



United States
Department of
Agriculture



Forest Service June 10, 2019

Santa Fe Mountains Landscape Resiliency **Project**

Scoping Document

Española and Pecos/Las Vegas Ranger Districts

Santa Fe National Forest

Santa Fe County and San Miguel County, New Mexico

Responsible Official: James Melonas, Forest Supervisor

For Information Contact:

Hannah Bergemann, Fireshed Coordinator

Hannah.Bergemann@usda.gov

(505) 438-5448

Comments are due by: Wednesday, July 10th 2019

Summary

The Santa Fe Mountains Landscape Resiliency (SFMLR) Project is a vegetation management project spanning approximately 50,566 acres proposed by the Española and Pecos-Las Vegas Ranger Districts. The purpose of the Project is to improve the ecosystem resilience of a priority landscape to future disturbances including wildfire, climate change, and insect outbreaks. To meet this purpose, the SFMLR Project proposes non-commercial mechanical and hand-thinning treatments on up to 21,000 acres and prescribed fire on up to 43,000 acres, riparian restoration on up to 557 acres and road improvement, decommissioning, and closure across up to 115 miles of National Forest System roads. Initial treatments would be conducted over the next 10 to 15 years.

Background

The Greater Santa Fe Fireshed

The Greater Santa Fe Fireshed (Fireshed) is a 107,000-acre landscape, along the Santa Fe Mountains near Santa Fe, New Mexico in the southern Sangre de Cristo Mountain Range. Forest, fire and water managers agree that after more than a century of fire suppression, this landscape is at great risk of large, high-severity wildfire and post-fire flooding and debris flow. The Fireshed is an area of concern for the City of Santa Fe, Santa Fe County, the Pueblo of Tesuque, the Santa Fe National Forest, the communities within and adjacent to its boundary, those who recreate and enjoy this landscape, and the tourism and ecotourism economies that benefit from it. In December 2015, the New Mexico State Forester and the City of Santa Fe Fire Chief convened a meeting of municipal, county, state, federal, and non-profit partners to discuss this priority landscape, which led to the formation of a collaborative group called the Greater Santa Fe Fireshed Coalition.

The stated mission of the Greater Santa Fe Fireshed Coalition is to:

"...use a pro-active, collaborative approach to improve the health and long-term resilience of forested watersheds and communities by addressing wildfire...Our primary goal is to identify and implement high priority on-the ground projects that make the Fireshed and its communities more resilient to wildfire while maintaining and restoring resilient landscapes. This goal will be realized when fire is used as a tool for management throughout our fire adapted forests, and communities in and adjacent to these forests become fire adapted - they understand the role of fire and are prepared for its occurrence."

The Coalition is comprised of organizations and individuals who are working to improve the ecological condition of the Fireshed area. Since 2015, the Coalition has met quarterly to coordinate and prioritize restoration work and to jointly conduct public outreach in the Fireshed area. With National Forest system lands comprising approximately 65,000 acres of the 107,000 acre Fireshed area, there is a need for the Santa Fe National Forest to conduct restoration at a landscape scale in this priority area in alignment with the Coalition's mission. The Santa Fe National Forest is proposing a restoration project across approximately 50,000 acres called the Santa Fe Mountains Landscape Resiliency Project (SF Mountains Project) located within and immediately adjacent to the larger 107,000-acre Fireshed landscape.

Where is the SF Mountains Project?

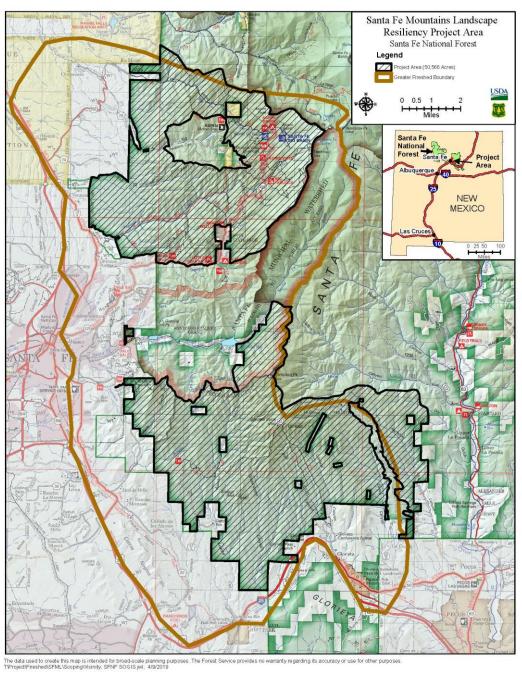


Figure 1 - The Santa Fe Mountains Landscape Resiliency Project area (approximately 50,566 ac)

