitive list.
Lower Hiwassee	Isoetes tennesseensis	Hiwassee Quillwort	P	LR	1	
Lower Hiwassee	Juncus gymnocarpus	Naked-fruited Rush	P	LR	6	
Lower Hiwassee	Monotropsis odorata	Sweet Pinesap	P	S	1	
Lower Hiwassee	Panax quinquefolius	American Ginseng	P	LR	2	
Lower Hiwassee	Symplocos tinctoria	Horse-sugar	P	LR	1	
Lower Hiwassee	Thermopsis fraxinifolia	Ash-leaved Bush-pea	P	S	1	
Lower Hiwassee	Trichomanes petersii	Dwarf Filmy-fern	P	LR	1	
Lower Hiwassee	Cryptobranchus alleganiensis	Hellbender	A	LR	1	
Lower Hiwassee	Desmognathus aeneus	Seepage Salamander	A	LR	1	
Lower Hiwassee	Limnothlypis swainsonii	Swainson's Warbler	A	LR	1	

Lower Hiwassee	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	
Lower Ocoee River	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	3	5 rare species: All are plant species (2 sensitive, 3 locally rare) representing 8 sites.
Lower Ocoee River	<i>Cyperus plukenetii</i>	Plukenet's Galingale	P	LR	1	
Lower Ocoee River	<i>Lysimachia fraseri</i>	Fraser's Loosestrife	P	S	2	
Lower Ocoee River	<i>Sedum nevii</i>	Nevius' Stonecrop	P	S	1	
Lower Ocoee River	<i>Xerophyllum asphodeloides</i>	Eastern Turkeybeard	P	LR	1	
Lower Tellico River	<i>Calamagrostis porteri</i>	Porter's Reedgrass	P	LR	1	13 rare species: 6 plant species (2 sensitive, 4 locally rare) representing 13 sites. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (2 sensitive, 5 locally rare) representing 13 sites.
Lower Tellico River	<i>Lobelia amoena</i>	Southern Lobelia	P	LR	1	
Lower Tellico River	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	5	
Lower Tellico River	<i>Monotropsis odorata</i>	Sweet Pinesap	P	S	2	
Lower Tellico River	<i>Panax quinquefolius</i>	American Ginseng	P	LR	2	
Lower Tellico River	<i>Trichomanes petersii</i>	Dwarf Filmy-fern	P	LR	2	
Lower Tellico River	<i>Cryptobranchus alleganiensis</i>	Hellbender	A	LR	1	
Lower Tellico River	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1	
Lower Tellico River	<i>Eurycea junaluska</i>	Junaluska Salamander	A	S	4	
Lower Tellico River	<i>Hemidactylium scutatum</i>	Four-toed Salamander	A	LR	4	
Lower Tellico River	<i>Myotis leibii</i>	Eastern Small-footed Bat	A	S	1	
Lower Tellico River	<i>Stenotrema fraternum montanum</i>	A Pillsnail	A	LR	1	
Lower Tellico River	<i>Vertigo clappi</i>	Cupped Vertigo	A	LR	1	
Middle Citico Creek	<i>Cymophyllum fraserianus</i>	Fraser's Sedge	P	LR	2	11 rare species: 4 plant species (1 sensitive, 3 locally rare) representing 7 sites. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (all locally rare) representing 24 sites.
Middle Citico Creek	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	3	
Middle Citico Creek	<i>Lobelia amoena</i>	Southern Lobelia	P	LR	1	
Middle Citico Creek	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	1	
Middle Citico Creek	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	16	
Middle Citico Creek	<i>Hemidactylium scutatum</i>	Four-toed Salamander	A	LR	1	
Middle Citico Creek	<i>Limnothlypis swainsonii</i>	Swainson's Warbler	A	LR	1	
Middle Citico Creek	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	1	
						Focal Points: none.

