

January 3, 2010

Marian Kadota
U.S. Forest Service
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Carpinteria, CA 93013
mkadota@fs.fed.us

Re: Scoping Comments on the Mount Laguna and Pine Valley Community Defense and Healthy Forest Restoration Project

Dear Ms. Kadota:

Thank you for the opportunity to provide scoping comments on the Mount Laguna and Pine Valley Community Defense and Healthy Forest Restoration Project.

We strongly support project goals to reduce the risk to life and property from wildfire and to improve the effectiveness of fire suppression and firefighter safety in the communities of Mount Laguna and Pine Valley. Treatment activities in the Forest Service's "Defense Zone" should be considered the highest project priority and implemented before all other project activities.

We also appreciate project goals to restore conifer forest health in the Mount Laguna area and particularly appreciate proposed use of prescribed fire in this area. Treatment of conifer forest vegetation in this area should be implemented as the second highest priority.

However, we are deeply concerned and dismayed that our initial comments on chaparral treatments have been ignored and that mastication treatment areas have actually significantly increased in size since earlier project descriptions. As indicated in our initial comment letter of March 31, 2010, we strongly object to most proposed prescribed fire and mastication in chaparral vegetation under the Mount Laguna / Pine Valley project as unnecessary and even harmful and counterproductive to stated wildfire safety goals. Most chaparral treatments beyond 100ft of structures are unnecessary, Forest Service data shows that chaparral in this area is already within the historic fire regime or has burned too frequently, and too much fire and mastication in chaparral can actually increase the risk of wildfire when native shrubs are replaced by highly flammable invasive grasses and weeds in a process known as type

conversion. Overall, the Forest Service's approach to the biologically rich and unique chaparral ecosystems in the project area appears to be based on significant misunderstandings about the chaparral's natural fire regime, a strong bias against shrublands in favor of forested communities, and an unfamiliarity with the Forest Service's own research.

At the end of these comments we provide detailed recommendations for measures to maximize the effectiveness of vegetation management in the Forest Service's designated Defense Zones around at-risk communities, roads, and facilities, as well as to protect chaparral and conifer vegetation resources. These recommendations should be incorporated and fully analyzed in a stand alone "Fire Safety and Conservation Alternative" in any NEPA and/or Healthy Forest Restoration Act documents for the Mount Laguna / Pine Valley project.

Please note that the term "chaparral vegetation" is used in these comments to refer to areas that are clearly dominated by any shrub species. The term "conifer forest vegetation" is used to refer to areas that are clearly dominated by conifer trees. Chaparral vegetation with the occasional scattered conifer tree should be considered chaparral vegetation and should be managed for the benefit of chaparral ecology, not for the protection of isolated conifers.

We also strongly object to the processing of this project under the Healthy Forests Restoration Act. We also note the failure of the legal notice to mention either the use of the HFRA process for this project or the importance of public comments during the scoping period to retain the right to formally "object" to the project in the future. The Forest Service may use this process at its discretion, but to do so indicates a clear disregard for and intent to limit public participation consistent with the goals of this flawed legislation. Use of HFRA also typically conveys a significant disregard for sound science or management approaches other than those identified in project documents. We urge you to follow the lead of the Palomar District of the Cleveland National Forest to value and incorporate public concerns and feedback, use sound science, and reject the HFRA process.

There is no Strong Relationship Between the Age of Shrubland Fuel and the Probability of Fire

Contrary to the apparent assumptions used to justify the project's proposed prescribed fire in chaparral, the age of vegetation (time since last burned) does not have a strong relationship to hazard of burning. Analysis of several hundred fires over a broad expanse of California shrublands has demonstrated that extreme weather conditions (Santa Ana winds) overwhelm the influence of the age and spatial patterns of fuels (Moritz 1997; Moritz et al. 2004). This has also been demonstrated in Australian shrublands (Bradstock and Gill 2001; Whelan 2002). Such fires can burn easily through 5-10 year old stands (Dunn 1989). A study of the 1985 Wheeler fire in Santa Barbara County concluded that only 14% of the fire perimeter was established due to wildland fuel type changes (Dunn and Piirto 1987). Similar observations have been made regarding the 2007 Zaca Fire in Santa Barbara County: 50% of the fire perimeter stopped at vegetation more than 70 years old (Keeley et al. 2009).

