



Mr. Darrell Vance  
Attn: Jacob Gipson  
Trabuco Ranger District  
U.S. Forest Service  
1147 E. 6<sup>th</sup> Street  
Corona, CA 92879  
Comments-cleveland@fs.fed.us

December 5, 2014

Re: South Main Divide and Greater El Cariso Fuels Management Project

Dear Mr. Vance,

We appreciate the opportunity to comment on this Project. We also commend the Cleveland National Forest for its ongoing effort to incorporate the best available science when developing vegetation management projects.

We are also pleased that the district did not follow through with its original plan to conduct prescribed burning on the eastern slope of Elsinore Peak as part of the original project. We met with district staff on March 4, 2010 and shared our concerns along with the science indicating that such a project would likely cause significant environmental harm and did not meet the standard of incorporating the best available science.

We respectfully offer the following points for review and incorporation into the current Project's upcoming environmental assessment (EA).

### **Existing South Main Divide Fuel Break**

We support the maintenance of the existing South Main Divide fuel break to achieve project goals so long as this is accompanied by crucial mitigation measures to protect the environment, reduce the threat of wildfire ignitions in this area, and facilitate a measure of habitat restoration.

Our greatest concern with the proposed maintenance of the fuel break is the existing presence and likely spread of exotic invasive grasses and other harmful weeds in this area (Figure 1). Weeds cause obvious ecological harm when they displace native plants and wildlife (Gelbard and Belnap 2003, Merriam et al. 2006). They also significantly increase the local fire risk and create a more dangerous fire environment because they dry out sooner than native plants, ignite more easily, and can create massive amounts of heat instantly when ignited.



Figure 1. Example of the invasion of flammable, invasive weeds along a fuel break. Photo: North Main Divide fuel break, Trabuco Ranger District.

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 South Main Divide Road 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;

2. The district should allow for the recolonization of native vegetation within the existing fuelbreak in order for habitat islands to form as described in the recent Lake Morena Community Draft EA (2014):

*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.*

3. Reduce fire risk by closing South and North Main Divide Roads during Red Flag Days.

### **Drop Expansion of South/North Main Divide Fuel breaks**

We strongly recommend that the district does not expand the South Main Divide fuel break into previously untreated areas north and south of Elsinore Peak or expand the clearance area near Old Dominion Mine along North Main Divide Road.

We understand the rationale of tying into previously treated areas by creating new fuel breaks in order to create strategic points to conduct fire suppression activities. However, expanding a ridgeline fuel break that has been demonstrated to have questionable value instead of focusing on treatments directly around threatened communities appears to be based on older thinking rather than the best available science.

The latest science has clearly shown that,

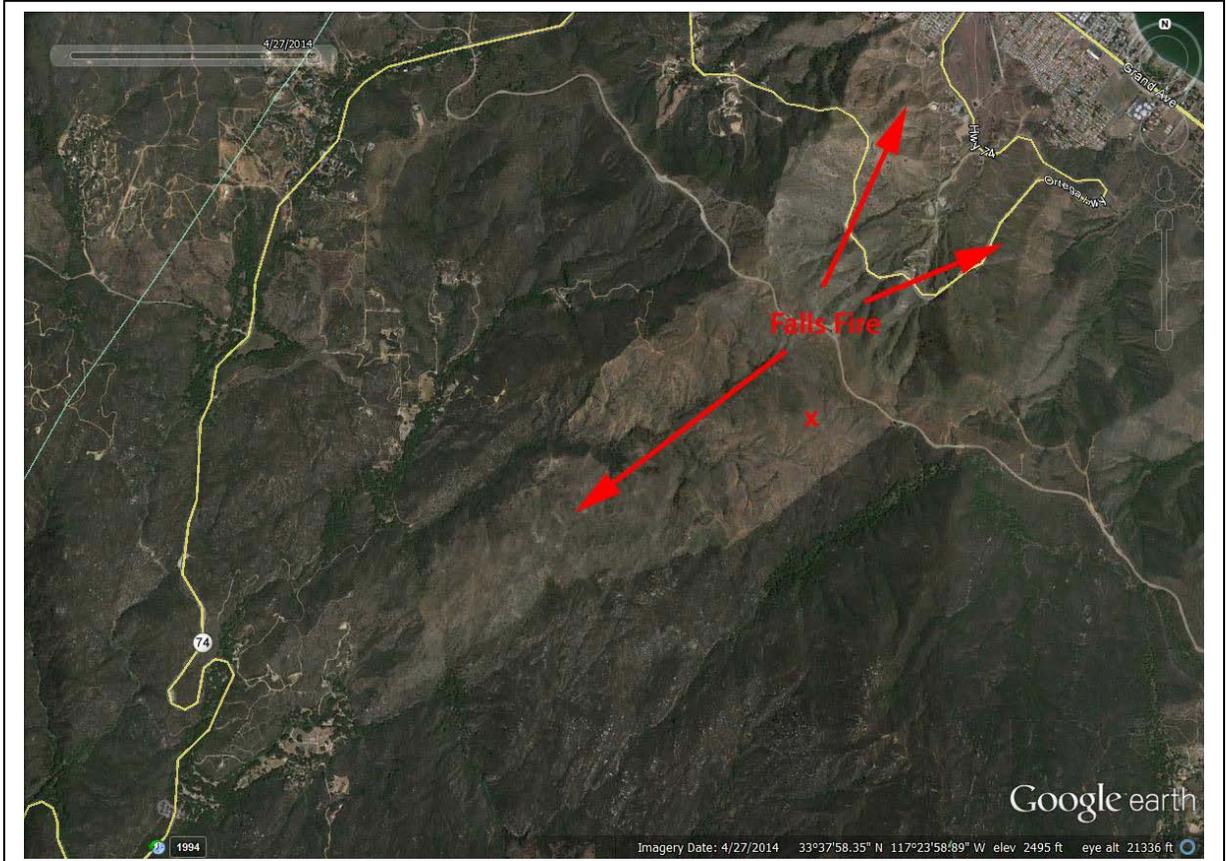
*It may be more effective to have fewer fuel breaks in strategically placed locations than to have greater area of fuel breaks overall, at least in terms of protecting communities... fuel breaks played an important role in controlling large fires primarily where they provided access for firefighting activities (Syphard et al. 2011).*

