

Public Scoping Comments on the Santa Barbara Mountain Communities Defense Zone Project

Letter #	Comment #	Response Assigned To:	Public Comment	Forest Service Response
1	4	Botany	Concerned about the introduction of non-native species.	This was addressed in the weed risk assessment. Noxious weed populations in the fuel breaks are likely to increase and persist. However, any existing or new infestations will be hand treated and removed.
2	5	Botany	A much more important project would be to control the several invasive species along the 154 including French broom, fennel, pampas grass, pepper tree, fountain grass, acacia, yellow star thistle, etc.	Weed treatments along Highway 154 are the responsibility of Cal Trans.
3	14	Botany	The excessive widths employed in the construction of the Gaviota Refugio fuelbreak will likely cause a significant loss for the sensitive species, Refugio manzanita (<i>Arctostaphylos refugioensis</i>). The fuelbreak is proposed to run down the center of the species only area of distribution.	The location of the project bisects the manzanita population in the Gaviota area which is approximately the eastern one quarter of the total population range and the majority of the population east of Highway 101. It is also bisects all of the population that occurs on the National Forest. The amount of the total population that will be affected is very small though perceptible and while a number of individuals will be affected, I stand by my determination that the project will not result in a decrease in viability or trend toward Federal listing for this species.
3	15	Botany	The Proposed Action does not specify any mitigation measures for the inevitable destruction of individual specimens by mastication. This is an obligate seeding species; therefore mastication will likely extirpate the species from the area of treatment. Leaving isolated shrubs with the surrounding canopy cover removed has typically failed to save individuals within treatment areas near the community of Painted Cave. This is likely due to changes in the microclimate and the disruption of soil flora and fauna (Figure 5). Considering the narrow distribution of this species, it is unlikely the loss can be mitigated. At the very minimum, there should be a ten foot buffer around each individual or cluster of individuals.	Individuals will be lost though in many cases will sprout back. The degree of loss is not to the level of causing a loss of viability or a trend toward Federal Listing for the species.
4	12	Botany	The growth of native chaparral vegetation will not "improve" because the Project will promote the further spread of invasive weeds.	The project area itself is for all practical purposes being type converted and in those areas, there is a moderate risk for the introduction and spread of noxious weeds, as determined in the weed risk assessment.

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4	13	Botany	The Proposed Action states, "Manual weed treatments for cape ivy, purple veldt grass, and yellow starthistle are recommended to be incorporated into the proposed action." It then goes on to propose several design criteria to mitigate against the impacts of noxious weeds in Table 3. However, Table 3 does not provide design criteria for all areas, nor for all invasive species listed. For example, it identifies nine invasive weed species in the Gaviota/Refugio fuelbreak area, but only proposes design criteria for three of them. Similarly, Table 3 identifies six invasive species for Haney Tract West, but only proposes design criteria for one of them.	These noxious weed species have a limited distribution; therefore manual treatments are more likely to effectively manage these species. Mitigation measures for non-native weed species are based on surveys that determined the species that exist in each treatment area. Therefore not all areas or potential species are covered in the mitigations. If the species that do not exist are found following treatments, non-native species treatments would be conducted.
4	16	Botany	The Proposed Action identifies four formally-designated sensitive plant species in the Project area. However, the Proposed Action does not require avoidance of these areas, and fails to recommend any mitigation measures for one species, Refugio manzanita. The Proposed Action also fails to identify and evaluate three additional sensitive plant species that may occur in the project area.	Avoidance of the area is not necessary to mitigate effects on all species. Timing of the treatments for when the plants are dormant will result in minimum impacts to the species. Even if some plants are affected by the treatments, it will not be enough to result in a trend toward Federal listing.
4	17	Botany	Sensitive plant species mentioned in the Proposed Action include Santa Barbara honeysuckle, lateflowering mariposa lily, Refugio manzanita, and mesa horkelia. The Proposed Action identifies three "design criteria" to mitigate impacts to these species, including: • Try to avoid when flowering and fruiting, otherwise nearly impossible to avoid and species may benefit from disturbance. [Santa Barbara honeysuckle and late-flowering mariposa lily] • We may be able to avoid small population of mesa horkelia. • Sensitive plant populations are so spotty we may be able to flag and avoid. [Santa Barbara honeysuckle, mesa horkelia, late-flowering mariposa lily] • Both species could be easily avoided. [mesa horkelia and late-flowering mariposa lily] These mitigation measures appear optional – "try to avoid," "we may be able to," "could be easily avoided." It is unclear when these mitigation measures will be implemented, when they will not be implemented, and whether they are adequate to protect against significant impacts.	Where possible, these mitigations will be implemented.
4	18	Botany	The Proposed Action does not provide any mitigation measures for Refugio manzanita. The Refugio manzanita (<i>Arctostaphylos refugioensis</i>) is endemic to the Santa Ynez Mountains, found in only thirteen locations. Other vegetation clearing projects in the area have routinely implemented protections for Refugio manzanita.	The location of the project is most unfortunate for the Refugio manzanita. It bisects the population in the Gaviota area which is about the eastern one quarter of the total population range and the majority of the population east of Highway 101. It also bisects all of the population that occurs on the National Forest. The amount of the total population that will be affected is very small though perceptible and while a number of individuals will be affected, I stand by my determination that the project will not result in a decrease in viability or trend toward Federal listing for this species.

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4	19	Botany	For example, the 2002 and 2009 Plant BEs for the Camino Cielo CDZ Project (approved in 2002 and updated in 2009) state that individual <i>Arctostaphylos refugioensis</i> will be flagged and protected, but does not recommend any buffer. As we stated at the time, this is not sufficient to protect <i>Arctostaphylos</i> because they are mycorrhizae-dependent, especially in poor soils and damage to soils around plants could cause significant damage the mycorrhizal fungi on which the plants depend, adversely affecting the plants' rooting systems and long-term health. At least a ten-foot buffer is necessary.	Mastication minimizes soil disturbance because all the activity takes place above the soil surface. Some soil compaction does occur where equipment moves over the ground. Studies I have read indicate that mastication can have a positive, neutral, or negative effect on the soil mycorrhizae in chaparral. I have never seen a study where buffering a shrub makes a significant difference in the soil biota.
4	20	Botany	Three additional sensitive plant species may occur in the Project area, but they are not mentioned in the Proposed Action. These include umbrella larkspur (<i>Delphinium umbraculorum</i>), Ojai fritillary (<i>Fritillaria ojaiensis</i>), and Santa Ynez false lupine (<i>Thermopsis macrophylla</i>), as cited by the Forest Service in its analysis of the adjacent Tequepis Inventoried Roadless Area. Without any surveys, evaluation or mitigation measures, these plants are susceptible to significant impacts should they occur in the Project area.	The project areas were all surveyed and none of these species were detected. However, because potential habitat exists in the project area, analysis of potential effects was analyzed.
4	21	Botany	The Forest Service's Species Account for <i>Fritillaria ojaiensis</i> states that "completion of project surveys would be adequate, in most instances, to avoid direct and indirect effects to this species." The Forest Service should survey the project area for the presence of <i>Fritillaria ojaiensis</i> , flagging locations for avoidance and establishing other mitigation measures, including buffer zones, to avoid adverse impacts to this species.	The project areas were all surveyed.
1	2	Fuels	They would like all activity fuels removed from the site. They would prefer not to have any of the materials (chips & brush) to remain.	This option would be cost prohibitive and unrealistic for the portions of the project area not adjacent to roads. In areas where appropriate, the crews will remove the material from the site through prescription burning.