The inability of younger age classes to stop a fire was also shown during both the 2007 Witch Creek and Poomacha fires in San Diego County. Of the total acreage burned in the County's 2007 firestorm, **more than 20% or approximately 70,000 acres was 4 year-old vegetation** recovering from the 2003 firestorm. In the Witch Creek Fire hundreds of acres of overgrazed pasture land in Pamo Valley burned despite the fact that very little vegetation was present.

The extent to which landscape level fuel treatments are effective is a function of weather conditions during the fire event. Under extreme weather conditions, there is overwhelming evidence that young fuels, or even fuel breaks, will not act as a barrier to fire spread (Keeley et al. 2004).

Misunderstanding Chaparral Fire Regimes

Chaparral has a crown fire regime. By definition, low and moderate intensity fires are not associated with crown fire regimes. **The natural pattern in the chaparral ecosystem is for infrequent, high intensity, crown fires to burn through vast areas, especially under severe weather conditions.** In fact, high intensity fires are vital for the proper recovery of chaparral plant communities. Extensive research has shown that older chaparral stands with high "fuel loads" show significantly greater seed recruitment levels for many obligate seeding species after a fire than do younger stands (Keeley et al. 2008). Such high intensity fires also destroy the seeds of invasive species, allowing the recovering chaparral to resist the colonization of non-native weeds. Old-growth chaparral stands remain dynamic, healthy plant communities (Fenn et al. 1993, Halsey 2008, Hubbard 1986, Keeley 1973, Larigauderie et al. 1990, Patric and Hanes 1989, Specht 1969, Zedler and Zammit 1989). One sign of a healthy, chaparral ecosystem that is recovering from a fire are large areas of blackened ground (punctuated with resprouting shrubs and tiny shrub seedlings) remaining long after the first rainy season. **Attempts to alter the chaparral's natural fire regime through prescribed fire will risk its ecological health and alter its natural successional processes.**

In fact, fuel treatments in shrubland ecosystems involving mastication or prescribed burning should only be done with the recognition that the resource is being sacrificed for fire hazard reduction. This is why it is so critical to limit such treatments to the absolute minimum necessary to protect lives and property. Dr. Jon E. Keeley (2009) addressed this issue in a comment letter to San Diego County. He wrote,

When treatments such as mastication are applied to shrubland ecosystems they have major environmental impacts on both the flora and fauna. Some have suggested that these impacts are temporary and the systems will recover to form perfectly natural functional ecosystems after a period of years. There is no scientific evidence to support such allegations. In addition, that sort

of thinking is inconsistent with the purpose of using these treatments, which is typically to produce permanent fuel breaks.

Negative Impacts of Unnecessary Fuel Treatments

Much of the chaparral and sage scrub habitat in the Cleveland National Forest has burned in excess of their natural fire regimes. This has been graphically illustrated by a recent map of the Forest developed by Forest Service scientists (Please see Attachment #1).

We urge the District to not over-generalize mixed-conifer fire regimes and apply them to other plant communities. While there is clear evidence the conifer forest on Mount Laguna shows a significant positive departure (not enough fire) from its natural fire regime, this is **not** the case for most surrounding chaparral vegetation.

Understanding this issue is critical because high fire frequencies are leading to the elimination of healthy chaparral and other shrubland ecosystems throughout Southern California to the process of type conversion and the expansion of highly-flammable, weedy grasslands. Applying even more fire to the ground in the form of prescribed burns or conducting large mastication treatments will only make this problem much worse.

