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31 May 2016

Re: Draft Programmatic EIR for the Vegetation Treatment Program
California Board of Forestry and Fire Protection
Attn: Edith Hannigan, Board Analyst
Email: VegetationTreatment@bof.ca.gov

Dear Ms. Hannigan and Members of the Board,

I am a researcher with the University of California studying vegetation and fire in southern California, specifically the role of non-native, invasive plant species in changing wildfire dynamics and including the use of prescribed fire for reducing wildfire risks. Thus, I was very hopeful that the updated Draft Programmatic Environmental Impact Report (DPEIR) for California's Vegetation Treatment Program would bring a fresh and scientifically-sound approach to these serious issues. Furthermore, I live within the chaparral vegetation type above Santa Barbara, and have been involved with our local Volunteer Fire Department, so these issues are both professional and personal.

Instead of being satisfied with the BOF re-analysis of wildfire preparation planning, I am deeply concerned that this report is inadequate, repeating many of the same short-comings as previous reports and ignoring the input of scientists, conservationists and others. Therefore, I ask that the whole program be over-hauled to correct unsupported statements, that in many cases run counter to current scientific knowledge regarding how to manage and reduce wildfire risks and better protect infrastructure, communities and ecosystems. These misrepresentations are more fully detailed in the response of the the California Chaparral Institute, so I will not repeat them here because I am a co-signer on that document.

Of particular concern is the promotion of the obsolete approach of clearing large areas of native shrubland vegetation, whether by mastication or by prescribed fire, with the intent of altering fire severity and proximity. As the BoF should be fully aware, the most serious wildfire impacts in shrublands (chaparral ecosystems) are during 'fire weather', when vegetation volume is of relatively little significance in determining fire intensity and spread rates. Thus, massive clearing does not have a substantial impact to fire return intervals nor the risk fires pose to communities.

Instead, these disruptive measures tend to promote proliferation of non-native, fire-prone ruderal plants, as we have outlined in a recent publication in the plant science journal *Madroño* (Lambert, A.M., C.M. D'Antonio and T.L. Dudley. 2011. Invasive species and fire in California ecosystems. *Madroño* 38:29-36). Intact vegetation assemblages are destroyed, particularly by repeated use of these vegetation management methods, and are replaced by weeds that increase

probability of fire ignitions. Attempts to manage fire severity have the perverse effect of leading to more ignitions, particularly when conducted along access routes that are where human activity, and thus likelihood of ignition sources, are concentrated. For example, we have observed adjacent to our community at the WUI, a fire that started along a ridge route presumably by cigarette or sparks from a passing vehicle, that burned the approx. 200 feet of adjacent vegetation that had been managed for 'fuel reduction' and then stopped cold at the edge of the undisturbed, mature chaparral vegetation. It bears repeating, vegetation removal promotes weed proliferation, which in turn increases likelihood for ignitions and does little to prevent either fire spread (embers or firebrands cross 100's of meters easily during 'fire weather' conditions when the risks of fire are most severe).

It is a serious failing that the current DPEIR circumvents CEQA requirements by inadequately evaluating significant effects of recommended treatments on natural resources and environmental quality, and mitigation measures to address damage that recommended treatments would impose on our landscape. This is in addition to those recommendations being inappropriate and unnecessarily destructive to ecosystem processes and biodiversity in the first place.

I am especially concerned, and in fact dismayed, that BOF and CalFire continue to promote obsolete and destructive measures that alter entire landscapes, when modern information highlights that fire risk is best addressed at the WUI itself rather than by causing massive alteration of surrounding landscapes. Scientific data indicated that not only is it the Best Management approach to work on vegetation management from the structure outward, rather than from the surrounding landscape inward. That is where protection efforts should be focused, on the structures themselves and the immediately surround vegetation, not away from the WUI. Furthermore, clearing the massive areas at the WUI is also unjustified, as data on vegetation relationships with wildfire show that there is no significant benefit from clearing vegetation further than 100 feet away from structures, yet this DPEIR promotes the unjustified idea that it is necessary to destroy natural vegetation many hundreds of feet away from structures. The data simply do not support these larger mass clearing efforts, as and noted earlier, INCREASE rather than diminish fire risk because they invariably promote invasion and proliferation of highly flammable weeds.

Clearings furthermore remove the protection that shrubland vegetation provides to soils, which otherwise lose organic content, and are exposed to erosion and mass wasting from rain and other forces. They severely reduce the quality of habitat for sensitive wildlife species, and damage watershed resources by enhancing sediment entrance and transport through stream systems, many of which contain Endangered Southern Steelhead Trout and other sensitive and formally protected species.