Middle Citico Creek	<i>Neotoma floridana haematorea</i>	Southern Appalachian Woodrat	A	LR	1		
Middle Citico Creek	<i>Sorex cinereus</i>	Common Shrew	A	LR	1		
Middle Citico Creek	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	3		
Mid Ocoee River	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	2	10 rare species: 8 plant species (1 Endangered, 3 sensitive, 4 locally rare) representing 30 sites. 2 animal species (locally rare) representing 3 sites.	
Mid Ocoee River	<i>Diervilla sessilifolia</i> var. <i>rivularis</i>	Mountain Bush-honeysuckle	P	S	4		
Mid Ocoee River	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	2		
Mid Ocoee River	<i>Lobelia amoena</i>	Southern Lobelia	P	LR	4		
Mid Ocoee River	<i>Lysimachia fraseri</i>	Fraser's Loosestrife	P	S	5		
Mid Ocoee River	<i>Pityopsis ruthii</i>	Ruth's Golden-aster	P	E	4		
Mid Ocoee River	<i>Sedum nevii</i>	Nevius' Stonecrop	P	S	3		
Mid Ocoee River	<i>Symplocos tinctoria</i>	Horse-sugar	P	LR	6		
Mid Ocoee River	<i>Glyphyalinia ocoae</i>	Blue-gray Glyph	A	LR	1		
Mid Ocoee River	<i>Mesodon archeri</i>	Ocoee Covert	A	LR	2		
North River	<i>Botrychium matricariifolium</i>	Chamomile Grapefern	P	LR	1		36 rare species: 19 plant species (5 sensitive, 14 locally rare) representing 46 sites. Important area for non-vascular plants with many sites not recorded in database. 17 animal species (1 Endangered, 2 sensitive, 14 locally rare) representing 46 sites.
North River	<i>Cardamine clematitis</i>	Mountain Bittercress	P	S	1		
North River	<i>Carex manhartii</i>	Manhart's Sedge	P	LR	6		
North River	<i>Carex ruthii</i>	Ruth's Sedge	P	LR	6		
North River	<i>Clintonia borealis</i>	Clinton's Lily	P	LR	1		
North River	<i>Cymophyllus fraserianus</i>	Fraser's Sedge	P	LR	5		
North River	<i>Euonymus obovatus</i>	Running Strawberry-bush	P	LR	5		
North River	<i>Eupatorium steelei</i>	Steele's Joe-pye Weed	P	LR	2		
North River	<i>Glyceria laxa</i>	Northern Mannagrass	P	LR	1		
North River	<i>Hydrophyllum virginianum</i>	Appalachian Waterleaf	P	LR	1		
North River	<i>Juglans cinerea</i>	Butternut	P	S	1		
North River	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	5		
North River	<i>Listera smallii</i>	Appalachian Twayblade	P	LR	1		
North River	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	4		
North River	<i>Monotropis odorata</i>	Sweet Pinesap	P	S	1		
North River	<i>Platanthera psychodes</i>	Small Purple Fringed Orchid	P	LR	1		
North River	<i>Poa palustris</i>	Fowl Bluegrass	P	LR	1		
North River	<i>Prenanthes roanensis</i>	Mountain Rattlesnake-root	P	S	1		
North River	<i>Streptopus roseus</i>	Rosy Twisted-stalk	P	LR	2		

North River	<i>Aegolius acadicus</i>	Northern Saw-whet Owl	A	LR	1	
North River	<i>Aquila chrysaetos</i>	Golden Eagle	A	LR	1	
North River	<i>Corvus corax</i>	Common Raven	A	LR	1	
North River	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	5	
North River	<i>Glaucomys sabrinus coloratus</i>	Carolina Northern Flying Squirrel	A	E	1	
North River	<i>Glyphyalinia pentadelphia</i>	Pink Glyph	A	LR	2	
North River	<i>Hemidactylium scutatum</i>	Four-toed Salamander	A	LR	1	
North River	<i>Mesodon christyi</i>	Glossy Covert	A	LR	1	
North River	<i>Myotis leibii</i>	Eastern Small-footed Bat	A	S	1	
North River	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	8	
North River	<i>Sorex cinereus</i>	Common Shrew	A	LR	6	
North River	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	7	
North River	<i>Sorex palustris</i>	Water Shrew	A	S	1	
North River	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker	A	LR	4	
North River	<i>Synaptomys cooperi</i>	Southern Bog Lemming	A	LR	3	
North River	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	A	LR	1	
North River	<i>Zapus hudsonius</i>	Meadow Jumping Mouse	A	LR	2	
Slick Rock Creek	<i>Dendroica cerulea</i>	Cerulean Warbler	A	LR	1	One locally rare animal.
