Encino Vista Landscape Restoration Project

Scoping Comment Content Analysis

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for:
Coyote Ranger District
Santa Fe National Forest

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Public Outreach and Tribal Consultation

The Forest Service first listed this proposal in the Schedule of Proposed Actions (SOPA) in January 2019, originally as Canones Vegetation Project. The project name was changed to Encino Vista Landscape Restoration Project in the July 2019 SOPA. We will continue to list this project in the SOPA until after the decision is issued. On November 19, 2019, we mailed a comprehensive scoping letter that included a description of the proposed action, the purpose and need, and a map of the proposed project. This letter was mailed to 144 interested groups, agencies, Indian Nations, and individuals. A public community meeting was held on December 11, 2019, approximately 30 community members attended.

Public Response

Thirteen comments were submitted in letters and emails. The interdisciplinary team (IDT) extracted and sorted a list of 68 to consider from all of the communications that were received. Table 1 lists the respondents to the scoping letter.

Table 1. Respondents to scoping for the Encino Vista Landscape Restoration Project.

Respondent Name, Agency/Organization	Correspondence ID Number	Number of Comments Submitted
Chuck Hathcock, Community Member	01	5
Brent Thompson, Community Member	02	10
Dennis Smith, Community Member	03	4
Thomas Jervis, Sangre de Cristo Audubon Society	04	10
Melissa Velasquez, Juan Bautista Valdez land Grant Advisory Group	05	24
Emmy Koponen	06	1
Norman Vigil, Mesa del Medio permittee	07	4
Judi Brawer, WildEarth Guardians	08	13
Jonathan Glass, Course of Human Events	09	3
Sarah Hyden	10	18
Sam Hitt, Wild Watershed	11	39
Lupita Salazar, Community Member	12	5
Cornelio Salazar, Permittee	13	4

Forest Service's Method in Analyzing Public Comments

The IDT reviewed all communications received to identify substantive comments. They grouped similar substantive comments and summarized them in public concern statements. The IDT considered the public concern statements in order to classify each concern into one of the following categories:

- The concern identified unintended consequences or irresolvable resource conflicts, requiring the Forest Service to consider either developing alternatives to the proposed action to reduce adverse effects or preparing an EIS[1];

- The concern directly suggested an alternative for the Forest Service to consider;
- The concern could be addressed in detail in the analysis; or
- The concern could be addressed with a summary response.

Issues and Alternatives

After considering all comments, I have determined that no significant issues were presented in scoping that would result in unavoidable significant effects and the need to prepare an EIS. The public also did not present new issues that would result in the need to develop alternatives to analyze in detail in order to reduce adverse effects.

The public recommended one alternative: The Santa Fe Conservation Alternative. The basic principles of the Santa Fe Conservation Alternative are:

- **Thinning**
  - Limited hand thinning (up to 9") only in dry pine and mixed conifer outside of IRAs.
  - Stumps cut down to the ground
  - No thinning adjacent to the WUI for the purpose of protection of structures or communities except within 150 feet of structures, and for fire fighter safety zones.
  - Maximum trees removed in most thinned areas to 80 BA
  - -Leave more tree groupings (50% minimum) and maintain a shrub understory. Utilize a wildlife habitat-based determination of tree and vegetation retention
  - Identify riparian area concerns and create plan to protect
- **Slash management**
  - Pile burning of activity fuels
  - Reevaluate slash management timing and methods to avoid potential bark beetle outbreaks, and sterilization of soil under slash piles. No slash over 3" left on the ground during the dry season
- **Prescribed burning**
  - Utilize managed wildland fire and pile burning wherever possible. Utilize minimal broadcast prescribed burns only in areas that are not assessable for pile burns.
- **IRAs**
  - No thinning in IRAs
  - Identify Roadless Area concerns and develop a policy to restore
- **Monitoring** (key means of reaching desired outcomes of healthy forest habitat and protection of public health)
  - Test plots for monitoring purposes
  - Soil sampling - plot number and spacing to be determined
  - Baseline species evaluation (i.e. population capacity and presence/absence)
  - Improved air quality standards and monitoring to protect sensitive (human) population
- **Reclamation and restoration**
  - Reclamation of any USFS roads deemed unessential in Travel Management Plan
  - Hand building of structures (example Zuni bowls) in arroyos to slow flood waters
  - Planting native, stream side vegetation where appropriate to slow floodwaters
  - Reintroduction of beaver where appropriate

- **WUI and community forests**
  - Develop a program to support fire-proofing of structures and surrounding 100 feet, at least through increased outreach and education. This should be a homeowner responsibility
  - If possible, support development of an alternative egress for communities with a single egress
  - Leave most areas that the public uses for recreation, including forests adjacent to communities, natural and intact.
  - Take into greater account the need to preserve areas that are special to communities, such as Cougar Canyon
  - Increased law enforcement to protect against unsafe fire behavior by forest visitors
- **Scenic quality**
  - Maintain the scenic quality of all treated areas. Develop a standard for acceptable scenic quality.

This alternative and the reasons why they will not be analyzed in detail will be discussed in the EA.

The IDT addressed the remaining public concerns in summary responses. We will analyze some of these concerns in the EA. The following section documents our consideration of all of the substantive public comments received.

Public Concerns and Forest Service Responses, by Subject

Table 2. Public concerns and Forest Service responses, by subject, for Encino Vista Landscape Restoration Project.

Riparian Health
Public Concern #01: Removal of non-native species Forest Service Response: The Santa Fe National Forest has a separate NEPA Decision for treatment and removal of non-native species; "Invasive Plant Control Project - Final Supplemental Environmental Impact Statement". In addition, the Santa Fe National Forest, along with the Cibola and Carson National Forests are actively conducting a NEPA analysis for treatments focused on the restoration and health of riparian corridors; "Northern New Mexico Riparian, Aquatic, and Wetland Restoration Project". As a result, these actions were not included as a part of this NEPA analysis. **Public Comment(s)**: *You do not mention removing non-native species. Areas along the Rio Puerco are choked closed with Russian olive and to a lesser extent salt cedar. You mention this and other watercourses in the background and mention that they are at risk, but I don't see any treatments listed for riparian health improvement. Consider adding treatment options that include non-native tree removals. (Ltr. 01)*

Public Concern #02: Riparian Protection

Forest Service Response: Please refer to Public Concern #1

Public Comment(s):

-- possibly fencing off (or other means of prohibiting livestock/recreation users) areas of Riparian & meadows should be considered. Using natural vegetation within the area to construct fences should be considered as this can accomplish the fencing-out goal, as well as a means to remove woody biomass from the vertical structure. After a pre-determined time of allowing the riparian/meadows/aspen to regenerate, the "natural" fencing could be set afire as a prescribed/pile burn. (Ltr. 02)

Wildlife

Public Concern #03: Jemez Mountain Salamander

Forest Service Response: Federal agencies are required to consult with the USFWS under ESA. Per ESA, critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. A biological assessment is being prepared for this project and section 7 consultation will be complete upon decision. These documents will be available on the project record. Under FSM 2670.12, the Forest Service is to "Manage "habitats for all existing native and desired nonnative plants, fish, and wildlife species in order to maintain at least viable populations of such species." The Jemez mountain salamander (JMS) will be analyzed in full detail in the wildlife specialist reports. Appropriate mitigations and project design features will be included in the analysis.

Public Comment(s):

You do not mention the Jemez Mountains salamander. While the project boundary looks to be just outside of designated critical habitat on the southern edge, this area is still within the salamander's historic range. You should have some considerations for salamander habitat along the boundary with the VCNP and just west of there. (Ltr. 01)

No mention is made regarding soil disturbance during peak Jemez Mountains Salamander surface activity. There should be prescriptions added to account for this Endangered species. (Ltr. 02)

Public Concern #04: Migratory Bird Treaty Act

Forest Service Response: The biological evaluation analysis will analyze compliance with the Migratory Bird Treaty Act (MBTA). The BE will also discuss best management practices and mitigation measures to be considered during implementation. The final BE will be available for review in the project record.

Public Comment(s):

You do not mention any compliance requirements for the Migratory Bird Treaty Act. You should have some mention of this federal law and have best management practices that can help mitigate impacts to migratory birds. The primary impact would be from active nest destruction, so having some guidelines to prioritize tree and shrub removals outside of the peak bird nesting season would be appropriate. (Ltr. 01)

Public Concern #05: Forest Sensitive Species

Forest Service Response: All RFSS species will be addressed in the Biological Evaluation.

Public Comment(s):

…why is the northern goshawk the only RFSS species mentioned? Others could be impacted by this work as well such as the boreal owl, pale Townsend's bid-eared bat, spotted bat, water and masked shrews, and several plant species. (Ltr. 01)

Public Concern #06: Amphibian Chytrid Fungus

Forest Service Response: *Amphibian Chytrid Fugus is often found in wet areas such as riparian areas. This project does not plan on implementing any treatments in wet areas. Best management practices require heavy equipment to be cleaned. The Forest Service inspects the equipment prior to entering a project area. This is done to prevent the spread of invasive weeds. Additional measures such as spraying equipment with a disinfectant may be implemented if heavy equipment is known or suspected to have previously worked in area with Amphibian Chytrid Fungus and/or will be operating in rare or sensitive amphibian or reptile habitat.*

Public Comment(s):

No best management practices mentioned regarding the minimization of amphibian Chytrid fungus spread due to heavy equipment use. A protocol regarding this should be implemented as well. (Ltr. 02)

Public Concern #07: Nesting Birds

Forest Service Response: Please refer to Public Concern #04.

"Design Features are being developed, to include as part of the proposed action, which would maintain and improve important habitats. This could include, though not limited to, the protection of large snags and downed logs, promoting vegetation diversity for foraging (e.g. flowers, seeds, insects), nesting and cover, maintaining known nests, etc. When possible, project activities would be avoided during the breeding season, however, activities may occur due to other factors, such as the small window to conduct prescribed burning when smoke transport could be directed away from human population centers to address air quality, another public concern. Along with this, the proposed action is restoration focused, designed to promote diverse, healthy, and resilient forest habitats. The proposed action would also minimize the threat and spread of stand-replacing wildfires, both in and adjacent to the project area, which could otherwise render some habitats unsuitable, like has occurred in such wildfires in the past. Additionally, the impacts to migratory birds would be analyzed and disclosed in the BE".

Public Comment(s):

We are primarily concerned about nesting birds. Direction for management and protection of migratory birds and their habitats within the continental United States exists in several forms.

- *The Migratory Bird Treaty Act (MBTA) enacted in 1918 established Federal prohibition, unless permitted by regulations, to pursue, hunt, take, capture, kill any migratory bird, any part, nest, or egg of any such bird.*
- *Executive Order (EO) 13186 signed January 10, 2001 directed Federal agencies to avoid or minimize adverse impacts (to the extent practical) on migratory bird resources when conducting agency actions (among many items within the "Federal Agency Responsibilities" section of the EO).*
- *Pursuant to the EO, agencies were to develop Memorandum of Understanding (MOU) to strengthen and promote migratory bird conservation and collaboration with the U.S. Fish and Wildlife Service. The original 2008 MOU was extended and signed in 2016.*
- *Bald and Golden Eagle Protection Act (1940 as amended) protects eagles from actions of anyone (or entity) which would "take" eagles to the point of causing nest failure or reduce productivity (unless you or your entity have obtained a permit issued by the Secretary of the Interior).*

There have not been specific USFS policies provided to direct migratory bird analyses into the NEPA process. However, the Southwestern Regional Office (R3 USFS) direction on migratory bird analysis is as follows:

1) Analyze effects to Species of Concern which are developed by the local (State) Partners In Flight Office with an emphasis on "high priority species".
2) Analyze effects of project action on Important Bird Areas (IBA's).
3) Analyze effects of project actions to important overwintering areas on USFS lands.