The Santa Fe Mountains Landscape Resiliency Project area consists of approximately 50,000 acres of NFS lands spanning the Española and Pecos-Las Vegas Ranger Districts. The City of Santa Fe is located to the west and downstream of the Project area. Other nearby communities include Rio en Medio, Tesuque Village, La Cueva, Cañada de los Alamos, Glorieta, Cañoncito and Nambe. The Project Area is also used and valued by tribal communities, including the Pueblos of Tesuque, Ohkay Owingeh, Santa Clara, San Ildefonso, San Felipe, Cochiti, Jemez, Santo Domingo, Nambe, and Pojoaque.

The Project Area includes a range of vegetative cover types that generally vary along an elevational gradient, which spans from approximately 7,000 ft to 12,000 ft., and with aspect. Ponderosa pine and mixed conifer forests comprise the majority of the vegetation in the Project Area in the low to middle elevations (7,000 ft to 10,000), transitioning into spruce-fir and aspen forests in the upper elevations (9,500 ft and above). Piñon-juniper woodlands are generally found on the lower slopes of the mountains and along the upland rolling hills. Riparian vegetation, such as alders, willows, cottonwoods and sedges, occur along some streams, springs and meadows. Other vegetation, such as oaks, upland willows, forbs and grasses are also present within the main vegetation types.

Table 1. Acres of Major Cover Types in the Project Area

Cover Type	Total Acres	Percentage of Area
Ponderosa pine	17,365	34%
Mixed conifer	18,313	36%
Piñon juniper	8,669	17%
Spruce-fir	5,022	10%
Grassland	630	1.2%
Riparian vegetation	557	1%
Alpine and tundra	10	<1%
Total	50,566 acres	

Purpose and Need

The purpose of the Santa Fe Mountains Landscape Resiliency Project is to improve the ecosystem resilience of a priority landscape to future disturbances by restoring forest structure and composition and reducing the risk of catastrophic wildfire. Resilience is the "ability of a social or ecological system to absorb disturbance while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change" (Forest Service Manual 2020.5). A critical component of improving resilience in the Project Area is creating conditions that facilitate the reintroduction of fire, a keystone ecological process, in the frequent-fire vegetation types found across this landscape. This translates to managing forest structure, composition and densities that would not contribute to active crown fire.

Moreover, prescribed burns and natural ignitions under most circumstances would remain at low to moderate intensities.

To increase the resilience of the forests and watersheds of the Santa Fe Mountains Project Area, there is a need to:

- 1. Move frequent-fire forests in the Project Area towards their characteristic species composition, structure and spatial patterns in order to improve ecological function;
- 2. Create conditions that facilitate the safe reintroduction of fire, allowing fire to play its natural role in frequent fire forest types;
- 3. Reduce the risk for large high-intensity wildfires, create safe, defensible zones for firefighters and minimize the risk of fire to nearby valued resources;
- 4. Improve and maintain diverse wildlife habitats to provide a large array of habitat types, habitat components, seral stages and corridors for a variety of species that utilize the area; and
- Improve watershed conditions by restoring the vegetative structure and composition of riparian ecosystems and by maintaining and improving water quality.

Existing and Desired Conditions

Vegetation Types

Ponderosa pine and dry mixed conifer

Ponderosa pine and mixed conifer forests are the dominant vegetation type found across the Project Area, comprising ~34% and ~36% of the vegetation respectively. Mixed conifer forests are often described within two sub-types: dry mixed conifer & mixed conifer with aspen. Dry mixed conifer is a frequent fire transition zone between ponderosa pine forest and mixed conifer with aspen. Mixed conifer forest with aspen is considered less fire frequent and transitions into the spruce-fir forest at higher elevations. The majority of restoration activities proposed for this project would be focused on the ponderosa pine and dry mixed conifer forest types.

