

File Code: 1570-1

Date: October 7, 1999

Mr. Sam Hitt
Forest Guardians
1411 Second Street
Santa Fe, NM 87505

Certified Mail - Return Receipt Requested

Re: Appeal #99-03-00-0090-A215, Chaparral Project, Cuba and Jemez Ranger Districts, Santa Fe National Forest

Dear Mr. Hitt:

This is my review decision on the appeal you filed, regarding the Decision Notice and Finding of No Significant Impact which provide for prescribed fire throughout a 22,000 acre landscape surrounding Rancho de Chaparral Girl Scout Camp.

BACKGROUND

On July 1, 1999 Roberto Rodriguez, Cuba District Ranger, Santa Fe National Forest issued a Decision on the Chaparral Project. The District Ranger is identified as the Responsible Official whose decision is subject to administrative review under 36 CFR 215 appeal regulations.

Pursuant to 36 CFR 215.16, an attempt was made to seek informal resolution of your appeal. The record reflects that informal resolution of the appeal was not reached.

My review of this appeal has been conducted in accordance with 36 CFR 215.7. I have thoroughly reviewed the appeal record and the recommendation of the Appeal Reviewing Officer. My review decision incorporates the appeal record. My review and findings are enclosed.

APPEAL REVIEWING OFFICER'S RECOMMENDATION

The Appeal Reviewing Officer recommended that the Responsible Official's decision on the Chaparral Project be affirmed. The evaluation concluded: (a) decision rationale and logic were generally and clearly disclosed; (b) the proposal and decision were consistent with agency policy, direction, and supporting information; (c) the analysis of anticipated results was adequate; (d) public participation and response to comments were adequate; and (e) all of the major issues raised by the appellant were adequately addressed in the project record.

APPEAL DECISION

After a detailed review of the records and the Appeal Reviewing Officer's recommendations, I affirm the Responsible Official's decision on the Chaparral Project.

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

/s/ James T. Gladen

JAMES T. GLADEN
Appeal Deciding Officer
Deputy Regional Forester, Resources

Enclosure

cc:
Forest Supervisor, Santa Fe NF
District Ranger, Cuba RD
Appeals/Litigation, R3
Aviation and Fire Management, R3

REVIEW AND FINDINGS

of the

Forest Guardians' Appeal #99-03-00-0090-A215

regarding the

Chaparral Project

ISSUE 1a: The cumulative effects resulting from the project are significant and therefore an environmental impact statement (EIS) is required.

Contention: Appellant alleges that the environmental assessment (EA) does not disclose the size, intensity, or impacts of ongoing or past logging.

Response: The project record contains evidence that the impacts of past and current logging were evaluated. The EA (Appeal Record (AR) 87, pp. 3 and 21) discusses past logging effects on vegetative structure. Ongoing timber sales, and their effects on diversity seral stage, forest health, and wildlife habitat are discussed in the Biological Assessment (AR 75, p. 17). The map in Appendix A (AR 94) spatially displays the implemented timber sales, the implemented thinning projects, and the planned timber sales in the project area. In the Finding of No Significant Impact section of the Decision Notice (AR 89), the District Ranger analyzed the proposed activities as to their cumulative effects when combined with other past or reasonably foreseeable future actions. He concluded that there would be no significant cumulative effects.

Finding: Based on the information and analysis contained in the project record concerning cumulative effects, significant cumulative impacts on the environment are not anticipated. An EIS is not required.

ISSUE 1b: Project has a high degree of controversy and involves uncertain effects therefore, an EIS is required.

Contention: Appellant contends that "Forest Service purports to reduce fire risk through logging" as controversial and "requires the preparation of an Environmental Impact Statement."

Response: Past and present research, that has been and is being done on the benefits of thinning from below and prescribed fire, is considerable. Thinning from below, fuel bed treatment, canopy spacing treatments, and periodic low intensity prescribed fire activities are supported by most scientists and researchers who work within, study, and research fire-adapted ecosystems.

Logging without subsequent fuel treatment can be expected to increase the probability of fire occurrence and under most conditions, the severity of fire. Logging, in conjunction with fuel treatments, can reduce the potential for catastrophic wildfire if the fuel treatment is of good quality. Good quality fuel treatments effectively reduce fuels that contribute to crowning, torching, spotting, and reduce the ecological damage of subsequent wildfires. Fuels change with

time and the length of time that a treatment will remain effective varies with treatment and site potential. Therefore, fuels management needs to incorporate periodic reassessment and retreatment.