While we appreciate the attention paid to Mexican Spotted Owl (Strix occidentalis lucida) and Northern Goshawk (Accipiter gentilis) in this initial Proposed Action, we are troubled by the lack of attention paid to other species. The New Mexico Avian Conservation Partners (Partners in Flight) Birds of Conservation Concern (Primary threat list status SCI) that can be reasonably expected to be found in the project area include:

Flammulated Owl Psiloscops fLammeolus
Grace's Warbler Setophaga graciae

Juniper Titmouse Baeolophus ridgwayi
Lewis' Woodpecker Melanerpes lewisii
Mexican Spotted Owl Strix occidentalis lucida
Pinyon Jay Gymnorhinus cyanocephalus (nesting colonies are of particular concern)
Virginia's Warbler Leiothlypis virginiae
Woodhouse's Scrub-Jay Aphelocoma woodhouseii
Scaled Quail Callipepla squamata

In the absence of comprehensive survey data of the area, these species should be presumed to exist in the project area and would therefore fall under R3 USFS item 1 above. (Ltr. 04)

Public Concern #08: Treatments during nesting season

Forest Service Response: The proposed new guidelines for this project is to limit human activity in protected activity centers during the breeding season. Management activities should be deferred from the nest/roost core during the breeding season (March 1st thru August 31st), except where non-breeding is confirmed or inferred that year per the accepted survey protocol in the current recovery plan **(from Encino Vista Purpose and Need for Action and Proposed Action).**

This will specifically be implemented by requiring timing restrictions in the areas of concern. Timing restrictions will not allow operations to be active during a specific time period.

Public Comment(s):

A project that cuts live trees or shrubs during the nesting season will result in the total failure of all nests in that vegetation. Inasmuch as most of the trees in an area will be cut during the restoration activities, compliance with R3 USFS direction suggests that restoration/ thinning work should not occur during the peak of the nesting season, specifically April 15 through August. This is also the primary season for reproduction of all wildlife so this restriction will have benefits for mammalian, piscine, and herpetological fauna as well.

Even those trees and shrubs that are not cut will be disturbed, all resulting in reduced nesting success by many neotropical migrant songbirds. Quite apart from violation of the Migratory Bird Treaty Act, this is another example where managing for desired conditions can disrupt natural ecological processes (reproduction) that are essential to proper ecological function. Since the period also includes the peak of the fire season, avoiding the use of mechanical equipment in treatment areas during this period reduces the likelihood of ignition at a sensitive time. (Ltr. 04)

Will clearing and burning be restricted in the spring to protect breeding bird nests and other wildlife? If not, please explain why.
Old growth aspen is important breeding bird habitat. Clearing and burning conifers in the understory will cause significant harm. Will bird populations in old growth aspen habitat be monitored to determine impacts? If not, please explain why. (Ltr.11)

Public Concern #09: Forest Plan Amendment for MSO

Forest Service Response: A project specific-plan amendment is needed because the 1987 Santa Fe Forest Plan includes the prior Mexican Spotted Owl Recovery plan (1995). The new MSO Recovery Plan (2012) will be incorporated with the amendment and to this project.

Public Comment(s):

We are also concerned that proposed changes in the Forest Plan will relax standards for Mexican Spotted-owl management. While this may be in an effort to reduce fuel loads, it appears to reduce protection and indeed degrade habitat. For example, on Page 18 the proposal states: "Within PACs, combinations of thinning trees up to 17.9 inches d.b.h., mechanical fuel treatment and prescribed fire should be used to abate fire risk to owl nest/ roost habitats and improve habitat structure in select protected activity center outside the l00-acre core area." The prior language states: "Use combinations of thinning trees less than 9 inches in diameter, mechanical fuel treatment and prescribed fire to abate fire risk in the remainder of the selected protected activity center outside the l00-acre "no treatment" area." Larger trees are an essential component of Mexican Spotted-owl habitat. Removal of trees in the 9-17.9" size class will inevitably degrade habitat for Mexican Spotted-owls. There is no justification for this change. (Ltr. 04)

Public Concern #10: TES and Species of Concern

Forest Service Response: The Biological Assessment and Biological Evaluation will address all pertinent species within the project footprint.

Public Comment(s):

A careful consideration should be given to Threatened and Endangered Species currently listed, once listed, or species of concern within the project boundaries, i.e.; Mexican Spotted Owl, Northern Goshawk, Rio Grande Cutthroat trout, and/or other fish and wildlife species who might "potentially" share the same habitat space. (Ltr. 05)

Public Concern #11: MSO

Forest Service Response: Please refer to Public Comment #09.

"The Forest Plan requires us to follow the Recovery Plan for species listed under the ESA, which includes the MSO. As part of that, the ESA requires that we consider and analyze effects to the species and its habitat, followed by consultation with the USFWS, as needed, if the proposed actions are determined to have effects. Additionally, design features are being developed, to include as part of the proposed action, which would maintain and improve important habitats. This could include, though not limited to, the protection of large snags and downed logs, promoting vegetation diversity for prey species. Along with this, the proposed action is restoration focused, designed to promote diverse, healthy, and resilient forest habitats. The proposed action would also minimize the threat and spread of stand-replacing wildfires, both in and adjacent to the project area, that could otherwise render MSO habitat unsuitable, like has occurred in such wildfires in the past.

Public Comment(s):

Accordingly, the NEPA analysis for this project must include the results of past monitoring of the impacts of timber management activities, roads and motorized use, noise and recreational activities, and livestock grazing on MSO. And, this project must incorporate the rigorous monitoring and other recovery recommendations of the 2012 Recovery Plan. We expect to see the results of at least two years of rigorous pre-project monitoring in the NEPA analysis.

The Forest Service must comply with the ESA, its Forest Plan (including the 1996 Standards and Guidelines), and the 2012 Recovery Plan to provide for the recovery of MSO. This includes limiting activities that impact critical habitat, Protected Activity Centers (PACs), and recovery habitat. The FS must consult with the U.S. FWS on the impacts of the project and Forest Plan Amendment on MSO, and these consultation documents must be provided to the public during the NEPA process on the agency's website for this project.

The Forest Service should follow the management recommendations in the 2012 Recovery Plan (see Appendix C of the 2012 Recovery Plan), for PACs, recovery habitat, and other habitats, and must also analyze the impacts of climate change on MSO, as discussed in the 2012 Recovery Plan. (Ltr.08)

Why are the threats of high severity fire to Mexican spotted owl habitat highlighted while it's benefits and the adaptability of the owl to burned forest habitat not discussed? Does the SFNF monitor the Mexican spotted owl population? If so, what are the current trends? (Ltr.11)

Public Concern #12: Wildlife Corridors

Forest Service Response: In terms of terrestrial species, The Santa Fe Draft Land Management Plan recognizes that "habitat configuration, connectivity, and availability allow wildlife populations to adjust their movements in response to major disturbances (e.g. climate change or uncharacteristic fire) and promote genetic flow between wildlife populations".

Wildlife corridors have not specifically been identified throughout this project. Through implementing treatments that replicate past disturbance regimes, wildlife corridors will be an end result of treated and avoided areas. For example, drainages and steep slopes may not be included in mechanical treatment areas, which could be defined as wildlife corridors. In addition, some unit boundaries of treatment blocks may not include areas for different reasons.

The RMRS GTR310 report provides science based guidance for creating/replicating "interspaces" in the canopy of ponderosa pine stands. These interspaces can create corridors of open areas, and denser areas. Through the implementation of BMP's, we plan to avoid mechanical treatment in SMZ's (Stream Management Zones), which ultimately create "wildlife corridors". The end result of irregular design in mechanical treatment boundaries, and avoidance of SMZ's and steep areas, can create wildlife corridors. The edges of timber sale boundaries can provide denser vegetation that can provide a wildlife corridor to another portion of the forest or wilderness.

In relation to prescribed fire, natural fire breaks can also create areas where a wildlife corridor can exist or develop. For example: natural features such as slopes, drainages/ravines and ridges may become wildlife corridors.

Public Comment(s):

How will wildlife corridors be maintained in areas cleared and annually burned? Have corridors been identified in the project area? (Ltr.11)

Public Concern #13: Wildlife General

Forest Service Response: The Biological Assessment and Biological Evaluation will address all pertinent species within the project footprint. All requisite wildlife surveys will be conducted prior to implementation.

Public Comment(s):

The proposed area of "treatment," especially the canyons that our community is most concerned about is prime habitat for a variety of species, yet there is no mention in the Restoration Project of any surveys to understand exactly what species are currently living and breeding in the "treatment" area, or how they would be protected, as per the Forest Service Plan and its proposed amendments if they are endangered species.

There are various species that call this ecosystem home, such as elk, bear, various birds, and reptiles, is there data on what creatures live and coexist here with each other and humans and livestock? (Ltr.12)

Vegetation Management and Prescribed Fire

Public Concern #14: ERUs

Forest Service Response: The project area has a wide variety of ecological response units (ERUs), the most represented being frequent-fire mixed conifer, piñon-juniper, ponderosa pine forest, spruce-fir forest, and mixed conifer w/ aspen. The Draft SF Forest Plan provides guidance for ERU's and describes them at the landscape scale (1,000 to 10,000+ acres), mid-scale (1000 to 10,000 acres), and fine-scale (less than 10 acres) which help clarify the ERU more specifically.

In relation to connectivity and wildlife corridors, please refer to Public Concern #12.

"The SFNF resource managers will use a "condition-based" approach because it provides flexibility to account for imperfect information that may occur in specific projects areas. As project areas are identified, managers will apply specific treatments and prescriptions to units based on site conditions. This approach will allow managers to adapt to changes/variations in vegetation compositions, terrain, treatment types. By describing existing conditions of major vegetation types (pinyon/juniper, ponderosa pine, mixed conifer) and the proposed tools (hand thinning, mechanical treatments, Rx fire) the condition-based approach will allow for the right tool to be used in specific treatment units. This approach has been successfully implemented in the Southwest Jemez landscape project on the SFNF."

Public Comment(s):

Planning treatments based on general landscape categories such as Ecological Response Units is not nearly targeted and strategic enough, and is a broad stroke way of planning that is likely to result in much ecological damage. (Ltr.10)

Connectivity - Connectivity is inadequately addressed in the Proposed Action, having an emphasis on vegetation management in Ecological Response Units. Connectivity should be a major focus and strong and effective wildlife corridors developed. (Ltr.10)

Reference conditions are mentioned as being used to establish a desired forest structure. Please identify the reference sites in the project's Colorado Rockies Forest ecoregion. (Ltr.11)

Public Concern #15: Use of goats.

Forest Service Response: The proposed utilization of small ruminant animals (such as goats) will be a controlled method of treating areas with less desirable vegetation. Prescriptions or design criteria for project areas will be determined prior to introducing goats to specific areas of concern. This will be an adaptive management strategy and the Forest Service will be flexible with employing different techniques as needed to be successful. The Forest Service agrees that a rotating schedule will be ideal for this management strategy and the Forest Service will develop schedules for this planned action. In addition, physical boundaries, such as enclosures, or the need for an animal caretaker may be needed for restricting goats to specific areas. As part of a design criteria and mitigation measures, it will also be necessary to develop a method for monitoring these areas to determine if the schedule needs to be adjusted. Appropriate resource specialist involvement and expertise will be needed to develop and implement this management strategy. Further analysis will be covered in the Encino Vista Draft EA.

Public Comment(s):

The use of goats is mentioned once as a means to control Gambel oak on page 10. Goats can be very destructive, you should detail the proposed use of goats and how you'll mitigate the impacts to other plant species on the landscape from the goats. (Ltr. 01)

I applaud the FS for using alternative means ('small ruminant animals - GOATS) to control less desirable vegetation. However, no prescription is given for number, duration, time of year of animals to be used within the project area. These animals should be as minimally as possible in numbers and rotated on a schedule that does not allow them to denude the forest of all vegetation. (Ltr. 02)

I am curious to hear how the USFS plans to use goats to thin Gamble oak. (Ltr. 03)

We are concerned about using goats to manage Gambel's oak. If goats were deployed during the nesting season, they would eat up a lot of understory vegetation (important for shrub nesters) and possibly the nests themselves. The use of goats for shrub control should also be restricted to periods outside of the nesting season. (Ltr. 04)

Ruminant Animals Containment Plan. Are you planning on enclosure facilities; how will ruminant animals be controlled on the landscape? Are there examples from other projects where this has been a successful tool? (Ltr.05)

Public Concern #16: Treatment Timeframes/Diameter Caps

Forest Service Response: Please refer to public concern #08. Mechanical treatment for timber harvest will be limited to 40% slopes. Slopes greater than 40% may be treated with chainsaws and/or prescribed burning. Mechanical treatment is not allowed in Wilderness. While this project boundary does border the San Pedro Parks Wilderness, it does not encompass/overlap with the Wilderness.