3	2	Fuels	<p>Alternatives to increasing fire hazard due to spread of weeds: We strongly support construction of 100 feet of defensible space because this has been clearly verified as the most effective way to protect communities and structures from wildland fire. However, clearance beyond 100 foot defensible space zones can actually increase fire risk rather than reduce it. For example, over the past decade, several large areas around the community of Painted Cave have been unnecessarily cleared in the name of fire protection by the Wildland Residents Association (see Figure 1 below). These projects are referenced in the Proposed Action document. What has actually been accomplished by the clearance activity is an increase in fire hazard due to the invasion of light, flashy fuels.</p>	<p>One hundred feet of defensible space around structures is the most effective means to protecting structures from wildfire damage or loss. California Public Resource Code section 4291 is enforced in the project area by the Santa Barbara County Fire Department. Annually, the county inspects all developed properties and issues fines for violations and has the power to hire contractors to perform hazard clearance work and bill property owners who fail to meet PRC 4291 stipulations. Information about the enforcement program and PRC 4291 stipulations is available here: http://www.sbcfire.com/vegetation-management/</p> <p>Community fuelbreaks in conjunction with one hundred foot defensible space zones provides firefighters with safer areas to take fire suppressions actions, increases fire line construction rates, and increases the probability of successful fire containment. The effectiveness of fuel breaks is dependent on the timeliness of first responders to reach the fire. The fuel breaks provide first responders safe access routes. One example of the effectiveness of fuel breaks in the local area is the East Camino Cielo Fuel Break. This fuel break has shown to be effective and has been used by first responders numerous times since its creation including the 2015 Gibraltar Fire.</p> <p>The effectiveness of a fuel break from a fire behavior perspective is based on two primary characteristics (Los Padres National Forest Strategic Fuel Break Assessment, Project Record):</p> <ol style="list-style-type: none"> 1. The effects of slope reversal on fire spread - The ridge top nature of many fuel breaks allows for much of the radiant and convective heat of a fire to be transferred into the atmosphere rather than preheating adjacent fuels. The reduced effect of radiant and convective heat on adjacent fuel slows fire spread at the fuel break. As the fire burns across the fuel break, it often does so in a backing or flanking orientation leading to reduced rates of spread as compared to fire spread in head fire alignment. The change to a backing or flanking fire associated with the change in orientation of the fire to topography provides opportunities for firefighting success. 2. Lighter fuel loads produce lower fireline intensity – Maintained fuel breaks are generally dominated by grass fuel types and early seral stage vegetation. There is generally a lack of fuel continuity along a fuel break which disrupts heat transfer processes, slowing overall fire spread. Lower fireline intensity due to reduced fuel loads and non-continuous fuels, reduces the resistance to control of a fire by enhancing the effectiveness of fire retardants, foams, water and constructed fireline. <p>Fuel breaks also have physical influence on firefighting effectiveness. The physical attributes of a fuel break which enhance firefighting efforts include (Los Padres National Forest Strategic Fuel Break Assessment):</p>
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				<p>1. Improved effectiveness of aerial firefighting resources – Water and retardant dropping helicopters and air tankers are more effective when working along ridgeline locations, such as those associated with fuel breaks. Flight paths for aircraft are safer, visibility is generally better than canyon locations and the reduced fuel load of fuel breaks allows lower fire retardant coverage levels to be effective in checking fire spread. Water, foam or retardant delivered by helicopters are also more effective when delivered onto areas of lighter fuel loading.</p> <p>2. Increased firefighter access and production rates – Both aerial and ground-based firefighters have improved fireline construction rates in the lighter fuels associated with fuel breaks. Hand crew fireline construction rates can increase up to six times when working in grass dominated fuels rather than in chaparral. Dozers have similar increases in production rates and air tankers can reduce coverage levels in lighter fuels; allowing their retardant to be effectively spread over a greater distance during a single drop. In addition, the change of the arrangement of fuels from predominantly shrub to a higher grass component along a strategically placed break allows aerial resources to be more effective. The smaller diameter fuels allows the aerial applied fire retardant to be more effective as it more thoroughly coats the fuels. This is usually referred to as the “coverage level” by air tactical group supervisors and air-tanker pilots. Per the Interagency Aerial Supervision Guide a Coverage Level 1 would be used for “Annual Perennial Western Grasses” and a Coverage Level 6 would be used for “California Mixed Chaparral”. Consequently, the “Line Length Production” is greatly increased when the air tankers can use a lower number coverage level.</p>

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3	3	Fuels	Recent research examining fire risk in California by studying vegetation growing within roughly half a mile of structures has found that the exotic grasses that often sprout in areas cleared of native habitat like chaparral can be more of a fire hazard than the shrubs. "We ironically found that homes that were surrounded mostly by grass actually ended up burning more than homes with higher fuel volumes like shrubs," lead scientist Alexander Syphard said (Syphard et al. 2012).	<p>Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>The proposed project is designed to reduce fire behavior in strategically selected areas across the landscape. Comparing a Moderate Load, Dry Climate Grass (GR4 104) fuel type to a High Load, Dry Climate Shrub (SH5 145) fuel type, flame lengths and fire line intensity are less in grass compared to brush. Burning with a 5 mph 20-ft wind speed, the brush would produce a 10' flame length and 900 BTU/ft-sec fireline intensity. Under the same burning conditions grass would produce a 2.5' flame lengths and 100 BTU/ft-sec fireline intensity. Hand crews and engine crews can generally safely work to contain fires burning with four foot flames or less. Flame lengths above eight feet generally require aerial resources to safely take containment action and are much more difficult to contain. Additionally, the reduced intensity allows firefighters to be able to operate and park equipment closer to the fires edge which ensures a more timely and effective response.</p>
3	4	Fuels	It is the houses themselves, their location, and the fuels within 100 feet of those houses (including litter in gutters, yard junk, cultivars like palms and acacia, wood piles, etc.), that determine whether the property is vulnerable to fire. Dr. Jack Cohen (2000), a research scientist with the US 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).	<p>Modifying the flammability of structures is outside the scope of the proposed project. Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>Clearance around homes is important and is the first and one of the most important defenses the homeowner can make. With the proposed fuelbreaks we are adding a second line of defense not only for the homes, but for the surrounding vegetation. Most fires start within communities and it is equally important to protect the wildlands as it is the communities. If the fuelbreaks can help prevent the fires from becoming large, vast areas of habitat can be protected. While the seral stage of the fuelbreak will be changed, this change can help the surrounding chaparral community.</p> <p>The changed arrangement of fuels from predominantly shrub to a higher grass component along a strategically placed break allows aerial resources to be more effective. The smaller diameter fuels allows the aerial applied fire retardant to be more effective as it more thoroughly coats the fuels. This is usually referred to as the "coverage level" by air tactical group supervisors and air-tanker pilots. Per the Interagency Aerial Supervision Guide a Coverage Level 1 would be used for "Annual Perennial Western Grasses" and a Coverage Level 6 would be used for "California Mixed Chaparral". Consequently, the "Line Length Production" is greatly increased when the air tankers can use a lower number coverage level.</p>

