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Working to protect and restore Western Watersheds and Wildlife

May 10, 2019

Nogales Ranger District
Attn: Jim Copeland
District Ranger
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Submitted this date via: https://cara.ecosystem-management.org/Public/CommentInput?project=51926

RE: Cienega Creek FireScape Project

The following comments on the Cienega Creek FiresScape Environmental Analysis (EA) are being submitted on behalf of the members of Western Watersheds Project (WWP) who are concerned with the management of our public lands. In addition to being an inappropriate level of National Environmental Policy Act (NEPA) analysis for a project this size and in this particular area, the EA here is insufficiently critical of the need to use livestock grazing in important habitat for wildlife species to "restore" wildlands or to reduce fire risk.

This project covers more than 90,000 acres of federal public lands and includes designated Wilderness, an Inventoried Roadless Areas (IRA), sensitive wildlife habitat, and habitat for species listed as threatened and endangered. EA at 1. The geographic and temporal scope along with the special designations and species found in this area, combined with the proposal to use mechanized and motorized equipment in designated Wilderness and the long-term use of herbicides throughout the project area, require the development of an Environmental Impact Statement (EIS) and preclude a Finding of No Significant Impact (FONSI).

The stated purpose of this project is to:

- Reduce fuel accumulations and uncharacteristic vegetation composition and structure in the Santa Rita Ecosystem Management Area that contribute to the risk of large, high intensity wildfire and the associated negative effects.
- Restore and sustain ecological processes in fire-dependent ecosystems, to enhance the overall health and resiliency of desired native plant and tree species to improve habitat for wildlife and forage for range and wildlife.

- Facilitate fire management within the project area to provide for public and firefighter safety and ability to manage natural ignitions to achieve desired Land and Resource Management Plan objectives and create conditions that enable naturally occurring fires to return to their historic role.

- Provide protection to values at risk within the project area, including, but not limited to, wildland-urban interface (WUI) communities and Forest Service (FS) infrastructure.

EA at 2. Unfortunately, the proposed action would not accomplish these goals, but would further exacerbate the spread of invasive non-native species of plants and the risk of fire.

Citing the Forest Plan, the EA for this project tries to justify the need for this project: "The Forest Plan objective for WUI is: 'treat 5,000 to 10,000 acres in the wildland-urban interface using wildland fire (planned and unplanned ignitions), prescribed cutting, and mastication every year to reduce fire hazard and risk to communities and the forest.' (Forest Plan, p. 23)." EA at 3. Notably, the Forest Plan does NOT call for livestock grazing as a WUI treatment. Yet this plan does call for the widespread use of livestock grazing to reduce fire risk. "Prescribed Grazing" (using targeted grazing in two treatment units to reduce fuel in WUI areas) would cover over 18,000 acres:

> Targeted grazing would be used as a management tool under specified conditions to remove fuel from predetermined WUI areas. Utilization standards and numbers would not be increased, and grazing permits would not change as part of this project. However, through range management practices in key locations with high fire risk and suppression difficulty at least one mile from the forest boundary, grazing utilization would increase but not pass the maximum 45% utilization standard due to improved livestock distribution in these target WUI areas.

EA at 4 and 6. And while "forage utilization should be based on site-specific resource conditions and management objectives" and "in general should be managed at a level corresponding to light to moderate intensity (15 to 45 percent of current year's growth)" according to the Forest Plan (at page 91), it appears that for this project the maximum end of the utilization (45 percent) is anticipated. Please clarify whether 45 percent utilization for targeted or prescribed grazing is expected to be implemented rarely, or regularly and disclose whether this would be in violation of the current Forest Plan.

As the Forest Service is aware, weather is a key part of this proposed project.

> Weather factors, limited operating periods, recent fire events, and available funding would dictate the amount and type of activities that might be applied in any given year. Anticipated treatments include wildland fire (planned and unplanned), hand thinning, mechanical treatments, and herbicide application, in addition to targeted fuels removal through grazing and fuelwood permits. Projects would be implemented incrementally over a period greater than 20 years.