Retaining large, old trees and old structures is a high priority of this project, even though a diameter cap will not be implemented.

An alternative was considered to establish a diameter cap, but was eliminated because it would ultimately not meet the purpose and need of the project. Diameter caps can result in an even aged structure over time, which is not a desired condition of this project. Implementing a diameter cap would hinder meeting goals for diversity of age, structure, and habitat.

This project will follow a conditions-based approach as to what will be treated from prescribed fire. In general, it can be assumed that prescribed fire operations will take place in either Frequent Fire ERU's or activity generated slash piles. Prescribed fire activities will build off of previous treatment areas. Annual prescribed fire activities will take place pending wildlife seasonal restrictions and survey outcomes.

Public Comment(s):

No tree removal should occur during the MSO and goshawk breeding timeframes; especially within known PACs or other sensitive areas. Tree removal should be minimized during MBTA-related migratory birds also. Timber harvest within slopes >40% should not be allowed, nor within Wilderness or Study Areas. Comments regarding the guideline to 'Strive to retain trees greater than 24 inches is too vague and arbitrary! The current comments should be retained and possibly have wording added to retain conifer spp. at >21 in. DBH, and oak spp. at> 15ft tall (or the like) as these types of tree tend to be taller than wider as they age. (Ltr. 02)

Timeline of the above actions. Considering that the percentage of what will be prescribed burn, and the percentage non prescribed burn cannot be determined until more than likely MSO and Northern Goshawk survey data has been completed; there is no timeline of activities in the purpose and need for action for the project at length. (Ltr. 05)

Public Concern #17: Invasive Species

Forest Service Response: Appropriate best management practices will be put in place to minimize the spread of invasive species. The eradication of invasive plants is already covered under the Invasive Pant Control Project EIS and Supplemental EIS.

Public Comment(s)

--no mention of eradication efforts related to invasive plant species. Please add prescriptive language regarding invasive/exotic plant species.(Ltr. 02)

Invasive species - The Proposed Action does not include sufficient actions for limiting the spread of invasive species via management of livestock grazing, roads, equipment used for thinning and OHV s. A thorough plan must be developed. (Ltr.10)

Public Concern #18: Meadow & Aspen Treatments

Forest Service Response: Meadow restoration treatments will be needed for this project. Conifers have encroached in meadows and aspen stands and by thinning conifers out of them, the Forest Service aims to promote aspen growth and re-establishment of meadows.

To protect soil productivity, the Encino Vista watershed design criteria allows for mechanical treatment in meadows only when the ground is frozen or when site-specific consultation with a watershed specialist occurs.

Public Comment(s):

Conifer removal w/in meadows & aspen should be done by sawyers only and felled trees should be bucked up for removal by hand crews. No machinery should be allowed to trample within these precarious ecotones. (Ltr. 02)

Public Concern #19: Implementation

Forest Service Response: Prescribed fire will be used as a tool to mitigate fuels after a silvicultural treatment. Some areas within frequent fire ERU's may not require a thinning prior to conducting a safe and effective prescribe fire. Prescribed burn units may vary in size based on vegetation, topography and holding features. Slope steepness puts a constraint on what can be treated mechanically, typically steeper areas are inaccessibly by mechanical means. In addition, mechanical treatments can be time consuming and are not always the most time and cost efficient course for treating a landscape. Prescribed fire is an excellent tool to complement silvicultural treatments to meet desired conditions. Resource specialists will evaluate on-the-ground conditions to implement the appropriate combination of forest restoration treatments and prescribed fire to meet desired conditions.

Masticators are a type of specialized equipment that the Forest Service plans to utilize. A combination of various types of equipment are needed to accomplish the desired conditions for this landscape restoration. Some areas in this project may be better suited for mastication than other areas, depending upon the current stand density, species composition, size classes, topography, slope and its proximity of a road. The end results of mastication can provide desired conditions and possible fire control lines in an efficient manner.

"Many products could result from treatments such as biomass, fuelwood, posts and poles, and saw timber, which could be sold through personal use and commercial wood product contracts" (**from Draft EA).** Mastication is an effective tool to alter fuels when these products cannot be safely and efficiently removed in a timely manner.

The Forest is using landscape modeling as a guide to target area for treatment. This model identifies areas that are departed from desired conditions. Prior to Euro-American settlement, the average MFRI (Mean Fire Return Interval) in southwestern frequent fire mixed conifer was 7.9 years (Evans et al. 2011), with instances of local (Jemez) MFRI as often as 4.5 years (Swetnam and Baisan 1996). Using landscape modeling framework such as LANDFIRE, it is evident that the majority of the Encino Vista project area falls within VCC (Vegetation condition Class) IIa and VCC IIb, which are defined as a low-moderate and moderate-high departure from historic conditions respectively. The majority of our treatments will be in fire frequent ERU's, but all woodland and forest ERU's are available for treatment. We will use a condition-based framework for prescribed fire and silvicultural treatments. To move towards desired conditions, resource specialists will evaluate on-the-ground conditions that would inform the appropriate forest restoration and prescribed fire treatments to be applied in specific locations within the project area.

To move toward or meet desired conditions, site specific silvicultural prescriptions will be developed based on ground conditions. The number of trees remaining after a treatment depends on many factors such as: current density, age, species composition, presence of forest insects and disease, other resource objectives, and wildlife habitat. The Forest cannot guarantee that there will not be any tree mortality resulting directly or indirectly from the treatments. All treatments are designed to minimize mortality.

The Santa Fe monitoring program is described in the Draft SF Land Management Plan, as required by the 2012 Planning Rule at 36 CFR 219.12. It describes desired conditions, objectives and/or guidelines for monitoring.

Watershed design criteria would guide the construction and burning of piles to protect soil productivity and diminish erosion.

Typical pile burn material will consist of thinning and logging generated slash <7" in DBH. In particular piles composed of small woody debris such as treatment generated slash "had a shorter heat duration and moderate temperature" (Busse et al 2014), therefore reducing negative effects on soils below and adjacent to piles. Conversely large bolewood >10" DBH, specifically in high volume can have negative impacts on soil. A common practice to follow where the "consumption of large wood is anticipated would be to ensure that the percentage of ground coverage occupied by piles is well under 15 percent" (Busse et al 2014), to limit the long term negative soil impacts in a particular area. Since both options of pile burning will be considered it will be imperative to find a balance between activities generated slash and desired conditions.

Public Comment(s):

I would like to know why areas would be burned without allowing thinning beforehand. I am wary of the use of masticators to thin areas instead of allowing fuelwood harvesting by the public. Prior use of masticators was not well planned or executed and resulted in over-thinning of areas that should not have been thinned. (Ltr. 03)

It is not clear the exact acreage and in what particular areas the prescribed burning will take place. Is there data on the actual location activities of prescribed burning? Where have current conditions departed from the desired conditions? Is there survey data on these actual locations? (Ltr. 05)

How many live trees will remain after the initial clearing and burning? How many remainder trees are expected to die in prescribed fires, bark beetles outbreaks and wind throw in newly opened stands?
** Will the legally required regeneration standards for remainder trees be monitored? If so will that data publicly be available?*
** Will the size of burned debris piles be limited to protect soils and discourage invasive plants from becoming established? (Ltr.11)*

Public Concern #20: Slash

Forest Service Response: Mitigation measures or treatment methods for slash disposal/management may vary depending upon current conditions for each area treated. For mechanical operations, a variety of slash disposal treatment methods may be specified depending on the types of conditions present and current fuel loads, etc.

For example, either a lop and scatter or machine piling requirement may be specified as a method for managing logging slash, which would eventually be scheduled for prescribed burning when appropriate conditions exist for burning. A pile burn will likely take place within 2 years of pile construction.

In many cases a low intensity broadcast burn will follow pile burning of material, however in areas such as wet mixed conifer broadcast fire spread is less affective and will likely not be considered.

In addition, the draft SF Forest Plan specifies that green slash will be limited to 3" in diameter to help mitigate the bark beetle concern.

The timeframe for the burning of slash is ultimately dependent upon the completion of the harvesting activity and if weather conditions are favorable for burning.

"In order to mitigate risk of insect outbreaks due to slash build up the follow mitigation measures would be implemented:

- avoid creating slash during times more conducive to promoting beetle brood development (February – June)
- avoid creating slash in the same location for more than one year.
- monitor treated sites for evidence of beetle outbreaks.

Public Comment(s):

We are concerned that the slash resulting from the thinning will remain on the ground for long periods of time prior to burning. Large quantities of green slash are likely to attract bark beetles, particularly in case of drought. This will lead to increased and unnecessary mortality in the remaining trees. If forwarding of the entire trees is not used as suggested above, we would encourage the piling and burning of slash as the project proceeds followed by a broadcast bum at the end of the project. (Ltr. 04)

Public Concern #21: Snag Retention

Forest Service Response: The Forest Service realizes the importance of snag retention and is managing for a continued presence of snags as stated in RMRS-GTR-310 (Reynolds et al. 2013). The Forest Service plans to retain and minimize damage to snags during the implementation phase of this project.

Public Comment(s):

We are disturbed by the low number of snags in the Santa Fe National Forest generally. Snags are extremely important for many species of birds and other wildlife. There is a propensity on the part of fuelwooders to cut snags in the mistaken belief that they are "lightning rods" that ignite fires. Many snags also make particularly nice firewood on account of their pitch content. We urge you to make a concerted effort to conserve existing snags through education of the personnel involved and if necessary by the marking of snags and snag recruit trees. Also, we note that dense duff can lead to the death of otherwise healthy mature trees during broadcast burns. While this is one means of snag recruitment, we do not support it. (Ltr. 04)

Public Concern #22: Old/Large Trees

Forest Service Response: Please refer to public concern #16.

Public Comment(s):

We are apprehensive about the treatment of old, large trees in this project. We urge you to be more specific as to the treatment of old, large trees in the analysis to ensure that these trees, which are essential for wildlife and future forest resilience, are protected. (Ltr. 04)

THE PROJECT FAILS TO PROTECT OLD GROWTH FORESTS *It is not disclosed how project-level knowledge will be gained to better define "the characteristics and inherent values of old growth stands." This would include how the SFNF Plan's parameters for determining old growth has been refined for this project.*

Only the bare minimum of 20 percent of the project area-the floor established by the SFNF Plan-is being managed for old growth. Managing for minimums gives no room for error and errors are inevitable given the acknowledged uncertainty and unprecedented scale and intensity of proposed activities. Managing for minimums and allowing discretionary cutting of trees up to 23.9 d.b.h. is clearly inconsistent with the SFNF Plan that requires projects to "strive to create or sustain as much old growth compositional, structural, and functional flow as possible over time at multiple-area scales." (Ltr.11)

The SFNFP says "no treatments should occur in a stand managed for old growth once the stand has achieved minimum structural characteristics of old growth" (SFNFP, p. 69).18 To determine old growth please indicate the methods used for determining the age of trees in the main canopy; the size, height and number of standing dead trees; the size, length and pieces of down dead trees; the number of decadent trees; the number of tree canopies; and the total percent of canopy cover and how this site-specific data will be used in the "quantitative models" specified in the SFNFP (USDA Forest Service 1996:95). (Ltr.11)

**Why is retaining the minimum allowed old growth the aim of this project when the forest plan requires as much old growth be managed as possible?*

** Preservation of old growth and fuel reduction have conflicting aims. How will old growth forests with their dense multistoried and high canopy cover be maintained on a minimum of 20% of the project area? (Ltr.11)*

Public Concern #23: Pinyon-Juniper Savannas and Woodlands

Forest Service Response: The Forest Service will use the best available science in conjunction with multiple use management strategies, and recognition of historical and cultural land uses as a guide to obtaining desired conditions for pinyon- juniper ERU's

Public Comment(s):

We are concerned about the management of Pinon-Juniper savannas and woodlands. "Management of Pinon-Juniper vegetation has been hindered, especially where ecological restoration is a goal, by inadequate understanding of the variability in historical and modern ecosystem structure and disturbance processes that exists among the many different environmental contexts and floristic combinations of Pinon, Juniper and associated species ... For example, "persistent woodlands" may still be within their historical range of variability, whereas degraded woodlands would be strong candidates for restoration to pre-1900 conditions. "The first step in effective restoration is to identify and then modify the cause of degradation. If our land uses are found to be responsible for tree invasions or density increases, and if restoration is to have lasting value, it is essential to change the land uses that led to the need for restoration.'" We strongly urge you approach the "restoration" of these woodlands and savannas with humility and care, cognizant of the centuries of land uses that have led to the conditions that are found on the Forest. (Ltr. 04)

Public Concern #24: Use of fire more predominant the silvicultural treatments

Forest Service Response: There has been extensive studies on the purpose and need for burning in Frequent Fire systems along with the effectiveness of fuels treatments and prescribed fire. In particular Dr. Zander Evans explains that there is a scientific consensus on the success of fuels treatments to change fire behavior in his memo on "Fuel treatment effectiveness". He also points out that the most successful method in moderating wildfire behavior are treatments that include thinning in conjunction with surface fuels reduction such as prescribed fire. " A recent meta-analysis of 56 studies of fuel treatment effectiveness in eight states in the western US showed general agreement that thin + burn treatments had positive effects in terms of reducing fire severity, tree mortality, and crown scorch (Kalies and Yocom Kent, 2016)" (Zander).