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3	5	Fuels	Although vegetation management is a critical component in reducing fire risk and hazard, excessive clearance beyond reasonable defensible space zones is unnecessary and can create a number of serious problems including increased flammability due to weeds, erosion, and loss of habitat.	<p>Information about the effectiveness of fuel breaks is shown in the response to letter 3 comment 2, above.</p> <p>Defensible space is an important component and the community should focus its efforts on defensible space. In addition the Forest Service is looking at ways in which it can effectively manage its land base and as part of that we are installing priority fuelbreaks to help the Forest Service manage its lands in times of wildfires. The question just isn't the flammability of the fuels, but under which conditions the fuels are going to burn and to which flame lengths the fire will produce. Rearranging the fuels will allow us to reduce flame lengths thus allowing us the higher probability of being able to control the fire. If fires can be caught early and kept small the risk of habitat loss, erosion and weed invasion can be reduced. After a wildfire all three of these things increase. Fuelbreaks can help minimize the amount of these outcomes.</p> <p>The response to letter 3 comment 4 is also applicable to this comment.</p>
3	8	Fuels	Most wildfires also start along roadsides, such as East and West Camino Cielo, where grass is the predominant fuel type. Therefore, we strongly recommend the following to mitigate the spread of flammable, invasive weeds and to help restore previously damaged habitat: 3. Reduce fire risk by closing West and East Camino Cielo Roads during Red Flag Days.	Where dangers are high and where the Forest Service has the authority, this method has been used under extreme fire dangers.
3	9	Fuels	Another issue concerning over-clearing relates to how fire behaves once it encounters a bare fuel break without encountering objects (such as properly thinned vegetation) that can interfere with air flow. Large areas of clearance around homes can create a "bowling alley" effect whereby embers are directed straight to the home.	<p>Information about the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>The fuelbreak rearranges the fuel and does not create a bare mineral soil firebreak. The goal is to modify the fire behavior to minimize flame lengths and fire intensity to where fire fighters can safely engage with fire suppression tactics. The fire behavior of each fire will be different depending on the variable at play at the time of the fire.</p> <p>Fire behavior is affected by fuels, weather, and topography. Of these, fuels is the only component we have the ability to manage.</p>
3	10	Fuels	We urge the US Forest Service and the local Santa Barbara area Fire Safe Councils to avail themselves to FEMA pre-disaster grants to retrofit communities like Painted Cave.	Good suggestion, however it is outside the scope of the proposed project. The Forest Service does not have the authority to facilitate the retrofit of non-Forest Service structures. However, in order for communities such as Painted Cave to become more fire adaptive we recommend they work with their fire safe councils and local fire departments to seek avenues for this to occur.

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3	11	Fuels	Expanding a ridgeline fuel break up to 300 feet across (the length of a football field) has been demonstrated to have questionable value especially when compared to treatments directly around threatened communities.	<p>Information about the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>Both treatments combined can be effective in limiting the impacts from fires. Both activities should take place to help effort out the best possible income. The Forest LMP, Standards and Guidelines S7 and S8, prescribe fuel break widths and exceptions.</p> <p>Following are the minimum and maximum widths for the WUI Defense Zone by general vegetation type:</p> <table border="1" data-bbox="1297 490 1927 685"> <thead> <tr> <th data-bbox="1306 496 1516 587">Vegetation</th> <th data-bbox="1524 496 1734 587">Min Width (ft) WUI Defense Zone</th> <th data-bbox="1743 496 1919 587">Max Width (ft) WUI Defense Zone</th> </tr> </thead> <tbody> <tr> <td data-bbox="1306 594 1516 620">Grass</td> <td data-bbox="1524 594 1734 620">50</td> <td data-bbox="1743 594 1919 620">100</td> </tr> <tr> <td data-bbox="1306 626 1516 652">Chaparral</td> <td data-bbox="1524 626 1734 652">100</td> <td data-bbox="1743 626 1919 652">300</td> </tr> <tr> <td data-bbox="1306 659 1516 685">Forests</td> <td data-bbox="1524 659 1734 685">300</td> <td data-bbox="1743 659 1919 685">1,500</td> </tr> </tbody> </table>	Vegetation	Min Width (ft) WUI Defense Zone	Max Width (ft) WUI Defense Zone	Grass	50	100	Chaparral	100	300	Forests	300	1,500
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3	12	Fuels	The proposed widening of the Gaviota Refugio Canyon fuelbreak to up 300 feet cannot be justified if a thorough cost/benefit analysis is completed. The fuelbreak is in a remote area that does not provide significant value to nearby communities. Although the 1955 Refugio Fire did burn over the ridge onto the northern side of the Santa Ynez Mountains, it was stopped by suppression efforts in the valley before causing serious loss of property. The 2004 Gaviota Fire did not burn over in part because the current ridgeline fuel break was adequate.	<p>Information about the effectiveness of fuel breaks is shown in 3-2 above. See also 3-11.</p> <p>We have analyzed this fuelbreak and it does show it has the potential to help protect the community. Stopping a fire away from communities is often the most desirable outcome.</p> <p>The chaparral ecosystem has a identified Fire Return Interval of approximately 30-60 years. As noted, the last time the north facing aspect of the eastern Santa Ynez range burned was just over 60 years ago in the Refugio Fire. During the 2004 Gaviota Fire, the Gaviota Fuel break was widened as proposed in this project to allow a safer fire fighter response. These two facts, taken together, help justify the purpose and need of the project proposal.</p> <p>Additionally, the stretch of Highway 101 near Mariposa Reina gets a high number of ignitions relative to other parts of the highway. As you continue south along highway 101 there is an agricultural buffer separating the highway from the receptive fuels leading up to the West Camino Cielo. This is not the case in the Gaviota area as there is a receptive fuel bed directly adjacent to Highway 101 and it continues to the top of the proposed project area.</p>												

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3	13	Fuels	<p>The only treatments that we find justified for community protection in the Project are modified versions of the Painted Cave treatment and the North and South San Marco Trout Club treatments. The southern portion of the Haney Tract West treatment is right next to an already extensive, type-converted area. There is no need for additional damage that would be caused by another treatment. The Rosario Park treatment can be justified as a strategic project, but it needs to be modified to reflect the design explained above</p>	<p>Information about the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>The fuelbreaks are a two-way gate. They can help prevent fires from entering a community as well as restrict fire from moving outside the community. We looked at both aspects when designing this project. One of the concerns is fire moving from the community into areas of chaparral that would not be easy for firefighters to control.</p> <p>The mentioned treatment area adjacent to the Haney Tract proved to be an effective control feature during the 2008 Gap fire and allowed fire fighters safe access to engage the fire.</p>
3	17	Fuels	<p>The careful avoidance of an artificially planted, non-native conifer plantation offering protection of such disruptive elements within the chaparral ecosystem over native species [in a previous project] is perplexing. Beyond the fact that the pines are not native and are becoming somewhat invasive at this location, they also provide an extremely flammable concentration of fuel. They should be removed to reduce flammability of the landscape and to restore the natural plant community.</p>	<p>The proposal is generally outside the scope of this project. Some non-native conifer plantations were established in the past. Currently much of these plantations are being killed from the drought and from insect attacks. As part of this project, fuels (both native and non-native will be treated to reach the desirable outcome. Dead trees in the plantations will be removed.</p>