Fire has historically played an important ecological role by frequently burning at regular intervals (~5-15 years) at low to moderate intensities in the ponderosa pine and dry mixed conifer forests of the Project Area. There is abundant evidence of the fire history in these types of forests from tree-ring data that has been collected within the Sangre de Cristo Mountains and within the Project Area (Margolis et al, 2007; Margolis and Balmat, 2009). However, a combination of fire suppression and grazing that began in the late 1800's have contributed to departure from the natural vegetative conditions and disturbance regimes. As a consequence of over a century without natural fire patterns, these forests have become overly dense, less diverse in structure and spatial pattern, and have experienced shifts in species composition towards shade-tolerant species (for example, Douglas fir and white fir) that are less fire-adapted. The presence of shade

tolerant tree species have increased significantly in these forests due to fire suppression and is creating ladder fuels and fire hazard while crowding out more characteristic tree species. In addition to altering forest structure, spatial pattern and composition, fire exclusion has also led to higher fuel loads.

These changes negatively impact ecosystem function and make the forests and watersheds of the Project Area less resilient to natural disturbances. For example, high tree density is associated with greater susceptibility to insect outbreaks, poor tree growth and vigor, and lower understory plant production. With a changing climate, the frequency, intensity, and extent of disturbances are expected to worsen. Moving forest conditions towards their characteristic composition, structures, and spatial patterns would improve these forests' resilience to disturbances and improve ecosystem function.

The desired conditions for ponderosa pine and dry mixed conifer forests are consistent with current direction from the 1987 Santa Fe National Forest Plan (as amended in June 2010) and informed by direction from the new proposed Forest Plan currently under revision as well as recent research, as summarized in GTR 310 – Restoring Composition and Structure in Southwestern Frequent-Fire Forests (Reynolds et al, 2013). The desired conditions for this project are informed by reference conditions, and are aimed at improving resilience to future disturbances and changing climate.

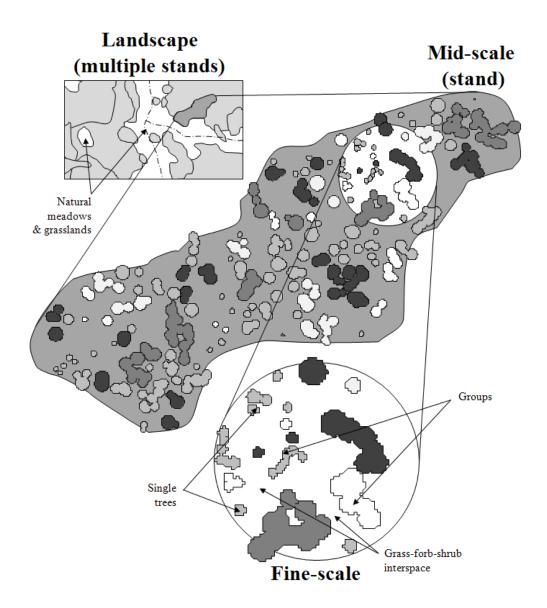
Generally, the desired forest structure would include:

- 1. Multiple age classes in groups, including seedlings, saplings, old growth and snags, and interspaces
- 2. Occasional patches of even-aged stands
- Overall, more open stand structures with lower tree densities; however a variety of tree densities depending on site conditions is also desirable. Tree densities would depend on site conditions, including but not limited to site index, existing structure, and biological conditions.
- 4. A healthy understory with native grasses, forbs, and shrubs
- 5. In dry mixed conifer stands that do not have natural groups, the tree distribution may include randomly spaced individual trees.

The spatial pattern in these forests would resemble a mosaic of patchiness that includes groups of trees with interspaces, and openings that vary in size and are irregularly shaped. At the landscape-scale, there would be patches of forested stands, meadows, and grasslands. At the mid-scale and fine-scale, there would be grass-forb-shrub interspaces and uneven-aged stand conditions with young, mid-aged, and old trees. The desired diversity of vegetative structure and pattern across spatial scales is depicted below in Figure 2.

