

Attachment 1

Some of the Forest-wide goals and objectives, Management Area objectives, and Prescription Area goals, objectives, and direction from the Revised Land and Resource Management Plan of the Cherokee National Forest (RLRMP) that direct the proposed action in the Big Creek Project Area are:

Forestwide Goals and Objectives:

GOAL 5 Stability of stream banks and channels is protected during management activities. Channeled ephemeral stream zones are managed to minimize sediment transport.

OBJECTIVE 5.01 Channeled ephemeral streams are managed in a manner that retains and provides for the recruitment of large woody debris.

GOAL 10 Maintain and restore natural communities in amounts, arrangements, and conditions capable of supporting viable populations of existing native and desired non-native plants, fish, and wildlife species within the planning area.

GOAL 14 Contribute to conservation and recovery of federally listed threatened and endangered species, and avoid actions that would lead to federal listing of other species under the Endangered Species Act.

OBJECTIVE 14.02 Provide upland water sources approximately every 0.5 miles, to provide an important habitat element for wildlife, including the endangered Indiana bat. Water sources are comprised of both permanent ponds and ephemeral pools and are often located in openings or near road corridors that allow access by bats.

GOAL 15 Minimize adverse effects of invasive non-native species. Control such species where feasible and necessary to protect national forest resources.

OBJECTIVE 15.02 Control non-native and unwanted native species, where they threaten TES elements, ecological integrity of communities, or habitats created for demand species.

GOAL 16 Manage through protection, maintenance, or restoration, a variety of large, medium, and small old growth patches to provide biological and social benefits.

GOAL 17 Restore and maintain forest communities to those plant communities predicted as most likely to occur based on the ecological potential of the site potential native vegetation.

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.

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.

GOAL 18 Contribute to maintenance or restoration of native tree species whose role in forest ecosystems is threatened by insects and disease. Management activities will reduce the impacts from non-native invasive species.

OBJECTIVE 18.01 Encourage reintroduction of extirpated or declining native species when technologically feasible. These species include, but are not limited to, American chestnut, butternut, hemlock, dogwood, Fraser fir, and red spruce. Develop partnerships with universities, groups and other agencies to facilitate reintroduction of native species.

OBJECTIVE 18.02 Promote the health of susceptible forest communities by maintaining a site-specific basal area that promotes tree vigor. Encourage advanced regeneration of oak species.

GOAL 19 Where forest management activities are needed and appropriate to achieve the desired composition, structure, function, productivity, public health and safety, and sustainability of forest ecosystems; a result of such activities will also be to provide wood products for local needs.

OBJECTIVE 19.01 Provide 33,726 MCF of sawtimber per decade.

OBJECTIVE 19.02 Provide 6,242 MCF of pulpwood per decade.

GOAL 40 Conserve, maintain, and enhance the scenic and aesthetic values of the CNF.

GOAL 48 Provide a transportation system that supplies safe and efficient access for forest users while protecting forest resources. Emphasize acquisition of rights-of-way or fee-simple titles as appropriate to facilitate maintenance and meet access needs.

GOAL 49 Decommission unneeded roads.

OBJECTIVE 49.01 Decommission unneeded roads that are identified through an interdisciplinary process.

Prescription Area Goals and Objectives:

OBJECTIVE 7.E.2-1.01 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.

GOAL 11-3 Aquatic habitat conditions are suitable to maintain viable populations of aquatic species native to the planning area, and to support desirable levels of selected species (e.g., species with special habitat needs, TE&S species, species commonly fished, MIS or species of special interest).

ACTIVITIES PROPOSED TO MEET THESE GOALS, OBJECTIVES, AND DIRECTION, AND MOVE BIG CREEK PROJECT AREA TOWARDS THE DESIRED CONDITION OF THE RLRMP:

- 1. Provide early successional habitat on up to 10% of the suitable acreage in Prescription Area 7.E.2 utilizing commercial timber harvest by regenerating eleven stands with the Shelterwood Method (Objective 7.E.2-1.01, Goal 19, Objective 19.01 and 19.02).**

Stands to regenerate:				
Compartment	Stand	Acres	Age/Year	Forest Type
242	20	40	1930	White Oak/Northern Red Oak/ Hickory
242	22	40	1913	Yellow Poplar/White Oak/Red Oak
242	51	12	1914	Chestnut Oak
242	52	27	1904	Yellow Poplar/White Oak/Red Oak
242	73	40	1913	Yellow Poplar/White Oak/Red Oak
244	10	34	1911	Yellow Poplar/White Oak/Red Oak
244	13	23	1911	Yellow Poplar/White Oak/Red Oak
244	16	15	1910	Cove Hardwoods/White Pine/Hemlock
244	39	7	1927	Yellow Poplar/White Oak/Red Oak
244	57	16	1923	White Oak/Northern Red Oak/ Hickory
244	70	14	1919	Chestnut Oak
TOTAL		268		

- 2. Clearcut White Pine stand, regenerate to hardwoods, and provide early successional habitat on up to 10% of the suitable acreage in Prescription Area 7.E.2 (Objective 7.E.2-1.01, Goal 17; Objectives 17.01 and 17.02, Goal 19, Objective 19.01 and 19.02).**

Clearcut:				
Compartment	Stand	Acres	Age/Year	Forest Type
243	10	10	1970	White Pine
244	9	18	1969	White Pine
TOTAL		28		

Plant mast-producing hardwood seedlings after harvest.