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4	1	Fuels	<p>The establishment of defensible space immediately around structures at risk has proven time and again to be the most cost-effective and successful way to protect our communities from wildfire. We are concerned that this Project wastes limited firefighting and fuels reduction resources by promoting landscape-scale vegetation clearing projects in remote areas that are far-removed from the wildland urban interface. Of greatest concern to our organizations is the Project's establishment of a 6-mile-long fuelbreak along the crest of the Gaviota Coast, one of the crown jewels of our region that features wetlands and vernal pools, unique and sensitive wildlife, and a naturally-appearing landscape.</p>	<p>Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above.</p> <p>Sometimes the best place to put a fuelbreak is not at one's door step of the community, but along ridgelines that prove a strategic and tactical area when suppression wildfires. Considering that in the Day fire of 2007 the fire moved 7 miles in one day being farther out from the community may prove a strategic advantage to suppressing a fire.</p> <p>Ridgeline fireline locations provide a strategic and tactical area for suppression wildfires on the Forest. The Day fire of 2007 moved 7 miles in one day and containing a fire farther out from the community could save suppression costs compared to fighting fire in the WUI.</p> <p>The fuels reduction being proposed on West Camino Cielo above the Gaviota coastline is similar to the work which was done to help suppress the 2004 Gaviota Fire. Due to the high number of ignitions and the continuous receptive fuel bed leading from the highway up to the West Camino Cielo and back down the north side to the Santa Ynez Valley leads us to believe this project is worth the time and resources. The fuelbreak is within a 30 minute drive for Santa Barbara County Fire Department Engine 18 on the south side, Santa Barbara County Fire Department Engine 32 and US Forest Service Engine 47 on the north side. This fuels reduction work would allow a more safe and effective fire response for these modules when the next fire escapes the initial attack and burns up the hill.</p>
4	2	Fuels	<p>As recently explained by some of the leading authorities on community wildfire protection in southern California, vegetation treatments are not effective if they (1) are located in remote areas, far from communities at risk, and (2) do not take into account community and regional planning policies and structural ignitability</p>	<p>Sometimes the best place to put a fuelbreak is not at one's door step of the community, but along ridgelines that prove a strategic and tactical area when suppression wildfires. Considering that in the Day fire of 2007 the fire moved 7 miles in one day being farther out from the community may prove a strategic advantage to suppressing a fire.</p> <p>Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above. See also 4-1.</p> <p>The proposed fuel treatments are not in remote areas. In addition to the 30 minute response time for the 3 engine modules, referenced above in 4-1, for the most remote portions of the proposed project, aviation resources would be on scene even quicker than that as it is a short flight time from the Santa Maria Air Tanker Base.</p>

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4	3	Fuels	According to Forest Service experts, vegetation clearance should be focused on the area immediately surrounding structures. Specifically, Dr. Jack Cohen, a research scientist with the US 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.	Absolutely, this activity should occur. The Forest Service is not the leading jurisdiction for this activity. We work with our partners to help focus on this fact. Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above.
4	4	Fuels	Worse, it may cause additional significant impacts by facilitating outdated and disproven policies that, when implemented, may actually promote the spread of wildfire and place communities at greater risk.	The risk of fire is ever present, with or without the proposed treatments. No action is always an option to be considered by the Deciding Official. Information about the hazard reduction enforcement near structures (PRC 4291) and the effectiveness of fuel breaks is shown in 3-2 above.
4	5	Fuels	Significant scientific controversy exists surrounding the effectiveness of fuel breaks, particularly under the extreme weather conditions that accompany most large fires in southern California.	Under certain extreme conditions no fuelbreak will be effective. This project is not designed for that event. It is in place for all of the other times when the fires can be safely managed. Even during Sundowner wind events fuel breaks can be used as anchor points by firefighters.
4	6	Fuels	In a recent review of fuelbreak effectiveness in the Los Padres National Forest over a 28-year period involving 342 miles of fuelbreaks, the researchers concluded that wildfire did not intersect with most (79%) of the fuelbreaks in the main division of the Los Padres National Forest. The fact that a substantial proportion of the fuel breaks never intersected a fire during the course of the study suggests that fuel breaks have not historically been placed in areas where fires are most likely to intersect them. Although it is possible that a fire may cross these fuel breaks in the future, fire managers might want to consider focusing maintenance and new construction in areas where fires and fuel treatments are most likely to intersect and thus provide greater opportunities for controlling fires.	In J. Keeley's and A. Syphards paper titled <i>Fuel Break Effectiveness in Southern California Depends on Firefighter Access</i> it states, "In Los Padres, fires stopped at fuel breaks 46% of the time, although many fuel breaks never intersected fires. Among the key factors leading to fire stoppage was firefighter access to the fuel break, illustrating the importance of strategically locating fuel breaks" The Forest Service just recently completed a strategic fuelbreak assessment going over this very idea - Los Padres National Forest Strategic Fuel Break Assessment. As part of this assessment we looked at areas that would be the highest probability areas where fuelbreaks would be most effective. The proposed fuelbreaks fall within the higher ranking areas to where it is believed that the construction of fuelbreaks would be most effective.
4	7	Fuels	In light of the ongoing controversy surrounding the overall effectiveness of fuel breaks, and with the potential environmental impacts of fuel breaks in mind, we continue to believe that land management agencies should focus fuel treatments immediately adjacent to communities in the wildland urban interface, not in remote areas far away from communities.	Fuel reduction activity should be conducted around the communities within the wildland urban interface. Please keep in mind a fire can move 7 miles or more in one day. The idea of remote areas in this case is well outside that 7 mile area.
5	3	Fuels	Although the proposal does not describe the roads that would be created or maintained to serve firebreak maintenance activities, much scientific data has shown that roads are flash points for wildfire ignition.	Road maintenance activities will occur within the area, and we agree that fires do often start along roads.

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5	4	Fuels	Creation and maintenance of these large fire breaks could increase human access and activity along ridge lines and provide flammable fuels that would increase the frequency of wildfire, putting fire fighters, residents, and infrastructure at risk.	Flammable fuels already exist within the area. The chaparral ecosystem is highly flammable under the right circumstances. As far as human access, this may or may not be compatible with the area depending on the activity. The Forest mitigates illegal OHV use by placing berms and barriers to block OHV's in areas where OHV have access to and use the fuel breaks.
5	7	Fuels	What was the justification for the proposed actions? What was the rationale for the locations and widths of the fuel breaks? Were these based on fire behavior models or historical data? If the former, how were model terms parameterized? Were historical data on points of fire ignition and trajectories of spread used?	The justification comes from the approved Land Management Plan for the Los Padres National Forest. We did complete a strategic fuelbreak assessment of all of the Los Padres fuelbreaks and this proposed project ranked high for implementation. See also the response to letter 4 comment above.
5	8	Fuels	What will be the cost of these actions? Taxpayers' dollars are at stake and the Forest Service has a fiduciary responsibility to spend these funds efficiently.	The project will have a cost for implementation between \$1,500 to \$3,000 dollars per acre. This is an estimate and may vary depending on a contract or if Federal employees are used.
5	9	Fuels	There are several contradictory statements in the proposal: The proposal states that, after chaparral removal, vegetation will recover to levels promoting flame lengths of > 6 feet within 3 – 7 years; however, the proposal later states that fuel removal activities will be repeated every 3 - 7 years when vegetation reaches a height of 18 inches (1.5 feet). These statements are contradictory.	The main vegetation treatment goal in the proposed action is to maintain shrubs in the early seral stage at a height of approximately 18 inches. Several factors, mostly precipitation amounts and species growth, will determine how often the fuel breaks are treated.
5	10	Fuels	There are several contradictory statements in the proposal: Still later, the proposal states that breaks will be maintained on a 3 to 10 year cycle, so will chaparral be removed every 3 – 7 years or every 3 – 10 years, which might have a much larger effect on type conversion?	The effects of the treatments will be monitored with the goal of maintaining the fuel conditions to a state conducive to allowing a safer and more effective fire response. Several factors, mostly precipitation amounts and species growth, will determine how often the fuel breaks are treated. Also see the response to letter 5 comment 9, above.
5	11	Fuels	There are several contradictory statements in the proposal: The proposal states that chaparral in fuel breaks will be maintained so that flame lengths will be < 6 feet and that grasslands in fuel breaks will be maintained so that flame lengths will be < 3 feet; however, there is almost no information on how grassland fuel breaks will be maintained.	See the response to letter 5 comment 9, above and tables 3 and 4 in the proposed action scoping report.
5	12	Fuels	What vegetation type does the Forest Service hope to maintain within the fuel breaks? Will fuel breaks be dominated by bare earth, chaparral, or grasslands and weeds?	The desired vegetation will be that of young chaparral and early seral species. We do not desire weeds as the outcome.
5	13	Fuels	What roads will be used for fuel break creation and maintenance activities, how will they be maintained, will they be open to the public, and what effect will they have on fire ignitions and wildlife movement, behavior, and habitat?	No new roads are proposed, only existing roads will be used and they will be maintained as part of the Los Padres transportation maintenance program.