The activities addressed in the purpose and action are projected over time. Though it is difficult to suggest a concise timeline for each activity, activities will be phased in according to a manageable workload and will be built off previous treatment areas. Silvicultural treatments are quite effective in restoring desired conditions, however silvicultural treatments do have limitations. Slope steepness puts a constraint on what can be treated mechanically, typically steeper areas are inaccessibly by mechanical means. In addition, mechanical treatments can be time consuming and are not always the most time efficient course for treating a landscape. Prescribed fire as a tool is typically the most cost-effective tool for removing surface fuels, especially over a large landscape. (Zander Fuels treatment effectiveness memo.)

Public Comment(s):

Fire is the predominant tool mentioned as the most likely response to the above-mentioned purpose and need for action, surpassing all other methods, including most silvicultural methods that might be less invasive. Is there an example where a project such as this has yielded positive results, and, if so, can that be available for public review and comparison? (Ltr. 05)

Support of the proposed treatment will only come when details of the project are outlined. There is a genuine concern with reintroduction of fire into an ecosystem in which fire has been suppressed for decades. A recommendation is to move forward with small treatments showing success before a large scale project is proposed. This approach might build the trust and confidence needed as opportunities arise in the future. Another recommendation is use silviculture treatments until the forestlands are in a "natural state" to allow fire as a tool. (Ltr.07)

Public Concern #25: Community Involvement

Forest Service Response: The Forest Service is committed to working across property boundaries to the greatest extent practicable. Private land owners who are within proximity to or adjacent to Forest Service landownership are encouraged to contact the District Office to present specific concerns. In addition, landowners are encouraged to contact the New Mexico State Forestry Division – Chama District Office for specific questions regarding land management on private lands (505)-476-3325. Your District Forester can facilitate coordination and communication of landowner concerns and need.

In general, the land immediately around the community of Cañones is difficult ground for implementation (it is steep & difficult to access). The Forest would be interested in the prospects of community-based projects adjacent to Cañones. For example, community fuelwood areas to treat the WUI area. The Forest intends to hold several public meetings in Cañones to better understand needs and concerns that the community may hold. The intent of the scoping document was to begin conversations and cast a wide net. This response is by no

means the end, and hopefully community meetings and the later opportunity to read and comment upon the more detailed preliminary EA will help inform and shape any decision the Forest Service ultimately makes.

Public Comment(s):

I request that any proposed actions planned that are in proximity to private land be discussed with the landowner prior to implementation. Simply publishing a document or having a public meeting are not sufficient in this. Direct contact with the affected property owner should be attempted if possible. (Ltr. 03)

Canones Watershed should be granted protection as a "priority" and with the least significantly impactful methods. Allow areas to be cleaned out through wood hauling, controlled thinning in incremental phases and as smaller niches, rather than large acreage prescribed burn tracts. Less prescribed burning in the watershed (and pile and burn methods) so as to not contaminate water quality or increase sediment flow in streams. (Ltr. 05)

Public Concern #26: Prescribed burning without silvicultural treatments

Forest Service Response: The 10,907 acres referred to in the below comment is in regards to acres that do not require pre-commercial or commercial thinning prior to prescribed fire. These acres are planned to be part of additional maintenance burning (5-20 year rotation). (**from final Purpose and Need for Action and Proposed Action)**

The basis for not needing to implement silviculture treatments prior may be a result of a variety of factors including but not limited to: vegetation type/species composition, previously treated areas, previously burned areas, low basal area / low trees per acre, un-suitable topography for mechanical treatment, etc. The acres proposed for prescribed fire (without prior silviculture treatments) are an estimate and are not mandatory for burning (especially if conditions are not optimal and fire managers do not expect a high probability of success).

Public Comment(s):

Rationale behind prescribed burning without prior silvicultural treatments on up to 10,907.00. What is the rationale behind prescribed burning with no exact delineation? Will less impactful silvicultural treatments be done prior to burning? (Ltr.05)

Public Concern #27: Fuelwood

Forest Service Response: Free-use Firewood: The decision by a District Ranger or Forest Supervisor to provide free-use firewood is a decision that is independent of the NEPA process. Currently the Forest has not identified Free-use areas, however new Forest policy has temporarily lowered the price of fuelwood to $2/cord and 10 cords per $20 permit. This should further aid in serving low-income residents and accelerate remove of fuel from the Forest.

Local Industry: There are a variety of mechanisms to support local jobs. One is the CFRP program. The Forest is open to consider ideas and suggestions for further collaboration with our local publics. Currently the Coyote RD supplies several local loggers from across Northern New Mexico.

Public Comment(s):

The Forest Service acknowledges in the purpose and need for action that fuelwood is an important resource. Fuelwood should be available to the communities prior to and during project implementation free of charge to accelerate the cleaning of the forest dead and down resources. It is a benefit to small communities with low income residents and assists in the cleaning of potential fire hazards. Local people should be hired in forest activities, and the process in which they participate needs to be simplified to encourage a greater pool of candidates. An example might be collaborating with local loggers and logging operations to mark or fell dangerous trees and pile them to be harvested by community members for fire wood or timber or allotting both community members and or loggers certain plots to harvest valuable timber. (Ltr.05)

Public Concern #28: Contingency Plan

Forest Service Response: The Draft SF Land Management Plan requires the planning and implementation of fuels projects to consider many different factors. Specific objectives are identified in prescribed fire plans and are written and approved for current NEPA requirements. The planning and implementation of fuels plans take into account many different factors to mitigate negative impacts. Community wildfire protection plans (CWPC's) may be involved/incorporated to help mitigate the risks.

Regarding Prescribed fire, the *Interagency Prescribed Fire Planning and Implementation Guide* (PMS484) establishes standards for the planning and implementation of prescribed fire. Prior to any prescribed fire events a "*Prescribed Fire Burn Plan*" (PMS 484-1), a site-specific legal implementation document, must be written and approved. A critical element within the Prescribed Fire Burn Plan is a "*Holding Plan*", which identifies measures to follow to prevent a prescribed fire escape. In conjunction with the Holding Plan a *"Contingency Plan" is* also established, whose main feature is to identify procedures and actions in the event of a prescribed fire escape.

Public Comment(s):

Contingency plans should be part of the planning process in the event a prescribed burn gets out of control which could have a major impact on the grazing operations not to mention other land uses. (Ltr.07)

Public Concern #29: Thinning

Forest Service Response: The Forest Service appreciates the feedback about pre and post thinning related to the GTR 310 framework, as well as past logging. We understand that there are many factors involved with forestry, especially considering climate change, insect infestations, drought, land-use history, and environmental management history. We rely upon our professional silviculturist prescriptions that are drafted for specific stands. These prescriptions may take into account best available science, professional opinion(s), SF Forest Plan, and other influences. Silviculturist prescriptions for the forest are not merely based upon the GTR 310 framework alone. Although the prescriptions may include much of the guidance and framework of the GTR 310, there is flexibility in how a prescription is written and applied to a stand of timber.

Public Comment(s):

Thinning - The framework provided by GTR-31O clearly supports over-thinning in the SFNF. Projects done in the SFNF post GTR-310 are not much healthier in appearance than pre-GTR-31O. The cost/benefit analysis of thinning, especially the severe thinning recommended by GTR-310, a document not focused on our forest type, has not been done. Any thinning done should be very light-handed, targeted and limited to protect specific discreet values or for extremely dense areas previously damaged by logging. (Ltr.10)

Public Concern #30: Thinning

Forest Service Response: WUI communities need to be aware of the need and purpose for "defensible space" from catastrophic wildfires. The Forest Service is trying to help the communities by implementing this project to minimize/decrease the safety risk of stand replacing crown fires. Thinning and prescribed burning are two tools/practices we have towards preventing catastrophic wildfires by removing canopy and surface fuels. Property owners who have adjacent property boundaries should contact the Coyote Ranger District about individual concerns.

Please also refer to public concern #25.

Public Comment(s):

WUI communities - Thinning should not be done further than 150 feet from structures in WUI areas for the prevention of fire in WUI communities as it has been proven to not be an effective strategy for this purpose y former USFS researcher Jack Cohen and others. Forests adjacent to communities should be left intact and natural as possible to be used for recreation. Support and education should be given to WUI property owners to effectively fire proof their homes and the surrounding 150 feet. The development of alternative egresses for communities that have only one egress should be supported. (Ltr.10)

Public Concern #31: Southwestern White Pine

Forest Service Response: All proposed actions under this decision will comply with the Santa Fe National Forest Plan. The silvicultural strategy in stands containing SW White Pine (*P. strobiformis*) is to favor this species for retention above all other tree species. Currently, there is no known presence of White Pine Blister Rust within the Encino Vista Project Area. However, the Santa Fe's overall approach is to retain and regenerates SW White Pine to the greatest extent practicable in order to conserve genetic variation within this unique tree species.

Public Comment(s):

The standards of the SFNF Plan (replacement page 69a) must be met requiring a minimum of 120 Southwestern white pine remain per acre following clearing and burning. However, preserving all individuals of this unique and relatively uncommon species is biologically warranted and needed to meet NFMA's biological diversity mandate. (Ltr.11)

Why are protection measures for the vulnerable Southwestern white pine population not discussed? (Ltr.11)

Archaeological and Cultural Areas of Importance

Public Concern #32: Cultural Surveys and Association Protections

Forest Service Response: Implementation cannot occur without the appropriate consultation and surveys. All surveys and reports will be on file at the local office or Supervisor's office. However, surveys and site locations are confidential and not made available to the public.

Public Comment(s):

Cultural resource management surveys and associated protection should be identified as a "priority" within the landscape plan, considering the area is so culturally diverse and a main geographical area of ancestral Tewa lands, native American culture. Archaeological survey data should be thoroughly completed and made available to the public for review. (Ltr. 05)

Restoration

Public Concern #33: Restoration Activities

Forest Service Response: Based on feedback provided during scoping. The preliminary EA now includes a modified proposed action which will address road decommissioning, road improvement, and road closure/storage to improve watershed health and water quality.

Public Comment(s):

Yet, despite being touted as a landscape restoration project, the proposed action provides little in actual restoration activities such as identifying the Minimum Road System and associated actions such as decommissioning system roads, removing non-system roads and fixing poorly placed and/or sized culverts, in-stream and riparian restoration, and reducing the impacts of livestock grazing and motorized use. Without such restoration work, the Encino Vista project is merely a logging and burning project, not restoration. These restoration actions are essential to meeting the stated purpose and need, and achieve the desired results, above. (Ltr.08)

Conservation - There should be a general strong bias in project planning towards conserving our forest in as natural a condition as possible, and to allow forest ecology itself to bring our forest into greater balance through natural processes. There are too many substantial adverse impacts related to intensive tree thinning and prescribed burning. Treatments should be very limited, site-specific and strategic, as recommended by the Santa Fe Conservation Alternative. (Ltr.10)

Genuine restoration - Focus should be on genuine restoration activities instead of cutting and burning. Decommissioning of all unneeded roads must be included in project planning. Focus should be on true restoration such as planting in riparian areas as needed and hand-building structures in arroyos to slow flood waters. (Ltr.10)

Roads

Public Concern #34: Travel Management

Forest Service Response: Based on feedback provided during scoping, the preliminary EA now includes a modified proposed action which will address road decommissioning, road improvement, and road closure/storage to improve watershed health and water quality. These proposed actions will use the Travel Management (Subpart B) decision to guide management actions; roads closed to motorized travel by the public (i.e., not on the Motor Vehicle Use Map; MVUM) would be prioritized for road decommissioning and closure/storage actions. Roads currently open to motorized travel by the public (i.e., on the MVUM), would be prioritized for road improvement. These activities would also be guided by the 2008 Santa Fe National Forest Travel Analysis Process Report (TAP; Travel Management Rule, Subpart A). ATV travel is motorized and is therefore limited by the Travel Management (Subpart B) decision; public use of ATVs are only legal on routes which are designated so on the MVUM.

