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Ms. Edith Hannigan, Board Analyst Dr. J. Keith Gilless, Chair Mr. Matthew Dias, Executive Officer California Board of Forestry and Fire Protection P. O. Box 944246 Sacramento, CA 94244-2460 VegetationTreatment@bof.ca.gov

SUBJECT: Draft Programmatic Environmental Impact Report for the Vegetation Treatment Program

Dear Ms. Hannigan, Dr. Gilless, Mr. Dias, and Board of Forestry Members:

Thank you for the opportunity to provide comments on the Draft Programmatic Environmental Impact Report (DPEIR) for the Vegetation Treatment Program (VTP). Vegetation reduction near homes and communities is an essential and effective fire management tool, and most of my comments are focused on how this is defined and described in the proposed action.

Objectives.

Objective 1 focuses on modifying wildland fire behavior, which is influenced by fire suppression and fuels in both structures and vegetation, so this objective is incompletely and inadequately addressed by an exclusive focus on vegetation management.

Objective 2 should be the primary objective for vegetation management, focusing on the wildland urban interface (WUI): "Increase the opportunities for altering or influencing the size, intensity, shape, and direction of wildfires within the wildland urban interface."

There is no scientific evidence for the effectiveness of Objective 3, for vegetation located in the "wildland," far from the WUI: "Reduce the potential size and total associated suppression costs of individual wildland fires by altering the continuity of wildland fuels."

Fuel break effectiveness.

Fuel breaks distant from structures and communities are an ineffective and misguided use of fire management funds. Evaluations of fuel breaks and wildfires in southern California by Syphard et al (2011) showed that only 23% of fires intersected fuel breaks, and only 10 to 23% of those fires stopped at fuel breaks. Firefighters were present at all fuel breaks that stopped wildfires, except for one fire, and fuel breaks were ineffective under severe fire-weather conditions. Fuel breaks located in the WUI are highly likely to have firefighters and fire suppression activities, at the time of a wildfire, and thus far more likely to be effective at stopping wildfire spread.

Fuel break treatments can effectively create strategic control points to allow firefighters to control wildfire in the initial attack phase and when the fire approaches residential structures or other assets at risk. Fuel reduction can also create safe ingress and egress routes along existing roads and driveways in the WUI. Overall, the effectiveness of a given fuel break is low, because wildfires burn a small percent of land each year, and so wildfires rarely encounter burned patches or fuel breaks.

Fuel break maintenance.

Fuel breaks require repeated vegetation treatment, which is unrealistic and unlikely in areas that are not in the WUI. If 60,000 acres are to be treated annually in California, and many fuel break treatments need to be repeated every 5 or 10 years, then calculations of effective fuel break acreage will be far lower than 60,000 x number of years. In addition, maintained fuel breaks often convert to annual grasses, that carry ignitions far more rapidly.

Fuel break width.

There is no rationale for the 1.5-mile-wide WUI, either in the DPEIR or the scientific literature. Embers can definitely be carried that distance in high winds, but such vast areas of ember-free fuel reduction could never be developed or maintained around every at-risk community. Structures need to be built or retrofitted to resist ignition by embers, not rely on "ember-free" WUI zones.

The defensible space around communities is generally accepted to be about 300 feet, and that is primarily to create fuel breaks for structure protection, not to eliminate embers. This complements the creation of defensible space immediately around structures of 100 feet, which is articulated in California's structural fire code.

Range of chaparral.

The separation of northern and southern California chaparral is not based on research or ecological realities. The DPEIR needs to recognize that chaparral in the northern part of the state will likely also be threatened by higher fire frequencies as the climate continues to change. There is no ecological rationale for fuel treatments in any California shrub dominated ecosystems.

Alternatives to proposed action.

The DPEIR fails to address the overriding influence of structure ignitability, and lacks a clearly articulated and analyzed alternative that features structure- and community-based actions to reduce wildfire risks.

Scientific research and decades of experience of wildland firefighters have shown that the most effective way to prevent the loss of life and property from wildland fires is to work from the house out, to reduce home flammability with non-flammable materials and features, ember-resistant vents, removal of debris from roofs and adjacent to the structure, and more. And then to properly maintain defensible space, within 100 feet of the structure. An even more effective alternative is to cease zoning and building homes and other structures in locations that have high wildfire risks.

Project level analysis and review.

The purpose of a programmatic EIR is to provide sufficient detail about a related group of actions, so that CEQA analysis does not need to be done for each project. While the VTP is meant to provide an overview of the comprehensive wildfire risk reduction program, the DPEIR must still provide sufficient information to determine how the VTP would be implemented and how it will affect environmental resources. Yet the DPEIR defers to managers at the individual project level, without public review of the checklist and extensive project description that would be prepared.

The at-risk resources, expected fire behavior, fire suppression strategies, establishment, and maintenance of fuel breaks should be developed, publicly reviewed, and subjected to CEQA analysis. The establishment and maintenance of fuel breaks need to build on and be limited to the fuel breaks identified in the Unit Fire Plans and Community Wildfire Protection Plans.

The project level analysis needs to be available for public review, to ensure that each project is consistent with the final approved PEIR for vegetation treatment. Project managers need to identify, reach out to, and work with stakeholders in their community, and keep them informed about project progress, modifications made to the project plan or implementation, completion of the project, and outcomes from the vegetation treatment.

The public notification and opportunity for involvement needs to be realistic and robust. CalFire needs to maintain an online list of proposed, current, and completed projects in each unit, with the draft project plans and schedule of public meetings and comments.

Scientific evidence.

Although the vegetation treatments are described in greater detail than in earlier drafts, there is still limited and inadequate scientific basis for their effectiveness. Experts have provided the Board of Forestry with extensive literature that apply to the proposed actions, much it still not included.

The DPEIR still has inconsistencies, statements unsupported by scientific literature, misrepresenttations of citations, contradictory statements, and undefined terms. The conclusions for several papers (notably Keeley and Syphard 2016, and Syphard et al 2011) are incorrectly represented. The DEIR has such anecdotal evidence as the distances that embers can be carried by wind. Important terms are not defined, including old growth chaparral, critical infrastructure, and forest health.

Future conditions.

With the impacts of human-caused climate change accumulating much faster than recent predictions, it is imperative that the DPEIR consider the driving factors of drought and severe weather patterns. Vegetation conditions, response of vegetation to prescribed fire, and regrowth after mechanical or other treatments may be different than past experiences, in a future changed climate.

Closing.

Thank you for this opportunity to comment on the DPEIR for the Vegetation Treatment Program, which has important, but not sufficient, tools for reducing wildfire risks and losses.

Sincerely,

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