Several scientific publications were identified by the appellant. The findings of these publications related to stand density, volume, and fire behavior, follow. Huff et. al. (1995) is referenced and quoted by the appellant. Huff et. al. used repeated aerial photography to determine the degree of change in forty-nine watersheds varying in size from 12,500-to-33,300 acres. They did not determine mapping accuracy (p. 4). Huff et. al. assigned fuel models on the basis of whether or not areas were logged or unlogged. No information was available on fuel treatments (p. 5). Therefore, their fire behavior analysis is based on logged versus unlogged, and not on actual fuel conditions. Their analysis was limited to low-to-moderate intensity surface fires (p. 5) and ignored crown fire potential. Therefore, the extreme fire behavior potential (crown fires) in unlogged stands was left out of their analysis. This is not a valid comparison. Furthermore, the trends reported by Huff et. al. were not statistically significant (p. 8). One of the primary objectives of the Chaparral Project is to "Reduce the hazards and high costs associated with intense crown fires, and reduce threats to all forest resources, especially human life and property, associated with current and future conditions." (AR 87, p. 6)

Fuel treatments cannot prevent all fires. Even quality fuel treatments may not protect an area from burning under the most extreme weather conditions. However, it is generally accepted that quality fuel treatments reduce fire damage. The appellant cites an unpublished report on the Tyee fire in Washington to claim, "...that harvest treatments could exacerbate fire damage." However, Pollet and Omi (paper presented at JFSC Fire Conference "Crossing the Millennium: Integrating Spacial Technologies and Ecological Principles for a New Age in Fire Management," June 15-17, 1999, Boise, ID; in press) reports that fuel treatment reduced fire damage on study areas in four wildfires including the Tyee fire. This would appear to support the appellant's claim that treatment results are variable and far from certain. However, the quality of fuel treatment is difficult to ascertain after a wildfire, and the time interval following treatment also affects a fire's potential to damage other resources.

The appellant cites Weatherspoon and Skinner's (1995) analysis of stand damage resulting from the 1987 wildfires in northern California. While it is true that Weatherspoon and Skinner found partial cut stands suffered more damage than uncut stands ("partial cut" is the terminology used by Weatherspoon and Skinner, "thinned" is the terminology used by the appellant), the appellant choose to ignore the fact that the partial cutting conducted in these California stands was predominantly an overstory removal (i.e. cutting trees constituting an upper canopy layer to release trees or other vegetation in the understory) followed by little or no slash treatment. The results of such treatments can be expected to result in high damage as Weatherspoon and Skinner point out (p. 444). To quote Agee (1997, Northwest Science 71 [1] pp. 153-156) who reviewed Weatherspoon and Skinner's paper, "...the major implication of this study is less an argument against logging than an argument against the types of logging and fuel treatments that were done in the past" (p. 155).

The appellant cites Stephens (1998). They correctly conclude that "restoration" treatments that include partial cutting without fuel treatments lead to more severe fires. Thinning without fuel treatments is, at best, only a partial restoration. Stand structure may be restored to some former

condition, but other stand processes are not restored. The Chaparral Project does not propose to leave fuels untreated. Activity generated fuels will be treated using prescribed fire.

The appellant cites Jack Cohen, Rocky Mountain Research Station Fire Sciences Laboratory, Missoula, Montana. However, the appellant's claim was directed at proposed thinning adjacent to Chaparral Girl Scout Camp. The proposed action (AR 66, p. 5) originally addressed thinning, prescribed burning, and fuelbreak construction. Of these activities, thinning small diameter trees adjacent to the Girl Scout Camp, to create a fuelbreak, stood alone as a complete project which generated no significant issues nor comments during scoping. This thinning activity was decided through a non-appealable Decision Memo signed by District Ranger Roberto E. Rodriguez on February 17, 1999 (AR 81).

Finding: The District has done a thorough search of literature on the subject and has shown that there is no substantial dispute concerning the anticipated effects of the action on fire behavior. An EIS is not required.

ISSUE 2: An analysis of cumulative effects was not completed.

Contention: Appellant alleges that the Chaparral Project EA does not provide the cumulative effects analysis described in Forest Service Handbook 1905.15.1 because there is "no analyses of particular resources."

Response: Forest Service Handbook 1905.15.1 briefly describes cumulative effects by rephrasing the definition in 40 CFR 1508.7 and states that consideration must be given to the incremental effects of past, present, and reasonably foreseeable future actions of the Forest Service, as well as, those of other agencies and individuals.