Smith Creek	<i>Cyperus dentatus</i>	Toothed Sedge	P	LR	1	12 rare species: 7 plant species (1 sensitive, 6 locally rare) representing 8 sites. 5 animal species (all locally rare) representing 5 sites. Focal Points: none.
Smith Creek	<i>Draba ramosissima</i>	Branching Whitlow-grass	P	LR	2	
Smith Creek	<i>Juglans cinerea</i>	Butternut	P	S	1	
Smith Creek	<i>Lobelia amoena</i>	Southern Lobelia	P	LR	1	
Smith Creek	<i>Marshallia obovata</i>	Piedmont Barbara's-buttons	P	LR	1	
Smith Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	1	
Smith Creek	<i>Trichomanes petersii</i>	Dwarf Filmy-fern	P	LR	1	
Smith Creek	<i>Cryptobranchus alleganiensis</i>	Hellbender	A	LR	1	
Smith Creek	<i>Elimia interrupta</i>	Knotty Elimia	A	LR	1	
Smith Creek	<i>Leptoxis virgata</i>	Smooth Mudalia	A	LR	1	
Smith Creek	<i>Limnothlypis swainsonii</i>	Swainson's Warbler	A	LR	1	
Smith Creek	<i>Somatogyrus</i> sp. 2	"Hiwassee" Pebblesnail	A	LR	1	
Spring Creek	<i>Platanthera integrilabia</i>	White Fringeless Orchid	P	S	1	8 rare species: 1 plant species (sensitive) representing 1 site. Important area for non-vascular plants with many sites not recorded in database. 7 animal species (all
Spring Creek	<i>Elimia interrupta</i>	Knotty Elimia	A	LR	2	
Spring Creek	<i>Hemidactylium scutatum</i>	Four-toed Salamander	A	LR	1	
Spring Creek	<i>Neotoma floridana haematoreia</i>	Southern Appalachian Woodrat	A	LR	1	
Spring Creek	<i>Ophisaurus attenuatus longicaudus</i>	Eastern Slender Glass Lizard	A	LR	1	

Spring Creek	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	locally rare) representing 8 sites.	
Spring Creek	<i>Sorex longirostris</i>	Southeastern Shrew	A	LR	1		
Spring Creek	<i>Synaptomys cooperi</i>	Southern Bog Lemming	A	LR	1	Focal Points: Bullet Creek Rare Community - <i>Platanthera integrilabia</i>	
Sylco Creek	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	1	4 rare species: 2 plant species (1 sensitive, 1 locally rare) representing 2 sites. 2 animal species (locally rare) representing 2 sites.	
Sylco Creek	<i>Diervilla sessilifolia</i> var. <i>rivularis</i>	Mountain Bush-honeysuckle	P	S	1		
Sylco Creek	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1		
Sylco Creek	<i>Eumeces anthracinus</i>	Coal Skink	A	LR	1		
						Focal Points: none.	
Towee Creek	<i>Cardamine flagellifera</i>	Running Bittercress	P	LR	1	10 rare species: All plant species (1 Endangered, 2 sensitive, 7 locally rare) representing 18 sites.	
Towee Creek	<i>Chrysogonum virginianum</i>	Green-and-gold	P	LR	1		
Towee Creek	<i>Fuirena squarrosa</i>	Hairy Umbrella-sedge	P	LR	1	Focal Points: Habitat management for <i>Pityopsis ruthii</i> is high priority.	
