

Decision Notice
&
Finding of No Significant Impact
Big Creek Project
USDA Forest Service
Nolichucky/Unaka Ranger District
Cherokee National Forest
Cocke County, Tennessee

Decision and Reasons for the Decision

Background

The Nolichucky/Unaka Ranger District has prepared an Environmental Assessment (EA) that documents the analysis of a no action alternative and two action alternatives that will implement the Cherokee National Forest Revised Land and Resource Management Plan (RLRMP). The action alternatives evaluate utilizing commercial timber harvest to provide early successional wildlife habitat, improve forest health, and diversify the age class distribution. Connected and associated actions such as site preparation, release thinnings to begin restoration of white pine plantations, release of mast-producing trees from competition, maintenance of system roads, temporary road construction, daylighting roads for wildlife forage, controlling nonnative invasive species, rehab of wildlife openings, providing water sources for wildlife, providing wildlife habitat structures, installing and maintaining gates, planting mast-producing shrubs, thinning rhododendron along streams, constructing fish habitat structures, restoring brook trout, decommissioning roads, and authorizing existing roads are also part of this analysis.

The EA (Purpose and Need pages 8 and 9) compares the existing condition of the Big Creek Project Area with the Desired Condition for Prescriptions 7.E.2. This comparison showed that the Goals and Objectives (EA pages 6-7) for this Prescription Area are not being fully realized:

- Field studies found there are no stands providing early successional habitat conditions in the project area. Many species of wildlife including Chestnut-sided warbler, Black bear, White-tail deer, Ruffed Grouse, and Wild turkey, utilize this habitat and their populations would decline as a result. There is a need to create early successional habitat.
- There are white pine stands occupying sites that are appropriate for more diverse native communities, including oak forests. There is a need to begin restoring these stands.
- Mast-producing trees are being out-competed in previously regenerated stands. There is a need to release these trees from competition to ensure mast-producing species are a component of the mature stands.

- There is a previously harvested shelterwood stand. There is a need to remove the overstory on this stand to release the advanced regeneration.
- Dense understories of rhododendron and other competing species are precluding regeneration of mast-producing species. Mast-production would decline in the area as mature trees are lost and not replaced. There is a need to reduce midstory competition in these stands to encourage regeneration.
- Establishment of nonnative invasive species would displace native vegetation. There is a need to control these as they occur.
- Wildlife forage opportunities are lacking or in need of maintenance in the project area. There is a need to maintain existing wildlife forage. Adequate watering holes for wildlife are lacking in the analysis area. Wildlife habitat structures are limited. There is a need to provide nest boxes and bat houses.
- Stream productivity in the tributaries to Big Creek is generally low. There is a need to improve stream habitat in these tributaries.
- There are 2.55 miles of unauthorized road that are not needed for resource management. These roads need decommissioned.
- There are 3.43 miles of system roads in the area that are not needed for resource management. These roads are not needed for resource management and need to be decommissioned.
- There are 3.28 miles of unauthorized road that are needed for resource management. These roads need to be authorized and added to the system.

To move toward meeting the RLRMP Goals and Objectives for Prescription Area 7.E.2 in the Big Creek Area, the Forest Service proposed the following actions (EA pages 9 and 14-19) that are analyzed in the EA as Alternative B:

- 1. Provide early successional habitat on 268 acres in 11 stands in Prescription Area 7.E.2 utilizing commercial timber harvest by regenerating eleven stands with the Shelterwood Method. There are no stands providing this habitat in the project area now. (Objective 7.E.2-1.01, Goal 19, Objective 19.01 and 19.02).**
- 2. Clearcut White Pine stand, regenerate to hardwoods, and provide early successional habitat on 28 acres 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).**
- 3. Overstory removal on a 28 acre shelterwood stand (Goal 10, Goal 18, Objective 18.02, Goal 19, Objective 19.01 and 19.02).**
- 4. All stands in Items #1-3 would require site preparation and release treatments (Goal 10, Goal 18).**