There are 8694 acres in Prescription area 7.E.2 that are suitable for commercial timber harvest. Items #1 and 2 total 296 acres and is 3.4 % of the suitable acres...

3. Overstory removal of shelterwood stand (Goal 10, Goal 18, Objective 18.02, Goal 19, Objective 19.01 and 19.02):

Overstory Removal:				
Compartment	Stand	Acres	Age/Year	Forest Type
242	32	28	1996	White Oak/Northern Red Oak/ Hickory
TOTAL		28		

Remove overstory down to 15 square feet of basal area to release advanced regeneration from previous shelterwood harvest.

4. All stands in Items #1-3 would require site preparation and release treatments (Goal 10, Goal 18):

Pre-harvest site preparation:

Prior to harvest, midstory species would be controlled with herbicide (Triclopyr and Imazapyr) to reduce post-harvest sprouting of overly-competitive species.

Chestnut plantings:

American Chestnut seedlings from American Chestnut Foundation may be planted in regenerated areas to test blight resistance

Post-harvest treatments:

Site preparation with chainsaw slashdown after harvest.

Chainsaw slashdown or herbicide treatment (Triclopyr and Imazapyr) of overly-competitive sprouts at approximately two years after harvest.

Chainsaw release of mast-producing trees at about age 10.

5. Begin restoration of white pine plantations by release thinnings favoring mast-producing trees (Goal 17; Objectives 17.01 and 17.02).

Release thinnings:				
Compartment	Stand	Acres	Age/Year	Forest Type
249	11	22	1997	White Pine
251	18	14	1997	White Pine
TOTAL		36		

Release approximately 100 trees per acre from direct competition using chainsaw slashdown). Treat nonnative invasives as found with Triclopyr, Imazapyr, or Glyphosate.

6. Release mast-producing trees from competition (Goal 10 and Objective 18.02):

Mast Tree Release				
<u>Compartment</u>	<u>Stand</u>	<u>Acres</u>	<u>Age/Year</u>	<u>Forest Type</u>
249	43	40	1997	Yellow Poplar/White Oak/Red Oak
250	14	5	1997	White Oak/Northern Red Oak/ Hickory
250	16	12	1997	White Oak/Northern Red Oak/ Hickory
250	24	32	1997	White Oak/Northern Red Oak/ Hickory
250	26	36	1997	White Oak/Northern Red Oak/ Hickory
251	22	51	1997	Upland Hardwoods/White Pine
TOTAL		176		

Release approximately 100 mast-producing trees per acre from direct competition using chainsaw slashdown). Treat nonnative invasives as found with Triclopyr, Imazapyr, or Glyphosate.

7. Daylight selected roads maintained as wildlife openings (Goal 10, Goal 14, Objective 14.02).

Road Number	Mileage
22421	1.58
22440	1.63
22441	1.63
22442	.76
22491	1.68
3243	1.51
3243A	.51
3249	3.34
TOTAL	12.64

An area 50 feet either side of the centerline of the road would be thinned, primarily removing non-mast bearing trees. This would increase forage production on these wildlife openings and create forest edge habitat.

8. Approximately 17.3 miles of prehaul maintenance, and 0.3 miles of temporary road construction would be required in support of Items #1, 2, 3, and 7 (Goal 48).

9. Encourage oak and other mast-producing species regeneration by reducing midstory competition in 20 stands with herbicide (Objective 18.02):

Midstory treatment				
Compartment	Stand	Acres	Age	Forest Type
242	24	23	1928	White Oak/Northern Red Oak/ Hickory
242	25	29	1909	Yellow Poplar/White Oak/Red Oak
242	26	19	1913	Yellow Poplar/White Oak/Red Oak
242	28	38	1920	Yellow Poplar/White Oak/Red Oak
242	30	25	1920	Yellow Poplar/White Oak/Red Oak
242	64	21	1913	Yellow Poplar/White Oak/Red Oak
243	8	15	1921	White Pine/Upland Hardwood
244	3	18	1910	Yellow Poplar/White Oak/Red Oak
244	15	30	1926	White Pine/Upland Hardwood
244	20	6	1928	Yellow Poplar/White Oak/Red Oak
244	38	11	1928	Yellow Poplar/White Oak/Red Oak
244	53	11	1911	Yellow Poplar/White Oak/Red Oak
244	61	5	1911	White Pine
244	65	16	1928	Yellow Poplar/White Oak/Red Oak
244	71	6	1926	White Pine/Upland Hardwood
249	24	12	1928	Yellow Poplar/White Oak/Red Oak
249	34	33	1928	Yellow Poplar/White Oak/Red Oak
249	37	20	1928	Cove Hardwoods/White Pine/Hemlock
249	45	12	1923	Cove Hardwoods/White Pine/Hemlock
249	48	149	1923	Yellow Poplar/White Oak/Red Oak
TOTAL		499		

Stocking of understory and midstory would be reduced by about 25% with herbicide (Triclopyr and Imazapyr) in these stands to reduce competition and provide increased sunlight to promote the development of mast-producing species.