Public Comment(s):

As part of the analysis of the Encino Vista Project under NEPA, the Forest Service must not only consider the Santa Fe National Forest's Travel Analysis Report and identify unneeded roads to prioritize for decommissioning or other uses, but it must also identify the Minimum Road System.(Ltr.08)

The Forest Service should clearly articulate the statement of purpose to include its duty to identify the minimum road system and provide support for the claimed need. The Forest Service has a substantive duty to address its over-sized road system. See, 36 C.F.R. 212.5. This underlying substantive duty must inform the scope of the project and be included in the agency's NEPA analysis. It's been nearly 2 decades since the agency finalized the Subpart A rules, and 11 years since the Santa Fe NF conducted its TAR, and the Forest Service can no longer delay in addressing this duty. (Ltr.08)

Roads - There are 6,900 miles of roads in the SFNF, many of which are leaking sediment into streams and fragmenting wildlife habitat. According to the 2008 Travel Management Record of Decision for the Santa Fe National Forest, 2,878 miles of open system roads were to be closed for public use. A minimum network of roads should be identified for the Encino Vista Landscape Restoration Project area, and all unneeded roads should be closed and/or decommissioned. (Ltr.10)

** Will unneeded roads be obliterated to protect water quality and wildlife habitat and prevent the spread of invasive plants and access by arsonists and poachers?*
** How will ATVs be effectively restricted during project activities?(Ltr.11)*

Public Concern #35: New Roads

Forest Service Response: The construction of new Forest Service System Roads is not a part of the proposed action. Below is draft excerpt that the Interdisciplinary Team developed for the Preliminary EA:

"Access to the project area for implementation of treatments will utilize existing non-Forest Service roads, existing Forest Service System roads (both those open and closed to the public), and existing Non-Forest System routes (e.g., user created routes). No new permanent roads would be constructed for access into treatment areas. In addition, existing Forest Service System closed roads and Non-Forest System routes would be closed following treatment in a manner that complies with Forest Service Best Management Practices (USDA, 2012). When Non-Forest System routes (e.g., user created routes) are used and then closed, design criteria would include disguise, physical closure/blockade, restoration of hydrologic function, and decompaction.

When Non-Forest System roads are utilized during implementation, minor deviations (adjustments) from the actual road alignment may be required in order to protect resources (e.g., stream channels). Such deviations would be designed to fit the topography, avoid sensitive areas (e.g., wetlands, streams, archaeological sites) and would in no cases exceed 1,000' in length."

Further, based on feedback provided during scoping, the preliminary EA now includes a modified proposed action which will address road decommissioning, road improvement, and road closure/storage to improve watershed health and water quality. Roads addressed would include NF System roads as well as unclassified routes (non-system roads on NF lands).

Public Comment(s):

In the Purpose & Need, it is stated that Roads are in poor condition and likely contributing to erosion in area; No new roads should be built to accomplish anything related to the project. Furthermore, any roads deemed necessary should be rehabilitated to accommodate increased traffic before any heavy equipment is on the roads. Reduction of roads within the project area, and forest in general, will thereby reduce siltation and infill of streams, as well as increase the quality of available water supply to the forest and adjoining communities. (Ltr. 02)

Public Concern #36: Temporary Roads

Forest Service Response: Based on scoping and Interdisciplinary Team review, language around temporary roads has been updated:

"Access to the project area for implementation of treatments will utilize existing non-Forest Service roads, existing Forest Service System roads (both those open and closed to the public), and existing Non-Forest System routes (e.g., user created routes). No new permanent roads would be constructed for access into treatment areas. In addition, existing Forest Service System closed roads and Non-Forest System routes would be closed following treatment in a manner that complies with Forest Service Best Management Practices (USDA, 2012). When Non-Forest System routes (e.g., user created routes) are used and then closed, design criteria would include disguise, physical closure/blockade, restoration of hydrologic function, and decompaction.

When Non-Forest System roads are utilized during implementation, minor deviations (adjustments) from the actual road alignment may be required in order to protect resources (e.g., stream channels). Such deviations would be designed to fit the topography, avoid sensitive areas (e.g., wetlands, streams, archaeological sites) and would in no cases exceed 1,000' in length."

Further, based on feedback provided during scoping, the preliminary EA now includes a modified proposed action which will address road decommissioning, road improvement, and road closure/storage to improve watershed health and water quality. Roads addressed would include NF System roads as well as unclassified routes (non-system roads on NF lands).

Public Comment(s):

--No new roads should be constructed. No information is given as to how many actual miles of "temporary roads" other than '5-10 miles', nor is any information given as to how these potential roads would be reclaimed/rehabilitated when project is complete, nor what timeline this restoration would happen in. The ranger district should administratively close the roads within the project area during the winter time to lessen the impact that careless forest users cause to open roads during this timeframe. (Ltr. 02)

Temporary roads map available to the public. Is it possible to see the exact road maps that will be constructed to facilitate this project? (Ltr.05)

The Forest should not construct temporary roads. If avoidance is impossible, the roads should be immediately reclaimed after use.

We encourage the Forest to take a hard look at the proposed temporary roads in order to be certain that they are needed. Current USFS policy is that road beds be restored to natural condition after such project, yet the scoping notice does not contain any such requirement. And, even when temporary roads are restored to natural condition, there is still an impact when temporary roads are developed. ***In*** *addition to their hydrologic impact, roads fragment habitat, disturb wildlife, invite more noxious weeds and increase fire danger. Additionally, if they are not properly rehabilitated post-project, they can invite illegal incursions and more damage to natural resources. At minimum, we ask that the Santa Fe National Forest restore these segments as soon as the project activities within that specific area are completed.* ***In*** *addition, we ask that the segments are monitored and enforcement actions taken to ensure proper closure. (Ltr.08)*

Constructing temporary roads will increase human caused fires in this area. Does the SFNF have the capacity of responding to this increase? (Ltr.11)

Public Concern #37: Social Roads

Forest Service Response: Access to the Encino Vista project area may involve utilizing Non-Forest System routes. It is planned that after these Non-Forest System routes are used, they will be decommissioned. This would likely include methods of disguise, physical closure/blockade, restoration of hydrologic function, and de-compaction. The Forest Service will continue to educate the public of travel management rules and enforce travel management. It will still be expected that the public follow travel management rules and adhere to them. This includes traveling on "open" roads, as shown on the SFNF motor vehicle use map. "Social" roads (as referred to in the below comment) should not be shown as an open road. The public has a responsibility of complying with travel management rules.

Public Comment(s):

We are worried that the use of many individual pickup trucks over a large area will result in the establishment of a large number of "social" roads that are difficult to obliterate. These roads tend to have a life of their own beyond the project lifetime and result in continuing disturbance of wildlife, the poaching of remnant snags (see concern below), and attendant erosion. (Ltr. 04)

Public Concern #38: Road Improvements

Forest Service Response: The Forest Service is developing a strategy that prioritizes road improvements and decommissioning in the Encino Vista project area. Improvements will be prioritized on roads which are eroding and delivering sediment to streams, as well as on roads needed for implementing the project.

Public Comment(s):

Road Improvement in project area. There are many existing Forest Roads in need of repair. Will these roads be identified in this document for maintenance and improvement? (Ltr.05)

Soils

Public Concern #39: Soil Compaction

Forest Service Response: The type of equipment utilized for mechanical treatment largely depends upon the logger under contract with the Forest Service. Soil compaction is an impact the Forest Service mitigates through Best Management Practices and design criteria (also see public comment #57). For example, mechanical operations would be allowed only on dry, frozen, or snow covered ground and on hillslopes less than 40% gradient.

Centralized or designated fuelwood areas have been designated in the past and would be designated (in locations unlikely to cause resource impacts) for this project as well.

Public Comment(s):

We are concerned with soil compaction in treatment areas. Skidding of whole trees and / or collection of fuelwood by large numbers of individual pickup trucks can lead to excessive soil compaction in large areas. Soil compaction retards recovery of desirable grasses, forbs, and shrubs that are important for wildlife and can advance the establishment and spread of noxious weeds. While the use of small fuelwooders to perform restoration work has some social benefits, we would prefer to see the use of tracked feller-bunchers in conjunction with forwarding equipment to remove both the fuelwood and the slash (see concern below) from the treatment areas. A central location where fuel wood could be collected by individuals would result in a more controlled area of compaction that could be remediated at the end of the project. (Ltr. 04)

Other

Public Concern #40: Petroleum Based Products

Forest Service Response: The Forest Service cannot require this type of stipulation for current local loggers because they do not have the means to acquire this and it is not feasible. Unfortunately, in order to implement this project, the use of motorized equipment is required and those machines use petroleum based oils and lubricants. Prior to operations commencing, there will be provisions listed in contracts and or agreements that require these types of concerns to be mitigated.

Public Comment(s):

--The FS should consider implementing phase-out of all petroleum based lubricants for chainsaws and feller bunchers, as they use large amounts of this ecologically degrading material. This project should also consider stipulating this requirement for any sub-contracted company that may be brought on to do vegetation removal work. (Ltr. 02)

Public Concern #41: Public Health

Forest Service Response: The proposed action contains 77,106 acres of prescribed fire in conjunction with or independent of silvicultural methods. This would be a multi-year process where burn units would build off previous year's treatments, burning more than a single unit within a year in the EV footprint would be un-characteristic. Fire mangers strive to for the most appropriate window for prescribed fire activities to minimize smoke impacts to local communities as well as the duration of the prescribed fire. In addition, prescribed fires typically burn at a lower intensity, consuming less biomass then that of a wildfire and therefore producing less emissions.

Labat-Anderson Incorporated completed a risk assessment titled "*Residues of Fire Accelerant Chemicals"* . The abstract states: "This report summarizes the results of quantitative human health and ecological risk assessments of chemical residues in the environment from the use of a variety of accelerants to ignite prescribed burns. On a per-unit basis for each ignition method, no risks were identified for human health, nor for general wildlife species. However, consideration should be given at the planning stage to protecting sensitive aquatic species in small watersheds that have limited potential for diluting residue chemicals that may run off or erode to surface water."

Public Comment(s):

Reduce prescribed bums for public health - The Proposed Action contains up to 110,213 acres of prescribed burning. That much burning will have very large negative impacts on public health. There is a great deal of upset and controversy among the public about the adverse health effects many are experiencing from the large number of prescribed bums and wildfires expanded with fire accelerants in recent years. The number of days per year that the USFS performs prescribed bums must be capped, so that there is a very limited number of days that create smoke impacts on the public. The effects of volatilized fire accelerants must be analyzed. A system must be set up to take in and document public health impact reports. (Ltr.10)

THE PROJECT FAILS TO PROTECT PUBLIC HEALTH
The scoping document calls for more than 77,000 acres to be periodically burned using low intensity prescribed fires that produce high particulate smoke emissions. This would expose affected citizens to far more smoke particulates over time than emissions produced by an infrequent high intensity wildfire.
There is no known safe level of exposure to small particulate matter in smoke « 2.5 microns in size) below which health impacts are not observed. A significant portion of the population, possibly even a majority, is at increased risk of harm from exposure. A Health Impact Assessment must be prepared to disclose and analyze potential impacts to the disadvantaged rural communities adjacent to the project area that will be most directly impacted.(Ltr.11)

NEPA

Public Concern #42: Proposed Action

Forest Service Response: As a part of the Preliminary Draft EA, more detailed maps will be included. It is important to note that this NEPA will follow a conditions-based approach whereby, the conditions which spur action are described in detail rather than explicit maps. In general, maps will reflect our best-estimate of where proposed activities will occur based on currently-available data. On-the-ground field verification will further inform the exact locations of proposed actions.

