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First name: Todd

Last name: Adelman

Organization:

Title:

Comments: Official Comment in Opposition to Forsythe II

To Whom It May Concern:

I am submitting my official comment in the form of an attachment (Forsythe II Letter of Objection - Todd Adelman) in opposition of Forsythe II. Please confirm receipt.

Sincerely,

Todd M Adelman
1890 Lazy Z Rd
Nederland, CO 80466
303-931-1188

January 27, 2016

To Whom It May Concern:

The Forsythe II plan is just as flawed and misguided as its predecessor, the Forsythe Plan, which was scrapped as a result of its false premises, incorrect and misconstrued "facts," poor and antiquated scientific justification, dismal execution, and cavalier disregard of required procedures in 2014.

As a founding member of Magnolia Forest Group NFP, a group of concerned residents made up of conservationists, recreationists, hunters, fishermen, veterans, foresters, firemen, and accomplished scientists, and as an 18--year resident of Lazy Z Road, I am surprised and disappointed that Forsythe II is so similarly flawed to the original Forsythe Project.

Dozens of my friends and neighbors have participated in numerous meetings and field trips over the last 18 months with USFS personnel (Sylvia Clark, Kevin Zimlinghaus, Cambria Armstrong and Reid Armstrong to name a few) in an effort to collaborate on what is best for our forest. The USFS asked for our participation in an effort to restore some of the trust and good faith that was lost during the original and aborted Forsythe Project. Our community has collectively submitted hundreds of e--mails which have included thorough outlines of our opinions, concerns, treatment recommendations, scientific references, and a comprehensive alternative plan.

To this point, it is hard to identify the incorporation of any of our ideas. To say this is frustrating is an understatement.

A few points worth noting:

The Forsythe Plan was fundamentally a "fuels reduction" plan. The Forsythe II plan is being paraded under the banner of "forest restoration." Restoration and fuels reduction are two completely disparate objectives, yet the prescriptions for treatment are hardly distinguishable.

Restoration is defined by Webster's Dictionary as:

- *the act or process of returning something to its original condition by repairing it, cleaning it, etc.
- *the act of bringing back something that existed before
- *the act of returning something that was stolen or taken

The Forsythe II plan does not deign to describe or even mention (i) the "original condition," (ii) what "existed before," or (iii) "what was stolen or taken," scientifically or philosophically, with respect to the proposed project area. That is the only natural place to start for a "restoration" project.

In addition, it would also be helpful to know why it is in the best interest of the forest to "restore" it. Lastly, why is the forest not in its original condition?

In the recent meeting on January 11th, 2016 it was mentioned that although Forsythe II is now being justified as a "restoration" project, fuels reduction and wildfire protection are also part of the purpose and need for the project.

A few points to consider, that based on the current available science, cannot reasonably be disputed:

1. Patch cutting (clear cutting) does not protect us from forest fire; rather, it makes the situation worse. The fire ends up taking a wider path and travels faster.

2. Grass fires are just as catastrophic, if not more so, than timber fires.

3. Forest thinning, unless done on a very regular basis, does not protect us from forest fire; rather, it makes the situation worse. The Forest Service admits that it does not have the manpower, money, or resources to thin on a regular basis. Thinning dramatically increases ladder fuels, which can turn slow--moving ground fires into devastating crown fires.

4. The best defense strategy against forest fires is to (i) leave the forest intact; and (ii) encourage and incentivize property owners to create proper buffer zones ("defensible space") around their property.

5. In high--wind fire situations (which constitute virtually all of the catastrophic fires in this area), it is probable that no treatment will have any impact. For example, in the Four Mile Fire, there were reports of embers blowing two to five miles. The Forest Service's internal review of the Four Mile Fire concluded that none of its fire mitigation practices had any noticeable impact on the fire's intensity and severity.

In sum, what the Forest Service has already done and is planning to do in Forsythe II in the name of "fire mitigation" is actually increasing fire danger.

I have attached two documents that address many of my concerns and of which I am in full support. These both meet the purpose and need of the Forsythe II project and are demonstrably superior alternatives to the current proposal:

- *Guidance and Treatment Changes Bullet Points
- *Magnolia Forest Group, NFP Forsythe II Alternate Plan

I have done my best to understand the parcel boundaries, but in case I have misunderstood any of them, I respectfully request that the USFS provide me with the GPS coordinates of all boundaries in the project as soon as possible.