Invasive, grassy fuels can create a more dangerous fire environment because they dry out sooner than native plants, ignite more easily, and create massive amounts of heat instantly. One of the common factors in firefighter fatalities is the presence of highly-flammable grassy fuels. As the Jackson fire in Sacramento County clearly illustrated in 2008, grass fires can be extremely dangerous. Five homes were destroyed, 6,400 acres were burned, and a fire captain was seriously injured when he was overcome by flames. The fuel was dried, non-native, invasive grasses. Grass fires that swept across Texas and Oklahoma between December 2005 and April 2006 burned more than two million acres and killed 11 people. The 2006 Esperanza fire in Riverside County that killed five Forest Service firefighters was started and made its initial moves in grassy fuels.

It's crucial that the District look forward rather than backward in assessing the potential impact of proposed prescribed fire and mastication of chaparral, especially given the high likelihood that treated areas will burn again prior to full recovery, and considering climate change, continuing drought that may or may not be associated with such change, and increasing human-caused ignitions. Perhaps chaparral burned in just those prescribed fire treatments in the Mount Laguna / Pine Valley project will recover, although this is questionable for chaparral that has already burned too frequently. However, the occurrence of additional accidental fires in these same treatment areas in the future during recovery of the chaparral is a near certainty. The cumulative harm caused by the combination of deliberate prescribed fire or mastication and future accidental fires will almost certainly cause large scale type conversion in this area.

Prescribed fire in chaparral is typically applied during cooler and wetter weather conditions during autumn, winter, and spring where there is a lower risk of wildfire. Yet there is also well documented evidence that cool-season burns can lead to type conversion (Le Fer and Parker 2005). Populations of fire dependent native species can be decimated if timing or heating requirements for regeneration are not met (Odion and Tyler 2002). Such a risk should be fully considered by the District and prescribed fire in chaparral limited.

Regarding mastication, we know such fuel treatments can negatively impact the long-term survival and health of shrubland ecosystems by increasing the population and spread of invasive species (Merriam et al. 2006, Gelbard and Belnap 2003). In addition, masticated areas that burn during a wildfire can have significantly lower rates of recovery for native species (Moreno and Oechel 1994). In field observations, we have noted the entirely predictable spread of non-native grasses and weeds in previously masticated areas of the proposed project. With implementation of the Mount Laguna / Pine Valley project, weeds will inevitably continue to spread in the proposed extensive mastication treatment areas (Please see Attachment #2).

Chaparral as a Valuable Natural Resource

A common fire management approach to chaparral, seeing it as a "fuel" rather than a valuable natural resource, is a systematic problem within the Forest Service that needs to be rectified. In the land management plans for the four national forests in Southern California, forest types were carefully distinguished and management strategies were offered for each. Silvicultural methods were detailed for seven forest types. Yet when it came to chaparral, types were neither distinguished nor was a vegetation management plan developed.

The Mount Laguna / Pine Valley project as proposed does not appear to recognize the intrinsic natural resource value of chaparral. Fuel treatments to protect the conifer forest should be conducted **within** the forest stand itself and the integrity of the valuable old-growth chaparral stands at the lower elevations must be preserved.

Rather than just seeing chaparral as "fuel," chaparral in the project area presents a significant conservation opportunity and evokes the Forest Service's duty to conserve a valuable and extremely threatened ecological community. Accidental wildfires in this area will inevitably occur, and are likely to occur with increasing frequency with growing nearby populations, and harm from these accidental fires should not be deliberately compounded by application of prescribed fire or mastication projects.

The Mount Laguna / Pine Valley Project is inconsistent with the Forest Plan

According to the Land Management Plan Vision document, "The long-term goal of vegetation management is to perpetuate plant communities by maintaining or re-introducing fire regimes appropriate to each type while at the same time protecting human communities from destructive wildland fires."

According to the Forest Service's Guidelines for Development and Maintenance of WUI Defense and Threat Zones (Appendix K of the Land Management Plan Design Criteria document), "There is no need to maintain any area in a less-flammable state within the Threat Zone. The object is to complete enough tree thinning and surface fuel management over time to reduce the potential for stand replacing fires in the Threat Zone. Emphasis will usually be the reduction of ladder fuels and periodic reduction of surface fuels. In vegetation types such as grass and chaparral, there may be no need to conduct extensive treatments in the Threat Zone."