EA at 4. However, the EA does not identify the weather conditions required for targeted grazing to be effective and safe.

Lack of NEPA Analysis in the Project Record

The analysis found in the EA is dependent on analysis supposedly located elsewhere, but that WWP cannot confirm the existence of:

> *The impacts* resulting from grazing not to exceed the maximum 45% utilization standard ***have already been analyzed*** for all of the proposed treatment units that include prescribed grazing. This **proposed action would not cause impacts that exceed the scope and range of effects analyzed *in these previous environmental assessments***.

EA at 30, emphasis added. And:

> Past disturbance could be fire, but the pervasive nature is more likely due to heavy grazing pressure. Currently, the entire project area is under grazing management. Grazing utilization standards and numbers would not be increased under the proposed action, ***but would instead be targeted within existing grazing permit specifications*** to remove fuel.

EA at 19, emphasis added. And:

> ***The impacts resulting from grazing*** not to exceed the maximum 45% utilization standard ***have already been analyzed for all of the proposed treatment units*** that include prescribed grazing. ***This proposed action would not cause impacts that exceed the scope and range of effects analyzed in these previous environmental assessments***:
>
> • Temporal Allotment Coordinated Ecosystem Restoration Project
> • Allotment Management Plan for Gardner Allotment[1]
> • Allotment Management Plan for Debaud, Greaterville, Rosemont Allotments
> • Santa Rita West Ecosystem Management Area Allotment Management Plan for Agua Caliente, Alto, Box Canyon, Proctor, and Stone Springs Allotments

EA at 22-23, emphasis added. WWP cannot find any information on the Forest Service website regarding any of these allotments, other than the Gardner Allotment, which does not have a signed final decision document available. The Forest Service should have included information from the EAs for all of these allotments in the EA for this project. Additionally, there are no AOIs available for this ranger district on the Forest Service website.

The Forest Service has not in any way analyzed the impacts of targeted or prescribed grazing ***in this EA*** and has not provided the public with information on where to find the existing grazing management documents. There is no clear indication of what the current AUM allocation is now, how those AUMs will change, or whether any grazing infrastructure will be modified or added. These oversights must be corrected and precludes a FONSI at this time.

This leaves unanswered questions, including:

> Who is/are the permittee/permittees?

[1] Note that this AMP was located but is in a draft form from 2018 and there is no signed final decision document for this allotment.

Would the permittee have to pay AUM rates and what would those AUM rates be? Is the permittee/are the permittees in good standing?

Does the permittee hold the requisite base property for the allotment?

Best Available Science

A study conducted in Arizona found that fire-control benefits from targeted grazing occur only when wind speeds are 5 m.p.h. or less. Bruegger, *et al*. 2016. Such conditions generally do not lead to large, out-of-control wildfires. The level of grazing needed to affect fire behavior would, in all likelihood, prevent recovery of native vegetation and soil crusts. Launchbaugh et al. (2008) found that the level of grazing required to influence fire behavior causes unacceptable impacts to habitat.

In general, researchers have found that "[r]educing fuel loads" in forests "has little, if any, benefit for protecting structures and communities from wildfires." Bracmort 2013. Fuels treatments "can leave slash on the ground, [and] increase[e] fire hazards at least in the short-run." *Id*. In one study, "rate of spread and flame length" in forest fires "were positively correlated with the proportion of area logged in the sample watersheds." Gedalof *et al*. 2005.