So, my cursory analysis of the draft PEIR document leaves me very concerned that it represents an incomplete, and rather obsolete, assessment of best practices for managing wildfire risk for the future. In particular, there is abundant emphasis on costly and often counter-productive vegetation removal approaches, especially in shrubland environments such as California chaparral ecosystems. The document largely ignores current scientific understanding and policy recommendations that would be at the same time be more cost-effective, less damaging to natural ecosystems and native biodiversity, and finally, a safer and more realistic approach to managing wildfire risks in California. Management efforts should be more carefully

targeted at the real wildfire concerns in the interest of best protecting lives, property, and the natural environment through an integrative and comprehensive approach focused on the at-risk human communities and immediate surroundings, rather than an unfocused effort to fundamentally alter the natural communities adapted to function in the context of fire. The planning effort should truly be focused instead on fuel modifications within and directly around communities at risk, on ignition sources and potential points of wildfire ignition including the role of flammable non-native plants, on protection of structures via better flammability inhibition, and on comprehensive community and regional planning to improve communication and planning among all stakeholders.

This PIER process requires an unbiased and scientifically justifiable re-consideration, with greater attention of input from independent fire researchers and the conservation community...which has NOT been the case to-date.

Sincerely,

Tom Dudley, PhD

Dir., Riparian Invasion Research Laboratory
& Affiliate, Cheadle Center for Biodiversity and Ecological Restoration

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Hannigan, Edith@BOF

From: janet.franklin1@gmail.com on behalf of Janet Franklin <jfrankl3@asu.edu>
Sent: Tuesday, May 31, 2016 9:12 AM
To: Vegetation Treatment Program@BOF
Subject: comments concerning the draft environmental impact report for Cal Fire's Vegetation Treatment Program

Dear Board of Forestry,

I am writing to submit my comments concerning the draft environmental impact report for Cal Fire's Vegetation Treatment Program. I am concerned that there are a significant number of inconsistencies as the document initially references current science to only qualify or ignore it later in order to support the Program's objectives. The Draft PEIR misrepresents cited scientific literature and depends on anecdotal evidence.

I support the request that you retract the Vegetation Treatment Program Programmatic EIR (Environmental Impact Report) and create a program that will properly consider the entire fire environment, reflect regional differences, allow for independent oversight, and incorporate the most up to date science.

Respectfully submitted,

Janet Franklin

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Hannigan, Edith@BOF

From: Brandon Pratt <rpratt@csub.edu>
Sent: Tuesday, May 31, 2016 5:55 AM
To: Vegetation Treatment Program@BOF
Subject: Draft Programmatic Environmental Impact Report (DPEIR)

Dear Ms. Hannigan,

I recently had a chance to read the Draft Programmatic Environmental Impact Report (DPEIR) and want to express concerns about some of the management approaches. In particular, the approach of fuels treatment (mastication, spraying with herbicide, clearing) in chaparral should be generally abandoned throughout the state. Such treatments transform these ecosystems and diminish the many important services that they provide (e.g. carbon storage among others), as well as their significant biodiversity. Another common phenomenon is that once these stands are altered annuals (many non-native and invasive) become more abundant. This makes these landscapes more prone to frequent fires, and thus more dangerous, because these annuals are dry for much of the year and thus able to carry a fire. A focus on providing defensible space around structures is a strategy that is more effective in limiting loss than the fuels manipulations that are commonly employed. Also, wise development strategies that build-in defensible space around new developments along the urban-wildlands interface will prove more effective in the long term.

I have studied fire and chaparral for many years and spent much time in the field and traveling around the state in chaparral systems, thus I have extensive experience on this topic. I have also engaged land managers in similar systems in Western Australia, central Chile, South Africa, and the Mediterranean Basin and discussed shrubland management in the context of fire. As a California state and federal tax payer I find the notion of funding a destructive and degrading fuels management approach to wildfire management distressing. I teach about these topics to both undergraduate and master's students and they too find this situation distressing. The risk (fuels manipulations may make a system more likely to frequently burn) and dubious cost to benefit of this management approach should weigh heavily in decisions to manage fuels in chaparral systems. If this is done I am confident that it will save tax payer dollars and help preserve the states most extensive, diverse, and uniquely Californian ecosystem type.

Sincerely,

R. Brandon Pratt
Professor
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Hannigan, Edith@BOF

From: Christopher A Reed <chris.reed@ucr.edu>
Sent: Tuesday, May 31, 2016 7:01 AM
To: Vegetation Treatment Program@BOF
Subject: EIR for Cal Fire's Vegetation Treatment Program

Dear Board:

The latest draft is highly problematic:

- Potential impacts are dismissed without support
- Mitigations of impacts are unenforceable and unmeasurable
- Clearance of northern chaparral is justified by logical fallacies
- Research of several scientists continues to be misrepresented (despite corrections being submitted)
- Lack of transparency remains a significant issue.

Please act more wisely.

Thank you

Chris Reed

Professor of Chemistry

Hannigan, Edith@BOF

From: Steve Rothstein <steve.rothstein@lifesci.ucsb.edu>
Sent: Tuesday, May 31, 2016 4:52 PM
To: Vegetation Treatment Program@BOF
Subject: Vegetation Treatment,Program

I have looked at the state's Draft Programmatic Environmental Impact Report for the Vegetation Treatment Program and also the review that the California Chaparral Institute has done of this program. I agree with the California Chaparral Institute that the DPEIR contains significant deficiencies and that the report needs major modifications before the process proceeds.

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Stephen Rothstein, Research Professor and Professor of Zoology Emeritus
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