The forest structure and spatial pattern would create conditions that allow fire to play its appropriate ecological role, staying at low to moderate severities without transitioning into large high severity crown fires.

Figure 2 – Desired characteristic vegetation patterns across the landscape scale, mid-scale, and fine-scale (USDA Forest Service RMRS-GTR 310, 2013).



The forest would be dominated by ponderosa pine and Douglas-fir, with some aspen limber pine, and white fir also present as minor components.

There is a critical need to reintroduce fire into these frequent fire ecosystems. These desired conditions describe a long-term vision for the ponderosa pine and dry mixed conifer forests of the Project Area. Reaching these desired conditions may not be feasible immediately following initial treatments. However, by reintroducing fire into these ecosystems, the intention is to move these forests onto a trajectory towards reaching the desired conditions over time.

Restoration activities would mimic low to moderate severity fire and create the type of structure, spatial pattern, and species composition that was representative in these forest types prior to fire exclusion.

Aspen

Aspen is present throughout the Project Area, with larger stands found primarily in higher elevations intermixed within mixed conifer forests ranging from 6,500 ft to 10,000 ft. Aspen is a successional species; it grows quickly after a disturbance and usually lives only 100 – 150 years.

Aspen needs openings that are created by disturbance such as fire or wind-throw that provide light to be maintained and to regenerate. Many of the existing stands of aspen are becoming decadent and encroached with conifers as a result of fire exclusion and as part of natural succession. Aspen provides important wildlife habitat for a variety of species. Aspen can also act as a buffer or fuelbreak, changing the dynamics of wildland fire behavior.

There is a need to maintain and enhance existing aspen stands, and encourage aspen regeneration for wildlife habitat and for vegetative diversity. Since young aspen stands are under-represented in the absence of disturbance, there is a need to encourage establishment of young aspen. The desired condition would include aspen with a diversity of age and size classes, and spatial distribution and arrangements. Existing stands of aspen would be healthy with minimal conifer encroachment and over-topping.

Old Growth

Old growth forests provide biological diversity and key wildlife habitat for a variety of species. Large and mature trees are found throughout the project area. However, the development of future large, mature trees is limited in areas characterized by dense stands of small to medium sized trees. Existing old growth is also at risk for damage or loss due to high-severity wildfire, insects and disease.

In accordance with the Old Growth Standards outlined in the current Forest Plan, 20% of the forested areas in the Project Area would be identified, allocated and managed as old growth. The desired condition in these areas is a healthy and resilient forest ecosystem with a component of old, large trees or a component of trees that would develop toward old, large trees in the long-term.

Wildfire Risk

The resilience of downstream communities to wildfire is a concern across the Project Area. The existing fuel conditions found across much of this landscape contribute to a heightened risk for large patches of high intensity fire. The presence of ladder fuels and high canopy cover levels found across much of the Project Area would also contribute to intense fire behavior by increasing the potential for torching and active crown fire. Large, high-intensity wildfire would threaten the many ecosystem services provided by

the forests of the Project Area, such as wildlife habitat, clean air, recreation, and drinking water production, and would also have devastating post-fire effects to downstream communities, such as floods. Furthermore, the continuity of fuels across the Project Area in combination with the steep topography limit the options for defensible zones where firefighters have the potential to safely engage with a wildfire.

Of particular concern are the forested areas surrounding and upslope of State Highway 475 (Hyde Park Road) due to the high concentration of recreational areas (trails), infrastructure (Ski Santa Fe and acequias), and property that could be impacted by catastrophic wildfire. There is a need to improve public safety around State Highway 475, as it would be an important evacuation route in the event of a high intensity wildfire. Post-fire debris flow and erosion would also have the potential to cause significant damage to these resources.

The risk for wildfire is also a major concern along the lower elevations and southern portion of the Project Area due to the high surface fuel loads found in much of the piñon-juniper woodlands. There is a need to reduce surface fuels in these areas, particularly where they abut other land jurisdictions and valued resources.