Based on my interpretation of the parcels, I have specific concerns regarding parcel numbers 43, 39, 76, 42, 45, 47, 48, 49, 68, 73, and 74.

Parcels 43 and 75. These parcels have been recently thinned and much of the regeneration and ladder fuels are a direct result of this thinning. There is significant age diversity throughout these units as well as species diversity. This is prime Canadian Lynx, Mountain Lion, Black Bear, Moose, Elk, Deer and Bobcat habitat (to name a few of the larger mammals). There are raptor nests, including but not limited to: Goshawks, Red Tailed Hawks, Peregrine Falcons, Golden Eagles, Great Horned Owls and dozens of songbird species. The only treatment if any that should be done is removal of the downed trees, removal of standing dead trees, and possible cutting of some ladder fuels. No mechanical cutting of any kind should be done. The road should be obliterated and returned to its natural state. In addition, the noxious weeds that thrive as a result of the road must be addressed.

Parcels 68, 76 and 42. These parcels are inholdings within 43, 75 and 45 and have the same ecological importance. All that should be done is removal of downed trees and cutting of any dead standing trees. If any treatment is deemed necessary, it should be done without any mechanical cutting.

Parcel 45. This unit has been thinned in the recent past. It is excellent wildlife habitat and contains all of the species mentioned in the summary of Parcels 43 and 75 above. All that should be done is removal of dead trees on the ground and standing dead trees.

Parcels 48, 49, 47, and 73. These parcels are of the same ecological significance and there is significant age diversity across these parcels. They have been thinned in the recent past and these areas have good spacing and a diversity of species. All that should be done is removal of dead trees by manual means.

Parcel 74. This two--stage proposed treatment is flawed. If the downed trees cannot be removed without cutting or destroying the healthy trees, then this whole unit should be omitted from treatment.

Parcel 39. I believe this parcel was treated during the Winiger Ridge project and should not be treated again. All that should be done is removal of remaining slash piles and dead trees.

The 16--inch diameter at chest height criteria is ridiculous, as there are very few trees in the project area that are this large. In the original Forsythe Plan the criteria on the task orders per my recollection was trees over 11 or 12 inches would be saved. Why suddenly the change to 16 inches, which would dramatically increase the number of healthy trees cut?

I was at times encouraged by a few of the meetings we had over the last 18 months in which the social aspects of the project were not only discussed, but acknowledged by USFS personnel and affiliated experts from the Nature Conservancy, CSU, etc. as vital components to the planning process. It was indicated to us on many occasions that these social and community factors were going to be given strong consideration. To this point, I have seen no such indication.

Similarly, I find the timing of the scoping period strangely disrespectful. Why would a government agency choose to start the clock ticking the week between Christmas and New Years? 30 days is not nearly enough time in the first place, and most folks including myself lost at least one if not two weeks due to this lack of consideration,

although I am aware that it technically satisfies the USFS's minimum legal requirements.

I also find it incredible that the USFS plans on completing a comprehensive Environmental Analysis in 60 days. Is that really enough time to gather all of the relevant science and expert opinions, to evaluate all of the opinions, weigh its alternatives, and construct a document that includes a recipe for precise execution, accountability, and success? The Supplemental Information Report for the original Forsythe Plan took longer than 60 days and all that report was tasked with was reviewing an existing plan to see what was incongruous.

What is still unclear to me is why the USFS is so intent on cutting the majority of healthy trees down regardless of the purpose? Is it jobs, funding, private interest? It would be good to know. Is there not a better way to spend taxpayer dollars?

What is becoming clearer to me is that the USFS is going to try and cut healthy trees and lots of them - whether in the name of "fuels reduction", "fire safety" or "forest restoration" it doesn't really matter, and frankly it doesn't seem to matter if it does any harm or good.

In summary, the current Forsythe II plan should be terminated immediately as it is an outrage. It plans to irreversibly destroy treasured areas of Boulder and Gilpin County. It is increasing fire danger and putting lives at risk, devastating wildlife habitat and cherished recreational areas, jeopardizing the watershed and increasing flood risks while ignoring the social impacts.

Lastly, and possibly the most enraging point, is that despite consistent public outcry by the majority of the community, the USFS continues to place its own slash--and--burn agenda, as well as the interests of Denver Water and Xcel Energy (to name two of the primary corporate interests involved) high above the opinions and desires of the public.