5. **Begin restoration of 36 acres in two stands of white pine plantations by release thinnings favoring mast-producing trees (Goal 17; Objectives 17.01 and 17.02).**
6. **Release mast-producing trees from competition on 176 acres in 6 stands. (Goal 10 and Objective 18.02).**
7. **Daylight 12.64 miles of roads maintained as wildlife openings. (Goal 10, Goal 14, Objective 14.02).**
8. **Approximately 14.95 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 on 474 acres in 19 stands with herbicide. (Objective 18.02).**
10. **Control nonnative invasive species within all treatment areas, roads, and wildlife openings. (Goal 15 and Objective 15.02).**
11. **Wildlife Habitat Improvement Activities including rehabilitation wildlife openings, controlling nonnative species, providing water sources, providing nesting and roosting boxes, planting mast-producing shrubs, maintaining and replacing gates, thinning rhododendron and restoring brook trout. (Goal 10, Goal 14, Objective 14.02).**
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. (Goal 49, Objective 49.01).**
14. **Authorize 3.28 miles of existing roadways (Goal 48).**

Decision

Based on the analysis and disclosures of effects contained in the EA, I have decided to select Alternative C. I believe this alternative:

- Addresses the Purpose and Need stated on pages 8 and 9 of the EA;
- Moves this area toward the Desired Condition of Prescription Area 7.E.2; from the RLRMP.
- Addresses the issue for this project stated on page 13.

Compared to the Modified Proposed Action (Alternative B), Alternative C:

- Regenerates 31 more acres, creating 31 more acres of early-successional forest habitat;
- Treats 12 fewer acres of midstory for oak regeneration;

All other actions are the same as in Alternative B.

I have chosen Alternative C because:

- The creation of early successional habitat will benefit many wildlife species, both game and nongame (EA pages 69-74). With Alternative C, 8.6 percent of the suitable area will be in early successional habitat. This meets the RLRMP Objective 7.E.2-1.01 of between 4 to 10 percent in early successional forest.
- Alternative C diversifies the age class distribution, and improves overall forest health (EA pages 44-46). This addresses Objectives 18.02.
- Utilizing commercial timber harvest as the tool to create early successional habitat and diversify ages of stands is an economical method to accomplish these goals while also providing forest products to the local economy. This addresses Goal 19.
- The process of restoring white pine plantations is begun on 36 acres. This addresses Goal 17 and Objectives 17.01 and 17.02.
- This project contains provisions for planting blight-resistant American Chestnut. This addresses Goal 18 and Objective 18.01.
- Site preparation, mast tree plantings, release and midstory treatments will increase the incidence of mast trees in the area (EA pages 44-46). This addresses Goal 10 and Objective 18.02.
- Nonnative invasive vegetation that is competing with native species is controlled (EA pages 53 and 71). This addresses Goal 15 and Objective 15.02.
- Wildlife habitat will be further enhanced by rehabilitating and constructing wildlife openings to provide forage, regenerating mast-producing trees, and providing cover logs, amphibian ponds, and water sources. Installing nest boxes and bat houses will provide habitat and provide increased opportunities for viewing wildlife (EA pages 71-74). This addresses Goals 10, 14, and 30, and Objective 14.02.
- Aquatic habitat will be improved by thinning rhododendron along streambanks, and constructing fish structures, (EA page 72-74). This addresses Goal 11-3, and Prescription Area Direction RX11-32.
- Road maintenance will reduce erosion. This addresses Goals 1 and 3, and Management Area Direction 10-1.02.
- Classifying needed roads and decommissioning unneeded and illegal roads addresses Travel Analysis direction from Forest Service Manual 7712, and addresses Goals 48 and 49, and Objective 49.01.

My decision is based on the effects disclosure in the EA, public input received throughout the planning process, and on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. This is reflected in the

112 citations in the EA, the 63 references utilized during analysis, and consultations with resource specialists.

