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Date: December 16, 2002

Bryan Bird
Forest Conservation Council
P.O. Box 22488
Santa Fe, NM 87502

**CERTIFIED MAIL – RETURN
RECEIPT REQUESTED**

RE Appeal #03-03-00-0005-A215, Thunderbird Ecosystem Management Project, Mountainair Ranger District, Cibola National Forest

Dear Mr. Bird:

This is my review decision on the appeal you filed regarding the Decision Notice (DN), Environmental Analysis (EA) and Finding of No Significant Impact (FONSI) on the project noted above, which provides hazardous fuel reduction, creating fuel breaks.

BACKGROUND

Forest Supervisor Agpaoa issued a decision on September 11, 2002, for the Thunderbird Ecosystem Management Project. The Forest Supervisor 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 indicates that informal resolution was not reached.

My review of this appeal has been conducted in accordance with 36 CFR 215.17. I have reviewed the appeal record, including the recommendations of the Appeal Reviewing Officer. My review decision incorporates the appeal record.

APPEAL REVIEWING OFFICER'S RECOMMENDATION

The Appeal Reviewing Officer concluded that: 1) decision logic and rationale were clearly disclosed; 2) the benefits of the proposal were identified; 3) public participation and response to comments were adequate; and 4) the project is in compliance with NEPA and other applicable federal laws and regulations.

The Appeal Reviewing Officer recommended that the Responsible Official's decision on the Thunderbird Ecosystem Management Project be affirmed.



APPEAL DECISION

After a detailed review of the records and the Appeal Reviewing Officer's recommendation, I affirm the Responsible Official's decision on the Thunderbird Ecosystem Management Project.

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

Sincerely,

/s/ Abel M. Camarena
ABEL M. CAMARENA
Appeal Deciding Officer,
Deputy Regional Forester

cc: Christina Gonzalez, Daniel Crittenden, Mailroom R3 Cibola

Enclosure

REVIEW AND FINDINGS**of the****Forest Conservation Council****Appeal #03-03-000-0005-A215****Thunderbird Ecosystem Management Project**

ISSUE 1: The Thunderbird Ecosystem Management Project EA violates NEPA.

Contention 1a: The Forest Service failed to evaluate an adequate range of alternatives, specifically a non-commercial restoration alternative.

Response: The noncommercial and/or restoration alternative was considered but eliminated from detailed study (EA p. 26, document #277). The interdisciplinary team determined that without a mix of harvest and non-harvest (noncommercial) vegetation treatments, it was not feasible to meet the purpose and need for the project. Their analysis followed cited manual direction (FSM 2409.18).

Finding: The Thunderbird Ecosystem Management Project EA has followed all current law, regulation, and policy. The analysis appropriately considered a reasonable range of alternatives, responded to scoping input, and is consistent with NEPA and its implementing regulations and Forest Service Manual direction.

Contention 1b: The Thunderbird EA failed to disclose contrary scientific opinions.

Response: The EA discusses Cohen's report that updates the research cited in the appeal. Pages 40 and 41 of the EA refer to Cohen's 1999 report that says there is a need to reduce fuel loadings across the landscape and not simply around the home structure. Cohen's 2000 report is referenced on pages 5, 40, and 41 of the EA; and it states that wildland urban interface fire commonly originates in wildland fuels. The rates of wildfire spread, long-range spotting of fire, and risk of wildfire near homes are discussed as part of the issue development on pages 9, 11, 12, and in the effects discussion on page 39 of the EA.

There is no assertion in the EA that water yield would increase over the long term, see pages 34 and 35. Instead, the EA states, "It is not expected that any of the action alternatives will produce measurable or sustained water yield increases." An in-depth discussion is found in the Watershed Report, document #177 in the record. This report cites published and unpublished papers that state vegetation removal is not a practical way to produce increases in water yields.

Finding: The EA discloses and discusses reference papers that are pertinent to the issues raised in this appeal. Further analysis of the two papers mentioned in the appeal would not add to the discussion or information previously disclosed.

Contention 1c: The Thunderbird EA fails to disclose the effects of temporarily opening of closed roads.