The desired condition is for reduced fuel loads in areas where vegetative conditions would contribute to high intensity crown fire and where wildfire would cause damage to resources and infrastructure valued by local communities. Surface fuel loads should average between approximately 5 to 7 tons per acre in ponderosa pine and approximately 10 – 12 tons per acre in mixed conifer. In areas characterized by continuous fuels in close proximity to valued resources, there is a need to provide defensible zones where firefighters can safely engage with wildfires. In ponderosa pine and dry mixed conifer forest types, meeting the desired conditions for restoration (Objective 1) would also achieve desired conditions for wildfire risk reduction by reducing fuels and breaking fuel continuity in frequent-fire forest types.

Wildlife Habitat

Varying habitat types exist in the project area, from ponderosa pine to piñon-juniper, and grasslands to riparian areas along streams, as detailed in Table 1. The Project Area is currently occupied by many wildlife species including the Mexican spotted owl (MSO), a federally listed Threatened species, and the northern goshawk, a Forest Service Sensitive species. There are currently four Mexican Spotted Owl Protected Activity Centers (PAC), along with restricted areas, and critical habitat in the Project Area.

The Project Area can provide continued habitat needs for these species and others into the future if habitats are maintained and improved to be healthy and resilient. Forests, woodlands, riparian areas and grasslands within the Project Area have changed drastically in the last 130 years. The trend towards increased densities of smaller trees and conifer encroachment/infill has contributed to increased vertical fuel continuity. Over time, wildlife habitats are changing, becoming less suitable as diversity decreases, conifer density increases and risk for large, high-intensity, high-severity wildfires

increases across the Forest. The current risk for large, high-severity fire also poses a substantial threat to MSO habitats across the Project Area.

This current condition limits the diversity and quality of wildlife habitat. Areas characterized by unnaturally dense forested stands and a closed canopy structure offer habitat for some species such as Mexican spotted owls, but are poor habitat for many species that rely on a healthy understory for forage such as deer, rodents and turkey. There is a need to maintain or enhance native understory vegetation and a diversity of habitat components for the wide array of species that utilize this area.

Overall, the desired condition is a resilient forest ecosystem with a mosaic of site-appropriate vegetation types consisting of a diversity of vegetation species, sizes, age classes, densities and distributions, which provides an array of habitat for the species that use the Project Area. Achieving the desired conditions outlined above for the major vegetation types (such as ponderosa pine, etc.) would also improve wildlife habitat. For example, creating more open stand conditions and openings would stimulate the growth of an herbaceous understory that provides forage, while still retaining areas of denser growth and closed canopy would maintain habitat for species like the MSO. Restoring forest structure with multiple age classes, retaining snags, and enhancing aspen stands would also provide a diversity of habitat types for multiple species including goshawks and elk. Similarly, reaching the desired conditions for wildfire risk would also help protect wildlife habitat from being destroyed in a catastrophic wildfire.

Watersheds

The Project Area includes portions of 10 Subwatersheds (HUC12 Subwatersheds) with approximately 60 miles of perennial stream, 48 miles of intermittent channels, and nearly 650 miles of ephemeral streams. The Forest Service classifies the condition of subwatersheds into one of three condition classes based on the quality of aquatic and terrestrial habitat: Functioning Properly, Functioning at Risk, or Impaired. With the exception of Arroyo Hondo (which is Functioning Properly), all the project subwatersheds are functioning at risk.

The primary resource concerns for riparian areas in the Project Area include departed vegetative conditions, wildfire risk, and impacts to water quality from roads and trails. Most of the riparian areas should be dominated by deciduous tree species like cottonwoods, willows and alders, as well as shrubs; however, in many areas these species are being crowded out and over-topped by conifer species. There is a need to improve riparian vegetation where conditions are departed and conifers are encroaching.

The increasingly dense vegetation and conversion from deciduous species to conifers also places riparian areas at risk of damage from intense wildfires. In general, riparian areas are adapted to fire; a natural fire with predominately low severities should be quickly followed by natural recovery. With fire exclusion and denser vegetation, wildfires are expected to burn hotter than historic fires. The higher fire intensity could limit

recovery potential and increase runoff and erosion following a wildfire. This would expose riparian areas to encroachment of non-native invasive species, increased water temperatures, and conversions to more shrubby vegetation rather than trees, which would negatively impact water quality and quantity.

