

Decision Notice
and
Finding of No Significant Impact
for the
Ferris East Timber Sale

USDA Forest Service
San Juan - Rio Grande National Forests
Mancos-Dolores Ranger District
Montezuma County, Colorado

Introduction

The purpose of this Decision Notice is to document the management alternative I have selected for implementation and the rationale for my choice. It also details additional mitigation measures that will be implemented with my decision. My decision is based on an environmental assessment (EA) prepared for the Ferris East Timber Sale.

The Ferris East Timber Sale EA describes the effects of two alternative ways to treat vegetation, manage road densities, maintain wildlife habitat, and comply with federal laws related to clean air and water, threatened and endangered species, and historic preservation. In accordance with the National Forest Management Act (NFMA) and National Environmental Policy Act (NEPA), an interdisciplinary team of Forest Service resource specialists (ID Team) conducted the analysis and documented the results in an EA. The EA on which I based my decision is available for review at the Mancos-Dolores Ranger District office in Dolores, Colorado.

The proposed timber sale is located in portions of Sections 3-9, T.39N., R.16W., Sections 1 and 12, T.39N., R.17W., and Sections 28-34, T.40N., R.16W., N.M.P.M. in Montezuma County, Colorado. A map is attached.

Purpose of and Need for Action

The San Juan National Forest Land and Resource Management Plan (LRMP) establishes management direction for the Forest in a manner similar to county land-use zoning. Each zone is assigned management emphasis (for example, recreation, grazing, or timber management). The amount of area dedicated to these management emphases reflects the balance that the LRMP attempts to establish in meeting social and economic demands and ecological needs of the Forest. The LRMP has established this project area's management emphasis as 7E -- production and utilization of wood fiber. The environmental analysis of the Ferris East Timber Sale focuses on implementing LRMP management direction within a 4,165-acre

analysis area in the vicinity of Canyon Creek and Cabin Canyon above the lower Dolores River. The area is roaded and has been periodically logged.

Current forest conditions exhibit several indicators of poor health. For example, the analysis area includes extensive acreage of overstocked stands of small-diameter ponderosa pine, heavy accumulations of forest floor fuels, and low levels of herbaceous production. These ecosystem structure elements could lead to severe fire behavior, reduced wildlife habitat diversity, and a decrease in other resource values. If these conditions continue, they could in turn, affect the ability to meet Forest Plan Goals and Standards and to sustain resource-dependent elements of the local community.

The purpose of and need for the proposed Ferris East Timber Sale as stated in the EA is to help meet Goals and Objectives identified in the Land and Resource Management Plan and the Western Forest Health Initiative. These Goals and Objectives include harvesting timber and the use of prescribed fire on 7E prescription areas, providing for healthy forest ecosystem elements, and contributing to sustaining a diverse economic base in local communities. The proposal also serves to maintain the productivity of the land. Implementation of the Forest Plan is required by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA, P.L. 93-378) as amended by the National Forest Management Act of 1976 (NFMA, P.L. 94-588). This decision pertains only to lands currently administered by the Forest Service.

Scoping and Public Involvement

In 1992, the San Juan National Forest made significant changes in the timber management direction in its LRMP. These changes included reducing the area of the Forest where scheduled timber harvest is allowed from 470,000 to 375,000 acres; reducing the maximum amount of timber the San Juan NF could sell from 413 million board feet per decade (MMBF/decade) to 240 MMBF/decade; and changing management to emphasize uneven-aged timber management systems and landscape ecosystem management. The 95,000 acres removed from timber management were primarily in unroaded areas of the Forest; the remaining 375,000 acres where timber management can take place constitute approximately 20 percent of the total Forest land base.

During the process of changing the LRMP, the Forest Service spent close to four years (1987-1991) working with concerned citizens to address the questions of where and how commercial timber management should be conducted on the San Juan NF (Amended LRMP, Record of Decision, 1992, pg. 22). The decisions made in 1992 provide the basis for current timber management, and projects such as the Ferris East Sale implement this revised management direction.

The scoping process was used to gather information regarding the potential environmental effects and issues surrounding the Ferris East proposal. The Forest Service ID Team, other resource specialists, and members of the public provided input to the process.