According to the Cleveland National Forest Land Management Plan, the desired condition for the Laguna Place is maintenance of this area as a natural appearing landscape and preservation of valued attributes such as vegetative diversity - especially mature over-story trees - and special botanical features that add diversity to the landscape. Vegetation is to be intensively managed *in a healthy and sustainable condition* to provide increased protection from wildfires. Program emphasis for the area includes protection of the Laguna Place's unique scenic attributes and ecosystems, protected viewsheds (particularly along the Sunrise Highway), and improved forest health.

According to the project description, "In these [Defense Zone] locations, approximately 300-foot wide sections (from structures) in chaparral will be managed to maintain vegetation heights to 18 inches to promote low flame lengths. "For units [in Threat Zones] made up of chaparral (i.e., units 49, 51, 52) 50 to 70 percent of the vegetation would be masticated with untreated islands of shrubs (generally no greater than 0.25 acre in size). These islands would have undulating edges to provide a natural appearance. If possible, the retained islands would be of differing plant species to maintain diversity."

The Mount Laguna / Pine Valley project would significantly undermine the Forest Plan and desired conditions for the Laguna Place by conducting overly aggressive prescribed fire and mastication in chaparral vegetation in both the Defense and Threat zones and by cutting large mature trees and snags and among other problems. The Forest Service's own research and documents show that chaparral vegetation is well within its natural fire regime or has burned too frequently in the Laguna Place. Forest Service research also shows that the best means to protect lives and property from wildfire is by creating defensible space in the immediate vicinity of structures and roads and by addressing the vulnerability of structures themselves. So prescribed fire in chaparral vegetation would be an ineffective or harmful method of achieving project goals. The Mount Laguna / Pine Valley project proposal to

manage out to 300ft. from structures in the Defense Zone overlooks Forest Plan guidance to start with 100ft. and resort to larger areas in extreme conditions. Prescribed fire and mastication in the Threat Zone would directly contradict the Forest Service's own WUI guidelines, especially considering that management measures identified there focus on tree thinning and surface fuel management to reduce the potential for tree stand replacing fires. And mastication in Units 1 and 48 would violate the Back Country Non-Motorized Land Use Zone.

Chaparral vegetation, especially old chaparral vegetation is an extremely valuable component, both ecologically and scenically, of vegetative diversity in the Laguna Place and old chaparral is a special botanical feature of this area. Prescribed fire or mastication of hundreds of acres of chaparral outside of the Defense Zone is not a healthy or sustainable method of fire suppression, would undermine forest health, would eliminate special botanical features, would not project vegetative diversity, would not protect unique scenic attributes and ecosystems, and would leave a scar of vegetation destruction visible from the Sunrise Highway. The extensive and unnecessary mastication of chaparral as proposed would also be extremely ugly in violation of Forest Plan Scenic Integrity Objectives. The project description to leave undulating edges in masticated areas "to provide a natural appearance" and to retain islands of differing plant species "to maintain diversity" are difficult to take seriously and would not address major discrepancies between the proposed project and the Forest Plan.

Cost/Benefit Analysis

We urge the Forest Service to conduct an honest cost/benefit analysis of the proposed chaparral treatments vs. treatments to vegetation immediately adjacent to homes and communities alongside grants for fire resistant retro-fitting of homes. We recognize that there is considerable pressure to perform fuel treatments because of "acres treated" quotas and available funding, but such pressure must not prevent the implementation of the least damaging and most effective fire risk reduction strategy. Establishment and maintenance of defensible space around homes, retrofitting unsafe structures, and supporting community based fire safe education programs are in the long run much more cost effective in preventing the loss of life and property from wildfire than compromising large amounts of native vegetation in the National Forest (Please see Attachment #3). The Forest Service's cavalier statement that, "Vegetation treatment on non-national forest lands to reduce the risk to individual homes is not part of this project and is the responsibility of private landowners" disregards the Forest Service's discretion to provide fire safety grants to private landowners for vegetation management and structural modifications.