As required by 36 CFR 219.35, I have considered the best available science in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and where appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

The specifics of Alternative C include:

- 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 thirteen stands with the Shelterwood Method (Objective 7.E.2-1.01, Goal 19, Objective 19.01 and 19.02).**

Table A12 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
249	22	19	1928	White Oak/Northern Red Oak/ Hickory
249	24	12	1928	Yellow Poplar/White Oak/Red Oak
TOTAL		299		

- 2. (Same as Alternative B) Clearcut White Pine stands, 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).**

Table A13 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 3,774 acres in Compartments 242, 243, 244, and 249 within Prescription area 7.E.2 that are suitable for commercial timber harvest. Items #1 and 2 total 327 acres and is 8.6 % 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):

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 and/or herbicide treatment (Triclopyr) after harvest.

Chainsaw slashdown or herbicide treatment (Triclopyr) 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).

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):

<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).

Table A6

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 commercially 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).

Table A7

Road Number	Type	Mileage
22421	Prehaul Maintenance	1.58
22440	Prehaul Maintenance	1.63
22441	Prehaul Maintenance	1.63
22442	Prehaul Maintenance	0.76
22491	Prehaul Maintenance	1.68
3242	Prehaul Maintenance	3.00
3243	Prehaul Maintenance	1.51
3243A	Prehaul Maintenance	0.51
3249	Prehaul Maintenance	3.34
96	Prehaul Maintenance	1.66
Temp Road to C338/3+4	Temporary Construction	0.3
	Total Prehaul	17.3
	Total Temporary Const	0.3

9. Encourage oak and other mast-producing species regeneration by reducing midstory competition in 18 stands with herbicide (Objective 18.02):

Table A14 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	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	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		462		

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 (28 possible acres; Item #11) may be needed (treatment would not occur over the entire possible acres). These acres would only be treated if nonnative species are found. Treatment of these occurrences would be with 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):

Table A9 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	32 ac.	

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

Table A10

Stream	Habitat Structures	Rhodo Thinning	Brook Trout Restoration	Monitor
Trail Fork Big Creek	15	1.7 miles	1.7 miles	X
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

Monitor – Monitor effectiveness of fisheries activities

12. Decommission 2.55 miles of unauthorized roads (Outlaw Road (OUT)12, Old Road (OR)4, OR5, OR6, OR7, OR10, OR11 and OR12) (Goal 49, Objective 49.01).

13. Decommission 3.43 miles of authorized road [1.29 miles of (National Forest Service Road) 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):
Old Road (OR) and Wildlife Road(WL)

Table A11

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	

(See Roads Analysis Plan (RAP) for definition of D2 Road Management Objective)

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

Mitigation measures:

Mitigation measures summarized below, and in the EA on pages 21, are part of this decision.

Standards from the RLRMP are applied. Herbicide Use mitigation measures #62-66, 68-79, 81-86, and 88-93, from the Record of Decision for the Vegetation Management in the Appalachian Mountains Environmental Impact Statement (VMEIS) are applied to Alternative C. These are also incorporated as standards in the RLRMP. (A copy of these measures is also in Section R of the project file.)

The following mitigation measures are applicable to Alternative C:

- Build the fewest skid trails, logging roads, and log landings as feasible.
- Use broad-based dips or waterbars on all access ways on non-level slopes.
- Use a soil scientist to assist in the location of ephemeral pools.
- Mix water for herbicide use would be brought to the site by work crews and not obtained from streams or other bodies of water.
- Scenery Design Features are in Appendix G.

Other Alternatives Evaluated

In addition to Alternative C, the EA analyzed the no-action alternative (Alternative A) and the Modified Proposed Action (Alternative B). Under the no-action alternative, current management would have continued. The Modified Proposed Action, Alternative B, would have created 296 acres of early successional habitat and is discussed previously on pages 14-19.

Other Alternatives Considered But Not Developed

The original Proposed Action has been modified and analyzed as Alternative B-Modified Proposed Action.

The original Proposed Action sent out for scoping included midstory herbicide treatment on Stand 30 in Compartment 242. This stand was dropped in response to public comment that this stand did not require this treatment.