The 2013 Falls Fire has also demonstrated the lack of efficacy of the South Main Divide (SMD) fuel break (Figures 2 and 3).

*Firefighters were making a stand at South Main Divide Road in Rancho Capistrano, but **the fire jumped the road and was heading for Lake Elsinore**, according to Vickie Wright of the U.S. Forest Service. Officials are concerned the fire will jump the crest of the mountain and head toward the more populated area. “The embers can start spot fires, and once the spot fires start, they spread,” she said (Miller 2013).*



Figures 2 above (pre-fire) and 3 below (post-fire). Failure of the SMD fuel break.



The expansion of the fuel break on either side of Elsinore Peak is not an effective use of fire risk reduction dollars. This area is generally undisturbed native shrubland and should be left alone. Instead, we suggest the district follow the science and establish perimeter vegetation treatments directly along the east side of Morrell Ranch community as per the Lake Morena Community Project description and identified by the yellow x's in Figure 4.

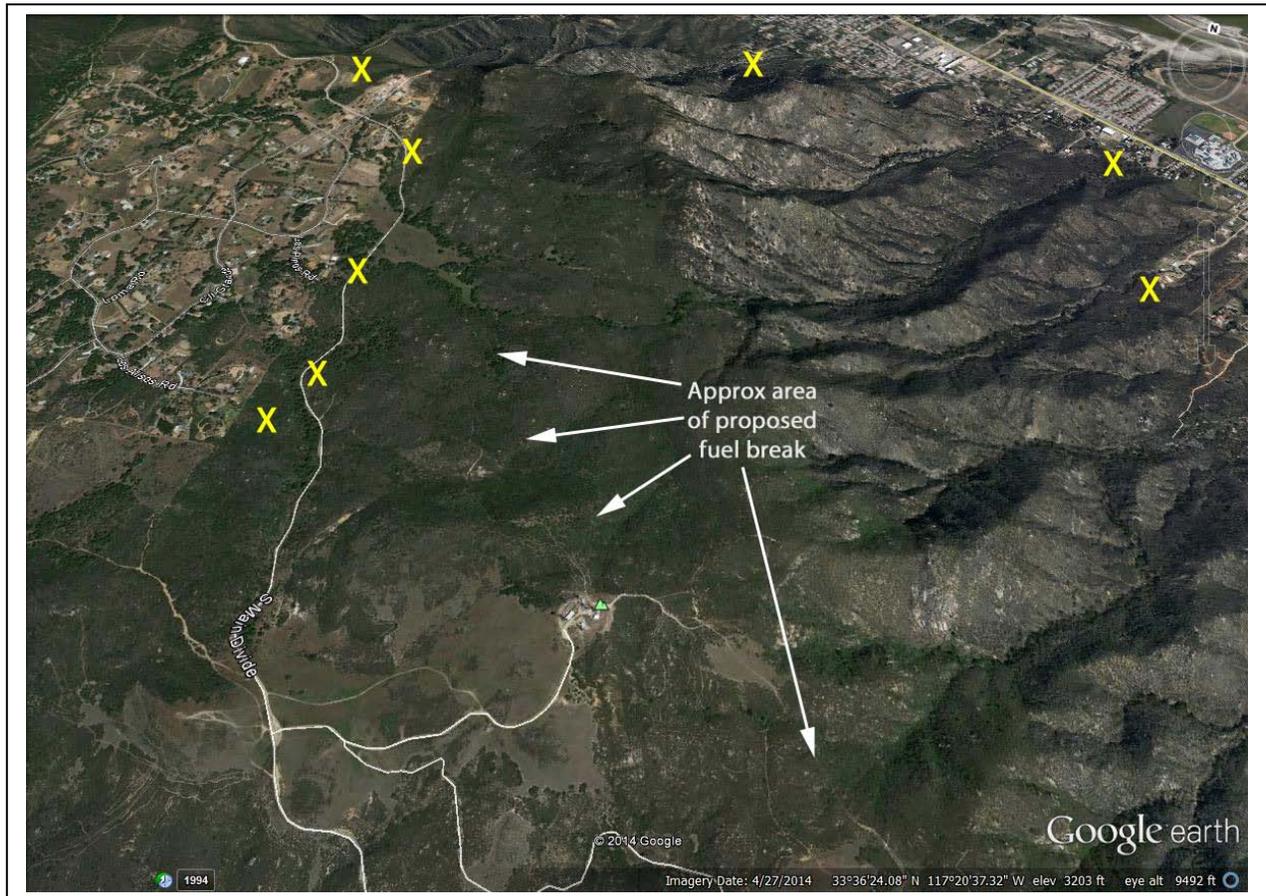


Figure 4. Proposed South Main Divide fuel break expansion and suggested alternative treatments (yellow x's).

The continued expansion of the habitat clearance operation near Old Dominion Mine along North Main Divide Road (Figure 5) is also a questionable fire risk reduction strategy for the same reasons mentioned above.



Figure 5. Old Dominion vegetation treatment area.

### **Protecting Assets Rather Than Attempting to Stop Fire**

We ask the district to move further away from the strategy of trying to fight fire in wildland areas. Spending significant amounts of money placing vegetation treatments and conducting invasive suppression activities such as building dozer lines in pristine areas far from assets at risk should be phased out. Science and experience has shown the best way to protect lives and property is help create fire resilient communities and to establish evacuation/firefighter safety areas where appropriate. Such an approach is much more cost effective in the long run and reduces environmental damage.

As we have written before in previous comment letters, the Forest Service should take advantage of its authority to provide grants and other assistance to nearby homeowners to improve the fire safety of actual threatened structures rather than attempting questionable modification (and related significantly harm) to vegetation growing outside reasonable defensible space zones.

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.