The courts have implied that consideration of the impacts on the existing environment necessarily take into account earlier and present actions and their effects. Therefore, an analysis of the existing environment is consideration of the effects of past and present actions. The EA (AR 87) and other reports (AR 75, AR 83, AR 94) adequately describe the existing environment and the past and present actions that shaped them including the cumulative effects of aggressive fire suppression. These same documents describe or display reasonably foreseeable future actions. The project record also contains information on planned timber sales of the neighboring Jemez Pueblo. The effects of the proposed action along with recreation, timber sales, traffic, and grazing impacts were evaluated for their effects on diversity, seral stage, forest health, and wildlife habitat (AR 75).

Finding: Past, present, and reasonably foreseeable future actions were considered in the analysis. The EA and record reflect an adequate analysis and disclosure of cumulative effects on the environment.

ISSUE 3: Old growth was not allocated in accordance with the 1996 plan amendments.

Contention: "There was no analysis of old growth distribution and function at multiple scales, no analysis of risks to sustaining old growth function, no analysis that considered the spatial arrangement of old growth areas and how that would benefit old growth related species."

Response: Page 1 of the Biological Assessment for the Chaparral Project (AR 75) states that there are 13,785 acres of ponderosa pine and 8,040 acres of mixed conifer forest in the analysis area. Since there are no old growth standards for oak woodlands, these areas do not require old growth allocation. The total forested area is 21,825 acres and 20 percent of this is 4,365 acres.

Page 8 of the Biological Assessment for the Chaparral Project (AR 75) states "Of the 5,940 acres of restricted area in the Chaparral Project, I designated 1,540 acres (about 26%) as target threshold (for spotted owls)." A comparison of the spotted owl nesting and roosting requirements given on page 92 of the owl recovery plan with the definition of old growth on page 96 of the Record of Decision for Amendment of Forest Plans show that if the area meets the nesting and roosting requirements, it will also meet the old growth requirements. Therefore, this is an allocation for old growth.

A total of 2,423 acres were allocated to old growth in the North Ojitos timber sale (AR 94, Appendix H). This sale is part of the analysis area. There are also portions of two spotted owl PACS within the area. Since PACS are managed in ways that will create old growth conditions, these areas also represent allocations of old growth. In addition, there are 1,720 acres of protected mixed conifer on slopes greater than 40 percent (AR 75, p. 12; AR 94, Appendix G) which would receive management compatible with old growth. A comparison of the maps of these areas (AR 94, Appendix H; AR 94, Appendix G) indicates that they do not overlap. The total allocation to old growth is in excess of 5,683 acres which is more than the 20 percent allocation required.

Page 19 of the EA (AR 87) states "As with the other resources, the greatest threat to wildlife, especially Mexican spotted owl habitat, is from wildfire." Since the Mexican spotted owl is generally recognized as being an old growth related species, it is apparent that the greatest threat to old growth is also wildfire.

Since the location of spotted owl habitat plays a large part in the old growth allocation, it is apparent that spatial arrangement of old growth and benefits to old growth related species have been included in the allocations.

Finding: The District has followed appropriate procedures for the allocation of old growth and has allocated in excess of 20 percent of the forested land within the analysis area to old growth.

ISSUE 4: The Chaparral Project will jeopardize the viability of species that find optimal habitat in interior forests, natural disturbed areas and old growth.

Contention 1. Habitat fragmentation will result from logging, road construction, and prescribed burning.

Response: The sources the appellant used to describe the predicted effects of fragmentation are from studies in Eastern forests where the fragmentation described is a patch of forest within a sea of non-forested land, often surrounded by urban development or rural farms. This is not the case in the Chaparral project area where the forest is in large blocks with treatments proposed within a portion of the forest. Wilcove (1988) and others have identified that the fragmentation effects are not found, or they are inconclusive, from studies of internal fragmentation of large forest tracts such as found in parts of the Chaparral area.

The effects of fragmentation in Eastern forests that affect Neotropical migrants are described as high rates of nest predation, high rates of brood parasitism, high rates of interspecific competition, reductions in pairing success, and reduction in nesting success with patches less than 20 ha in size having few if any Neotropical migrants present. Wilcove (1988) identified that while Neotropical migrants were showing declines, permanent residents and short-distance migrants usually exhibit stable or even increasing populations within these same forests.