On a landscape scale, roads can have multiple impacts on a variety of resources. They can channel water, contribute to erosion and sedimentation, damage cultural resources, spread invasive plants, fragment wildlife habitat, and impact riparian function. There is a need for improving the transportation system that would be used for project implementation activities. There are approximately 121 miles of National Forest System roads, including 25 miles of level 1 roads (closed to motor vehicle use) and 94 miles of level 2 roads (maintained for high clearance vehicles). The poor condition of many roads in the Project Area have the potential to impact water quality in nearby streams. Many roads are unsurfaced primitive dirt roads with poor drainage, and some run along riparian areas, which could contribute to sedimentation of riparian areas.

The desired condition is a functional road system that facilitates project implementation while limiting the sedimentation of the watersheds of the Project Area and impacts to other resources. Roads would have adequate surfacing and drainage, and would not actively contribute to erosion and sedimentation. Roads would not be redundant, only existing where needed and where impacts to resources could be minimized.

Proposed Action

To meet the purpose and need for the Santa Fe Mountains Landscape Resiliency Project and move the project area towards the desired conditions, the Santa Fe National Forest proposes a combination of activities/treatments, including:

- A. Mechanical and hand-thinning treatments;
- B. prescribed fire;
- C. riparian vegetation enhancement;
- D. road improvement, closure and decommissioning

This Proposed Action does not define specific treatment units, but rather general areas throughout the project area where treatments are most likely to occur and the suite of tools that would be used. We do not have complete information about the conditions found on every acre, but we do have enough information to make informed decisions about the types of treatments that work best in certain conditions.

Prior to project implementation, the Forest Service would identify specific treatment units and prescriptions based on site specific conditions. Treatments would be guided by landscape features (what we find on the ground). Examples of landscape features are cover types, slope, scenic sensitivity levels, or threatened and endangered species habitat. Once a set of landscape features is identified, we would then identify the types of treatment tools, design criteria, and any applicable resource protection measures that we could use to treat those features. This 'condition-based' approach provides flexibility

and lets us account for imperfect information and adapt to changes in environmental conditions. As landscape conditions vary, the appropriate tool is applied to achieve the desired result. A tool that might be appropriate in one area may not be the right tool to use somewhere else.

Acreage amounts would not exceed the proposed action acreages described below. All actions would be conducted in accordance with Forest Plan requirements, and all applicable laws, regulations, and policies. Thinned material would be made available for fuelwood collection where feasible and in line with other resource objectives. No mechanical equipment would be used on slopes greater than 40 percent. No new roads or temporary roads would be constructed.

Treatment: Noncommercial mechanical and hand-thinning treatments (up to 21,000 acres)

Ponderosa Pine & Dry Mixed Conifer (up to 14,000 acres)

<u>Objectives</u>: Restore characteristic structure, composition, and spatial pattern to forests and woodlands of the Project Area; facilitate reintroduction of fire to ecosystems; reduce wildfire risk and spread; improve wildlife habitat.

<u>Description:</u> Thinning methods would include hand-crews using chainsaws and mechanized equipment such as masticators and feller-bunchers. No mechanical equipment would be used on slopes greater than 40%. Lop and scatter or piling of thinned material would occur depending upon site conditions. No new roads will be constructed.

Thinning would primarily target small diameter trees and medium diameter trees (up to 12 inches dbh) and no trees above 24 inches dbh would be cut. Uneven-aged structure would be emphasized by implementing treatments to create openings, breaking stand continuity and allowing for regeneration of site-appropriate vegetation.

Piñon-Juniper (up to 4,000 acres)

<u>Objectives:</u> Reduce the risk for large high-intensity wildfires, create safe, defensible zones for firefighters and minimize the risk of fire to nearby valued resources.

<u>Location:</u> Adjacent to values at risk and in Wildland Urban Interface (WUI)

<u>Description:</u> Dense vegetation would been thinned in strategic locations to aid fire suppression efforts and to improve forest health. Treatments would be designed to reduce the intensity of a fire that enters the fuel-altered area.