10. Control nonnative invasive species within all treatment areas, roads, and wildlife openings. (Goal 15 and Objective 15.02)

Project activities may result in the introduction of nonnative invasive species. In addition to the acreage where herbicide is proposed in Items #4, 5, 6, and 9; spot treatments for nonnative invasives on roads (70 possible acres, Item #8) and wildlife openings (26 possible acres; Item #11) may be needed (treatment would not occur over the entire possible acres). These acres will only be treated if nonnative species are found. Treat these occurrences using herbicides (Glyphosate, Triclopyr, or Imazapyr; using either the foliar spray, hack-and-squirt, streamline, or cut-surface treatment).

11. Wildlife Habitat Improvement Activities (Goal 10, Goal 14, Objective 14.02):

Big Creek Wildlife Activities

Location	Rehab	NNIS	Water	Boxes	Logs	Topdress	Brushing	Gate	Plant	Monitor
All Harvested Areas	-	-	-	-	-	-	-	-	32 ac.	-
Mitchell Loop WLO – C242	5 ac.	5 ac.	2	6	-	5 ac.	5 ac.	1 M	-	X
Boomer Den WLO - C249	15 ac.	15 ac.	2	6	5	15 ac.	15 ac.	1 M	-	X
Pheasant Gap WLO – C244	2 ac.	2 ac.	1	3	-	2 ac.	2 ac.	1 M	-	X
Hunter Cr./Fork Ridge WLO – C244	4 ac.	4 ac.	2	6	5	4 ac.	4 ac.	1 N	-	X
Round Mtn. Lookout Rd. – C242	-	0.25 ac.	1	-	-	-	-	1 M	-	X
Hurricane Branch Old Field* – C242	-	2 ac.	-	-	-	-	2 ac.	-	-	X
Totals	26 ac.	28.25 ac.	8	21	10	26 ac.	28	4 M 1 N	-	

WLO – Wildlife opening

Activity Descriptions:

Rehab – Disc, fertilize, lime, and re-seed wildlife openings, Year 1

NNIS – Control non-native invasive species in wildlife openings and old field, Years 4-5

Water – Construct waterholes, vernal ponds, or wetland (25' x 25'), Years 2-3

Boxes – Place bat roosting boxes and bird/small mammal nesting boxes, Years 2-3

Logs – Place grouse drumming logs, Years 3-4

Topdress – Fertilize and lime wildlife openings, Year 3

Brushing – Cut brush along WLO edges, Years 5 and slash brush in old field, Years 4-5

Gate – (N) Replace gate, Year 1; (M) Maintain gate, Years 2 and 5

Plant – Plant mast-producing shrubs in skid trails and landings, Years 2-3.

Monitor – Monitor effectiveness of wildlife improvement activities

* Activities at Hurricane Branch would restore the native plant community and would be maintained as old field habitat.

Big Creek Fisheries Activities

Stream	Structures	Rhodo Thinning	Brook Trout Restoration	Monitor
Trail Fork Big Creek	15	1.7 miles	1.7 miles	X1
Tom Creek	6	0.6 miles	-	X
Hunter Creek	5	0.5 miles	-	X
Totals	26	2.8 miles	1.7 miles	

Activity Descriptions:

Habitat Structures – Place logs in stream for overhead cover and pool development

Rhodo Thinning – Trim rhododendron on stream banks to increase light and productivity

Brook Trout Restoration – remove non-native rainbow trout by electroshocking and stock native brook trout

12. Decommission 2.55 miles of unauthorized roads (OUT12, OR4, OR5, OR6, OR7, OR10, OR11 and OR12) (Goal 49, Objective 49.01).

13. Decommission 3.43 miles of authorized road [1.29 miles of NFSR 225201A Carmichael Tract Spur (0.37 miles remains authorized) and 2.14 miles of NFSR 5145 Dry Fork (0.10 remains authorized)](Goal 49, Objective 49.01).

14. Authorize 3.28 miles of existing roadways (Goal 48):

Roads Analysis Inventory	Road Name	Road Management Objective	Length	Disposition
OR01	Davenport Gap 1	D2	0.58	New NFSR #225701
OR02	Davenport Gap 2	D2	0.37	New NFSR #225702
OR03	Green Corner Utilities	D2	0.25	New NFSR #225203
OR09	Hootowl Ridge Spur A	D2	0.89	New NFSR #225203
WL01	Hurricane Gap	D2	0.15	Add to NRSR #3243
WL02	Hurricane Gap	D2	0.53	Add to NRSR #3243
WL03	Hurricane Gap Spur	D2	0.51	New NFSR #3243A
			TOTAL 3.28	

These roads will be gated and closed to all but administrative use. OR01-03 are powerline access roads under Special Use Permit.

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