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5	17	Fuels	Will debris piles resulting from fuel break creation or maintenance activities constitute flash points for fire ignition? The proposal should include more detailed information on the amounts and conditions of the masticated, cut, and shredded vegetation that will be left on site.	Some debris piles will be created and later burned. Other vegetation will be treated (chipped, masticated, cut) and rearranged which will result in a change of fire behavior. We are not after reducing all of the vegetation, but to rearrange it to where it will burn at desirable flame lengths.
6	2	Fuels	North section: A four acre section between the 154 and northwest corner of the Trout Club: There is a large amount of material to be cut from this section and it will continue to pose a fire hazard for several years if chips and logs are left on site. Embers landing in the chippings can re-ignite for days and blow into the community. All material that is cut should be hauled away so that living fuel is not converted to dry fuel.	Where feasible fuels will be reduced either through removal or burning. The main desired outcome is the reduction of the fuels to modify the fire behavior and not necessarily the full removal of the fuels. Also see response to letter 1 comment 2, above.
6	4	Fuels	Clear-cutting Chaparral: Cutting every plant to the ground is not an optimal way to create defensible space in chaparral. It is better to leave small native shrubs like canyon sunflower, solanum, monkey flower and hummingbird sage which do not contain much fuel but will help hold the soil and inhibit weed growth. If a few large shrubs are selected and well spaced and cut to 1-2 main trunks, limbed up, they will not crown sprout anywhere near as vigorously and will retain a root system to hold the hillside. Admittedly this method requires more care and training (though less cutting and hauling) to implement initially but in the long-run it is much easier to maintain, causes less erosion, preserves native plants and inhibits weeds.	Thank you for your comment. Some of this is part of the desired condition. We are not after bare mineral soil for this project, but to have some of these early seral species occupy the fuelbreak. The proposed project does not include removal of all vegetation that would result in significant areas of bare mineral soil. Early seral species would remain occupying the fuelbreaks. The project would maintain the larger shrubs and create a "shaded" fuel break where the vegetation conditions make this feasible to do so.
6	3	Fuels Hydrology	South section: A 7 acre section primarily along the Trout Club entrance road extending several hundred feet downslope: I favor clearing 10-20 feet along the roadway, however clearing several hundred feet on a steep slope below the community will cause erosion and create a greater hazard to the community due to slope de-stabilization below our road than any small fire protection benefit can offset. The proposed clearing is largely below the road and NOT the structures and a fuel/slope driven fire going up-slope can easily flank the clearing to the west and get to the houses so there is not much fire protection benefit. If the area is cleared and re-cleared, eventually the chaparral plants that hold the hillside will die and be replaced with non-native grasses and weeds and slope erosion is sure to follow. Just working and moving around on this slope could de-stabilize it. This road is the only access to the community and is already perched on a steep slope. Down-slope erosion could destroy the road.	After review, the 7 acre unit will be removed from the proposed action.
1	3	Fuels Vegetation	For the unit that is in the North End of the San Marcos community they would like to see all of the oak trees remain. They would also like the focus to be on the removal of the non-native species (Eucalyptus & Acacia).	Preference for retention will be given to the oaks. In addition the non-native species will be the priority for removal. The treatments will also focus on limbing the remaining vegetation to reduce the probability of a fire transitioning into a more hazardous crown driven fire.

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2	4	Fuels Vegetation	The chaparral environment has fire as part of its natural regime and the species leaving in it are adapted to this disturbance. Clear cutting (or control fires out of the season) is not a disturbance that the native species are adapted to.	<p>Repeated large scale fires which result in a type conversion of the chaparral is also not a desired outcome. This project is designed to help the Forest manage potential fires to protect not only the community, but protect the chaparral from such repeated events. The Angeles, Cleveland and San Bernardino National Forests are all experiencing conversion due to these fires that have a higher return interval than occurred before European-American settlement, increasing population and development. This proposed project will help to keep a fire smaller and thus prevent this ecosystem from being converted.</p> <p>The estimated fire return interval of a healthy chaparral ecosystem is 30-60 years. All of the adjacent areas of the proposed project are well within this range except the north slope of the western portion of the Santa Ynez range which hasn't burned since the 1955 Refugio Fire. Therefore, the strategically placed fuelbreaks would help assist in fire suppression efforts to keep fires from burning a large portion of the landscape and potentially type converting the shrubs to grass.</p> <p>The main goal of the proposed project is to maintain vegetation in the fuel breaks in early seral stage.</p>
3	6	Fuels Vegetation	Most wildfires also start along roadsides, such as East and West Camino Cielo, where grass is the predominant fuel type. Therefore, we strongly recommend the following to mitigate the spread of flammable, invasive weeds and to help restore previously damaged habitat: 1. Anticipate, monitor, and provide for perpetual treatment of weed infestations anywhere within the existing fuel break using hand tools, hand-held power tools, and hand-applied herbicides. We do not recommend goats as they are known to disrupt fragile soil ecology. Exotic invasive grasses in the fuel break along the edges of West Camino Cielo and other open public roads and congregating points should be mowed annually to reduce the risk of wildfire ignitions. Highly noxious invasive weeds should be treated annually to prevent colonization and spread into nearby native vegetation;	Noxious weeds are not a desirable outcome and mitigations have been and will be implemented to minimize weeds.

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3	7	Fuels Vegetation	Most wildfires also start along roadsides, such as East and West Camino Cielo, where grass is the predominant fuel type. Therefore, we strongly recommend the following to mitigate the spread of flammable, invasive weeds and to help restore previously damaged habitat: 2. Instead of the massive clear cuts that have been created along West Camino Cielo in the past, the district should allow for the recolonization of native vegetation within existing and new fuelbreaks in order for habitat islands to form in the following manner: Fuel breaks should be no wider than 150 feet, except for specific firefighter safety zones. For initial mastication and hand cut treatments, 50 to 70 percent of the vegetation would be treated, leaving 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 consist of differing plant species to maintain plant species diversity.	Leaving some vegetation to create a mosaic effect and to provide some habitat is desired as long as it doesn't interfere with the desired conditions in regards to flame length and doesn't provide a control issue. The proposed fuel breaks would be designed to blend the edges into the remaining landscapes in order to minimize visual impacts as much as possible.
4	11	Fuels Vegetation	Specifically, the Forest Service regulations provide the following example of a project eligible for this exclusion: "Thinning or brush control to improve growth or to reduce fire hazard..." However, this Project will accomplish neither of these objectives. First, clearing 95% of native chaparral as stated in the Proposed Action will not "improve growth." Instead, the Proposed Action states that "All vegetation is proposed for treatment" and "Up to 95 percent of the existing vegetation would be cut."	The project does call for most of the vegetation to be cut. With that said a good portion of the chaparral species in the area will re-sprout which will do a couple of things. First these re-sprouts will grow much faster than the existing vegetation since they have the existing root structure to pull from. The second benefit will be that this new growth will be more fire resistant. Much of the older vegetation has a good portion of dead material on the plant and this new growth will not have this dead portion which helps make the new growth more fire resistant. Also opening the chaparral will help promote new growth of early seral species which are also a desirable outcome of this project.
4	14	Fuels Vegetation	Similarly, the project will not "reduce fire hazard." Instead, the project will promote the spread of invasive weeds, which are highly flammable. 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.	Information about the effectiveness of fuel breaks is shown in 3-2 above. See also 3-11. The fire hazard will exist unless we remove all of the vegetation which is not a desirable outcome of this proposed project. The outcome that is changed is that the vegetation is put into a condition which gives firefighters a chance to control a fire in the area of the fuelbreak. In its existing conditions we have little to no good control options.
5	2	Fuels Vegetation	Creation and maintenance of proposed fuel breaks may increase fire risk. The USFS's own manuals (e.g., Bentley 1967) recognize that the frequent removal of chaparral via mechanical means or prescribed fire would convert chaparral to areas dominated by exotic weeds and grasses. Because these exotic species constitute fine fuels that are more flammable than chaparral, they can promote fire ignition and act as ladder fuels, spreading fire into adjacent or nearby chaparral areas.	Information about the effectiveness of fuel breaks is shown in 3-2 above. The fire hazard will exist unless we remove all of the vegetation which is not a desirable outcome of this proposed project. The outcome that is changed is that the vegetation is put into a condition which gives firefighters a chance to control a fire in the area of the fuelbreak. In its existing conditions we have little to no good control options.