### **Oakwoodlands and Native Understory**

The Project scoping letter indicates a need to protect oak woodlands "where fuel has accumulated in the understory and meadows with encroaching shrubs." We strongly suggest the Forest Service continue its move away from thinking that native shrubs are somehow "encroaching" as if some natural process has been eliminated and there needs to be mitigation to correct the problem.

During our field observations of Potrero El Cariso, Blue Jay and Falcon Campgrounds we have not observed any unusual shrub growth that is compromising native habitat. A shrubby understory is perfectly natural for the oak woodlands in this area. The meadow of Potrero El Cariso also appears to be in ecologically healthy other than the non-native grasses and weeds that have invaded the area.

We agree that campground infrastructure should be protected and that limited vegetation treatment is justified. But beyond the immediate user area, the district should only lightly thin the vegetation and focus on removing mostly dead material. Understory shrubs provide important habitat for a significant number of animals and plants.

Restoration efforts in the potrero should be limited to removing any non-natives.

## Cumulative Effects

Extensive vegetation treatments have already taken place in some areas proposed again for treatment. The upcoming EA for the Project should consider any harmful cumulative effects of these past vegetation modification activities combined with those planned in the same areas as part of this proposed project. In addition, there should be consideration given to the future in terms of how climate change and increased fire frequency may compromise native shrubland habitat throughout the Trabuco Ranger District.

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.

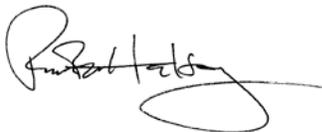
There have been significant impacts caused by vegetation modification projects on the Trabuco District in the past. All of these past projects and the current one should be considered when examining the cumulative impacts. We have provided photos of some of these projects in the linked album below and hope the Forest Service will consider the impacts shown in its cumulative impact analysis:

<https://plus.google.com/photos/111832478062101189732/albums/5444493002476885681?banner=pwa&sort=1>

We thank the Forest Service for considering and incorporating our comments in the past and are hopeful you will continue to do so with this project to better protect human communities, firefighters, and valuable natural resources on the Trabuco Ranger District. We have also provided two papers (including their links below) with this letter to assist in this effort.

Thank you for your consideration.

Sincerely,



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