Additionally, the analysis of impacts from targeted or prescribed grazing on recreation are incomplete. There is no description of how year-round livestock grazing impacts forest recreational users and the impacts on "visitors who prefer to camp away from livestock and their effects (e.g. feces, concentration at water sources)" are artificially minimized with the statement "the presence of animals could have a negative effect[.]" EA at 37. Furthermore, the analysis of the impacts of targeted or prescribed grazing are inconsistent. They are described in one area of the EA as the same as current grazing impacts (which are not disclosed in this EA), but at page 37 the impacts appear to be more targeted or site and time specific. The Forest Service must clarify exactly how the targeted or prescribed grazing proposal differs from the existing grazing program. Similarly, just because "visitors are generally used to seeing some form of livestock grazing" does not mean that the impacts are minimal or unimportant. EA at 37.

Please explain why the Forest Service believes this project will be successful in light of the 2003 McClaren report indicating that "burroweed cycles appear to be more closely related to winter precipitation patterns and maximum plant longevity than land management activities. Similarly, the increase of Lehmann lovegrass is largely independent of livestock grazing management. McClaran *et al*. 2003. Mesquite density seems unchanged as a result of fire regimes as well and is spread via livestock grazing. *Ibid.* And, "[s]imilar to burroweed, the eruption of cholla and recent increases of prickly pear appear to be largely independent of livestock grazing and fire manipulations." *Id*. at 26. Declines of cholla and increase of prickly pear between 1972 and 1984 were no different in areas with yearlong versus seasonal rotation of grazing. *Ibid*. Fire produced only a short-lived decline of cactus density and within 10 to 13 years after fire the cactus density exceeded that which existed prior to the fires. *Ibid*.

Livestock grazing promotes the spread and colonization of alien plants, which can increase fire frequencies. Billings 1990, Billings 1994, Rosentreter 1994, Belsky and Gelbard 2000, Kimball and

Schiffman 1993. Disturbance is a reliable indicator of alien dominance in vegetation composition, and livestock grazing is a significant disturbance. Brooks and Berry 2006. Further, weed invasions are strongly associated with livestock watering sites. Brooks et al 2006. The Forest Service has not adequately addressed this issue and, in addition, must analyze the cause and effect relationship of livestock grazing with the woody vegetation. See, e.g. Bahre and Shelton 1993.

Disturbed soils with fewer intact soil crusts favor invasive annual plants like cheatgrass and medusahead over native perennial grasses and forbs. Reisner *et al*. (2013) found "strong evidence" that livestock grazing indirectly increases cheatgrass dominance by: increasing native bunchgrass abundance, shifting bunchgrass composition, increasing gaps between perennial plants, and damaging biological crusts. Cheatgrass invasion has in turn been found to increase fire frequency and severity.

WWP is concerned that the Forest Service may be forging ahead with a project that is designed to increase non-native invasive species instead of reaching the stated goal of the project, which is to reduce non-natives and therefore the risk of fire. However, the effects of fire as reported in McClaran et al 2003 indicate that native grass abundance decreases following fire, and the recovery is dependent on subsequent growing conditions while seed germination of the non- native lovegrass increases after fire. *Id*. at 30.

The Analysis is Generally Inadequate

The impacts of livestock grazing on cultural resources is not described at all. The impacts of livestock on cultural resources is well known[2] and the Forest Service must amend this EA, or preferably prepare an EIS, to include the identification, disclosure and analysis of the impacts of livestock grazing – both ongoing and as modified for targeted and prescribed grazing – throughout the project area. Appendix A of the EA does not include any design features to reduce the impacts of livestock grazing on cultural resources. EA at 42-44.

The use of targeted or prescribed grazing is not adequately analyzed in the EA. There is no information regarding AUMs, season of possible use, pasture rotation, if any, or the need for water developments or supplemental feeding.

Why is this project necessary given that for the Gardner allotment (and presumably other allotments) the purpose of that grazing authorization was to correct the effects of historic grazing? Why does the Forest Service believe that continued livestock grazing is the solution to the problems caused by livestock grazing?

There is insufficient analysis of the impacts of prescribed grazing on the hydrology of the project area. EA at 19. The Forest Service must identify how livestock grazing and related infrastructure and any water pumping will impact hydrology.

There is insufficient analysis of the impacts of this project on butterflies and bees. This analysis must be included and expanded.