Response: The EA clearly states that the existing road system is considered adequate to access treatment areas (pp. 19, 23). Those closed roads needed for the proposed action will be opened and used as needed for the project and then re-closed following their need (p. 58).

By definition, a closed road is essentially a "stored road" intended for long-term, periodic use. A closed road is a part of the National Forest Road System and is an existing classified road. Closures between uses exceed one year. Maintenance-level classification during the closure period is level 1. Most closed roads are maintenance level 2 roads, prior to being closed, however all maintenance levels (2-5) can be placed in a closed status. When a road is needed and opened for use, the maintenance level is changed back to the maintenance level that existed for the road prior to the closure. To re-open a road (or close a road) requires evaluation through the roads analysis process at the project or higher level. The EA states that a roads analysis was completed for the Thunderbird Ecosystem Management project (p. 58) and determined that some closed roads would be re-opened and used and then re-closed following the completion of the project.

A temporary road is a road that is constructed and used *only for the project*. It is not needed long-term and is not part of the National Forest Road System. It is evaluated as a part of the project analysis and is not part of the roads analysis process. The EA states (pp. 19, 23) that temporary access points will be ripped and/or seeded following their need for the proposal.

Only routine maintenance is proposed on the existing road system (Appendix B, Comparison of Alternatives, p. 6 of 6). There is no proposed reconstruction. Routine road maintenance will likely occur on the existing road system (p. 25) with or without the project to protect resources (maintain drainage patterns and minimize sediment movement) and investments for the existing roads. Routine road maintenance is addressed and approved in the Forest Land Management Plan and is an established best management practice. Road maintenance is considered to have an overall positive effect.

Finding: Temporarily opening closed roads for this project will have no long-term or significant effects. The required roads analysis process was conducted on this project. Closed system roads were identified in the process to be opened and used and then re-closed following the completion of the project. Periodic use of closed roads is completely within the management objectives for the roads. Closed roads are a part of the existing system identified as sufficient for long-term access needs. No reconstruction of the existing road system is being proposed, only routine road maintenance. Routine road maintenance is addressed in the Forest Land Management Plan and is an established best management practice. Routine road maintenance will be performed on the existing road system with or without the project.

Contention 1d: The EA does not meet the objectivity standard as required by OMB.

Response: The USDA Forest Service, following OMB direction, has established guidelines on quality information for objectivity, utility, and integrity. No specifics are identified in the

appeal, so it is impossible to know what piece of information is believed to violate USDA Quality of Information guidelines. NEPA CEQ regulations require that environmental information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail (40 CFR 1500.1 (b)).

Finding: The Thunderbird Ecosystem Management Project Vegetation Treatments EA meets the USDA Quality of Information Guidelines and NEPA standards.

Contention 1e: An Environmental Impact Statement is required. The Thunderbird project as currently planned clearly meets the threshold for significance as determined by the CEQ.

- The Project may adversely affect public health and safety.
- The Project is adjacent to a designated wilderness area [which] supports a number of unique, ecologically significant habitat types.
- The project is highly controversial in a scientific sense.
- The effects of the project on the environment are highly uncertain, and involve unique or unknown risks.
- The action is linked to other proposed actions, such as the Benton Burn, that will generate significant cumulative impacts.

Response: A Finding of No Significant Impact was prepared and signed on September 11, 2002. For each of the above items it found as follows (Document #290 in record):

No aspects of implementing the selected alternative will threaten public health and safety. Air quality and fire risk were disclosed in the environmental assessment. Smoke management guidelines established by the State of New Mexico will be followed to protect air quality (see mitigation measures, EA p. 30). The action alternatives would lessen the existing potential of catastrophic wildfire (EA, pp. 39-41).

There are no wilderness areas within the area affected by the decision. Users of the Manzano Mountain Wilderness (described as Management Area 3, EA, p. 28) may be affected by smoke from prescribed fires nearby (EA, p. 54); however, no management activities are proposed in the wilderness area in the selected alternative (EA, p. 23).

Experts familiar with site-specific conditions of the Arroyo de Manzano and Abo Arroyo Watersheds have indicated that there are no effects that are likely to be highly controversial.