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5	15	Fuels Vegetation	How will the removal of chaparral to create fuel breaks affect native plant and animal species and their habitats?	The overall native plant communities and habitats will remain on the landscape. For this project the native plants will favor the early seral species and thus the habitat will be changed to favor native species that prefer the early seral habitat.
6	1	Fuels Vegetation	North section: A four acre section between the 154 and northwest corner of the Trout Club: I enthusiastically favor removal of the Eucalyptus and Acacia stand and the goal of a type conversion to oaks. To this end immature oaks should be left as well as mature ones.	We agree and we will modify the proposed action.
1	1	Hydrology	The first concern is in regards to the hillslope stability within the unit that is in the South East corner of the community of Trout Club. They are concerned about the hillslope failing in a rain event. They are specifically concerned that the road could be blocked from a debris flow. They would like to see activities limited within 10 to 20 feet of the road and would prefer that no fuels reduction activities occur on the slope outside of this 10 to 20 foot zone.	This unit has been removed from the proposed treatments.
5	14	Hydrology	Watershed science recognizes that any activities within a watershed are likely to affect the hydrology, geomorphology, sediment and nutrient dynamics, and stream chemistry of those watersheds, but there is no analysis of how the fuel breaks will affect these physical and chemical variables, which have many implications for erosion and the quantities and quality of drainage water.	The project is located along a ridge top and the BMPs incorporated which include riparian zone buffers will help mitigate this issue.
5	18	Hydrology	Although the proposal sensibly recommends protecting 100 to 300 foot buffers around riparian zones, the proposal needs to recognize that sediment, water, nutrients, or other chemical constituents from denuded areas will eventually find their way into drainage waters with possible effects on downslope or downstream riparian and aquatic communities.	The project is located along a ridge top and the BMPs incorporated which include riparian zone buffers will help mitigate this issue
2	2	NEPA	I also don't agree that this project fits the categorical exclusion to improve wildlife habitat. Quite the contrary, clear cutting destroys habitat for several species. This project proposal needs to be transparent about its goal which is to protect human population. There is no scientific evidence or expectation that this clear cutting would benefit habitat.	The Forest Service has found that "timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction" do not individually or cumulatively have a significant effect on the human environment (36 CFR §220.6(e)(6)). Examples of these activities include but are not limited to thinning or brush control to reduce fire hazard, and prescribed burning to reduce natural fuel build-up. This project fits the category.

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3	1	NEPA	As a consequence, a Categorical Exclusion (CE) is not appropriate for this Project because it does not adequately address possible alternatives that can provide greater reductions in fire hazard with less environmental impact. In addition, a CE is not appropriate because this Project will likely have “significant effects on the environment,” and there is the presence of “unusual circumstances.” Such variables cannot be properly addressed without conducting a thorough Environmental Assessment (EA).	Because the Forest Service has previously found that “timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction” do not individually or cumulatively have a significant effect on the human environment, there are no requirements to explore alternative ways to address the need for action to categorically exclude a project. The Code of Federal Regulations at 36 CFR §220.6(b) and Forest Service Directives at FSH 1909.15, Section 31.2 specify the seven “[r]esource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS.” The Forest Service will complete an analysis of the required seven resource conditions (36 CFR §220.6(b)) to determine whether extraordinary circumstances exist.
3	18	NEPA	As you know, 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 or person undertakes such other actions. There have been significant impacts caused by vegetation modification projects on the Santa Barbara Ranger District in the past. All of these past projects and the current one should be considered in planning. This is another reason why a CE is not an adequate approach in examining the Santa Barbara Mountain Communities Defense Zones Project.	The Forest Service’s regulations do not require a cumulative impacts analysis when determining whether there are extraordinary circumstances (see the court’s Memorandum and Order in <i>Conservation Congress v. USFS</i> , NO. CIV. 2:12-02416 WBS KJN, E.D. Cal., June 6, 2013, p. 22).
4	8	NEPA	This CE does not apply to this project, for two reasons. First, the clearing of native chaparral does not meet the basic definition of improving wildlife habitat, and nowhere in the Proposed Action is “wildlife habitat improvement” cited as one of the purposes or needs of this project.	The responsible official has determined that the Santa Barbara Mountain Communities Defense Zones Project is consistent with this category of actions. Timber stand improvement is one activity mentioned in this categorical exclusion and it is consistent with the category.
4	9	NEPA	Second, the presence and significance of several “extraordinary circumstances” makes this project ineligible for a categorical exclusion.	The Code of Federal Regulations at 36 CFR §220.6(b) and Forest Service Directives at FSH 1909.15, Section 31.2 specify the seven “[r]esource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS.” “The mere presence of one or more of these [seven] resource conditions does not preclude use of a categorical exclusion (CE). It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether extraordinary circumstances exist” (36 CFR §220.6(b)). The analysis will determine the degree of potential effect on the seven resource conditions.

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4	10	NEPA	The Proposed Action does not mention anything about improving wildlife habitat. Rather the project's "Purpose and Need" statement focuses on the following goals: "enhance community protection," "reduce the risk of loss," "improved opportunities for tactical operations," "safety would be enhanced," "improve the effectiveness of firefighting operations," and "halt the rate of fire spread into urban areas."	The purpose of the project is not wildlife habitat improvement. The purposes of the project are stated in the proposed action document. Timber stand improvement is the tool that has been selected to address these proposes.
4	15	NEPA	The Project involves several extraordinary circumstances, including sensitive species and wetlands. For the reasons outlined below, the degree of potential effect to these extraordinary circumstances requires preparation of an EA or EIS.	The Code of Federal Regulations at 36 CFR §220.6(b) and Forest Service Directives at FSH 1909.15, Section 31.2 specify the seven "[r]esource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS." "The mere presence of one or more of these [seven] resource conditions does not preclude use of a categorical exclusion (CE). It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether extraordinary circumstances exist" (36 CFR §220.6(b)). The analysis will determine the degree of potential effect on the seven resource conditions.
4	28	NEPA	Cumulative impacts require preparation of an environmental assessment. The impacts outlined above are made more severe when combined with similar impacts of other recent vegetation clearing projects along the Santa Ynez Mountains, cumulatively contributing to significant impacts. These projects include: • Camino Cielo Defensible Fuel Profile Zone Project (2002) – prescribed fire, hand cutting with chainsaws and mechanical treatments on 1,455 acres (300' wide, 40 miles long) between Refugio Pass and Romero Saddle. 14 • Ojai Community Defense Zone Project (2008) – mechanical treatment, hand cutting, piling and burning, and burning standing brush in place on 2,032 acres (from 300 to 2,000 feet wide, 50.8 miles) between Chismahoo Mountain and Topa Topa Bluff. • Adjacent Private Land – Several thousand acres of chaparral have been indiscriminately cleared from private land along the Santa Ynez Mountains, including Windermere Ranch, Slippery Rock Ranch, and others. This clearing too has escaped proper environmental review.	The Forest Service's regulations do not require a cumulative impacts analysis when determining whether there are extraordinary circumstances (see the court's Memorandum and Order in <i>Conservation Congress v. USFS</i> , NO. CIV. 2:12-02416 WBS KJN, E.D. Cal., June 6, 2013, p. 22).