Several reasons were identified. First, the small patches in Eastern forests are often surrounded by areas with high levels of nest predators, i.e. dogs, cats, crows, jays, etc. Several studies have shown essentially no difference in predation rates between edges and interior forests where these high levels of predators do not exist (Wilcove 1988). Second, the rural areas often have high levels of cowbirds present increasing nest parasitism. Third, the small patch size and large distances between patches of forest habitat in the East may not allow individuals to find a mate if the population is low and competition for the small amount of available habitat is high.

For most if not all of the species using ponderosa pine/mixed conifer habitats, prescribed fire and thinning are not equivalent to fragmentation. The conditions described above for the effects of fragmentation to be high do not exist in the Chaparral project area, and thus any effects of fragmentation would not be expected to be high and they may not be present at all. In addition, most of the project is designed to restore natural disturbance processes to the area. (AR 87)

Wilcove, David S. 1988 Forest fragmentation as a wildlife management issue in the eastern United States. A paper presented at the Convention of the Society of American Foresters.

Contention 2: The Forest Service runs afoul of the viability and diversity requirements set forth in forest planning regulations.

Response: The Forest completed an adequate analysis and determination of the affects the Chaparral project would have on the viability of sensitive and management indicator species found within the project area. (AR 86, AR 87)

Finding: The Chaparral Project will not jeopardize the viability of sensitive, management indicator species, nor those species that find optimal habitat in interior forests, naturally disturbed areas, and old growth.

ISSUE 5: The EA fails to assign any economic value to existing uses of the area and fails to consider the externalized economic costs of logging.

Contention: "The EA fails to place any economic value on existing uses and functions of the sale area, including recreation, flood control, pest control, carbon sequestering and many other "ecosystem services." In addition, the economic analysis fails to consider a wide range of costs that will be incurred through loss of ecosystem services such as increased flooding, increased risk of death, injury and property damage from logging operations and increased fire risk."

Response: Forest Service Manual (FSM) 1970 and Forest Service Handbook (FSH) 1909.17 contain detailed guidelines for conducting economic and social analyses. FSM 1970.3(6) states, "Select cost effective methods of conducting economic and social impact analyses to ensure that

the degree of analysis is commensurate with the scope and complexity of the proposed action." Obviously not every project requires the same level of analysis. FSM 1970.6 goes on to state, "The responsible line officer determines the scope, appropriate level, and complexity of economic and social analysis needed."

One identified issue directly addresses the project economic effects. This issue, which originated from public response to scoping, states "The trees to be removed during thinning and fuelbreak construction may have some commercial value; could this value be used to pay for the fuelbreak construction and prescribed burning activities?" (AR 87, p. 7) The economic effects were not needed as a basis for alternative development, however, they were used as one measure of comparing alternatives. These comparisons can be found in the EA III. Environmental Consequences, G. Socioeconomic Resources. (AR 87, pp. 18-19) The Decision Notice and Finding of No Significant Impact (DN & FONSI) describes the very low probability of any commercial removal of wood products. According to the DN & FONSI "Due to the size and access there is very little commercial opportunity but the Forest Service will assess the potential at the time of implementation as this is a constantly fluctuating market." (AR 89) The level of economic analysis is commensurate with the scope of the proposed project.

Finding: The economic analysis is consistent with regulation, manual, and handbook direction.

ISSUE 6: The Forest Service has failed to gain an archaeological clearance in violation of the National Historic Preservation Act of 1996, as amended.

Contention: The Appellant contends that the Chaparral Project decision was signed prior to completing the archaeological clearance and obtaining concurrence of the State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officer (THPO). The Appellant also contends that the Forest Service did not initiate the Section 106 process early in the planning process.

Response: The AR documents that the Forest Supervisor submitted the archaeological clearance report to the SHPO on March 4, 1999 (AR 88), and that the SHPO concurred with the report's findings on May 27, 1999 (AR 88), prior to the project decision of June 22, 1999. Because the decision (AR 89) does not include activities on tribal lands, THPO concurrence was not required.

The record contains evidence that heritage resources were considered from the outset of the project planning process (AR 26, AR 39), that tribal consultation was initiated in January of 1998 (AR 24) and continued throughout the analysis (AR 38, AR 40, AR 44, AR 57), and that the archaeological surveys were completed during the summer of 1998 (AR 70, AR 88).

Finding: The Chaparral Project is in compliance with The National Historic Preservation Act of 1996.