Vegetation management activities will not modify the environment to create unknown, highly uncertain, or unique risks. Vegetation management treatments have been practiced for decades, and effects are generally known.

This decision is not related to other actions with individual insignificant but cumulatively significant impacts. The Benton Burn is disclosed and analyzed in the EA (pp. 8, 56).

Finding: An environmental impact statement is not needed. Significant effects were not found in the environmental analysis.

ISSUE 2: Thunderbird Ecosystem Management Project EA Violates NFMA

Contention 2a: The Thunderbird EA does not comply with the 1996 Forest Plan Amendment for the Mexican spotted owl (MSO).

Response: The Thunderbird Ecosystem Management Project incorporates both the MSO and Northern goshawk, Forest Plan Amendment Standards and Guidelines (S&Gs). There are no treatments scheduled to take place within MSO Protected Activity Centers (PACs) or any other protected habitats, including the Manzano Mountain Wilderness and mixed conifer habitat on slopes over 40% (Project Record #243). Activities in MSO restricted habitat will meet MSO guidelines to retain woody debris larger than 12 inches in diameter, snags, clumps of broad-leaved woody vegetation, and hardwood trees larger than 10 inches in diameter at the root collar (Project Record #247). Existing large oaks will be retained, and treatments are designed to promote growth of additional large oaks (Project Record #243). Furthermore, all trees greater than 24 inches DBH (diameter at breast height) will be retained (Project Record #243). The overall project is expected to improve habitat for the MSO by increasing the diversity of habitat for prey species, reducing the probability of catastrophic stand replacing fires, creating wildlife openings, and opening dense habitat to allow for the development of nesting and foraging habitat over time.

The proposed management activities are also designed to meet the 1996 Forest Plan Amendment S&Gs for the Northern goshawk. Goshawk management guidelines recommend forest structural stages and habitat components desirable for the goshawk and its 14 important prey species. Current forest conditions in the analysis area do not meet those recommendations. In general, treatments in goshawk foraging habitat are designed to favor the growth and retention of large-diameter trees and improve understory conditions. Habitat components important to goshawk prey species, such as snags and woody debris, will be retained, as well as large-diameter trees with potential for providing roosting or nesting sites. Furthermore, the wildlife openings proposed are expected to enhance the availability of food and habitat resources for goshawk prey species. The goshawk management prescriptions for creating wildlife openings in the Thunderbird Project were developed from the S&Gs for implementing wildlife openings. Human disturbance factors have also been addressed by imposing seasonal timing restrictions that require project activities, etc., to occur outside of the goshawk breeding season in active goshawk nesting areas.

One area of potential contention however, is the proposed creation of shaded fuel breaks. The creation of approximately 666 acres (26.2 miles) as outlined in the preferred alternative, is likely to result in a greatly reduced canopy cover over the fuel break treated acres. This potential deviation from the S&Gs for canopy closure for the Northern goshawk was not addressed in the EA or the project record. It should be noted however, that the canopy closure S&Gs for the Northern goshawk apply only to VSS classes 4, 5, and 6. Most of the fuel-break treatment areas within the Thunderbird Project are in a VSS3 condition and those in VSS classes 4, 5, and 6 are pinon/juniper woodlands. There is no conflict with the goshawk management guidelines.

Finding: The treatments proposed in the Thunderbird Project in Protected or Restricted MSO habitat are consistent with the 1996 Forest Plan Amendment for MSO. Furthermore, Endangered Species Act Section 7 consultation has been completed and concurrence has been received for the MSO through the Programmatic *1996 Forest Plan Amendment for the MSO and Northern Goshawk* Biological Opinion, as well as, the preferred alternative of this project.

Contention 2b: The selected alternative will not meet the standard and guidelines for snag retention and down wood requirements of the Forest Plan.

Response: Woody debris larger than 12 inches in diameter and snag and hardwood trees larger than 10 inches in diameter will be retained (Project Record #243). All trees larger than 24 inches in diameter will be retained, as well as all existing large oaks (Project Record #243). In the absence of further management, the current snags and large downed woody material are present in sufficient quantity and quality (within the Thunderbird Project) to meet the Northern goshawk's (EA, p. 35; Project Record #184) and the MSO's S&Gs and MSO Recovery Plan (Record of Decision for Forest Plan Amendments, p. 90; Project Record #243).