I was intent on putting a stop to the original Forsythe Project, and I intend to do the same to Forsythe II unless there are significant changes in favor of conservation and the proper consideration of local concerns. Please be advised that dozens, if not hundreds, of my neighbors and friends feel the same way.

Sincerely, Todd Adelman

1890 Lazy Z Rd. Nederland, CO 80466

Cc: Benjamin M. Wilson, Esq.

Guidance and Treatment Changes

Forsythe II Project - Information & Guidance

*Support the MFG alternate plan over the USFS scoping plan.

*Coordinating with residents to create safe zones 100' around houses is a good thing and also investing in firefighting facilities, equipment, manpower, and improved response times. Much current science indicates that patch cuts for fire mitigation have the opposite effect than intended. On the other hand, homes with 30' and 100' mitigation zones can survive crown fires.

*Surface and ladder fuels created by previous thinning are in need of reduction in some areas. Many papers published by the USDA FS, indicate that the "most effective strategy for reducing crown fire occurrence and severity is to (1) reduce surface fuels, (2) increase height to live crown, (3) reduce canopy bulk density, and (4) retain large trees of fire resistant species" in that order. Also, bear in mind that reducing canopy density has the

effect of increasing surface regeneration.

*The latest science indicates that thinning in this area at this elevation and vegetation type will have no benefit in terms of fire mitigation. The open forests and low frequency fire regime cited by the USFS is applicable to lower altitudes (<7000'). This area of higher elevation and steeper slopes is not suitable for that type of forest and fires here are more dependent on weather (wind, heat, drought) than on fuels. Widely spaced trees and even aspen stands will burn in this upper montane zone with crown fires, given the right weather. This is the type of fire we experience here. The upper montane zone vegetation type is Lodgepole, mixed-conifer, and Ponderosa, along with a variety of shrubs and is the type of vegetation in the Forsythe units. This is an upper montane vegetation type.

*Forest restoration should not include converting an upper montane zone into a lower montane zone. Patch cuts and clear cuts in lodgepole pine do not restore the forest to any natural state. See above. USFS project proposal appears to be trying to convert this upper montane zone into a lower montane vegetation type, with widely spaced Ponderosa pine. That is contrary to the actual vegetation type, terrain, and weather patterns found here and can in no way be considered "restoration". Lodgepole pine are found in large, even age stands. Yes, different hillsides may have a different age stand and there may be a few patches of uneven aged lodgepole within an area, but not many. You have already created considerable amounts of clear cut and patch cut areas in this area to create uneven age stands. More cuts at this time will just create another cycle of dense, even aged stands, or an unnatural hodgepodge of more fire prone uneven aged trees.

*Thin the regenerated pine now, before it gets older. Thinning lodgepole pine at ~age 12-15 allows them to develop stronger root systems and resist blowdown later. It can also produce variable stands with some thick clumps and some spaced a little further apart (they still shouldn't look like an open ponderosa forest). They should still be closed canopy, but thinning will increase their vigor and growth.

*We suggest no manipulation to select for particular species. The effects of climate change on the forest cannot be accurately predicted for any given area. Overall global warming does not mean that we will necessarily see immediate warming here. The local effect could be cooler and wetter even as other areas get hotter and drier. Simply cutting for a Ponderosa forest will not create one. The trees that will regenerate on north facing slopes will in all likelihood be Lodgepole and Fir. Better to have mature, tall trees than a slope of small ones for fire mitigation purposes. Nature does a better job at selecting trees for changing conditions than we can hope to do.

*Slash needs to be removed and no more slash produced until the backlog is burnt or otherwise dealt with. Removing the overstory and placing it on the ground in slash piles, or lopped and scattered, does nothing to reduce fire hazard. Producing more piles than can be dealt with in a year is counterproductive. Leaving 2 slash piles per acre (sized a minimum 6'x6') is too much. The wildlife would probably benefit more by having the forest standing than in piles on the ground. There are already more slash piles in the district than can be dealt with in several years. <http://www.skyhidailynews.com/article/20100614/NEWS/100619985> and <http://www.containedburn.com/Products.php>

*Any treatment should be designed for conditions on the ground including diversity of species, habitat, riparian & watershed protection. This means leaving trees in the ground to hold and shade the soils to protect the watershed and prevent future flooding. Keeping thick forests (what few we have) for species that need them. It is hard to improve wildlife habitat, if you don't know the full diversity of species present and their needs. A variety of diverse habitats is best.