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5	1	NEPA	Given the scale and nature of this Project, we believe that a categorical exclusion is not warranted because the Project will destroy wildlife habitat, has obvious effects on the human environment, and constitutes extraordinary circumstances that may actually increase wildfire risk while contradicting USFS mandates to protect natural resources and native species.	The Code of Federal Regulations at 36 CFR §220.6(b) and Forest Service Directives at FSH 1909.15, Section 31.2 specify the seven “[r]esource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS.” “The mere presence of one or more of these [seven] resource conditions does not preclude use of a categorical exclusion (CE). It is the existence of a cause-effect relationship between a proposed action and the potential effect on these resource conditions and if such a relationship exists, the degree of the potential effect of a proposed action on these resource conditions that determine whether extraordinary circumstances exist” (36 CFR §220.6(b)). The analysis will determine the degree of potential effect on the seven resource conditions.
5	6	NEPA	The proposed actions will certainly have a significant effect on the environment. The large scale of the actions itself constitutes extraordinary circumstances, requiring detailed environmental analysis and public input.	The Code of Federal Regulations at 36 CFR §220.6(b) and Forest Service Directives at FSH 1909.15, Section 31.2 specify the seven “[r]esource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS.” The analysis will determine the degree of potential effect on the seven resource conditions that are required to be considered.
2	1	Wildlife	I do not support the implementation of the clearing of the chaparral at the crest of the Santa Ynez mountain because of the environmental impacts it will create. Mountain crests, including the crest of the Santa Ynez Mountain have a high level of endemism. This is because over time, as climate warms, a cumulative number of species are trapped at the top of mountains as their habitat moves up. Eventually they diverge to become unique species or sub-populations due to prolonged isolation and natural selection. Several species of Timema walking stick offer examples of endemism at mountain crests and tops (i.e 2 undescribed species of Timema at the top of San Jacinto mountain and Cuesta Ridge). With global warming, it is more important than ever to protect the mountain top vegetation because the habitat for these unique species will be shrinking. Removing their habitat with clear cutting could be devastating for their future.	The Timema walking stick is not a federally-listed (TEPC), Forest Service sensitive, MIS, or high priority MBTA species and is not recognized as a species of special conservation concern. Federal agency biologists are not able to include all biological organisms as part of project level analysis. USFWS, as the federal regulatory agency, is responsible for determining whether a species warrants federal listing. Forest Service Sensitive species are determined by the agency’s Pacific Southwest Regional Office and assigned to specific forests based on their level of local conservation importance. “Clear cutting” is a silvicultural practice applied to forested habitats as a harvest practice for shade-intolerant tree species and is not applicable to the proposed action.

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3	16	Wildlife	Attempts to spare big-eared woodrat (<i>Neotoma macrotis</i>) nests from the masticator ultimately fail due to their exposure to the elements and predators.	<p>The big-eared woodrat is not a federally-listed (TEPC), Forest Service sensitive, MIS, or high priority MBTA species, and was therefore not analyzed as part of this project. USFWS, as the federal regulatory agency, is responsible for determining whether a species warrants federal listing. Forest Service Sensitive species are determined by the agency's Pacific Southwest Regional Office and assigned to specific forests based on their level of local conservation importance.</p> <p>While some habitat for big-eared woodrats within the treatment areas may be altered, there is abundant habitat for the species in close proximity to the project area. Further, while project actions might affect some individuals, they would not lead to a population trend which would alter the species' conservation status.</p> <p>The big-eared woodrat is ranked as a species of Least Concern by the International Union for Conservation of Nature (IUCN).</p>
4	22	Wildlife	The Proposed Action identifies two formally-designated "sensitive" animal species in the Project area – California spotted owls, and California legless lizards. However, the Proposed Action does not propose any mitigation measures or design criteria to minimize or avoid impacts to these species.	<p>Nesting and roosting habitats for spotted owls would not be impacted by project actions as those habitats are not present in the treatment areas. The probability of the species using foraging habitats within the vicinity of the project area is considered low, but feasible.</p> <p>California legless lizards may occur at various locations within the treatment areas, but are unlikely to be impacted beyond a few individuals. They utilize burrows or hardcover for protection, and any injury or mortality would be circumstantial.</p>
4	23	Wildlife	The Forest Service's updated species account for California legless lizards states, "The predominant factors which define the habitat for this species and prevent range expansion are the moisture content of soil, ground temperature, soil structure, and vegetation." This Project could adversely affect habitat by removing vegetative cover, exposing the ground to sunlight, and increasing ground temperature, rendering previously-suitable habitat unusable. In addition, the Project could result in direct impacts to California legless lizards through crushing and soil disturbance by masticators and other heavy equipment. Moreover, the removal of native vegetation can result in direct mortality and habitat destruction for beetles and other insects that serve as the primary food source for legless lizards. The Proposed Action does not provide any design criteria or mitigation measures to reduce or avoid these impacts, suggesting that the Project may result in potentially significant impacts that must be evaluated in an EA or EIS.	The wildlife biological assessment/ evaluation for Santa Barbara Front Country acknowledges that California legless lizard individuals may be impacted by project actions. Analysis of impacts to FS sensitive wildlife species, such as California legless lizard, are made at a population level. A determination that a project "May affect individuals, but is unlikely to result in a population trend that warrants listing the species" does not preclude a finding of no extraordinary circumstances for the project or support the comment that an EA or EIS is required.

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4	24	Wildlife	<p>The Proposed Action suggests that the ephemeral pond along the Gaviota crest may contain California red-legged frogs, and vernal pool fairy shrimp. However, it is unclear whether protocol surveys have been conducted. It is important to conduct protocol surveys prior to approving this project. In the event that either species is present, then the 100' buffer would be significantly inadequate to protect the wetland and associated upland habitat. For example, a buffer of 100m is recommended to protect aquatic sites occupied by California red-legged frogs. See Bulger, J.E. et al. 2003. "Terrestrial activity and conservation of adult California red-legged frogs <i>Rana aurora draytonii</i> in coastal forests and grasslands." Biological Conservation 110 (2003) 85-95</p>	<p>Ephemeral ponds along the Gaviota crest have been visited multiple times by a biologist and amphibian specialist. No CRLF were detected and no evidence was observed of any breeding activity. Habitat is not considered suitable for CRLF as primary constituent elements (PCEs) are not present at the site (lack of overhanging or emergent vegetation). Further, the pools fall well outside the proposed treatment areas (> 200 meters) and are not anticipated to be impacted. No historic records for CRLF exist along the crest of the Santa Ynez Front Range which would lead biologists to anticipate that they would be present.</p>
4	25	Wildlife	<p>Upland areas are also important as food sources for vernal pool crustaceans. See U.S. Fish & Wildlife Service. 2002. Critical Habitat Designation for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon; Proposed Rule. 67 Fed. Reg. 59884, 59899 (September 24, 2002) ("The entire vernal pool complex, including the pools, swales, and associated uplands, is essential to support the aquatic functions of the vernal pool habitat. Although the uplands are not actually occupied by vernal pool crustaceans, they nevertheless are essential to the conservation of vernal pool habitat and crustaceans because they maintain the aquatic phase of vernal pools and swales. Associated uplands are also essential to provide nutrients that form the basis of the vernal pool food chain, including a primary food source for the vernal pool crustaceans.").</p>	<p>The pools fall well outside the proposed treatment areas (> 200 meters) and are not anticipated to be impacted by the proposed action. Further, riparian conservation areas as defined in the FLMP provide additional protections around potential habitats.</p>