Thinning methods would include hand-crews using chainsaws and mechanical equipment such as masticators. Lop and scatter or piling of thinned material would occur depending upon site conditions. Treatments would focus on reducing small-diameter ladder fuels and opening up the canopy to modify fire behavior and facilitate fire suppression.

Spruce-Fir & Mixed Conifer with Aspen (up to 3,000 acres)

<u>Objectives:</u> Reduce wildfire risk and spread, and facilitate vegetation diversity especially of grasses, forbs, shrubs, hardwoods (such as oaks and aspen) and young trees.

<u>Location:</u> Spruce fir and wet mixed conifer forests located adjacent to State Highway 475.

<u>Description:</u> Thinning treatments would be implemented to mimic mixed severity disturbances characteristic of these forest types and to reduce wildfire risk to a key resource. Thinned material would be lopped and scattered or piled. Thinning methods would include hand-crews using chainsaws and mechanical equipment such as masticators.

Treatment: Prescribed fire (*up to 43,000 acres total***)**

<u>Objectives:</u> Restore characteristic structure, composition, and spatial pattern to forests and woodlands of the Project Area; facilitate reintroduction of fire to ecosystems; reduce wildfire risk and spread; improve wildlife habitat.

<u>Location</u>: Ponderosa pine and dry mixed conifer. Targeted areas of mixed conifer with aspen, spruce/fir, piñon-juniper vegetation, and riparian areas.

<u>Description:</u> Prescribed fire may be conducted on up to 43,000 acres in the Project Area. Methods may include broadcast, jackpot, and pile burning. Control lines would be constructed around burn units using hand line or machine fire line. Control lines would largely follow ridgelines, roads and natural fuel breaks. Aerial or manual ignition may be used. Initial treatment would be followed by maintenance burns approximately every 5 – 10 years. No new roads would be constructed.

The majority of prescribed fire treatments would focus in frequent fire vegetation types; prescribed fire would also be used in a limited capacity to reduce activity generated fuels in mixed conifer with aspen, spruce/fir, and piñon-juniper vegetation.

Table 3. Prescribed fire and non-commercial mechanical and hand-thinning treatments

Vegetation Type	Acres treated with both mechanical or hand-thinning treatments and prescribed burning	Acres treated with prescribed burning only
Ponderosa pine and dry mixed conifer	14,000 acres	22,000 acres
Spruce fir and mixed conifer with aspen	3,000 acres	
Piñon-juniper	4,000 acres	
Total	Up to 21,000 acres	Up to 22,000 acres

Treatment: Riparian vegetation enhancement; thinning, prescribed fire and planting

Objectives: Improve watershed conditions

<u>Location</u>: Riparian areas where riparian vegetation occurs or is expected to occur including around springs, seeps, wetlands and streams (perennial, intermittent and ephemeral).

<u>Description</u>: In areas where riparian vegetation is in poor condition, or is being encroached with conifers, thinning, prescribed burning, and re-vegetation plantings would occur. Conifers would be cut and removed from riparian areas to allow riparian vegetation to thrive and expand. Non-native species such as Siberian elm, Russian olive, salt cedar and Tree of Heaven would be cut and removed. Prescribed fire would be introduced in low-intensity to reduce understory fuels and promote riparian vegetation growth. Native species such as willow, cottonwood, alder, grasses and forbs would be planted if natural regeneration is determined to be insufficient following conifer and non-native species removal. Fencing may be installed if needed to protect restored areas if it is determined that riparian vegetation regeneration is being hampered by browsing and grazing.

Table 4. Riparian vegetation enhancement treatment description

Location	Treatment	Acres
Riparian areas	Hand-thinning conifers and/or re-vegetation of native riparian species	Up to 557 acres

<u>Treatment:</u> Road improvement, closure, and decommissioning on existing road system <u>Location</u>: Selected roads throughout the project area

<u>Description</u>: To achieve project implementation, a functional road system is needed that does not cause sedimentation of the watersheds of the Project Area. Road improvement activities would reduce erosion and sedimentation and improve access to implement project activities. Decommissioning and closing select roads would also help to reduce resource impacts. Decommissioning reduces erosion by eliminating motor vehicle traffic and wear on the road surface, allowing the road to return to a more natural condition. Road closures similarly reduce erosion by reducing traffic and surface wear.