Finding: The snag and woody debris retention levels proposed under the preferred alternative are considered sufficient to achieve the standards and guidelines set out in the 1996 Forest Plan Amendment for both the MSO and the Northern goshawk. Furthermore, snags and large downed woody material are currently present in sufficient quantity and quality within the Project to meet the goshawk's and MSO's S&Gs for retention of snags and forest floor woody debris.

Contention 2c: The Thunderbird Project fuel breaks reduce the mixed conifer canopy cover in foraging areas below the standards set in the LRMP.

Response: Within the Thunderbird Project, 95% of the mixed conifer type is currently categorized as VSS5 (Project Record #160). Treatments in the mixed conifer vegetation type will primarily focus on areas of where trees are infected with mistletoe (Project Record #243). The EA (p. 18) indicates that shaded fuel breaks will be established in two areas within the Thunderbird Project: 1) near the urban interface area along a Thunderbird Project private inholding and northeastern boundary of the project area; and 2) along Forest Roads 275, 522, 422, and 253. The majority of the proposed fuel breaks are located in the pinon/juniper vegetation type (EA, Appendix B Alt II map); however, one of the fuel breaks does traverse the Ponderosa pine vegetation type. In this area, at least 40% canopy cover will be maintained (Project Record #312), meeting the S&Gs for the Northern goshawk.

Finding: As proposed, the fuel breaks are primarily located in the pinon/juniper vegetation type along Forest Service roads or immediately adjacent to a private land inholding. The small area of fuel break located in the Ponderosa pine type, will maintain at least 40% canopy cover, satisfying the S&Gs for the Northern goshawk.

Contention 2d: The Thunderbird Project has not complied with direction to allocate 20% old growth for each ecosystem management area (EMA).

Response: The Thunderbird Project currently has no inventoried stands that meet the old growth requirements established in the Forest Plan (no less than 20% old growth in each ecosystem management area). Individual stands have not been identified as potential old growth because the stands are so far from the requirements in the Forest Plan that it did not make sense to identify them at this time (Project Record #248).

The silvicultural prescriptions proposed for the project area are intended to move the treated stands towards a condition where 40% of the treated areas will have trees over 18" DBH (Project Record #248). There are currently 798 acres of mixed conifer stands and 701 acres of ponderosa pine stands in the Manzano Mountains Wilderness that will remain untreated and can be considered future old growth stands (15% of project area) (Project Record #248; EA, p. 36). Furthermore, there are 2 goshawk post-fledging areas within the Thunderbird Project that will be managed at a density that meets the old-growth guidelines (Project Record #248).

Over the long term, 77% of the mixed conifer stands will meet the old-growth requirements and 27% of the ponderosa pine stands will meet old-growth requirements. In addition, small clumps of VSS5s and VSS6s will be scattered throughout the treated stands, and the pinon/juniper vegetation type will be treated to ensure that at least 20% meets the old growth requirements (Project Record #248; EA p. 37). Under the proposed alternative, thinning treatments done in the ponderosa pine and mixed conifer stands will have the cumulative effect of creating conditions that allow those treated areas to move towards the old-growth condition faster than if no treatment were given (EA, p. 37). Given the predicted growth rates in the planning area, the acres treated by thinning will be moved into an old growth condition in approximately 60–80 years (EA, p. 37), representing approximately 28% of the Thunderbird Project. Because the development of the old-growth component in the EMA is a future desired condition and not a current condition, the prescriptions focus on the trees remaining on the site, not those removed under the proposed action.

Finding: The EA is consistent with the Forest Plan's direction to manage, in the long term, for old growth patterns that provide for a flow of functions and interactions at multiple scales across the landscape (LRMP, p. 65; Project Record #249).

Contention 2e: The selected alternative fails to disclose the long- and short-term maintenance impacts of the fuel breaks.

