



What's happening in our forest?

The Santa Fe National Forest is a high desert ecological treasure. Local residents and visitors are fortunate to have an inspiringly beautiful forest rising right up out of Santa Fe, where we can go to hike, camp, cycle, birdwatch, or just go for a peaceful walk in the woods.

Yet our forest is increasingly at risk from a widespread and aggressive program of tree thinning and prescribed burns by the US Forest Service. Typically, the vast majority of trees, along with most of the understory, are removed in thinning project areas, followed by repeated prescribed burns. The treated areas are left in an unhealthy and unnatural state — largely barren, dried out, and ecologically broken.

Also, our health is becoming increasingly harmed by pollution from frequent prescribed burn smoke in our air.

Two very large-scale fuel treatment projects are in planning now. We must engage, educate ourselves about these projects, and understand the ecological and health issues involved to help protect our forest and ourselves. We can make a difference, but we must stand *for the forest*.



Santa Fe Watershed, thinned in 2002 and burned twice. Photo: Dee Blanco

The projects



Satellite image background from Google Earth; project boundaries from US Forest Service

The Santa Fe Mountains Project

The Santa Fe Mountains Landscape Resiliency Project is the largest thinning and prescribed burning project ever proposed for the mountains nearby Santa Fe. The Forest Service has proposed to cut the majority of trees over a total of up to 18,000 acres, and to repeatedly burn up to 38,000 acres, within a 50,566 acre, or 79 square mile project area.

Past projects in this area have left behind damaged, barren and dried out ecosystems lacking ecological integrity, and the natural beauty of these large sections of our fragile high desert forest has been greatly compromised. The frequent prescribed burn smoke has become an increasingly serious health hazard to Santa Fe area residents.

Over 5,000 comments have been submitted to the Forest Service about this project, and the vast majority are opposed to the project and/or expressing concerns about adverse impacts. Almost all comments request that comprehensive analysis, an Environmental Impact Statement, be completed. However, a lesser analysis has just been released. It is time for an active public response now.

The Encino Vista Project

The Encino Vista Landscape Restoration Project in the Jemez Mountains northwest of Los Alamos has been kept so quiet that it has never had a mainstream news story written about it. Yet the 200 square mile cutting and burning project is the largest ever proposed in the Santa Fe National Forest.

The Forest Service has proposed to cut and burn 99,306 acres of the 128,400 acre project area, and to burn another 10,907 acres without prior thinning treatments.

Parts of the Encino Vista Project area have dense stands of even-aged trees as an aftereffect of logging projects of the past.

Some of the trees cut may be sold as timber, and some made into biomass and other types of wood products. They would be brought out of the forest on existing or "temporary" roads, which typically become permanent roads.

Few scoping comments were submitted for this project, likely because public notice and outreach about the project were minimal.

Are fuel treatments beneficial for our forests?

The Forest Service states that the purpose of carrying out widespread thinning and prescribed burn treatments in our forest is to reduce the impacts of wildfire, and to improve forest health. Fire and forest ecologists are increasingly questioning whether this strategy is effective for these purposes.

It has been proven conclusively that fireproofing homes, limited thinning, and clearing fine fuels in the 100 feet around structures keep homes safer from fire. Fuel treatments outside this area do not keep homes safer from fire.

Although fuel treatments out in the forest can sometimes slow the spread of fire, it has not been proven that overall logging, thinning and prescribed burns reduce the impacts of forest fire. In fact, in 2016, a large-scale study showed that such treatments do not decrease the amount or intensity of fire in Western forests, and may even increase fire impacts. (1)

Research shows that it is very unlikely that any particular fuel treatment will ever be encountered by a wildfire.

Fuel treatments have been shown to do little good during the very high intensity fires that occur in hot, dry and windy weather, which are the fires land managers are most concerned about. Embers can fly for miles and spread fires during "fire weather."

Also, the openness resulting from removing the majority of trees from large areas of forest can increase wind speeds and actually cause undesirable fire behavior. Thinned and open forests tend to be drier and more flammable than those with closed canopies. Debris left behind from logging and thinning can cause wildfires to burn more severely.