*The proposal should be in accordance with the Arapaho Roosevelt Forest Plan!! That means placing importance

on scenic and social values, wildlife habitat, as well as preserving future old growth. No trees 12" or over should be cut.

*We see no mention of the Gross Reservoir expansion. This could be a major development and its impact needs to be considered with any forest project and visa versa. The issuance in April 2014 of the Final Environmental Impact Statement ("EIS") for the proposed expansion of Gross Reservoir represents a significant change of circumstances and impact on the area. Denver Water has contributed money towards this project, but we have seen no science that cutting the trees actually contributes more towards protecting the watershed than the occasional fire.

*If any cutting is needed, it should be by hand, limited to a few areas, and should avoid disturbing wildlife. Cutting between May and September is likely to disturb nesting birds, migratory birds, and elk calving, as well as attracting MPB into the area (during their flight period). Of course, many areas cannot be cut during the winter due to disturbing the Winiger elk herd.

*Any Task orders need to be specific and there must be more supervision at all times. There must be a method of public recourse for task orders or trees marked that do not follow the EA. Too much discretion is placed in the hands of the contractors. Too many changes happen to the project when it is time for the task orders to be issued.

*Aesthetic, social, and ecological factors must be included!! The way a forest looks is important to its inhabitants, both human and others. Most of us will not live to see a grown replacement forest in an area cut down. Most of the trees in this area are not grandfather trees; we have very little old growth. This area was razed in the 1800's, so most of the trees are only a little over 100 - young in tree life. Perpetual cutting guarantees we will never get old growth. If we include the effects of fire mitigation around homes (where it does make a difference), we have lost a lot of dense habitat. The patches of USFS land are the remnants of this type of habitat and we need to keep them to retain ecological diversity.

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Forsythe II Project Alternate Plan November 2015

Purpose:

*Forest Health

*Watershed Protection

*Wildlife Habitat

*Improved Home Protection from Wildfire

Reasons: Given that:

*the area of the Forsythe II project is all above 7600', in the northern half of Colorado, and falls into the upper montane zone, with a historical fire rotation of 100+ years, fire exclusion has probably had little effect on the forest. [1,2,5, 8]

*this fire regime is one of mixed intensity fire, with a predominance towards moderate and high severity fire, primarily dependent on weather and terrain, not on fuel density, thinning will likely have few mitigating effects on fire in this area. [1,2,3,4,5,6, 7, 8]

*the upper montane zone is not an area that has ever been similar to the pure ponderosa, open stands of the lower montane zone and that this area actually is transitioning to sub-alpine, as evident by the dominance of lodgepole pine over ponderosa or Douglas fir, all attempts to convert it into a lower montane zone should be

abandoned. [1,5,8]

*continued chronic disturbances may degrade forest resilience, more recovery time should be allowed for the forest to continue in its return to equilibrium, along with allowing nature to determine resilience, rather than human guesswork. [9]

*the units proposed for treatment (in original Forsythe2 proposed action) have been clearcut, patch-cut, burned, &/or thinned multiple times in the past 100 years and have not, according to that proposal, been sufficiently mitigated, it could be concluded that this type of treatment doesn't work. [8]

*this is a fragmented area of forest WUI, with roads, residences, reservoirs, recreational trails, and small patches of forest, in which reside diverse species of wildlife, further cutting will have a negative impact on overall habitat for current species. [10]

*as the forest is opened, facilitating human traffic through the forest, including recreational users creating more social trails, which increases human pressure on wildlife, further cutting would have negative impacts on wildlife. [10]

*the wildlife in the area have not been monitored, catalogued, or studied for current health by the USFS, there is no evidence that changes would have a positive impact.