[2] See, for example, page 15 of the Gardner Allotment Draft EA. These impacts include trampling, breaking, knocking down standing features.

General Questions

What model was used to determine the potential fire behavior for the existing condition?

What percent of large diameter trees, snags, and shrubs will remain following fuel treatments in the project area? Are large paniculate agaves present and if so, how many (by percent) will remain on the landscape post-treatments?

Why is the Gardner allotment being proposed as part of this project given that the Draft EA for this allotment indicates that 60% of the allotment is in high ecological condition and the remaining 40% is in mid ecological condition? Gardner Allotment DEA at 5. How will implementation of this project affect ecological condition?

For the Gardner allotment, given that the EA for this allotment is not signed, please explain the status of all livestock improvements and explain whether waters and/or pipelines would need to be constructed/installed for this project or whether they have already been constructed/installed (despite no signed decision for this allotment). Because WWP can find no information on the other nine allotments that are a part of this project, please also provide that same information for each of the 9 allotments. How does targeted or prescribed livestock grazing differ for this project as compared to the signed decisions for each of the allotment.

What level of utilization would be necessary to make targeted grazing an effective tool for fire reduction

What is chance you will be able to repeat/retreat the area to ensure fuel reduction?

Who is paying for this "treatment" – the Forest Service? The permittee/permittees? Another entity?

How is grazing infrastructure a part of this project? Who pays for it? What is it exactly and where? Who will maintain it? Is it permanent?

Is the true impetus for this project to improve the project area as a livestock feedlot?

How will converting the project area from a shrub and woody species dominated area to a grassland affect soil storage of CO2?

Please explain why there is no alternative that excludes livestock grazing for entire area.

How did the Forest Service make a fire history determination?

Please identify areas where prescribed fire is "not feasible." EA at 8.

This Project Requires the Development of an EIS

The use of an EA for this project fails to comply with National Environmental Policy Act requirements. The proximity to and overlap with specially designated areas require a higher level of analysis in light of the intensity and context of this specific project. Similarly, the presence of federally

listed species and their habitat covering vast swaths of the project area raise the level of analysis necessary to ensure compliance with federal regulations. *See* 40 C.F.R. §§ 1508.27(a) (context), b (intensity)).

In addition to the scientific and political controversy surrounding fuel reduction/treatment projects, prescriptive or targeted grazing, this area is home to threatened and endangered species and designated Wilderness which prohibits the use of motorized and mechanized equipment, which is planned for this project (hand thinning of 688 acres using chainsaws and weed-eaters in the Mt. Wrightson Wilderness for "prescribed fire"). EA at 7.

Wilderness and Inventoried Roadless Areas

In 1964, Congress passed the Wilderness Act "to secure for the American people of present and future generations the benefits of an enduring resource of wilderness." The law provided statutory protections for wilderness areas and established the National Wilderness Preservation System. The Act, among other things, mandated that wilderness areas be administered in a manner that will leave them "unimpaired for future use and enjoyment as wilderness" and that will provide for "the protection of these areas" and "the preservation of their wilderness character."

The Wilderness Act defines "wilderness" in part: "A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are *untrammeled by man*, where man himself is a visitor who does not remain." Wilderness is "land retaining its *primeval character and influence*, without permanent improvements or human habitation, which is protected and managed so as to *preserve its natural conditions*…"[3] In addition, wilderness should be "*affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable*."

Grazing is recognized as a nonconforming use. The language in the Wilderness Act and the subsequent grazing guidelines do not mean livestock grazing must occur at any cost, rather, decisions about livestock grazing won't rest *solely* on whether an area is designated as Wilderness. For example, a decision to close sheep allotments to protect bighorn sheep, as was done on the Payette National Forest, was made regardless of whether the allotments in question were Wilderness or not (most, if not all, were not).