A wide array of individuals and organizations were contacted by letter soliciting issues in January, 1997. News releases were also made during January, 1997 informing the public that comments to the proposal needed to be submitted to the Mancos-Dolores Ranger District by February 27, 1997. In addition, public notification took place in the "San Juan National Forest NEPA Project Update" published in March and June, 1997 and the American Indian Consultation Bulletin published in May, 1997. Several letters were received in response to these solicitations. These comments were reviewed to identify the issues, concerns, and opportunities described in them.

An initial EA was released for public comment on July 15, 1997. The public comment period ended on August 15, 1997. We received comments from two organizations following public review of the draft EA. Our response to these two organizations is presented in Appendix G (p.66) of the EA.

Decision

Based on the analysis documented in the EA, it is my decision to implement a modification of Alternative 2 which emphasizes ecosystem restoration and forest health issues by using timber harvest and fire in a fashion that would seek to replicate pre-1870 forest conditions on 938 acres (23%) of the ponderosa pine type within the analysis area. Five harvest units, ranging in size from 124 to 278 acres, will be placed adjacent to and between past harvest units, to imitate the scale of natural disturbance patterns and modify the edges of past harvest units. Small group and individual tree selection methods will remove individually marked trees with the objective of creating a clumpy distribution of trees in the residual stand. Density will vary throughout the treatment units, from open pockets with no trees on areas up to an acre in size, to dense pockets of leave trees up to three quarters of an acre in size. Average basal area per acre across treatment units will be 40-50 sq. ft./acre, leaving about 50-60 trees per acre. No ponderosa pine in excess of 20 inches in diameter at breast height (DBH) will be harvested. An adequate number of ponderosa pine trees greater than 16 inches DBH will be retained to meet desired future condition objectives for large trees in uneven-aged stands and to help meet desired snag densities. Minimum cutting diameter on ponderosa pine will be 5 inches DBH. Trees of all other species will be retained for diversity. All standing snags greater than 10 inches DBH and 15 feet tall will also be retained. About 1.9 million board feet of ponderosa pine timber will be harvested. No new road construction is required. Portions of some existing system roads will require reconstruction to provide for adequate cross drainage.

A late summer prescribed burn will be conducted in all treatment areas, as well as an additional 400-800 acres within the analysis area north of Cabin Canyon, in the first year following harvest. A second burn will be conducted in 3-10 years to reintroduce a periodic fire regime to the area. Created openings will be naturally regenerated. All existing non-system roads will be obliterated following the harvest.

The modifications of Alternative 2 are meant to balance our desire to meet the proposed timber sale's Goals and Objectives with the need to protect wildlife habitat and rehabilitate roads to reduce erosion. The modifications included with Alternative 2 reflect concerns that were received during the EA comment period.

These modifications of Alternative 2 add supplemental management requirements and mitigation measures which provide for additional habitat for Abert squirrels and establish priorities for non-system road obliteration. These additional mitigation measures are listed below. The management actions common to all alternatives on EA pages 11-14 are also included in my decision, but are not specifically listed here. The rationale for my decision is included below.

- Provide for at least two Abert squirrel nest tree clumps per six acres in all harvest units. A nest tree clump is defined as a group of 6-12 ponderosa pine trees (9-12 inches DBH) with interlocking canopies. Basal area should average 180-220 square feet per acre in these clumps.
- Close and rehabilitate all existing non-system roads within the analysis area to the extent that timber sale and other resource funding allows. The first priority will be those roads that pose soil and watershed problems and impair site productivity, the second priority will be those roads that adversely affect wildlife habitat security areas, and the third priority will be those roads which lead to

the same destination as other specified roads and are less than one-quarter of a mile away. Specific roads to be closed or rehabilitated have not yet been identified. These roads will be identified and included in the timber sale contract and sale area improvement plan.

Public access within the analysis area will be assured through retention and reconstruction of the open system road infrastructure. The area will also continue to be open to ATV use as well as non-motorized methods of travel such as horseback riding and mountain biking.