Fires of all intensities have an ecological role in our forests. A 2019 study indicates that there was no increase in high intensity fire in Western forests over the two decades ending in 2015. (2)

Simple observation of treated areas suggests that improved forest health has not been achieved, and in fact forest ecology has been greatly harmed.



La Cueva Block A, 2019. Photo: Carol Johnson.



Santa Fe Watershed. Photo: Fred King

Forest health and the ecological impacts of fuel treatments

What is a healthy forest? Most of us would say it's a forest in its natural state — balanced, diverse and functioning well.

To improve forest health, the Forest Service is attempting to return our forest to conditions similar to what forests *may* have been like historically, by removing what they consider to be an over-abundance of trees and vegetation.

Yet how can a forest that has had the vast majority of trees and understory cut out, and has been burned repeatedly so that most of the naturally-occurring understory does not return, be natural and healthy?

Thinning projects such as the two large-scale projects proposed for the Santa Fe National Forest are highly impactful and damaging to the forest ecosystem. New forest roads are built to bring in heavy machinery, and these roads have severe ecological consequences. Masticators, bulldozers, and large trucks compact the soils. Removal of so much vegetation can cause soils to erode and sediment to flow into waterways. Debris from thinning increases the risk of bark beetle outbreaks. Wildlife habitat is damaged or destroyed.

Trees are connected under the soil, and roots form a mutual structural support system. When nearby trees are removed, those remaining are prone to blow over. Trees communicate and share nutrients through a vast network of mycorrhizal fungi. Cutting out so many of them damages this network, impacting the health of the remaining trees.

Prescribed fire is applied much too frequently. The research the Forest Service is utilizing indicates that fire historically occurred in our local forest every 5-15 years, and project plans are to carry out prescribed burns at similar time intervals. In fact, recent research indicates that fire occurred in our forest much less frequently, at an average of every 55 years in the Santa Fe Watershed. (3)

Intentionally burning forests so frequently creates a dry, barren and sterile forest, lacking ecological integrity and diversity. It also allows sequestered carbon to be released into the atmosphere.

In our warming and drying climate, it is uncertain that young trees will grow back in many treated areas. We need more trees instead of fewer. Trees help cool the forest floor, and they retain moisture in the forest ecosystem. The forest has become very sensitive to impacts, and the ecological costs of widespread and aggressive fuel treatments may far outweigh any benefits.

Prescribed burn smoke and our health

Over a decade ago, the Santa Fe area had exceptionally clean air, despite occasional small prescribed burns. Burns typically occurred for only a total of a few weeks per year.

Now, the amount of prescribed burn smoke in the air is increasing by the year, and burns occur throughout the seasons — in addition to smoke from wildfires. The impact on public health has been substantial. Local physicians have stated that it is becoming a serious hardship for their patients. It is forcing some sensitive Santa Fe area residents to consider moving away.

The two large-scale fuel treatment projects in planning in the Santa Fe National Forest would greatly increase the local smoke pollution. This smoke would be in addition to smoke from projects already underway.

Prescribed burn smoke is likely to contain residues of fire accelerants such as potassium permanganate, gas and diesel, and the amounts and effects of breathing these chemicals when volatilized into smoke have not been measured or evaluated by the Forest Service. However, the most damaging aspect of breathing smoke is the very small particulates known as PM 2.5. This fine particulate can affect lung function, cause eye and nasal symptoms, adversely affect the immune system, increase heart attack risk, and increase cancer risk. Higher levels of PM 2.5 are associated with higher death rates. (4)

In addition to particulates, wood smoke contains toxic chemicals such as benzene, formaldehyde, acrolein and polycyclic aromatic hydrocarbons. In New Mexico, smoke from prescribed burns may also contain heavy metals, including uranium.

In March of 2020, the Forest Service suspended prescribed burns because, according to the CDC, smoke can increase symptoms and risk from Covid. Yet they chose to resume burns at a time Covid was far more widespread than it had been when they made the decision to suspend burning.