Response: Fuel breaks will be established along Forest Service roads. These shaded fuel breaks will be thinned, and the slash piled and burned. Mitigation measures on EA pages 29, 30 and 31 cover removal of hazard trees along roads, and monitoring for herbaceous recovery in sites that are burned. Also, see page 40, which describes fire-created openings moving to broadleaf herbaceous plants through natural processes. The monitoring described is similar to any post-burn monitoring. Roads will be maintained, hazard trees removed, and vegetation monitored, including noxious weeds.

Finding: No special maintenance along roadside openings is discussed or envisioned in the EA. Monitoring is a foreseeable activity, while use of herbicides or further prescribed burns as

described in the appeal are speculative and outside the reasonable schedule of activities disclosed in the EA. The EA describes reasonably foreseeable actions as required under NEPA.

Contention 2f: The Thunderbird Project fails to provide for a diversity of plant and animal communities and fails to insure the maintenance of viable wildlife populations.

Response: Vegetation treatment activities associated with density management in the Thunderbird Project were designed to open up the forest canopy and promote increased numbers and species of plants and grasses (EA, p. 15). Existing conditions within the Thunderbird Project consist of even-aged stands with a lack of under story vegetation, resulting in a lack of diversity of vegetation types and structure (EA, Appendix A, p. 6). The proposed vegetative treatments are expected to increase the diversity of vegetative age classes and structure, thereby benefiting a variety of plant and animal species by diversifying the vegetative age class structure and improving under story forage conditions (EA, p. 47,48). Furthermore, many plant and wildlife species are expected to benefit from the establishment of forest openings ranging in size from ¼ to 4 acres. Forest openings will be created in 10% of the total treated project acres, in the mixed conifer and Ponderosa pine vegetation types.

Pinon/juniper stands will be opened up to a savanna-like density of roughly 20 trees per acre (EA, p. 16) to provide wildlife and vegetation diversity objectives for this vegetation type. Habitat components important to wildlife in pinon/juniper woodlands, such as thermal and hiding cover patches, production of juniper berries and pinon seeds, large diameter trees, hardwood trees, herbaceous ground cover, alligator juniper, cone-producing pinon trees, snags and woody debris, will be retained (EA, p. 42). According to the Wildlife Cumulative Effects Analysis (Project Record #241), all of the proposed actions under Alternative #2 would result in a positive result for ecosystem and species diversity. It is expected that under the proposed alternative, management indicator species will benefit from the increased diversity of age class structure and improved understory forage conditions.

Finding: The desired future condition of the Thunderbird Project is a mosaic of forest types, representing a broad range and balance of structural stages across the landscape to provide for a diversity of plant and animal communities. Although thinning and burning operations, especially if conducted during the nesting season, may result in the direct loss or displacement of individual nesting bird, mammal, and reptile species, this loss is not likely to result in long-term population decreases (Project Record #195). Past management activities (fire suppression) has caused a reduction of biodiversity within vegetation types resulting in decreased wildlife and plant biological diversity. Under the proposed alternative, the viability and diversity of plant and wildlife species is expected to improve through the, creation of wildlife openings, thinning of the under story vegetation, prescribed burns, riparian area treatments, etc.

Contention 2g: The Cibola NF routinely ignores its duty to conduct scientifically credible population surveys for MIS. There is no site-specific evidence that the Thunderbird Project gathered the requisite population data for MIS. In the admitted absence of information, the analysis relies solely on the opinion of a Forest Service biologist to determine viability.

Response: The Thunderbird Project's EA of May 22, 2002, (Project Record #2) contains a detailed analysis of MIS population trends and habitat trends, as required by 36 CFR 219.19 (see Project Record #2 at 3.3.5, MIS p. 45; Project Record #273 MIS Report; Project Record #274 Cibola National Forest MIS Assessment; Project Record #241 Cumulative Effects for Wildlife). In these documents there are population and habitat trends information for each of the MIS connected to habitats found in the Thunderbird Project. Forest-wide trends in habitat and populations of MIS are clearly displayed and an analysis of how the Project will affect population and habitat trends for each MIS, are reported.

Finding: This project has met the intent of the 36 CFR 219.19(a)(6) "Population trends of the management indicator species will be monitored and relationships to habitat changes determined."