Road improvement activities would include:

 Constructing or improving drainage features such as grade dips, lead-out ditches, roadside ditches, drainage crossing, and culverts

- Install erosion control treatments such as riprap, geotextile materials, and sediment basins
- Regrading and surfacing roads.

Road decommissioning would restore unneeded roads such as by blocking entrances, re-contouring, installing grade dips, placing logs and boulders, and/or revegetation, as site-specifically needed. Approximately 1.5 miles of Forest Road 79W would be gated and closed for public motorized access, although private landowners would maintain access.

Table 7. Road improvement, closure, and decommissioning treatment description

Location	Treatment	Miles
Selected roads	Road improvement	Up to 94 miles
throughout project area		·
Selected roads	Road	Up to 20 miles
throughout project area	decommissioning	·
Forest Road 79W	Road closure	Approximately 1.5 miles

Forest Plan Consistency

Management direction for the Santa Fe Mountains Landscape Resiliency Project is found in the Forest Plan, to which this project is tiered. The Forest Plan assigns management areas based on the resources found in different geographic locations across the Forest, identifies management objectives for these areas, and describes the types of management activities that should be carried out to achieve these objectives. Each management area has desired conditions, standards, and guidelines that must be followed. The SFMLR Project lies within five management areas: A, D, E, L and O.

How to get involved

Attend a Public Meeting

Two public meetings are planned during the scoping period for the Santa Fe Mountains Landscape Resiliency Project. The meetings will be held at the following dates and locations:

- Monday, June 24th 2019 from 4:30 pm 6:30 pm: Santa Fe National Forest Supervisor's Office, 11 Forest Lane, Santa Fe, NM
- Saturday, June 29th 2019 from 9:30 am 12:00 pm: Hondo Fire Station 2, 645 Old Las Vegas Highway, Santa Fe, NM

During these events, Forest Service staff will provide an overview of the SF Mountains Project and answer questions. Resource specialists will be present to discuss a variety of topics, including the development of the proposal, fire and fuels, hydrology, wildlife, cultural resources, inventoried roadless areas, and silviculture.

Comment on the Santa Fe Mountains Landscape Resiliency Project by Wednesday, July 10th 2019.

A 30 day public comment period will start on Tuesday, June 11th, 2019. This will be the first of two opportunities to give written input on the project. The public will also have the opportunity to comment on the Draft Environmental Assessment. Those who provide timely and specific comments during either comment period may also be eligible to file an objection to the Final Environmental Assessment and Draft Decision Notice.

Comments can be submitted online, by mail, in-person, or by email. For objection eligibility, each individual or representative from each entity submitting timely and specific written comments must either sign the comments or verify identity upon request. We will place all written and electronic comments received, including the names and addresses of those who comment, in the project file and that information will become a matter of public record. We will accept and consider anonymous comments. You may submit comments through the following options:

- Attend one of the two public meetings, which will be held on Monday, June 24th, 2019 and Saturday, June 29th, 2019.
- Submit a comment online (this is our preferred method to receive your comments): On the project webpage
 (https://www.fs.usda.gov/project/?project=55088), click on 'Comment/Object on Project' under the 'Get Connected' heading on the right side of the page to submit comments using an online form.
- Send an email to <u>comments-southwestern-santafe@fs.fed.us</u> with "Santa Fe Mountains Landscape Resiliency Project" in the subject line. If attaching a document, please use .doc, .txt, .pdf, or .rtf formats only.
- Send a fax with your written comment to:

505-438-5390

Attn: Santa Fe Mountains Landscape Resiliency Project

Postal mail:

Attn: Santa Fe Mountains Landscape Resiliency Project 11 Forest Lane, Santa Fe, NM 87508

 Hand-delivered comments may be submitted to the Santa Fe National Forest Supervisor's Office (11 Forest Lane, Santa Fe, NM) between 8:00 am and 4:30 pm.

For More Information

For more information concerning the proposal, please contact:

Hannah Bergemann, Fireshed Coordinator

Hannah.Bergemann@usda.gov

(505) 438-5448