*this is an important migration corridor and core habitat for the Winiger elk herd, which has already been impacted by cutting and trails, further depredations could have a severe impact on the herd's ability to utilize traditional wintering and calving grounds. [11,12]

*Douglas firs are an important wildlife resource, providing nesting habitat, hiding & thermal cover, and forage for many species of wildlife, large and small, including American martens, blue grouse, Cooper's & sharp-shinned hawks, chipmunks, and numerous songbirds, the emphasis on removing these trees from the landscape is misguided. The same is true for dwarf mistletoe. [13]

*producing more surface fuels, as scattered or piled slash, does not mitigate for fires, or promote forest health, slash should be removed, not increased by more cutting. [3,7, +]

*trees protect the watershed by providing shade to help retain soil moisture and increase soil absorbency, by holding soil on hillsides with their roots, and by providing a natural regulatory effect by taking in and releasing water, they should be retained, not cut, especially as tree removal can increase flood potential. [15,16]

*research has shown that pulsed disturbances from fire may be less deleterious than chronic watershed impacts from repeated treatments, mitigation should not be attempted. [8,15,17, 16]

*research has shown that the best defense for homes in the WUI is to have a mitigation zone up to 100' around the home, emphasis should be placed on this action. [3,9,18,19]

*residents and recreational users place a high value on a sense of wilderness and the biophysical factors that contribute to these natural amenities and that this importance is integral to community well-being, both socially and economically, any forest treatments that degrade this sense of wildness will be detrimental to the community and county. [10]

*the "Theme" for the ARF Forest Plan emphasizes providing adequate amounts of quality forage, cover, escape terrain, solitude, breeding habitat, and protection for a wide variety of wildlife species and associated plant communities, as well as limited management, and given the above facts, less intervention is more in line with the Forest Plan.

Actions: Regeneration Thin

Units that were treated in the past 20 years should be assessed for conifer regeneration (trees < 18 years old). While dense lodgepole growth is the norm, some thinning of the regeneration at this stage could allow for increased growth and root strength, both of which would be advantageous given the high winds in this area.

The amount of regeneration thinned should be based on slope, aspect, species, and adjacent stands.

Regeneration thinning on steeper, north facing slopes should be minimal to provide wildlife cover, moisture & soil retention, and prevent surface fuel growth (800-1400 stems/acre, spacing - irregular). On gentle slopes and south facing slopes, thinning of regeneration can be more aggressive to achieve a somewhat more

open forest, although with clumps and heavier patches to provide cover and migration corridors for wildlife. Where ponderosa have regenerated, lodgepole can be thinned away from them. In areas of Douglas fir and lodgepole, thinning would be consistent with historical variation for those species. (Basal area for sparse to moderate lodgepole would be 80-150 ft²/acre, or 300-700 stems/acre, 6.6'-10' random spacing between trunks). [20]

Areas that were cut in 2014 will need to be monitored and slated for regeneration thinning in the next 10-15 years.

Surface Fuel Reduction:

As fire still seems to be perceived as a threat to be mitigated, rather than an integral part of ecological restoration, addressing the preponderance of surface fuels in the area would be the best way to mitigate. The 1000's of slash piles produced by the USFS in the last 20 years should be removed, either by chipping & spreading (no deeper than 1"), incineration (preferably with mobile incinerator), or removed off-site. Burning all of these piles in situ produces high heat (inconsistent with natural fires), especially as many consist of cut boles, that sterilizes the soil, alters the soil chemistry, and kills natural seeds, such that nothing grows for years and/or invasive weeds are most likely to colonize the sites [14]. Many of the piles are barely ten feet apart, meaning that quite large areas will be at risk for invasive weeds, if piles are burned in situ, as well as an increased risk of escaped fire. Piling slash can also facilitate an increase in bark beetles, increasing mortality in residual trees (Six et al. 2002)

There are numerous areas with heavy downfall of small diameter lodgepole pines. Although woody debris is an important component to the ecosystem, providing habitat and nutrients to the forest floor as they decay, it is a slow process and they act as abundant surface fuel. It may not be practical to remove some of this debris, but it would be more effective as fire mitigation to do so, rather than to cut the forest. The natural progression of lodgepole forest is dense growth, followed by self-thinning, leading to undergrowth of other species. [20]

Weed Control:

Past treatment efforts have caused a proliferation of invasive weeds, particularly in sites that were treated by machine. Many of these weeds are highly flammable (e.g., wooly mullein, cheat grass) and should be removed. Canadian and Musk thistle spread rapidly and affect neighboring properties. These also need to be removed from FS lands. More personnel and funds are required to address this problem, which will only expand if not addressed now.