ISSUE 3: The Thunderbird Ecosystem Management Project EA violates ESA.

Contention 3a: The Forest Service has failed to protect the MSO and its habitat from the impacts of grazing.

Response: This appeal point is outside the scope of the Thunderbird Project. No grazing activities are proposed to occur under any of the alternatives formulated, including the proposed alternative.

Finding: Grazing is not a management action considered in the Thunderbird Project's vegetation treatments' Environmental Assessment.

Contention 3b: The Forest Service has failed to monitor the owl population.

Response: Surveys were conducted for the MSO within the Thunderbird Project in 1991-1992, and site occupancy was monitored from 1993-2000 (Project Record#243). Two PACs have been identified in the project area, one in upper Ox Canyon and one in upper Red Canyon, both located primarily in the Manzano Mountain Wilderness. The two PACs have been monitored annually since they were discovered in 1992, but have not been reoccupied since then; and no reproduction is known to have ever occurred (Project Record #243). No other MSO have been located during survey efforts, and it is unlikely that MSO would occupy other habitats due to human presence and existing habitat conditions (dense, single-storied, even-aged stands with little or no under story vegetation and no other rocky canyons) (Project Record #243). In addition to the annual monitoring of the MSO PACs, the EA (p. 31) indicates that gross changes in acres of MSO habitat resulting from natural and human-caused disturbance will be monitored, which is consistent with recommendations in the Forest Plan amendment for the MSO.

Finding: Monitoring activities for the MSO have occurred in the project area. Surveys have been conducted annually since the discovery of two PACs in 1992. No other MSOs have been located during survey efforts in the Thunderbird Project. Consistent with the S&Gs for the MSO, gross changes in acres of MSO habitat resulting from natural and human-caused disturbance will be monitored.

Contention 3c: The Thunderbird Ecosystem Management Project EA may result in an illegal take of MSO.

Response: The proposed alternative (#2) for the Thunderbird Project has received Endangered Species Act Section 7 concurrence from the U.S. Fish and Wildlife Service (Project Record #247) for effects to the MSO. The Forest Service determined in the Biological Assessment (Project Record #243) and the Fish and Wildlife Service concurred (Project Record #247) that there was no adverse effect to the MSO; therefore, informal consultation was completed, and no take for the MSO was issued. Management prescriptions will not occur within MSO PACs, and no other adverse impacts are expected to occur to the MSO as a result of project implementation. In the long term, habitat for the MSO is expected to improve under the proposed vegetative management actions.

Finding: An informal consultation on the preferred alternative was completed and a “may affect, not likely to adversely affect” call for the MSO was concurred on by the U.S. Fish and Wildlife Service on June 7, 2001. Under the ESA, take is issued only during the formal consultation process, which was not the case here. Furthermore, only two MSO PACs have been identified in the Thunderbird EMA, both of which have been monitored since 1992. No reproduction is known to have ever occurred. The Fish and Wildlife Service has determined that the project is expected to have long-term beneficial effects to the MSO and its habitat, and concluded that any short-term effects to the MSO from implementing the Preferred Alternative are likely to be insignificant and discountable.

ISSUE 4: The Thunderbird Ecosystem Management Project EA fails to disclose financial efficiency, nor does it analyze overall economic impacts.

Response: There is a requirement for programmatic social and economic analysis driven by 36 CFR 219 that was met when forest plans were adopted for implementation. Projects such as the Thunderbird Ecosystem Management Project are developed to be consistent with the direction described in the Forest Plan. Project-level requirements for social and economic analyses are described in Forest Service Manual (FSM) 1970 and Forest Service Handbook (FSH) 1909.17. 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.” The primary purpose of the economic analysis in an EA is to assist in decision-making.

Document #44 in the Project Record outlines the estimated cost to accomplish the proposed project. The EA (p. 26) covers the consideration of a non-commercial and/or restoration alternative. Socio-economic effects of the project are covered on pages 52-54 of the project EA.

Finding: The economic analysis is consistent with regulation, manual, and handbook direction for project-level analysis and is not in violation of applicable laws, regulation, or policy.