Dr. Jack Cohen (2000), a research scientist with the Forest Service, has concluded after extensive investigations that home ignitions are not likely unless flames and firebrand ignitions occur within 120 feet of the structure. His findings have shown that,

...effective fuel modification for reducing potential WUI (wildland/urban interface) fire losses need only occur within a few tens of meters from a home, not hundreds of meters or more from a home. This research indicates that home losses can be effectively reduced by focusing mitigation efforts on the structure and its immediate surroundings (Cohen 1999).

Cohen's work is consistent with the research on homes with nonflammable roofs conducted by other scientists. During WUI wildland fire events, the Stanford Research Institute (Howard et al. 1973) found a 95 percent survival rate for homes with a defensible space of 30 to 54 feet, and Foote and Gilliss (1996) at Berkeley found an 86 percent home survival rate for homes with a defensible space of 84 feet.

We understand and support the objective of reducing fuel loads at the edge of communities and at strategic locations to create safety zones and assist fire suppression efforts. This is why we urge the Forest Service to focus fuel treatments within and immediately adjacent to communities. We also support the use of fuel treatments and prescribed fire to restore conifer forests. Unfortunately, a significant portion of the Mount Laguna / Pine Valley project fails to address such objectives when it emphasizes the modification (and therefore destruction) of native chaparral communities in wildland areas.

Cumulatively Significant Impacts

The Cleveland National Forest is implementing vegetation modification projects on a scale that clearly requires increased scrutiny of cumulative effects.

NEPA documents for the Mount Laguna / Pine Valley project must include an analysis of all effects of the proposed action, including cumulative impacts from other related activities. 40 C.F.R. § 1508.8 (effects include ecological, aesthetic, historical, cultural, economic, social or health impacts, whether direct, indirect, or cumulative). NEPA defines a "cumulative impact" as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. 40 C.F.R. § 1508.7. If the combination of these cumulative effects would result in significant impacts to the human environment, the Forest Service must prepare a full EIS. *Inland Empire Public Lands Council v. Schultz*, 992 F.2d 977, 981 (9th Cir. 1993).

The Descanso District has implemented numerous fuels reduction projects and plans many more. The District has also already carried out several elements of the proposed project (Please see Attachment #4). The District is also considering grazing management in this area and grazing can directly facilitate unnatural conifer stocking. These fuels / vegetation and grazing projects and many other

similar Forest Service and non-Forest Service projects such as those conducted by CalFire and others are radically changing the face of vegetation communities throughout much of the Descanso Ranger District and Cleveland National Forest and in turn are resulting in significant harm to natural resources that has yet to be meaningfully reviewed in any systematic NEPA cumulative effects analysis.

RECOMMENDATIONS

1. Implement effective vegetation treatments to protect the public, firefighters, and private property

For the purposes of fire suppression to protect public and firefighter safety and private property, vegetation treatment and fuels reduction activities should take place only within the actual wildland/urban interface, identified by the Forest Service as the “Developed Area Interface Land Use Zone” in the Land Management Plan - Part 2 Cleveland National Forest Strategy. Vegetation treatment and fuels reduction activities may also be appropriate along limited, designated, and strategic evacuation and fire access roads.

Fire suppression activities in these areas should be carried out consistent with California state law (Public Resources Code 4291). Specifically, break up vegetation fuel continuity within a maximum of 100 feet of structures with few exceptions for extreme conditions such as steep slopes. Remove vegetation immediately adjacent to structures, treat the structures themselves, and remove weeds at least annually from treated areas. Focus chaparral vegetation treatments solely within the Developed Area Interface Land Use Zone **and** within 100 feet of structures with few exceptions.

The Chaparral Institute will vigorously oppose unfounded chaparral treatments as measured from the boundary of National Forest land instead of structures.

The Forest Service must anticipate the inevitable problem of colonizing exotic invasive weeds and grasses as a part of the Mount Laguna / Pine Valley project and include a long-term plan for at least annual treatment of weed infestations. The current project does not appear to include provisions addressing weed invasions of treated areas. Deferring this crucial project element to a future project or decision will greatly increase the risk of harmful wildlife to both people and chaparral and forest vegetation and violate NEPA. The 2 years of monitoring for weeds described as part of the proposed is inadequate and should be extended to at least 10 years.