Rationale for My Decision

During the scoping process, four key issues were identified that formed the basis for the development and comparison of alternatives. These key issues are identified in the EA on pages 6-7, and include:

1. Ecosystem restoration
2. Forest health
3. Effects on the local economy
4. Wildlife

In addition, the ID Team evaluated each alternative for its compliance with the Endangered Species Act/Region 2 Sensitive Species policy, the Clean Water Act, and the National Historic Preservation Act.

In selecting my alternative, I considered the key issues raised, as well as the Specific Features of Alternative 2, (EA, pages 11-14); the Alternative Design Criteria and Silvicultural Treatment Descriptions for Proposed Harvest Units included in Appendix A (EA, Pages 42-43); the effectiveness of proposed mitigation measures; and our ability to implement the specified management requirements. Further, I reviewed the ID Team's assessment of how each alternative complied with federal laws and policy. The following is my rationale for selecting modified Alternative 2.

Response to Issues and Concerns

Key Issue 1: Ecosystem Restoration

There is general concern that most pine forests on the Mancos-Dolores District are outside the range of natural variation for the Southwestern United States ponderosa pine type. These conditions were created over the last 100 years through the elimination of natural fire, the introduction of intensive livestock grazing, and the harvest of nearly all the large old-growth trees. The area now consists of relatively dense, small diameter, immature trees. Isolated pockets of trees exhibiting old growth character exist but are rare. This is in sharp contrast to conditions which existed 100 years ago when forests in the Ferris East area would have been far more diverse, and contained abundant park-like old-growth stands (EA pages 8-9, 11, 14, 18, 20-23, 26-28, 33, 35, 36, and 42-44).

If the No Action alternative were implemented, timber stands would continue to develop old-growth characteristics, but more slowly than might be otherwise possible. With no action, the forest structure would have fewer openings and a more "closed canopy" condition. Natural pine regeneration would be less common. Snag densities would improve over time.

Alternative 2 has ecosystem restoration as a primary objective. Silvicultural treatments are designed specifically to restore forest conditions which were typical prior to 1870. Alternative 2 treats 938 acres, about 25 percent of the total pine acres in the analysis area.

Key Issue 2: Forest Health

Stand conditions in the Ferris East area warrant a concern about overall forest health. Forest health means the project area's capability for sustaining resource conditions which satisfy long term management objectives such as: wood fiber production, forage production, protection of diverse wildlife habitat, and providing recreation opportunities. The overcrowded clumps of young ponderosa pine are growing slowly and demonstrate poor vigor. These stands are currently at risk for mountain pine beetle attack, as documented in the EA (page 18). The presence of dwarf mistletoe disease in portions of the area also contributes to reduced growth and creates deformed trees. The area is also considered a high-risk for catastrophic wildfires (EA pages 8-9, 11, 14, 18-20, 22, 28-29, 35-36, 43, and 61-64).

With the No Action alternative, there would be no abrupt change in current stand conditions. Areas of medium to high risk would remain in those states, or develop increasing risk.

Alternative 2 proposes treatment that would directly reduce risk of catastrophic losses of timber stands in the area. Alternative 2 treats 731 acres which are at moderate to high risk for mountain pine beetle and reduces the risk of catastrophic fire on 938 acres. Alternative 2 also treats noxious weeds on 38 acres and improves grass, forb, and shrub conditions.

Key Issue 3: Effects on the Local Economy

The economic dependence of local communities on National Forest resources is an issue. The local wood products industry is dependent on a supply of timber from public lands. Supply of raw wood fiber material helps sustain jobs and processing facilities. It diversifies the tax base and adds stability to the economy (EA pages 9, 29, and 46)..

Each alternative's responsiveness is based on the total pine acres harvested. Modified Alternative 2 harvests timber on 938 acres of National Forest land and is directly responsive to this issue. The No Action alternative is not responsive to this key issue.

Key Issue 4: Wildlife

Important habitat requirements for wildlife species found in the area are also an issue. There is a lack of habitat for wildlife species associated with old-growth ponderosa pine forests. There is a lack of dead standing ponderosa pine snags for cavity dependent wildlife species. Snag surveys conducted in this habitat have consistently found snag densities to be 0.5 snags per acre, well below the average of 2.0 considered necessary for maintaining habitat for cavity dependent wildlife in the Forest Plan. Down logs which provide habitat for small mammals are in short supply. These are all conditions more commonly found in old growth stands.