Public Comment(s):

I request that as planning proceeds, more specific description with maps be provided to show where specific actions are planned. I would like to see where temporary roads are planned, where specific silvicultural treatments are planned and where areas planned to be burned without allowing silvicultural treatments are. (Ltr. 03)

Public Concern #43: Project Development

Forest Service Response: Stream channel restoration is an activity included within the Northern New Mexico Riparian, Aquatic, and Wetland Restoration Project (NNMRAWR; currently under analysis https://www.fs.usda.gov/project/?project=56975). Upon decision, Encino Vista project area stream channels may be treated; these activities are therefore not included in this project's proposed action.

Minimizing the adverse impacts by motorized recreational access will be addressed by this project through proposed road improvements, road decommissioning, and road closure/storage. These treatments will be conditions based and consistent with the Travel Management (Subpart B) decision and the 2008 Transportation Analysis Process report (Subpart A). Addressing erosive roads would decrease road-related sedimentation, thereby improving water quality and watershed function. Other recreation related management activities are outside the scope of this project, but may be treated by the NNMRAWR project.

Grazing management is largely outside the scope of this analysis, with the exception of resting pastures after prescribed fire so as to allow vegetative groundcover (forage) to re-establish and recover.

Public Comment(s):

In carrying out this work, we would hope that you would also consider the following in developing the details of the project:

- *Improving stream function to accommodate processes of stream meander, stable stream morphology, and floodplain development.*
- *Managing recreational access to minimize impacts on the function of watersheds, riparian and cultural areas, and wildlife.*
- *Managing grazing to minimize impacts on watersheds, rangeland, riparian and cultural areas, and wildlife. (Ltr. 04)*

Public Concern #44: Purpose and Need

Forest Service Response: The Encino Vista project includes measures to protect soil, water quality and wildlife habitat. These measures include Best Management Practices, design criteria, and any terms of regulatory documents provided by the US Fish and Wildlife service. The Effective implementation of Best Management Practices is required for compliance with the Clean Water Act; they are the method by which the Forest controls non-point source pollution.

These measures are included in an EA as part of the decision and are largely what support the Finding of No Significant Impact (FONSI); without implementation of these protective measures, effects could be significant. If effects are thought to be significant, the Forest would prepare an Environmental Impact Statement (EIS), disclosing the significance of the effects. By either document (EA or EIS), the measures prescribed to protect resources and reduce adverse impacts are required because they are part of the decision (and may constitute compliance with various laws).

The Encino Vista project outlines restoration to take place on National Forest lands. This work includes prescribed fire and thinning, which have been proven to reduce the threat of catastrophic wildfire. Private lands adjacent to these treatments may benefit from the lowered risk of catastrophic wildfire, which these treatments produce. Though clearing of vegetation on private lands and structural defensible space are effective at preventing structure and property loss it is the responsibility of the owner to implement these precautions and not the Forest Service.

Public Comment(s):

The National Environmental Policy Act (NEPA) requires federal agencies to consider social, cultural and economic aspects. The community is interested in knowing if this project is truly one that intends to protect and sustain the forests' natural resources, associated fish and wildlife habitats, and the social, cultural, and economic practices of the surrounding rural communities, or if it's being driven by mandated acreage targets set forth by upper management within the federal agencies programs. (Ltr. 05)

**Why isn't protecting lives and property the primary purpose of this project? Making vulnerable homes fire-safe and clearing flammable vegetation immediately around structures are proven strategies.*

** Will measures to protect soils, water quality and wildlife habitat be mandatory and enforceable if they are proposed in an Environmental Assessment as opposed to an Environmental Impact Statement? Please explain the role of mitigation measures in each document. (Ltr.11)*

Public Concern #45: Best Available Science

Forest Service Response: Fire is highly effective in creating desired conditions and encouraging environmental diversity by promoting an un-even age class of trees and the reproduction and rejuvenation of shrubs and herbaceous plant species. All of which benefit wildlife and promote a healthier and resilient forest.

Dr Zander's memo "Fuel treatment effectiveness". States: "The scientific consensus highlights the ability of fuel reduction treatments to change fire behavior. Modeling provides one avenue for testing the effectiveness of fuel treatments (Finney et al., 2007; Johnson et al., 2011; Loudermilk et al., 2014; Mason et al., 2007; Mitchell et al., 2009; Moghaddas et al., 2010; Stephens and Moghaddas, 2005; Vaillant et al., 2009). Fuel treatments have also been tested by wildfire and proved to reduce severity (Cochrane et al., 2012; Dailey et al., 2008; Pollet and Omi, 2002; Prichard et al., 2010; Prichard and Kennedy, 2012; Safford et al., 2012; Stevens-Rumann et al., 2013; Wimberly et al., 2009), even under extreme conditions (Prichard and Kennedy, 2013).

A recent meta-analysis of 56 studies of fuel treatment effectiveness in eight states in the western US showed general agreement that thin + burn treatments had positive effects in terms of reducing fire severity, tree mortality, and crown scorch (Kalies and Yocom Kent, 2016).

Prescribed fire, particularly multiple burns, can reduce the threat of high severity wildfire (Collins and Stephens, 2007; Stephens and Moghaddas, 2005)."

Public Comment(s):

The scoping document's stated purpose ignores the highly questionable scientific basis of fuels treatments on forests and presents nothing resembling a cost-benefit analysis that the public deserves before contemplating such an impactful project. (Ltr.09)

The best available scientific information (BASI) must be utilized in project planning, and the U.S. Forest Service is require to explain how it met this mandate. There are numerous studies that support a much more conservationist approach to managing the Encino Vista project area that have not even been considered. The USFS must consider a broad range of best available science. (Ltr.10)

The use of prescribed bums needs to be re-evaluated using the full range of the best available science.(Ltr.10)

***In** conclusion, the project ignores NFMA's requirement to base decisions on the best available science and NEPA's requirement to address allegedly insufficient information. (Ltr.11)*

THE PROJECT FAILS TO USE THE BEST AVAILABLE SCIENCE
As noted earlier, NFMA's 2005 regulations that guide implementation of the 1987 SFNF plan requires the Forest Service use and document the best available science. 36 C.F.R. § 219.11(a)(1)-(4).(Ltr.11)

Public Concern #46: EIS

Forest Service Response: The National Environmental Policy Act (NEPA) requires federal agencies to evaluate the environmental effects of their actions so that environmental factors are weighted equally with other considerations in the decision-making process. NEPA does not mandate any specific actions based on the size or cost of a project. Rather the law lays out a process for federal agencies to assess a project's environmental impacts before any decisions are made and requires agencies to disclose those impacts to the public.

When the Forest Service proposes an action or project, it first must determine the appropriate path for NEPA compliance. If the project will have minimal and predictable impacts, the agency can use an authorized Categorical Exclusion (CE). If the project would clearly have a significant impact on the environment, the agency must prepare an Environmental Impact Statement (EIS), which requires an in-depth review of alternative actions and their effects. If it is unclear that significant impacts would result from the project, impacts, the agency prepares an Environmental Assessment (EA). Based on the analysis and whether the project will have significant environmental impacts, the EA process concludes with either a Finding of No Significant Impact (FONSI) or a determination to proceed with an EIS to analyze those impacts.

Significance is determined by the context and intensity of resource impacts (40 CFR 1508.27). The significance of an action is analyzed in several contexts, such as the locality and the affected region. Intensity refers to the severity of an impact, and includes consideration of several factors, such as impacts to public health and safety or adverse impacts to threatened and endangered species.

The SFNF plans to prepare an EA for the Encino Vista Project. If the analysis shows that the proposed action will have significant environmental impacts, the SFNF will prepare an EIS.

Public Comment(s):

After thoroughly reviewing the document and agreeing in consensus, the community would like to see this project complete an Environmental Impact Statement and not shortcut through an Environmental Assessment. The community agrees, that more attention to details is necessary as this project could have not only "significant" but "catastrophic" implications to its main watershed if not managed in a way conducive and considerate to this ecosystem and associated habitats for aquatic wildlife and water quality downstream. The community agrees that the threshold of a potential significant impact has been reached with the controversy of environmental effects, primarily to river ecosystems, but also to fish and wildlife species associated habitats and to the social, cultural, and economic aspects of this community and its livelihood. (Ltr. 05)

I am submitting my demand for an EIS to be held before granting permission for this large" restoration project". (Ltr.06)

The Forest Service must prepare a robust Environmental Impact Statement (EIS) under NEPA. (Ltr.08)

The Encino Vista is a major federal project which will certainly affect the quality of the human environment - particularly the air we all breathe. As such, it feels unconscionable for SFNF not to prepare an Environmental Impact Statement for public consideration before proceeding. (Ltr.09)

An Environmental Impact Statement must be prepared. The Encino Vista Landscape Restoration project, including the proposed Forest Plan amendment, "may' have a significant impact on the

environment, and thus the Forest Service must prepare a robust EIS, ensuring that it complies with NEPA's required "hard look." (Ltr.10)

Public Concern #47: Data and analysis

Forest Service Response: All effects associated with the proposed action and any alternatives will be disclosed in the EA and associated specialist reports. The respective reports and data will be part of the project record and available to the public when the analysis is complete.

Public Comment(s):

Scientific documents and data analyses of conditions that have merited the purpose and need for action should be cited or referenced in the documents at length. The effects by the proposed action on the environment and associated ecosystems-and on the aesthetic, historic, cultural, economic, social, and health- are of concern. (Ltr. 05)

Public Concern #48: Timeline

Forest Service Response: While we anticipate the decision for the project to be signed in Spring/Summer of 2022, the implementation timeline would depend upon funding and completion of required surveys.

Public Comment(s):

Prepare a detailed timeline (in specification and in increments) available to the public for review. The timeline should include phases to identify and measure impacts from areas within the project and effects outside of project boundaries).

The timeline scope needs to have a planned (proactive not reactive) set of strategies that would address any scope creep and its impact on project and stakeholders. (Ltr. 05)

I am concerned that there is not a defined proposed start date for the project, or a general timeline in which the project is to be carried out in the proposal. I am advocating for a longer timeline to properly study and attain the data necessary to properly treat the diverse landscape mapped out in the proposal.(Ltr.12)

Public Concern #49: Funding

Forest Service Response: This is outside the scope, because NEPA analyzes the effects of proposed actions on the environment, not the cost or funding source. Funding sources maybe a combination of private, federal, and/or grants. The analysis only analyzes the proposed actions, which would allow for treatments to occur upon the landscape.

Public Comment(s):

The USFS should clearly commit financial resources for implementation of the plan. Past performance indicates a lack of financial resources to many treatment plans on the shelf. At a minimum the financial plan should identify sources of funding or the approach to funding the proposed treatments. The current staff at all levels indicate a willingness for treatment but past history indicates a continual change in personnel with differing approaches and commitment. Almost impossible to build trust with a revolving change in personnel. Again, you started off on the wrong foot with the community of Canones. (Ltr.07)

Public Concern #50: Public Involvement

Forest Service Response: The Coyote RD held two community meetings, a pre-scoping and scoping meeting, to gain community input on the proposed action and project boundary. The community meeting flyers were mailed to over 300 box holders in Coyote, Gallina, Youngsville, and Canones each time. The flyers were also posted on the respective post offices and community businesses. The District also mailed a scoping letter, and posted all project information on the Forest's project webpage.

Public Comment(s):

Announcement of the project and its scoping period did not even make it to SFNF's main news release email list used for far smaller projects and far more minor news.

There has been no mention of the Encino Vista Project in newspapers or other news, including Santa Fe National Forest's own online news feed.

At least several people and organizations well known by SFNF likely not to be in accord with a project such as Encino Vista were not notified about the project in advance of scoping. (Ltr.09)

Sufficient notice of the project and the comment period was not given. Very few people in the Santa Fe area, where most of the forest protection advocates focused on the Santa Fe National Forest reside, were aware of the project and the ongoing comment period until the comment period was half way complete. There was no notice placed in any newspaper, and the notice was only put out on a very limited mailing list. I strongly suggest the USFS start over on the scoping comment period and put out proper notice so all citizens and conservation groups who are interested will have time to write comprehensive scoping comments. (Ltr.10)

Public involvement during the short 30 day comment period was limited. One meeting was held in a remote location and no public notification was published in a newspaper of record. The scoping document was devoid of critically important information. (Ltr.11)

Social/Economics

Public Concern #51: Funding

Forest Service Response: This is outside the scope, because NEPA analyzes the effects of proposed actions on the environment, not the cost or funding source. Funding sources maybe a combination of private, federal, and/or grants. The analysis only analyzes the proposed actions, which would allow for treatments to occur upon the landscape.