The original Proposed Action stated that the proposal would result in creation of 3.4 % early successional habitat based on 8,694 suitable acres. Further analysis has determined that there are only 3,774 acres in Compartments 242, 243, 244, and 249 within Prescription area 7.E.2 that are suitable for commercial timber harvest. The modified Proposed Action reflects this change.

The original Proposed Action (unmodified) was not developed or analyzed further.

An alternative that would have created the maximum of 10% early successional habitat was not feasible. Virtually all stands qualifying for regeneration utilizing commercial timber harvest and considering other resource constraints are included in Alternative C. Further creation of early successional habitat with non-commercial means is beyond the scope of this project.

Three letters from scoping called for more roads to be decommissioned and expressed opposition to adding existing unauthorized roads to the road system. An alternative that would have added fewer roads to the system and decommissioned more roads was considered but not developed. Roads inventoried during Roads Analysis must be added to the road system or decommissioned to comply with Title 36 of the Code of Federal regulations §212.5. Roads to decommission are those that are not needed for long-term resource management. The Modified Proposed Action adopts the recommendations from the Big Creek Roads Analysis Plan (RAP). The roads to be added to the system were determined during the Interdisciplinary RAP process to be needed for long-term resource management. Those proposed for decommissioning in the Modified Proposed Action are not needed for resource management.

Three letters suggested further restoration of white pine and yellow poplar-dominated stands, specifically Stands 3, 8, and 50 in Compartment 243; and Stands 15, 41, and 61 in Compartment 244. Stands in the Gulf Tract were also advocated as in need of restoration.

Following are the reasons that these suggestions for alternatives were not developed further:

The white pine stands submitted are mostly too small in diameter to commercially harvest at this time. In about 10 years these stands would be commercial size and could be thinned with commercial timber harvest.

Thinning of young yellow poplar is usually not silviculturally desirable because of residual stand damage and epicormic sprouting of remaining stems that decrease the future value of the stand. It is also marginal economically, there is usually a weak market for small diameter yellow poplar. Again, in about 10-20 years these stands can be economically regenerated with commercial timber harvest.

Stand 8 in Compartment 243, and Stands 15 and 61 in Compartment 244 are included in the proposed action for midstory completion treatment to promote the development of mast-producing species and begin the conversion process.

Stands in the Gulf Tract are generally too old to benefit from Mast Tree Release treatments, and too young to be commercially thinned or regenerated.

Public Involvement

During the Big Creek Project Area Assessment a public call for preliminary information gathering was made in June of 2008. One hundred forty one letters were sent out, flyers were posted in several public places in the Big Creek area, and news releases were sent to the *Greeneville Sun* and *Newport Plain Talk* newspapers. Seven comments were received.

The proposed action was provided to the public and other agencies for comment during scoping 2/26/2009-4/03/2009. The proposal has been published in the Schedule of Proposed Actions since April 1, 2008. Twenty letters and e-mails were received. Using the comments from the public and other agencies, the interdisciplinary team developed a list of issues to address.

Ninety-seven comments were derived from the twenty responses. Sixty-six comments fell into the following categories: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) not relevant to the decision to be made, 4) conjectural and not supported by scientific or factual evidence 5) general comment, suggestions, opinion, or position statement; or 6) other agency or partners consultation, review, advice, recommendations, etc., or 17) already considered in the proposed action or is standard procedure. These were all considered non-significant issues.

The remaining 31 comments were specific to this project and 14 issues were developed from these comments. Of the 14 issues, one is directly or indirectly caused by implementing the proposed action and is a significant issue for this project:

1. Early Successional Habitat is lacking.

Content Analysis of the scoping comments, issue development, and determination of significant issues is in Appendix B. Original letters are located in the project file.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action (see EA Chapter III).
2. Public health and safety are minimally affected by the proposed actions (see EA Chapter III).
3. There are no unique geographic characteristics affected by the planned activity (see EA Chapter III).