Use of the existing system of open and closed roads by motorized vehicles is also an issue that can be affected by the proposed action. Current open road density may be too high, causing disturbance to the area's wildlife species. There are about 15 miles of open system roads in the analysis area (2.2 miles per square mile of analysis area). There are about 15 additional miles of open non-system roads. Forest Plan Standards allow for 1-3 miles of open roads per square mile. The planned timber harvest activities provides the opportunity to close existing open non-system roads to improve wildlife habitat and reduce erosion.

The No Action alternative would not close existing open roads. It would not bring the area within the Forest Plan Standards for open-road densities.

Alternative 2 includes design criteria which specifies closing 5.3 miles of non-system roads inside treatment unit boundaries.

The Forest Plan requires that Abert squirrel habitat in 7E Management Prescription Areas be mitigated during harvest by retaining at least one squirrel nest tree clump per six acres harvested. The No Action alternative maintains the suitable squirrel habitat on 90 percent of the area in the short term. Over the long term, this habitat would improve.

In modified Alternative 2, two squirrel nest tree clumps would be retained per six harvested acres. Timber harvest will degrade the overall squirrel nesting habitat values in the treatment units. However, the retention of two nest tree clumps per six acres exceeds the Forest Plan Standards and Guidelines and will maintain the habitat in at least a "fair" condition.

The Forest Plan directs that hiding cover be maintained on at least 40% of forested ecosystems. The IDT determined that, conservatively, 60% of the analysis area presently provides quality hiding cover. This does not include the additional value of topographic relief as effective hiding cover. The No Action alternative would maintain hiding cover in its current distribution.

Alternative 2 would selectively remove some pine hiding cover through timber harvest. It would also remove a portion of the Gambel oak cover component during prescribed burning. In a typical prescribed burn, the hiding cover provided by oakbrush is eliminated on about 50% of the treated acreage, as the area is burned in a mosaic pattern. Based on this, about 869 acres within the analysis area would be affected for an estimated 10 years or longer until the oak again reaches 4-6 feet in height. Despite this loss of hiding cover on the treated acres, quality hiding cover would be retained throughout the analysis area in untreated stands and adjacent canyons. This other residual hiding cover still comprises an estimated 40 percent of the area, meeting the Forest Plan Standard and Guideline.

The Biological Evaluation for the Ferris East timber sale (EA, pages 47-60) determined that no federally listed Threatened, Endangered, or proposed species, including the bald eagle and Mexican spotted owl, would be affected. It was determined that the following Region 2 Sensitive species may be impacted: milk snake and northern goshawk. The determination for these species is that individuals may be impacted, but proposed treatments are not likely to result in a loss of species viability or a trend toward Federal listing. No goshawks have been found within the analysis area. Specific mitigation measures (EA page 17) protect nesting goshawks, should a nest ever be located.

Response to Compliance Issues and Established Management Goals

The selected alternative complies with requirements of the National Forest Management Act, the National Environmental Policy Act, the Clean Water Act, the Endangered Species Act, and the National Historic Preservation Act. My selected alternative is very effective in meeting the Purpose and Need for the Proposed Action (EA pages 1-2) as well as Forest Plan Goals and Objectives.

There are three Forest Plan standards and guidelines that will not be met, due to historic, intensive management in the analysis area. It is important to recognize that none of these standards and guidelines would even be met under Alternative 1: No Action. In each case, my selected alternative will move the analysis area closer to meeting Forest Plan direction than would the No Action alternative.

The first Forest Plan standard and guideline that will not be met is the requirement to maintain a road density of 1-3 miles per square mile (Forest Plan III-222). My selected alternative includes the road rehabilitation emphasis proposed in Alternative 2, which is designed to rehabilitate as many roads as budget allows.