Public Comment(s):

A funding and contingency plan should be prepared in concert with the proposed project in case of catastrophic consequences. This contingency plan should be made available to the public for review. The management decisions made caring for this public resource should not be viewed as a least cost-effective analysis decision, but in a resulting decision that ensures the protection of the public resource and is amicable to all users of the forest system. (Ltr. 05)

Public Concern #52: Community Involvement

Forest Service Response: Please refer to response to Public Concern #50. The Coyote RD plans to continue efforts to hold community meetings with the communities surrounding the project area, including the Land Grant community. This is an evolving project that has been proposed by community ad supported by community members. We have adjusted our proposed actions and project boundary based on suggestions form the community and will continue to seek the valuable input and feedback.

Public Comment(s):

Consideration should be given to some of the oldest forms of governance in Canones. These lands were historic land grants, awarded by the King of Spain to the Spanish families that settled here. The land grant is a functioning body of families whose origination and genealogy in the area dates back to the early Spanish settlement, and well before many of these traditional lands were acquired by the federal government. (Ltr. 05)

Include accountability and collaboration with local governmental bodies, the use of local resources, and local personnel and contractors, with simplified ways of participation, with oversight representation by local community in the performance of defined work scope. (Ltr. 05)

Public Concern #53: Impacts socially and economically to land-based community

Forest Service Response: This will be addressed in the Environmental Assessment.

Public Comment(s):

I would like to request more study to take into consideration how the actions of the forest service could impact our land based community in the long term both economically and socially, as our fate is tied to that of the lands and waters that we rely on. (Ltr.12)

Rangeland Management

Public Concern #54: Incorporation into the proposed action

Forest Service Response: We acknowledge that grazing is an important multiple use of the Forest. There will be many benefits to grazing, including an increase in vegetation available to livestock as a by-product of meadow restoration. These benefits and others will be analyzed in the environmental assessment.

Public Comment(s):

Rangeland grazing should be incorporated into a segment of the purpose and need for action as a "valid" multiple user of the forest with permitted allotment access. Range grazing pastures that will be improved, are to be identified and mapped, as well as discussed, in the document to ensure the opportunity to comment (livestock allotment permittees) on pasture improvements. (Ltr. 05)

Public Concern #55: Grazing impacts

Forest Service Response: This will be analyzed and reflected in the environmental assessment.

Public Comment(s):

It is unclear how livestock grazing has impacted the other vegetation communities such as Aspen, mixed conifer, Ponderosa pine, dry mixed conifer, Pinion-Juniper woodlands, and pinion-juniper sagebrush. This must be analyzed as part of the baseline conditions and cumulative effects analysis. (Ltr.08)

Will on-going livestock grazing impede the goal of restoring low-severity fire regimes? (Ltr.11)

Water

Public Concern #56: Water quality in streams and acequias

Forest Service Response:
Prescribed fire is planned to result in low to moderate vegetation burn intensity, minimizing erosion by implementing when soil is moist (often when there is snow on the ground), thereby conserving soil structure and ground cover. Sedimentation within stream channels (and therefore adverse effects to macro-invertebrates and acequias) is therefore not expected, nor are increased peak flows and flooding. The effective implementation of Best Management Practices (BMPs) and design criteria are further expected to minimize erosion and sedimentation.

Some short-term impacts to water quality by proposed activities are possible but would be minimized to insignificance through the implementation of Best Management Practices (BMP's) and project design criteria. As part of these protective measures, buffers around water features (streams, wetlands, springs and acequias) would be utilized; activities within these buffers would be limited. For example, the ignition of prescribed fire within these buffers would not be allowed, but fire from hillslopes would be allowed to back into these areas (resulting in lower vegetation burn intensity, soil burn severity, and therefore erosion/sedimentation).

Public Comment(s):
Water quality, of the area's streams and acequias should be considered as a "significant" impact and one that merits concern. Studies about prescribed fire impact on macroinvertebrate communities in select river systems, in conjunction with findings from studies of wildfire in Yellowstone National Park USA, have shown that as fire produces large quantities of fine debris and increases run-off of ground litter materials, it reduces taxonomic richness and diversity and increases dominance of Chironomidae and Baetis spp.' (Ltr. 05)

Canones watershed. Prescribed burning near aquatic streams has been shown in some studies to have detrimental effects to the water quality and aquatic wildlife. The Canones creek is key habitat for the Rio Grande Cutthroat trout which has in the recent decade finally been de-listed. The community is concerned about ash-filled streams from prescribed burns, loss of sediments, and impacts on water quality. According to some studies mentioned earlier, utilizing fire to treat near riparian areas can potentially be detrimental to the benthic and macroinvertebrate communities. Some studies have shown prescribed burning resulting in streams that have significantly lower taxonomic richness and diversity. There is no current hydrological data cited with a reference and approach to river ecosystem protection. The Canones watershed draws water from a sizeable area, and during regular rain events, the Canones creek and Polvadera creeks can triple in size. The incremental phasing of the project is vital to control unintended higher velocity flow that can increase sediment in the water and detrimental erosion.(Ltr. 05)

Inadequate protections for the top of the watershed could result in destruction of our acequias and lack of water to provide our crops for our animals and families.
I am concerned about the effects of the proposed treatment, especially burning on our river water quality. What efforts can be enacted to protect our waters from flooding due to lack of vegetation, excessive ash in our water from burning, and intense erosion resulting in sediment in our river and acequias, and eventually our fields and gardens? What compensation is available if our crops are ruined due to flooding, or if there are losses of homes, barns, or any other structures? (Ltr.12)

Public Concern #57: Water quality

Forest Service Response: Protecting and restoring watersheds is a top priority of the Forest Service in the Southwest Region. The SFNF realizes that the health of project area watersheds is a significant concern of local communities.

One of the objectives of this project is to reduce the risk of high intensity wildfires by thinning the forest and reducing fuel loads. Because prescribed fire is planned to result in a low to moderate intensity burn, the flooding and erosion commonly associated with wildfire is not expected.

Further, the effective implementation of Best Management Practices (BMP's) and project design features are expected to diminish adverse water quality and aquatic habitat impacts to insignificant levels.

Public Comment(s):

Water quantity, in streams below, should be "strongly considered" in a manner to prevent severe flooding during regular rain events or natural flood events, especially with the potential for an increase in quantity of water through potentially thinned and open canopies. (Ltr. 05)

This particular project is a larger area, and closer to our village, and the canyons steeper, so any negative effects of the treatment could prove devastating to our community. We are concerned over the quality of water that can be compromised, our natural springs that could potentially be damaged, and our lands, animals, and crops that could be wiped out in the incident of a devastating flood. What practices is the Forest Service willing to enact to protect our watershed from potential damage? And how can we hold them accountable? Without our water we cannot live here, threatening our watershed threatens our existence. (Ltr.12)

There is no mention in the plan of how our rivers will be protected from the residues of the proposed treatments. (Ltr.12)

Public Concern #58: Water quantity

Forest Service Response: Proposed treatments (decreasing canopy cover by forest thinning followed by broadcast burning) are expected to result in increased ground cover. This is because fire would release nutrients from the soil and more light would reach the ground. Increasing ground cover slows the runoff flowing over land, causing it to infiltrate into the soil. Therefore, Because of the proposed treatments, a greater percentage of the precipitation which falls on a watershed will go towards recharging groundwater; some of it will also be taken up by vegetation and lost to increased evapotranspiration. The Forest Service is not claiming treatments will result in a sustained increase in water yield.

Public Comment(s):

Yet, there is no substantive information as to how these watersheds will be improved to ensure the necessary groundwater recharge. (Ltr.08)

Forest Plan Amendment

Public Concern #59: General

Forest Service Response: There is a need for the project analysis to be in alignment with the management direction provided in the revised Recovery Plan. A project-specific plan amendment is needed because the 1987 Santa Fe National Forest Plan, as amended, includes direction from the former (1995) recovery plan.

The draft plan amendment would:

- Update definitions and direction for protected (protected activity centers (PACs)), recovery habitat, and other forest and woodland types to be in alignment with the current recovery plan.
- Update language and direction related to prescribed cutting and fire treatments in PACs to be consistent with the current recovery plan.
- Add forest structure guidelines for recovery habitat.
- Add direction for riparian forest habitats.
- Update survey information.
- Remove the direction for treating habitat in incremental percentages.

There is a need for the project analysis to be in alignment with the best available science for northern goshawk management. The Santa Fe National Forest Plan provides guidelines to manage for uneven-aged stand conditions, but does not provide guidelines for the management of interspaces at the fine-scale. Recent science (Reynolds et al. 2013) has shown that historically more interspaces were present on the landscape essentially remaining treeless within a frequent-fire regime, along with scattered individuals. In order to meet restoration objectives there is a need for a project-specific Forest Plan amendment to include: the definition of interspaces; how interspaces and openings relate to vegetative structural stage (VSS) and how canopy cover would be measured across the landscape.

The 1987 Forest Plan provides direction for frequent-fire forest types on three levels: management scale, outside goshawk post-fledgling areas, and within goshawk post-fledgling areas. Therefore a project-specific Forest Plan amendment would need to address the direction provided on all three levels (see Table 1). The Santa Fe National Forest is currently undergoing Forest Plan Revision, but because a final revised forest plan is not expected until 2020 an amendment to the 1987 forest plan is needed to:

- Replace forest plan standards and guidelines for ponderosa pine and dry mixed conifer (including northern goshawk direction) with desired conditions and guidelines.
- Add a desired condition for the percentage of interspaces within uneven-aged stands to facilitate restoration.
- Add the desired interspaces distance between tree groups.

Public Comment(s):

Further, replacing Forest Plan standards with desired conditions and guidelines weakens the Forest Plan. The Forest Service's desired conditions are not based on the best available science and are static conditions used as an excuse for the Forest Service to continuously log in areas where natural fire

should be returned. Forests are not static, they are constantly changing, and natural fire is an essential component of this change. (Ltr.08)

Public Concern #60: MSO Amendment

Forest Service Response: Please see public concern #09.

Public Comment(s):

MSO Amendment. What survey analysis has been completed up to this point for Mexican Spotted Owl recovery? Have locations of habitat been mapped within the boundaries of the proposed Encino Landscape Restoration Plan? Do you have current survey data available to the public as an addition to this proposed project? If so, are there current habitat mappings? We refer to page 15 of the document Purpose and Need for Action. Will these guidelines be adhered to in the proposed project? Highest densities of Mexican spotted owls have been shown to occur in mixed-conifer forests that have experienced minimal human disturbance. Will areas within these project boundaries be reserved for this protection? (Ltr. 05)

So, since the proposed Forest Plan amendments deviate from the 1996 Standards and Guidelines that is an action "outside" of the programmatic Biological Opinion that requires a separate "stand alone" Biological Opinion. Further, the Encino Vista project and associated MSO Forest Plan Amendment fails to incorporate significant and essential components of the 2012 Recovery Plan.(Ltr.08)

No amendment should be made of the existing Forest Plan for this project relating to Mexican Spotted Owl. The Encino Vista Landscape Restoration Project directly contradicts the current injunction on logging activities in Mexican Spotted Owl habitat. (Ltr.10)

*The proposed project-specific forest plan amendment would invalidate the current programmatic MSO Biological Opinion (BiOp) for the SFNF. This BiOp assumes the implementation of the 1996 standards and guidelines including rigorous population trend monitoring. **In** the absence of region-wide long term population trend monitoring, a separate BiOp would be required for the project to evaluate whether the proposed landscape-level clearing and burning will jeopardize the owl population and/or adversely modify its critical habitat.(Ltr.11)*

Public Concern #61: Effects of amendment on T&E species, goshawk

Forest Service Response: Please see public concern #04 and #09.