4. The effects on the quality of the human environment are not likely to be highly controversial (EA Chapter III).
5. We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk (see EA Chapter III).
6. The action is not likely to establish a precedent for future actions that may be implemented to meet the goals of the RLRMP.
7. The cumulative impacts are not significant (see EA Chapter III).
8. The action will have no effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because potential earth disturbing activities avoid these areas (see EA page 84).
9. The action is “not likely to adversely affect” any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973. The Biological Evaluation (BE) was sent to the US Fish and Wildlife Service (USFWS) for informal consultation in January 2010. A letter of concurrence from USFWS was received on May 3, 2010.
10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. The action is consistent with the Cherokee National Forest Revised Land and Resource Management Plan (See EA pages 6-8).

Findings Required by Other Laws and Regulations

The actions are consistent with the intent of the management goals, objectives, and standards described in the Revised Land and Resource Management Plan for the Cherokee National Forest. The project was designed in conformance with the Plan and incorporates appropriate guidelines and mitigation measures. The project is feasible and reasonable, and it results in applying management practices that meet the Plan’s overall direction of protecting the environment while providing goods and services.

It is my finding that the actions of this decision comply with the requirements of the National Forest Management Act (NFMA) of 1976, NFMA implementing regulations in 36 Code of Federal Regulations (CFR) Section 219, the National Historic Preservation Act, the Endangered Species Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations.

All stands where harvesting activity is planned are located on lands suitable for timber management in Prescription Area 7.E.2. The shelterwood and clearcutting method of regeneration are identified as applicable vegetation management practices for the community types found in this analysis area (Table F-7, Page 397, Appendix F, RLRMP).

Optimality Statement

In Alternative C, clearcutting was determined to be the optimum method of regeneration for Stand 10 in Compartment 243, and Stand 9 in Compartment 244. Clearcutting is one of the three silvicultural methods evaluated in Appendix F of the RLRMP “used to create early successional habitat and provide a sustainable level of these habitat conditions to meet management prescription objectives for the CNF”. The term “optimum method” means it must be the most favorable or conducive to reaching the specified goals of the RLRMP.

To evaluate when clearcutting would be the optimal regeneration method, the Chief of the Forest Service’s letter on ecosystem management dated June 4, 1992 stated in Attachment 2 that “Clearcutting would be limited to areas where it is essential to meet forest plan objectives and involve one or more of the following circumstances:..”. At least two of the seven circumstances listed in the letter apply to this project:

#5 “To provide for the establishment and growth of desired trees or other vegetative species that are shade intolerant.

Regeneration of these stands are planned to restore them to a more natural condition of native mast-producing hardwoods. To accomplish this, the current stand of white pine needs to be completely removed to reduce competition and remove the white pine seed source. Existing advanced regeneration of hardwoods or a suitable seed source for hardwoods is lacking. Hardwoods would be planted after white pine is removed. Seedlings of these species develop best in full sunlight. To achieve these objectives, clearcutting is therefore the “most favorable or conducive” to “fully achieve the productive potentials for the sites” for these species.

#6 “To rehabilitate poorly stocked stands due to past management practices or natural events.

These stands were planted to white pine on formerly upland oak sites. This predominately single species forest type would seldom occur naturally and regeneration of these stands is proposed to “restore and maintain forest communities to those plant communities predicted as most likely to occur based on the ecological potential of the site potential natural vegetation” (Goal 17, RLRMP). Clearcutting is required to remove the existing pine and provide for planting hardwoods to begin restoring these white pine plantations to “diverse native communities” (Objective 17.01, RLRMP) and to “oak or oak pine forests” (Objective 17.02, RLRMP). See also the discussion under Circumstance #5. To achieve these objectives, clearcutting is therefore the “most favorable or conducive” to “fully achieve the productive potentials for the sites” for these species.