The second Forest Plan standard and guideline that will not be met is the requirement to provide 20 pine snags/10 acres with DBHs greater than 10 inches (Forest Plan III-214). As described in the EA, past harvest and firewood activities have caused existing snag densities to fall below the Forest Plan minimum. My selected alternative includes snag protection and creation measures proposed in Alternative 2. However, in reality, the ability to create snags will depend on KV collections. The amount of KV collections cannot be determined until a sale is sold. Other funds, such as wildlife program dollars, could also be used; however, these dollars have been declining.

The third Forest Plan standard and guideline that will not be met is the requirement to maintain 5% of the analysis area in an old-growth structural class. There are currently no stands of ponderosa pine in the analysis area that could be considered even minimal-quality old-growth. The selected alternative is specifically designed to promote old-growth stand conditions.

In summary, the alternative I have selected will:

1. Provide about 1.9 million board-feet of timber to local dependent operators.
2. Restore the health, vigor, and diversity of all vegetation types in the area ponderosa pine forest, and reduce the threat of noxious weeds on 938 acres in the analysis area.
3. Improve big-game forage quantity and quality on 938 acres.
4. Improve ponderosa pine timber stands through the use of management-ignited, fire to reduce oakbrush competition with ponderosa pine regeneration.
5. Take action to perpetuate the aspen type within the ponderosa pine type, provided sufficient KV funds are available.
6. Provide quality big-game hiding cover over 40% of the area while accomplishing restoration objectives.
7. Reduce open-road densities while retaining ATV, horseback, and mountain bike access.
8. Move aggressively towards meeting Forest Plan standards for road density,snags, and old-growth conditions.

Other Alternatives Considered

Besides Alternatives 1 (no-action) and 2 (action), two other "action" alternatives were considered but not fully developed and analyzed in the Ferris East EA. Both alternatives required leaving higher residual stocking levels than Alternative 2. Leaving denser stands to maximize wood fiber production or improve wildlife habitat conditions would result in an economically non-viable sale.

Public Response to Alternatives

The ID Team received 2 letters during the public comment period. In the first letter, concerns were expressed about protection of riparian areas, road densities, livestock grazing as an element of ecosystem restoration, management for wildlife snags, monitoring, habitat for squirrels and surveys for mexican spotted owls. The second letter expressed concerns about habitat fragmentation, viability of wildlife species including the northern goshawk, the scale of analysis in the EA, and the distribution of developing old-growth. These letters and the full text of our responses is on file at the Dolores office, and is included in Appendix G of the EA, pages 66-73.

Results of Consultation

June 4, 1997, the Colorado State Historical Preservation Officer concurred with the Forest Service "no adverse effect" determination regarding cultural resources.

Compliance with the National Forest Management Act (NFMA)

This decision complies with the San Juan National Forest's Land and Resource Management Plan and with the National Forest Management Act, including the management requirements found in 36 CFR 219.27. This Act requires documentation of several specific findings at the project level:

Forest Plan Consistency

All resource plans are to be consistent with the Forest Plan (16 U.S.C. 1640(i)). The Forest Plan guides all natural resource management activities (36 CFR 219.1(b)). All administrative activity must be based on the current Forest Plan (36 CFR 210.10 (E)).

The EA (pages 1-2), lists the Forest Plan management area prescriptions and desired Goals and Objectives. The ID Team reviewed and affirmed that my selected alternative is consistent with current Forest Plan management direction.

Lands Suited for Timber Production

When timber is to be harvested, a determination that the harvesting will either: (1) occur on lands suited for timber production or (2) occur on lands classified as not suited for timber production only in the cases of salvage sales, sales necessary to protect other multiple-use values or activities that meet other objectives on such lands if the forest plan establishes that such actions are appropriate (36 CFR 219.27(c)(1)).

I have determined that the harvest will occur on lands suited for timber production

Clearcutting and Even-Aged Management

This decision does not involve clearcutting or the use of timber harvest for even-aged management. NFMA guidelines concerning clearcutting and even-aged management are not relevant to this action.