Private Home Defensible Space

Property owners in cooperation with the Colorado State Forest Service and Boulder County are continuing to create areas of defensible space around homes and other improvements on private lands. In order to comply with home insurance companies, some private landowners have been required to complete defensible space mitigation around their homes. Defensible space is the area around a home or other structure that has been modified to reduce fire hazard. In this area, natural and manmade fuels are treated, cleared or reduced to slow the spread of wildfire. Creating an effective defensible space involves a series of management zones in which different treatment techniques are used. The materials the home is built out of, what you store on and around your home, and vegetation present within 30 feet of your home have the greatest influence over whether your home will survive a wildfire. [18]

Some of these private homes are in close proximity or adjacent to Forest Service lands. One of the purposes of this project is to provide homeowners the ability to complete the required defensible space across their property

boundaries onto National Forest System lands.

In areas where there are private homes located within 100 feet of the Forest Service boundary, within the project boundary, private property owners would be permitted to complete defensible space treatments on Forest Service lands in accord with the USFS. Treatment would follow the guidelines outlined by the QUICK GUIDE SERIES FIRE 2012-1. Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones. http://static.colostate.edu/client-files/csfs/pdfs/FIRE2012_1_DspaceQuickGuide.pdf

There are three zones that characterize defensible space and are defined as the following:

1. Zone 1 is the area nearest to the structures that requires maximum hazard reduction. This zone extends up to 30 feet outward from a structure where the most flammable vegetation would be removed including most trees. Remaining trees would be pruned to a height of 10 feet from the ground and be spaced at least 30 feet between crowns.

2. Zone 2 is a transitional area of fuels reduction between Zones 1 and Zone 3 or the forest. Typically this zone should extend at least 100 feet from structures. Stressed, diseased, dead or dying trees would be removed along with ladder fuels. Trees would be thinned to a crown spacing of at least 10 feet. Retained trees would be pruned to a height of 10 feet from the ground. Groups of trees may be left in areas however these groups would have at least 30 feet spacing between the crowns of the group and any surrounding trees.

3. Zone 2 could be extended to 200' from the structure, where it slopes steeply down from the house. Thinning between tree crowns would occur to an average spacing of 10 feet. Ladder fuels may be removed from underneath retained trees.

4. Zone 3 does not apply in this case, as it has no defined distance and is only to extend to the homeowners property boundaries. Studies have shown that a distance of 30-100' is sufficient to protect homes from crown fires. [18,19]

Patrols and Enforcement:

Although the danger of lightning strike caused fire is ever present in this area, human caused fires are the most prevalent. The best form of mitigation is to reduce fire starts. Longer fire bans, bans on dispersed shooting, along with increased patrols and enforcement to ensure compliance, will do more to reduce the threat of catastrophic fire than any amount of thinning or patch cutting. Funding is required for these activities.

Wildlife Monitoring:

To improve wildlife habitat, one must first know what wildlife species are present and the types of habitat preferred by those species. The most recent study on the migration corridor for the Winiger Elk Herd was conducted in 1980's. Large patches of forest have been cut and thinned since that time. Many residences have been built since that time, as well. Both of these may have had an undocumented impact on the elk herd. The Forsythe Project area falls directly in the path of the historical migration corridor. While elk do like open areas for browse, they need the shelter of denser forest to protect them from winter winds and to provide cover during migration (which can coincide with hunting season or calving).

Northern Goshawks, Ferruginous and Rough Legged Hawks, Golden Eagles, Lewis' Woodpeckers, Chorus Frogs, American Marten, American Mink, North American Porcupine, and River Otters are among a number of animals that have been sighted in this area and which are listed on Boulder County's list of "Wildlife Species of Special Concern", as well as on other lists. Many of these species require special habitats, including retaining wetland and dense forest, as well as protection from human contact. "Some wildlife species have adapted to limitations of suitable patches and tolerate habitat fragmentation, others may take advantage of changes and colonize new openings, however, with human habitation have come more openings and fragmentation, so those species that do not tolerate fragmentation and loss of denser habitat may suffer decline.[21]" Without a study to

determine which species are present, where they are, and what habitat is essential for them, we can have no idea of how to improve habitat. Their presence would indicate that they are finding appropriate habitat, so to make changes, without knowledge, is to risk destroying essential habitat.

While it can be said that there is more habitat for these animal species in other parts of the forest, over time more and more habitat is removed from the landscape, with poor results for many species. The USFS needs to look at the mosaic of both public and private lands to determine available types of habitat. Personnel and funding should be provided to perform wildlife studies before any major changes to the forest structure are proposed.

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