2. Provide grants to homeowners in Mount Laguna and Pine Valley for effective fire safety activities – Reduction of vegetation and landscaping fuels near structures and retrofitting homes with fire resistant materials

3. Protect valuable chaparral vegetation

- Eliminate proposed prescribed fire treatments in chaparral vegetation so as to retain the unique and valuable stands of this natural community in the project area and to reduce future fire risk from highly flammable, colonizing exotic weeds and grasses. Environmental review documents should consider the high likelihood of a wildfire within treated areas prior to full recovery of chaparral vegetation and the resulting likelihood of harmful type conversion.
- Bar use of mechanized masticators and other heavy equipment outside of the designated Defense Zone and on any slopes exceeding 20 percent grade.
- Apply only one primary treatment to chaparral vegetation (i.e. mastication OR broadcast burning) to reduce the likelihood of type conversion.
- Retain all monarch shrub specimens where any portion of the stalk is 6 inches or greater in diameter.
- Suspend cattle grazing in treated areas to limit the spread of weeds and facilitate ecological recovery.
- Anticipate, monitor, and provide for perpetual treatment of weed infestations anywhere within the project area using hand tools and hand-held power tools.

4. Implement beneficial vegetation treatment to protect conifer forests

- Retain all larger diameter trees and snags greater than 14 inches diameter at breast height (dbh) outside the Defense Zone. Forest Service and other research does not support any need to cut trees or snags outside the Defense Zone larger than 14 inches dbh with the possible exception of trees leaning over structures or roads. Environmental review documents should address the scientific literature showing that wildfires may burn hotter, kill more trees, and be a greater threat to lives and property in areas where conifer tree density and canopy has been overly thinned. The project description statement that, "Within all treatment areas, trees that pose a hazard to firefighter and public safety would be cut" does not provide adequate information on what is considered a hazard tree and would likely result in an unnecessarily significant reduction in ecologically valuable snag habitat for forest wildlife species.
- Selectively thin and remove conifers less than 14 inches dbh and shrubs less than 6 inches (at largest diameter of stalk) in and around conifer forest vegetation using hand tools or hand-held power tools. Retain all oak species where any portion of the stalk is 6 inches or greater in

diameter. After initial thinning treatments use prescribed fire for maintenance in accordance with the natural fire regime.

- Patches of chaparral vegetation inside areas otherwise dominated by conifer forest vegetation should be retained at a level roughly consistent with the amount of chaparral patch located outside of the drip line of conifers. There is no ecological justification whatsoever to remove large patches of chaparral vegetation outside the conifer understory.
- Selectively remove actual hazard trees near homes, along limited/designated/strategic fire evacuation and access roads, and recreation areas. However, given extensive past and ongoing removal of hazard trees and snags around Mount Laguna, all larger diameter snags greater than 14 inches dbh should be retained away from homes, fire access roads, and recreation areas.
- Bar use of mechanized masticators and other heavy equipment outside of the Defense Zone and on any slopes exceeding 20 percent grade.
- Suspend cattle grazing in treated areas to limit the spread of weeds and facilitate ecological recovery. Environmental review documents should address the conclusions of scientific literature that cattle grazing encourages unnaturally dense conifer forest vegetation by reducing competition from grass and herb species.
- Anticipate, monitor, and provide for perpetual removal of weed infestations anywhere within the project area using hand tools and hand-held power tools.