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4	26	Wildlife	<p>The Forest Service must comply with the Migratory Bird Treaty Act, which prohibits the destruction of the eggs of most birds native to our area. The easiest way to protect nests and eggs is to impose a "limited operating period" in which vegetation clearing is prohibited during the nesting season. However, the Proposed Action relies on an overly-narrow nesting period of March 15 to July 31. The Forest Service should adopt language that is commonly adopted by other agencies throughout southern California, which prescribes a February 1 through August 31 nesting period and requires thorough surveys if any clearing is to be conducted during this timeframe. Specifically, the Southern California Association of Governments recommends the following mitigation measure to protect migratory birds: (See page 12 of comment letter)</p>	<p>The Forest Service has an existing MOU with USFWS concerning the MBTA which is currently in the process of renewal (expired in Dec. 2015). "Take" as defined under the MBTA is not equitable with "incidental take" covered under the Endangered Species Act, as the MBTA does not provide coverage for circumstantial impacts which might occur as the result of actions taken by federal agencies which are part of their mission objectives. This comment is based on a misunderstanding of the 2 pieces of legislation and how they apply to federal land management agencies.</p> <p>For the Los Padres, a window of March 15- July 31 covers the breeding period for the vast majority of avian species, while still allowing operational flexibility to accomplish mission objectives and targets. Other species of special concern which fall outside of this window (California condor, California spotted owl, and northern goshawk) are analyzed separately and targeted with specific limited operating periods (LOP) and monitoring efforts when determined necessary. The February 1 through August 31 window recommended by the State of California is considered to be unnecessarily restrictive without providing any substantial biological benefit.</p> <p>Mandated surveys and nest monitoring recommended by the Southern California Association of Governments as "mitigation measures" are considered by professional wildlife biologists to represent an excessive level of disturbance that can be detrimental to conservation strategies for many avian species, due to increased potential for nest depredation, nest abandonment and inadvertent take (crushed eggs and nestlings) on species resulting from nest monitoring efforts.</p>

Letter #	Comment #	Response Assigned To:	Public Comment	Forest Service Response
4	27	Wildlife	<p>In addition to relying on an overly-narrow nesting season, the mitigation measures proposed for migratory birds are inadequate to prevent take, for the following reasons: a. The proposed limited operating period only applies to “initial entry” and not to repeat treatments in the future, which could place ground-nesting birds at risk. b. The proposed limited operating period contains a loophole – clearing can occur during the nesting season “if determined by a qualified wildlife biologist.” An appropriate mitigation measure needs to include the detailed language of the BIO/OS34 sample mitigation measure cited above. The Forest Service’s proposed language does not provide any criteria or conditions for the biologist to determine whether a shorter nesting period/limited operating period should apply. c. The proposed mitigation requires surveys “to the extent practicable” to “more effectively identify which species are located” in the project area. That survey should be conducted as part of the NEPA process, prior to Project approval, so that any potential impacts can be identified and mitigated as necessary. d. The proposed limited operating period impermissibly defers analysis of impacts to the future. Specifically, it states that if a biologist determines that work can be done during the nesting period, “a qualified wildlife biologist will conduct a biological risk assessment to determine the severity of impacts to the migratory birds.” The MBTA prohibits destroying the nests or eggs of birds during nesting season, period. It treats the destruction of one such nest or egg as “severe” and punishable under the law. The evaluation of impacts should be done now, as part of the NEPA process, not at some time in the future when there is no requirement for public notice or review.</p>	<p>BIO/OS34 is a State of California regulation and is not relevant to the operations of a federal land management agency on federal lands.</p> <p>Los Padres NF is in compliance with the ESA, NEPA, the MBTA-MOU, and the FLMP related to the required level of biological analysis related to potential impacts.</p> <p>Comments related to the MBTA and confusion regarding “take” as defined by the MBTA and “incidental take” as defined under the ESA are addressed in the response to comment # 26.</p> <p>The Forest Service’s 2008 MOU with USFWS requires analysis of project actions on migratory bird species. Required pre-project monitoring was not stipulated under the MOU and is only mandated by the federal regulatory agency as part of Terms and Conditions related to a Biological Opinion. Biological opinions are only issued related to the conservation of federally-listed species and unrelated to the MBTA.</p>
5	5	Wildlife	<p>Fuel breaks destroy wildlife habitat, not improve it A recent analysis of environmental impact reports by the Environmental Defense Center lists over 50 sensitive or listed native plant and animal species that are associated with chaparral in our local area. The proposal notes a number of these sensitive species in the proposed firebreak areas. As a consequence, the destruction of nearly 420 acres of chaparral would destroy habitat supporting many native species and communities.</p>	<p>Maintaining fuel breaks as early successional shrubland or grassland through periodic re-treatment is not equitable with habitat destruction, as type conversion is not occurring. Alteration of habitat from one seral stage to another generally benefits a different suite of species than those present, and diversity of age classes in ecological cover types is an important factor in promoting biological diversity.</p> <p>Further, the proposed treatment area of 420 acres (170 ha) represents an extremely small proportion of the total chaparral habitat present on Los Padres National Forest. Habitat altered as part of the proposed action is present at high levels of abundance on other parts of Santa Barbara RD and Los Padres NF. Analysis of impacts to sensitive and other plant and wildlife species of special conservation concern are made at a population level. Determinations are made regarding the potential of project actions to affect populations rather than individuals.</p>

Santa Barbara Mountain Communities Defense Zone Project

Letter #	Comment #	Response Assigned To:	Public Comment	Forest Service Response
5	16	Wildlife	The proposal pays only cursory attention to the mitigations required to protect sensitive species in the fuel break areas. Mitigations for the protection of sensitive, emerging, or migratory native species needs to be guided by comprehensive analyses of the species that are present and detailed mitigations that consider the requirements of each sensitive species.	The proposed action was analyzed for all federally-listed species, species identified as sensitive within Region 5 of the National Forest System, MIS species, and 75 migratory bird species as required under the ESA, MBTA, NEPA and the FLMP. Comprehensive and detailed mitigations are not required and were determined by professional biologists to not be warranted at this time.
2	3	Wildlife Botany	The proposal lists an inadequate number of species that might be affected. The truth is, we know very little about this chaparral. No large scale project such as the one proposed should be conducted without a full EIR and surveys done at the right time of the year by specialists (ornithologists, entomologists, botanists, vertebrate zoologists, etc). This chaparral does not have yet a complete map of sensitive and rare species and therefore a categorical exclusion of "extraordinary circumstances" cannot be assumed.	The proposed action was analyzed for all federally-listed species, species identified as sensitive within Region 5 of the National Forest System, MIS species, and 75 migratory bird species as required under the ESA, MBTA, NEPA and the FLMP. Landscape scale inventory and monitoring of chaparral cover types for all biological species is outside of the scope of this project and the jurisdiction of the Forest Service.