"Surveys for MSO and goshawks were done before implementing the proposed actions. Observations of other species are documented during surveys for MSO and goshawks, or are documented, either incidentally or as part of other efforts, like if there were researchers in the area that might have trapped small mammals. Species observed in the Encino Vista Project area would be considered during the analysis/assessment phase of planning for the project. The biology reports (Biological Assessment and Biological Evaluation) will include an analysis and discussion of a wide array of species (Federally-listed, FS Sensitive, MIS and Migratory Birds) and their habitats that might occur or do occur in the area".

Public Comment(s):

*In response to amend the **1987 Santa Fe National Forest Plan** to add clarifying language for northern goshawk management with current survey analysis available for public review. Owl and goshawk breeding time occurs during the summer months (March 1 to August 31). Do these intensity burns affect habitat and or breeding cycles for T&E Species? More existing data on wildlife species should be reflected prior to implementation of this project. Currently there is a lack of field sampling and current data analysis. Will this data be available prior to project implementation and available for public review? (Ltr. 05)*

Climate Change

Public Concern #62: Climate change and forest resources

Forest Service Response: The treatments described in the proposed action are designed to move the current forest condition to a healthier more resilient state (in the face of insect and disease outbreaks and hotter and drier conditions). The existing overly dense forest is at risk of insect and disease outbreak as well as high-intensity wildfire. Proposed treatments would increase resiliency to climate change by moving forest structure to include various age classes of trees, creating conditions that allow for a diversity of understory vegetation, and allow watersheds to retain more precipitation.

Public Comment(s):

The Forest Service should analyze in detail the impact of climate change on the Forest, streams, groundwater, roads, and fish and wildlife habitat. Removing culverts, improving stream/ road crossings, upgrading culverts, and decommissioning roads are all very important activities that can increase resiliency to climate change impacts. We encourage the Forest Service to consider climate change impacts - especially related to increasing storm intensity - to ensure that culverts are large enough and/or stream crossings are appropriately designed. (Ltr.08)

Climate needs to be considered much more in the analysis of this project, both as a causative factor for fire and that there is a need to preserve trees to sequester carbon. (Ltr.10)

THE PROJECT FAILS TO DISCLOSE AND ANALYZE CLIMATE IMPACTS The project fails to disclose and analyze the important role forests and woodlands play in sequestering atmospheric carbon.
First, the assumption that logging/thinning/burning will reduce the severity of wildfires is not universally supported.
Second, increased vegetation treatment operations will reduce forest carbon stocks in the short term without guaranteeing increased carbon sequestration in the future.
Third, the scoping letter failed entirely to address the issue of whether the putative future emission reductions from thinning will occur at all.
Fourth, the notion that dense, long-unburned forests must be "thinned" through logging operations prior to reintroducing fire is simply not scientifically supported, and is directly contradicted by a wealth of scientific data.
The SFNF must quantitatively disclose and analyze the impacts of GHG emissions using guidance provided by the Council on Environmental Quality (CEQ).
The Forest Service must include a comparison of estimated net GHG emissions and carbon stock changes that are projected to occur with and without the proposed actions. (Ltr.11)

Public Concern #63: Mycorrhizal Fungi

Forest Service Response: The effects of proposed activities on mycorrhizae fungi are analyzed within the watershed specialist report as follows:

Soil organisms, including mycorrhizae fungi, are important for soil health and overall soil function. Mycorrhizae fungi help support plant growth and increase nutrient cycling in the soil. Mycorrhizae generally occur within the top four inches of soil (Anna 2009) potentially increasing the chances that they are affected by harvesting or prescribed burning activities. Mycorrhizae fungi have developed in the ecosystem in conjunction with low intensity, somewhat frequent fires (Anna 2009). These fungi have been found to withstand prescribed burning, but their resilience is somewhat dependent on soil moisture levels during fire. When soil moisture levels are high, fire has little effect on mycorrhizal populations, but burning under drier soil conditions have been shown to reduce but not eliminate mycorrhizal productivity (Anna 2009; Dove and Hart 2017). Harvesting has been shown to have some suppressive effects, especially in larger openings, but as nutrient cycling, forest floor cover and root growth occur following treatments, mycorrhizae populations return rapidly (Philpott et al. 2018; Harvey et al. 1980). The proposed action includes group selection openings likely 0.1 to 0.5 acres in size, which will likely increase grass cover, which has been shown to increase mycorrhizae populations(Reynolds et al. 2013).Retention of organic matter is important for soil and mycorrhizae recovery overall (Johnson et al. 1991; Mann et al. 1988). Overall mycorrhizae fungi are resilient to the activities that are proposed in the Encino Vista Landscape Restoration project (Philpott et al. 2018) and it is expected that although they may be reduced in numbers and productivity for the short term, no long term effects are expected.

Anna, C. 2009. The forest, the fire and the fungi: studying the effects of prescribed burning on mycorrhizal fungi in Crater Lake National Park. JFSP Briefs. 61.

Dove, C.D. and S.C. Hart. 2017. Fire reduces fungal species richness and in situ mycorrhizal colonization: a meta-analysis. Fire Ecology 13(2): 37-65.

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Public Comment(s):

THE PROJECT FAILS TO PROTECT MYCORRHIZAL FUNGI The project does not mention the critical role that mycorrhizal fungi networks play in sustaining forests. No protection is proposed for mycorrhizal networks from vegetation clearing and burning, roads and livestock grazing. These omissions

undermine the environmental protection purpose of NEPA and the biodiversity mandate of NFMA. (Ltr.11)

Public Concern #64: Climate Disruption

Forest Service Response: Please see public concern #62.

Public Comment(s):

** Is the Forest Service allowed to discuss the role that human emissions play in creating a hotter and drier climate in the Southwest? If so, why was the climate not discussed in the scoping document?*
** Is current climate science being used to analyze the impacts of clearing trees and annual burning?*
** Why isn't climate change mentioned as the primary driver of larger and more frequent high severity fires?*
** Why is the aim of this project to restore past forest structure instead of working with natural succession and evolutionary processes to help the forest adapt to a warmer and drier climate?(Ltr.11)*

Inventoried Roadless Areas (IRAs)

Public Concern #65: IRA Protection

Forest Service Response: IRA's will be discussed in more detail in the Draft Preliminary EA. "This project will not implement any treatments, thinning or prescribed fire, in the adjacent San Pedro Parks Wilderness. Vegetation treatments that will occur within the project area will act as a buffer to the Wilderness to slow or moderate the impacts that may occur due to an uncharacteristic wildfire.

The project area includes several designated IRA's. Project implementation will not include the construction of new roads. Due to the roadless status of the projects, they are subject to the Chief's Review Process for Activities in Roadless Areas (issued on May 31, 2012). The purpose of these projects fits within that directive, and per its requirements the Regional Forester for the Southwestern Region reviews all activities that involve "the cutting, sale, or removal of generally small diameter timber when needed to maintain or restore characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period."

After review of the actions proposed by the Project, the Regional Forester may approve treatment activities in the IRAs upon determining that the project is consistent with the 2001 Roadless Area Rule (36 CFR Part 294) and that the proposed action is expected to protect and maintain IRA characteristics.

Public Comment(s):

IRAs - No mechanical thinning should occur in Inventoried Roadless Areas, and very little prescribed burning - only when there is a limited, strategic and site-specific reason. IRAs should be left as intact as possible. (Ltr.10)

This project failed to identify protection of inventoried roadless areas (IRAs) as a potential issue. No information was presented concerning the delineation, location and potential impact to IRAs. Therefore, the project planning team must identify, delineate and quantify unroaded lands and take the required hard look to determine if planned clearing and burning activities may have significant impacts. We strongly oppose any developments in unroaded portions of the project area until potential impacts can be comprehensively disclosed and analyzed.
In summary, the cumulative effects of clearing and burning thousands of acres over many decades in unroaded, lightly-roaded and IRAs eligible for wilderness must be analyzed and disclosed in an EIS. (Ltr.11)

Public Concern #66: Number of IRAs within Project Boundary

Forest Service Response: Please see public concern #65.

Public Comment(s):

How many inventoried roadless areas exist in this area? Are they be proposed for Wilderness in the new forest plan? (Ltr.11)

NFMA

Public Concern #67: Monitoring

Forest Service Response: The preliminary EA will include the monitoring requirements for each resource the monitor the effects of implementation. In addition, Santa Fe monitoring program is described in the Draft SF Land Management Plan, as required by the 2012 Planning Rule at 36 CFR 219.12. It describes desired conditions, objectives and/or guidelines for monitoring.

Public Comment(s):

*Monitoring - There must be a robust monitoring program developed and put into place. **It** should thoroughly consider effects of fuel treatments on overall forest ecology, connectivity, riparian ways, wildlife (especially endangered and at-risk species), tree health, affects on recreation and the health impacts of prescribed bum smoke on humans and wildlife. Mexican spotted owl populations must be monitored. It is necessary for a requirement to be put into place that the project be halted if the monitoring plan is not thoroughly and comprehensively carried out. (Ltr.10)*

Public Concern #68: Forest Plan Consistency

Forest Service Response: Piling activity generated fuels and existing fuels would be necessary for the successful implementation of this project considering the large project area. Machine piling not only offers efficiency by also safety benefits. Hand piling will also be utilized in sensitive areas and hillslopes steeper than 40%. Lopping and scattering may also occur, depending on fuel loads. To minimize adverse impacts to soil and water resources project design criteria specify piling methods and placement They include:

- *Piling of activity-generated slash would be conducted in a manner that minimizes the amount of soil incorporated into burn piles. Duff and litter layers would be left as intact as possible.*
- *Machine slash piles shall not be located within drainage channels. Avoid constructing these piles on moist swales (valley bottoms); if they must be constructed in these areas, consult a watershed specialist for best placement.*
- *Where possible, do not pile slash or fuels within stream channels; piles may never be constructed within perennial or intermittent stream channels. If piles must be constructed within ephemeral channels (because of steep, narrow terrain); leave many piles unburned. Unburned piles help to trap eroded sediments and ash.*
- *Wherever possible, slash piles would be built outside of the RMZ and swale bottoms. If slash must remain in these areas, scattering slash is preferred to piling. If piling must occur within these areas, the following would apply:*
    - *Piles would be stacked as far from the channel and riparian vegetation as possible; where no riparian vegetation exists, piles would be stacked as far away from the channel as possible.*
    - *Piles would cover less than 30 percent of the riparian area.*
    - *Not all piles would be burned; maintain some unburned piles within stream channels.*
    - *Piles would be burned when soil moistures are high, or when snow is on the ground.*
- *Do not cover more than 30% of an acre with piles.*
- *Burn pile composition should contain a mixture of fuel sizes. Large woody fuels, over 8.9 inches in diameter, should be limited to less than 40 percent of the composition of the pile to prevent adverse impacts to the soil.*

Public Comment(s):

THE PROJECT MUST BE CONSISTENT WITH SFNF PLAN

As noted earlier NFMA requires that any action taken at the project-specific level comply with the Forest Land and Resource Management Plan. 16 U.S.c. Sec. 1604(i). Forest Service procedures also require consistency with the Forest Land and Resource Management Plan (FSM 1922.12 and FSH 1909.12)

The SFNFP also lists "dozer piling" as the least preferred treatment for woody debris and wisely "limits dozer use for piling or scattering of logging debris so that the forest floor and herbaceous layer is not displaced or destroyed" (USDA Forest Service 1996:94). Maintaining the organic surface soil layers where ectomycorrhizae fungi are concentrated-mobilizing nutrients and providing food for Goshawk prey-is critically important to sustaining healthy forest ecosystems (Reynolds et al. 1992:31). Please indicate site-specific measures that will be taken to limit dozer piling. (Ltr.11)

Public Concerns to be Analyzed

Although many of the following issues are routinely analyzed by specialists in their effects analyses, I assign the following public concerns to ensure they are addressed.

Table 3. Public concerns to be addressed by specialists for the Encino Vista Landscape Restoration Project

Public concern	Responsibility

IRAs	Sandy
Community/Public Involvement	Sandy
Forest Plan Amendment	IDT

As the Responsible Official, I have determined that no significant issues were raised during scoping. Therefore, only the proposed action and the no-action alternatives need to be analyzed in detail. Also, the effects section of the assessment should only focus on information needed to support a determination of the significance of the environmental effects.

_____ _____

Mark Sando Date
District Ranger