At this stage of the project, no Minimum Requirements Decision Guide or Minimum Requirements Analysis has been done, but at some point "will be" done. EA at 7:

> Treatments within the 25,121-acre Mount Wrightson Wilderness include approximately 13,253 acres of wildland (planned and unplanned) fire. Treatment is needed in this portion of the wilderness, and boundaries have been identified to allow treatment unit boundaries to follow existing trails and natural control features, such as ridgelines, which best provide for firefighter safety during prescribed burning activities. In the long term, fire would transition from prescribed fire treatments to unplanned ignitions to restore natural fire across the landscape.
>
> Prescribed fire within the Mount Wrightson Wilderness would be conducted using tools prohibited under Section 4(c) of the Wilderness Act. Therefore, a Forest Service Minimum

[3] 16 U.S.C. 1131(c) (emphasis added).

> Requirements Decision Guide would be used to plan treatments on NFS lands in wilderness. The guide provides the information for the Regional Forester to determine whether or not action is necessary to meet the minimum requirements for administration of the wilderness area and, if so, which actions are the minimum necessary.
>
> Prohibited tools, including chainsaws and weed-eaters, would be used to reduce firefighter time and exposure to hazards in extremely rugged terrain. Chainsaws and weed-eaters would be used for fire control line preparation and as a safety precaution during ignition and holding efforts. Due to the number of snags and other down woody debris that would need to be cut beneath snags, it is critical, for the safety of firefighters, to minimize the length of time preparing or holding lines. Chainsaw and weed-eater use for line prep would be limited to improving existing trails and natural control features, with a 150 foot buffer on each side of the control features, totaling about 688 acres in the Hopkins, Wrightson, and Josephine- Temporal units, or less than 3% of the Mount Wrightson Wilderness.

This EA fails to analyze the impacts to Wilderness and IRAs individually and, as such, the analysis of and impacts to Wilderness and IRAs is not fully disclosed. This lack of analysis in a specially designated area precludes a FONSI.

Additional NEPA Violations

The range of alternatives is insufficient. The Forest Service should have considered: 1) an alternative that prohibits use of mechanized and motorized equipment in Wilderness and IRAs; and 2) an alternative that would have eliminated livestock grazing in the project area to facilitate analysis regarding livestock grazing's impacts on fire susceptibility, especially the continued proliferation of non-native invasive plants. The single most effective thing the Forest Service could do to stop the spread of non-native invasive plants and reduce fire risk is to eliminate livestock grazing throughout the forest.

WWP strongly recommends the Forest Service select the No Action Alternative for fuel treatment in Wilderness and Inventoried Roadless Areas. Especially in Wilderness areas, natural processes should be allowed to play out and the use of mechanized or motorized equipment to unnaturally modify the environment should be prohibited.

WWP's final question for the Forest Service is whether this project will impact the ongoing research on the Santa Rita Experimental Range? If so, are the uncertain and probably temporary effects of this project worth the potential losses to the scientific community?

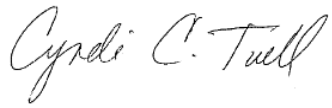
> The most incontestable conclusion from this century of vegetation change is that future changes cannot be perceived and understood if there are no records of previous conditions. An equally important conclusion is that the response of vegetation to management practices will be contingent on past and future precipitation patterns, elevation and soils at the location, and the current mix and vigor of plant species.

McCalan 2003, at 31. With this in mind, it is imperative that the Forest Service act cautiously and responsibly and acknowledge that livestock grazing played a large role in the current conditions of this

project area and it is unlikely that continued, more intense, or more frequent livestock grazing will restore this area. We simply cannot graze our way out of these problems.

As we note above, the sheer scope of this project clearly precludes the use of an EA and there are many reasons that a Finding of No Significant Impact is inappropriate. Therefore, Western Watersheds Project encourages the Forest Service to revise the existing environmental analysis to correct the deficiencies we have identified above. We look forward to reviewing the next step in this NEPA process for this project.

Sincerely,



Cyndi Tuell
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