NFMA findings

1. Soil, slope, or other watershed conditions will not be irreversibly damaged (16 U.S.C. 1604 (g)(3)(E));
2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (16 U.S.C. 1604 (g)(3)(E));
3. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat (16 U.S.C. 1604 (g)(3)(E));
4. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber (16 U.S.C. 1604 (g)(3)(E));
5. For clearcutting, it is determined to be the optimum method; for other cutting methods it is determined to be appropriate and meets the objectives and requirements of the applicable land management plan (16 U.S.C. 1604 (g)(3)(F)(i));
6. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii));
7. Regeneration areas are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii));
8. Regeneration areas conform to the maximum size limits for areas to be cut in one harvest operation as required by 16 U.S.C. 1604 (g)(3)(F)(iv)).
9. Timber harvest is carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource (16 U.S.C. 1604 (g)(3)(F)(v)).
10. Under 16 U.S.C. 1604 (m) even-aged stands of trees scheduled for regeneration harvest generally have reached culmination of mean annual increment of growth, unless the purpose of the timber cutting is excepted in the land management plan (FSM 1921.17f).

Travel Analysis Plan (TAP):

Forest Service Manual *FSM 7712* states: Use travel analysis to inform decisions related to identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands per 36 CFR 212.5(b)(1) and to inform decisions related to the designation of roads, trails, and areas for motor vehicle use per 36 CFR 212.51, provided that travel analysis is not required to inform decisions related to the designation of roads, trails, and areas for those administrative units and ranger districts that have issued a proposed action as of January 8, 2009.

A Project Level TAP was completed for this project. Recommended changes to the transportation system from the TAP were incorporated into the analysis.

Old Growth Guidance:

This project is in compliance with Old Growth Guidance in the RLRMP that is based upon the report of the Region 8 Old Growth Team entitled **Guidance for Conserving and Restoring Old-Growth Forest Communities on national forest in the Southern Region 1997** (Forestry Report 62).

No stands meeting the minimum age criteria for Old Growth are harvested in this project. About 105 acres in Stands 42 and 43 in Compartment 242 are designated as Existing Old Growth.

No additional Existing Old Growth was identified in Prescription Area 7.E.2.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215.11. Appeals must meet content requirements of 36 CFR 215.14. A written Notice of Appeal, including attachments, must be postmarked or received within 45 days after the date the legal notice is published in the *Johnson City Press* (Johnson City, TN). The appeal shall be sent to Cherokee National Forest, ATTN: Appeals, 2800 Ocoee Street, Cleveland, TN 37312. Appeals may be faxed to (423) 339-8650. Hand delivered appeals must be received at 2800 N. Ocoee Street, Cleveland, TN within the normal business hours of 8:00 am to 4:30 pm. Appeals may also be mailed electronically: Appeals-southern-chokeee@fs.fed.us.

All time periods are computed using calendar days, including Saturdays, Sundays, and Federal holidays. However, when the time period expires on a Saturday, Sunday, or Federal holiday, the time is extended to the end of the next Federal working day (11:59 pm). The day after publication of the legal notice of the decision in the newspaper of record (§215.7) is the first day of the appeal-filing period. The publication date of the legal notice of the decision in the newspaper of record is the exclusive means for calculating the time to file an appeal. Appellants should not rely on date or time information provided by any other source.

For additional information concerning appeals, contact Stephanie Medlin, Cherokee National Forest, 2800 Ocoee Street, Cleveland, TN, 37312, or by phone at (423) 476-9700.

For further information on this decision, contact Terry Bowerman, Nolichucky/Unaka District Ranger, 4900 Asheville Highway SR70, Greeneville, TN 37743, telephone (423) 638-4109.

Implementation Date

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 business days following the date of appeal disposition. (36 CFR 215.9)

Contact

For additional information concerning this project, contact Jeff Chynoweth, Cherokee National Forest, 4900 Asheville Hwy SR70, Greeneville, TN 37743, or by telephone (423) 638-4109.

/s/ Terry S. Bowerman

8/24/10

TERRY BOWERMAN
District Ranger
Nolichucky/Unaka Ranger District
Cherokee National Forest

Date