The Forest Service must genuinely consider our health and systematically collect and document prescribed burn smoke health impact reports from the public. So far, they have not been willing to do so. It's up to us to tell them that they must fully evaluate the impacts on our health of so much burning. Our health matters.



Prescribed burn smoke, Santa Fe Watershed. Photo: Satya Kirsch

The importance of comprehensive analysis and public involvement

When forest projects are being planned that have significant impacts on the "human environment," environmental law requires thorough analysis that includes a broad range of the best available science. It also requires that ample opportunities for public involvement be provided.

The projects that are in planning in the Santa Fe National Forest will have a profound effect on the ecology of the forest, altering vast areas from relatively natural forest to "frankenforests" -- human planned forests with few trees and little understory.

We will be greatly affected by the projects. The smoke from all the ongoing burning will turn many of the clean air days we have left into days of hazy and polluted air, affecting our health. The beauty of the unique forest we enjoy will be highly compromised. Damaging forest resources will likely impact our economy, including tourism.

For projects with such intensive impacts, the Forest Service is required to complete an Environmental Impact Statement (EIS). In the past, an EIS was completed for much smaller and less impactful projects. Under the Trump administration, the Forest Service was directed to log, thin and burn much larger areas of forest, as quickly as possible, with minimal analysis. That is what the Forest Service wants to do with our



Gallinas Canyon near Las Vegas



Hyde Park WUI Project. Photo: Dee Blanco

forest. They are analyzing the projects with a much lower level of analysis called an environmental assessment.

The Forest Service has not shown a willingness to even consider current forest ecology outside of their "thin and burn" perspective.

There has been little genuine public involvement allowed. A few public meetings were held, but presentations were only of the "thin and burn" perspective. The public had opportunities to comment on the projects last year, but the notice of the comment periods was so minimal that many were not able to comment in time.

The Santa Fe Mountains Project scoping comments overwhelmingly oppose the current proposal. The comments, which are normally posted publicly for transparency, were withheld from public view. The Forest Service and their partners are running a publicly funded campaign to convince us that what they want to do is right and agreed upon by the public.

We must defend our right to be genuinely involved in decisions about our forest. During the current draft environmental assessment comment period, we must demand an Environmental Impact Statement. Check theforestadvocate.org for further information.

How to engage

We can protect our forest!

The Santa Fe National Forest belongs to us. We need to claim our right to be involved in the planning of projects in our cherished forest. Rise up and make our voices heard! Stand for life!

For Wildland/Urban Interface homeowners

It is critical for Wildland/Urban Interface property owners to do their part in protecting their own homes and communities by fireproofing homes and reducing fuels judiciously in the surrounding 100 feet. Fires spread embers for many miles, so there should not be anything flammable that embers may ignite near structures. There are many sources of information on how to do this online, or property owners can contact Santa Fe City or County fire departments for assistance.

Get informed about Santa Fe National Forest issues

Protecting our forest takes being informed about the projects and issues. The Forest Advocate's purpose is to help the public to be informed. Just by reading the articles on the home page, one can have a much greater understanding of what is going on in our forests, and what we need to do to help. More in-depth information is available on other pages. Please check theforestadvocate.org regularly to stay updated on when specific actions are needed.

References:

- (1) Bradley, Hanson and DellaSala, 2016
- (2) DellaSala and Hanson, 2019
- (3) William Baker, 2017
- (4) <u>Doctors and Scientists Against Wood Smoke</u> <u>Pollution</u>



Theo Leahy Silver

Make it known that you want our forest protected

Take every opportunity to make your views heard. Write editorials and letters to the editor urging that an Environmental Impact Statement be completed for the projects. Or write about whatever concerns you the most. When Forest Service project comment periods are open, be sure to write comments. The Forest Advocate will provide guidance on writing comments so it can be quick and easy. Tell your local officials that you want them to take strong action to protect our forest, our community, and our health.

Contact information for local officials is available at theforestadvocate.org/officials

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