Towee Creek	<i>Gelsemium sempervirens</i>	Yellow Jessamine	P	LR	1		
Towee Creek	<i>Monotropis odorata</i>	Sweet Pinesap	P	S	1		
Towee Creek	<i>Pityopsis ruthii</i>	Ruth's Golden-aster	P	E	7		
Towee Creek	<i>Potamogeton epihydrus</i>	Nuttall's Pondweed	P	LR	1		
Towee Creek	<i>Sacciolepis striata</i>	Gibbous Panic-grass	P	LR	2		
Towee Creek	<i>Scutellaria saxatilis</i>	Rock Skullcap	P	S	1		
Towee Creek	<i>Symplocos tinctoria</i>	Horse-sugar	P	LR	2		
Upper Citico Creek	<i>Carex ruthii</i>	Ruth's Sedge	P	LR	2		21 rare species: 8 plant species (4 sensitive, 4 locally rare) representing 16 sites. Important area for non-vascular plants with many sites not recorded in database. 13 animal species (1 sensitive, 12 locally rare) representing 19 sites.
Upper Citico Creek	<i>Cymophyllus fraserianus</i>	Fraser's Sedge	P	LR	4		
Upper Citico Creek	<i>Hypericum mitchellianum</i>	Blue Ridge St. John's-wort	P	S	3		
Upper Citico Creek	<i>Juncus gymnocarpus</i>	Naked-fruited Rush	P	LR	3		
Upper Citico Creek	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	1		
Upper Citico Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	1		
Upper Citico Creek	<i>Porella wataugensis</i>	Watauga Porella	P	S	1		
Upper Citico Creek	<i>Stachys clingmanii</i>	Clingman's Hedge-nettle	P	S	1		
Upper Citico Creek	<i>Condylura cristata</i>	Star-nosed Mole	A	LR	1		
Upper Citico Creek	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1		
Upper Citico Creek	<i>Glyphyalinia pentadelphia</i>	Pink Glyph	A	LR	2	Focal Points: None.	
Upper Citico Creek	<i>Mesodon wheatleyi</i>	Cinnamon Covert	A	LR	1		
Upper Citico Creek	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	3		
Upper Citico Creek	<i>Neotoma floridana haematoxia</i>	Southern Appalachian Woodrat	A	LR	1		
Upper Citico Creek	<i>Paravitrea lamellidens</i>	Lamellate Supercoil	A	LR	1		

Upper Citico Creek	<i>Sorex cinereus</i>	Common Shrew	A	LR	2	
Upper Citico Creek	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	3	
Upper Citico Creek	<i>Sorex palustris</i>	Water Shrew	A	S	1	
Upper Citico Creek	<i>Striatura exigua</i>	Ribbed Striate	A	LR	1	
Upper Citico Creek	<i>Vermivora chrysoptera</i>	Golden-winged Warbler	A	LR	1	
Upper Citico Creek	<i>Zapus hudsonius</i>	Meadow Jumping Mouse	A	LR	1	
Upper Hiwassee	<i>Cyperus dentatus</i>	Toothed Sedge	P	LR	1	9 rare species: 8 plant species (1 Endangered, 1 sensitive, 6 locally rare) representing 9 sites. 1 locally rare animal site. Focal Points: Habitat management for <i>Pityopsis ruthii</i> is high priority.