Vegetative Manipulation

The seven requirements in 36 CFR 219.27(b) for management prescriptions that involve vegetative manipulation are:

1. *Be best suited to the multiple-use goals for the area.* This is addressed in the Rationale for My Decision section, on pages 3-7 of this document. It is also referenced in the EA, Chapter 1, Purpose of and Need for the Proposed Action.
2. *Assure that lands can be adequately stocked.* Treatment prescriptions for harvested stands in this proposal are designed to leave adequately stocked stands using the existing tree component. Additional stocking is desired but not necessary to meet this requirement.
3. *Do not choose an alternative primarily because it provides the greatest dollar return or the greatest output of timber.* My selected alternative will provide about 1.9 MMBF of timber to be harvested. It was chosen because it best met the issues of ecosystem restoration, forest health, effects on the local economy, and wildlife. Dollar return and output of timber were neither the exclusive nor the primary reasons for selecting Alternative 2. They were only two factors among many.
4. *Be chosen after considering potential effects on residual trees and adjacent stands.* The key issues of ecosystem restoration and forest health address these concerns. Only about 23% of the analysis area was selected for harvest. I have not precluded any future management options within the analysis area.
5. *Avoid permanent impairment of site productivity and insure conservation of soil and water resources.* No units lie on unstable soils, nor will riparian areas be directly affected. My selected alternative provides for long-term improvement of soil and water resources through the rehabilitation of non-system roads. Site productivity should be enhanced through implementation of the selected alternative.
6. *Provide desired effects on...wildlife habitat, regeneration of desired tree species, forage production, and other resource yields.* Chapter 4 of the EA, Affected Environment and Environmental Consequences, details the effects on wildlife habitat, regeneration of desired tree species, forage production, and other resource yields. The chosen alternative will maintain existing wildlife habitat capabilities in both the short term and long term, regenerate the desired tree species and enhance forage production.
7. *Be practical in terms of transportation, harvesting requirements, and sale preparation and administration.* The area is well accessed by existing roads. Only minor amounts of road improvements will be needed. No major harvesting, sale prep, or administration problems were evident during site visits by the ID Team.

Finding of No Significant Impact

Analysis of the environmental consequences indicates this is not a major federal action with significant effects on the quality of the human environment. Therefore, an Environmental Impact Statement is not required for this proposal. This determination was made considering the following factors:

1. The proposal conforms with the direction provided in the 1992 Amended Land and Resource Management Plan for the San Juan National Forest.
2. No irreversible or irretrievable commitment of resources will occur.
3. The proposed action will not have a significant effect on the quality of the human environment, either as an individual action or as part of the cumulative effects of other past, present, and planned actions within this area.
4. The proposed action does not affect public health and safety.
5. The effects of the proposed action on the human environment are not highly uncertain, nor do they involve unique or unknown risks.
6. The proposed action is not precedent-setting. It does not establish a precedent for future actions that may have a significant effect on the environment. It does not represent a decision in principle about a future consideration.
7. The proposed action will not adversely affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places. The proposed action will not cause loss or destruction of significant cultural or historic resources.
8. The proposed action will not adversely affect Endangered or Threatened species.
9. This action complies with other federal, state, and local laws and requirements imposed for the protection of the environment.
10. The effects of this action on the quality of the human environment are not likely to be controversial.


Implementation Date

Implementation of the selected alternative may begin 45 days after publication of the Legal Notice for this decision appears in the *Durango Herald*, the paper of record.

Appeal Rights

This decision is subject to appeal, pursuant to Forest Service regulation 36 CFR 215.7. Any written appeal must be postmarked or received by the Appeals Deciding Officer, Lyle Laverty, Regional Forester, Rocky Mountain Region, 740 Simms P.O. Box 25127, Lakewood, Colorado 80225, within 45 days from the day after notice of this decision is published in the *Durango Herald*, Durango, Colorado. Appellants are required to simultaneously send a copy of the Notice of Appeal to Calvin N. Joyner, Associate Forest Supervisor, at 701 Camino del Rio, Durango, Colorado 81301. Appeals must meet content requirements of 36 CFR 215.14.

For additional information concerning this decision of the environmental analysis, contact Phil Kemp, Mancos-Dolores Ranger District, P.O. Box 210, Dolores, Colorado 81323, or call (970) 882-7296.



CALVIN N. JOYNER
Associate Forest Supervisor

2/9/98

Date