5. Implement specific California spotted owl protection measures

- Treat current, modeled, or past recorded occupied California spotted owl habitat as occupied for the purposes of identifying vegetation treatments. For example, the La Posta Creek headwaters spotted owl territory should be treated as occupied for the purpose of identifying vegetation treatments in Mount Laguna / Pine Valley project units 12 and 35.
- Prohibit treatments in current, modeled, or past recorded occupied California spotted owl nest stands outside the Defense Zone.
- In current, modeled, or past recorded occupied California spotted owl Protected Activity Centers outside the Defense Zone, retain all trees greater than 9 inches and snags greater than 12 inches. Please note that Mexican spotted owl PACs have a 9 inch diameter limit, and that the 2001 Sierra Framework California spotted owl PACs had a 6 inch limit when mechanical treatments were determined to be absolutely necessary (mechanical treatments in PACs were

discouraged). For PAC stands with canopy cover over 70%, do not reduce to below 70%. For stands with canopy cover between 50% and 70%, do not reduce to below 50%.

- In current, modeled, or past recorded occupied California spotted owl Home Range Cores outside the Defense Zone, retain all trees greater than 12 inches and snags greater than 14 inches. For stands with canopy cover over 50%, do not reduce to below 50%. For stands with canopy cover between 40% and 50%, do not reduce to below 40%.
- Prohibit tree cutting and other proposed treatment activities in any California spotted owl habitat during the breeding season.

6. Implement other resource conservation measures

- Do not treat Riparian Conservation Areas outside the Defense Zone.
- Assess the status of weed invasions in previously treated areas within the proposed project (Please see Attachment #4). Treat weed invasions in these areas prior to conducting additional fuels / vegetation activities.
- Prior to treatment identify suitable habitat and conduct surveys (to protocols where available) for all other Endangered, Threatened, Candidate, and Regional Forester's Sensitive species as well as sensitive species identified in the California Natural Diversity Data Base and by the California Native Plant Society. Do not treat occupied habitat for these species outside of the Developed Area Interface Land Use Zone.
- Collect and present population trend data on any Management Indicator Species in any NEPA documentation.
- Flag and avoid any areas within 33 feet (10 meters) of downed logs, rocky outcrops, boulders, pack rat middens, and brush piles. Trees should not be felled across rocky outcrops or downed logs.

7. Support full public participation and environmental review

- Do not undermine public participation and environmental review of the Mount Laguna / Pine Valley project by processing the project under the Healthy Forest Restoration Act.
- Prepare an Environmental Impact Statement for the Mount Laguna / Pine Valley project. NEPA requires preparation of an EIS for a project of this magnitude where there are likely to be significant impacts to the environment. An EIS is required for the Mount Laguna / Pine Valley

project because, at least: 1) The project could significantly impact public safety; 2) The project area contains unique characteristics; 3) Project impacts on the environment are likely to be highly controversial; 4) Project impacts on the environment are highly uncertain or involve unique or unknown risks; 5) The project may establish a precedent for future actions with significant effects; 6) The project would likely result in cumulatively significant impacts, and; 7) The project could significantly impact special status species.

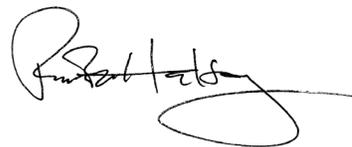
- NEPA requires that any Environmental Assessment disclose whether an Environmental Impact Statement will be prepared.
- Fully disclose and analyze the cumulative environmental effects of the Mount Laguna / Pine Valley project alongside ongoing fuels / vegetation management and hazard tree removal activities in the project area by the Forest Service, CalFire, the County of San Diego, private property owners, and others.
- Prepare a Cleveland National Forest-wide fire and vegetation management plan and environmental impact statement.
- Provide a figure showing proposed project activities in relation to the Cleveland National Forest Mean Fire Frequency Departure Map (2006).

Thank you for your consideration. Please contact David Hogan with any questions at 760 809-9244.

Sincerely,



David Hogan
Board Member
California Chaparral Institute



Richard W. Halsey
Director
California Chaparral Institute

Attachments

1. Cleveland National Forest Fire Regime Departure Map (Safford and Schmidt 2008).
2. Fuel modification impacts on nonnative plant invasion (Keeley 2006)
3. Chaparral fuel modification: What do we know – and need to know? (Keeley 2005)
4. Letter to Mr. Owen Martin and Ms. Marian Kadota, Forest Service, from David Hogan, California Chaparral Institute date May 4, 2010

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