Upper Hiwassee	<i>Fuirena squarrosa</i>	Hairy Umbrella-sedge	P	LR	1	
Upper Hiwassee	<i>Magnolia virginiana</i>	Sweetbay Magnolia	P	LR	1	
Upper Hiwassee	<i>Pityopsis ruthii</i>	Ruth's Golden-aster	P	E	2	
Upper Hiwassee	<i>Platanthera psycodes</i>	Small Purple Fringed Orchid	P	LR	1	
Upper Hiwassee	<i>Potamogeton epihydrus</i>	Nuttall's Pondweed	P	LR	1	
Upper Hiwassee	<i>Potamogeton tennesseensis</i>	Tennessee Pondweed	P	S	1	
Upper Hiwassee	<i>Symplocos tinctoria</i>	Horse-sugar	P	LR	1	
Upper Hiwassee	<i>Cambarus hiwasseeensis</i>	Hiwassee Crayfish	A	LR	2	
Upper Ocoee River	<i>Acer saccharum</i> ssp. <i>leucoderme</i>	Chalk Maple	P	LR	1	
Upper Ocoee River	<i>Symplocos tinctoria</i>	Horse-sugar	P	LR	1	
Upper Ocoee River	<i>Desmognathus aeneus</i>	Seepage Salamander	A	LR	1	
Upper Ocoee River	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	1	
Upper Ocoee River	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	
Upper Tellico River	<i>Carex manhartii</i>	Manhart's Sedge	P	LR	2	17 rare species: 6 plant species (4 sensitive, 2 locally rare) representing 8 sites. Important area for non-vascular plants with many sites not recorded in database. 11 animal species (3 sensitive, 8 locally rare) representing 17 sites. Focal Points: None.
Upper Tellico River	<i>Clintonia borealis</i>	Clinton's Lily	P	LR	1	
Upper Tellico River	<i>Hypericum mitchellianum</i>	Blue Ridge St. John's-wort	P	S	1	
Upper Tellico River	<i>Juglans cinerea</i>	Butternut	P	S	1	
Upper Tellico River	<i>Megaceros aenigmaticus</i>	Megaceros	P	S	2	
Upper Tellico River	<i>Porella wataugensis</i>	Watauga Porella	P	S	1	
Upper Tellico River	<i>Corvus corax</i>	Common Raven	A	LR	1	
Upper Tellico River	<i>Dendroica cerulea</i>	Cerulean Warbler	A	LR	1	
Upper Tellico River	<i>Eurycea junaluska</i>	Junaluska Salamander	A	S	1	
Upper Tellico River	<i>Glyphyalinia pentadelphia</i>	Pink Glyph	A	LR	1	
Upper Tellico River	<i>Helicodiscus fimbriatus</i>	Fringed Coil	A	LR	1	
Upper Tellico River	<i>Napaeozapus insignis</i>	Woodland Jumping Mouse	A	LR	3	
Upper Tellico River	<i>Sorex cinereus</i>	Common Shrew	A	LR	2	
Upper Tellico River	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	3	

Upper Tellico River	<i>Sorex palustris</i>	Water Shrew	A	S	1	<p>9 rare species: 6 plant species (2 sensitive, 4 locally rare) representing 13 sites. 3 animal species (all locally rare) representing 3 sites.</p> <p>Focal Points: None.</p>
Upper Tellico River	<i>Speyeria diana</i>	Diana Fritillary	A	S	1	
Upper Tellico River	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker	A	LR	2	
Wildcat Creek	<i>Menziesia pilosa</i>	Minniebush	P	LR	1	
Wildcat Creek	<i>Monotropsis odorata</i>	Sweet Pinesap	P	S	3	
Wildcat Creek	<i>Panax quinquefolius</i>	American Ginseng	P	LR	1	
Wildcat Creek	<i>Symplocos tinctoria</i>	Horse-sugar	P	LR	1	
Wildcat Creek	<i>Thermopsis fraxinifolia</i>	Ash-leaved Bush-pea	P	S	2	
Wildcat Creek	<i>Xerophyllum asphodeloides</i>	Eastern Turkeybeard	P	LR	5	
Wildcat Creek	<i>Pituophis melanoleucus melanoleucus</i>	Northern Pine Snake	A	LR	1	
Wildcat Creek	<i>Sorex cinereus</i>	Common Shrew	A	LR	1	
Wildcat Creek	<i>Sorex fumeus</i>	Smoky Shrew	A	LR	1	