

July 8, 2015



Protecting Marin Since 1934

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Subject: Vegetation and Biodiversity Management Plan and Draft Tiered Program Environmental Impact Report

Dear Mr. Raives:

The Marin Conservation League (MCL) has reviewed the Vegetation and Biodiversity Management Plan (VBMP, or Plan) and associated Draft TPEIR and wishes to submit general comments on the VBMP and TPEIR, as well as specific comments that relate to deficiencies in the Draft TPEIR. It is our understanding that the VBMP is labeled as a "Draft," but is unlikely to be revised. Since the Plan constitutes the "Project" and the subject of impact analysis, however, we believe our comments on the Plan are relevant to the "adequacy" of the Project Description and other sections in the TPEIR and should be incorporated as appropriate in the Final TPEIR.

MCL strongly supports the purpose and direction of the VBMP and Draft TPEIR

MCL strongly supports the purpose and direction of the Vegetation and Biodiversity Management Plan. The 34 open space preserves are a significant component of Marin County's natural heritage. They are under increasing threat from climate change, invasive plants, pathogens, wildfire, a historical legacy of misuse and neglect, ongoing disturbances caused by managing fuel to reduce risk of wildfire, and intensifying recreational uses. Additionally, a recent public initiative could inhibit the use of herbicides as a tool to combat the exponential growth of invasive plants on the preserves. We are pleased that for the first time in the history of the Open Space District, the VBMP provides the knowledge, procedures, and tools to address all of these threats. Notwithstanding the Plan's merits, MCL believes it could be strengthened through the Final TPEIR in several ways, as follows.

The VBMP and TPEIR should make a stronger case for the central importance of biodiversity. Protecting biodiversity, along with reducing wildfire risk, is the fundamental reason for preparing the Plan. The ecological elements that make up biodiversity on the preserves are summarized on pages 2-3 to 2-5 of the VBMP, and they are presented throughout the Plan in the many pages of tables of preserve conditions and sensitive species. A key paragraph that summarizes *why biodiversity is important to protect*, however, is buried at the end of page 2-5, beginning: "...areas of high biodiversity provide important ecological functions, such as food and shelter for wildlife, natural water purification and filtration, storage of carbon in living plant tissue and in soils, and other essential ecological functions..." And so on.

This paragraph should be brought forward into the Final TPEIR Summary of Findings. At present, the Draft TPEIR simply notes the three purposes listed in the Plan, namely maintaining

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biodiversity, maintaining emergency and public access, and managing fuel characteristics to reduce wildfire threat (Draft TPEIR p. 17; Plan p. 1-5). This bland statement assumes that the public understands and appreciates the importance of maintaining biodiversity as essential to all life forms, including human well-being, just as they understand the importance of preventing wildfire as critical to human safety. We don't think this is the case.

One purpose of the Plan and the TPEIR should be to educate the public about the importance of biodiversity generally and of the biodiversity of the preserves specifically. Since there is no intention to modify the Plan, this function should be handled in the TPEIR.

**The Final TPEIR needs to contain a clear explanation of the values and functions of Marin's native plants and habitats and an explanation of what would be lost if they were allowed to degrade or disappear. This should include the value of these biota not only within their biological environment, but also in educating and inspiring the citizens of Marin as well as visitors from abroad.**

The VBMP and TPEIR should demonstrate a stronger connection with the Road and Trail Management Plan. The VBMP lays the groundwork for the RTMP in zoning vegetation according to rarity and sensitivity to disturbance, presumably to guide the designation and potential future development of roads and trails away from the most sensitive "Legacy" and "Sustainable Natural Systems" zones. Missing from the Plan, however, is a section that relates recreational use to specific requirements for vegetation management. The VBMP, Chapter 3, Assessment of Regional Trends... (p. 3-9), emphasizes the importance of tying resource protection and restoration actions to visitor access improvements, especially given the strong link between trails and invasive plant infestations and continued public pressure for more public access and more diverse types of visitor use. Other impacts to vegetation besides invasion of non-natives species can result from excessive recreational use, including habitat fragmentation, vegetation trampling, soil and duff compaction, and alteration of water regimes.

These links between recreational infrastructure and the need for both protection and management of vegetation are scattered throughout the Plan, but the TPEIR suggests that implementation of the RTMP and the VBMP will be independent of each other (See pp. 102 and 132).

**The Final TPEIR should identify how the two Plans can and should work together with a common purpose of preserving natural resources, especially where projects overlap, e.g., a trail decommissioning or realignment, combined with a treatment program to eradicate invasive plants, followed by revegetation.**

A clearer picture of the extent of non-native plant invasions in the preserves is needed. CEQA requires a clear description of existing conditions to serve as an impact baseline. In Table 4, (Priority Invasive Plants and Acres Infested), and in Table 5.1 (Invasive Plant Projects), the TPEIR provides an extensive inventory of particular species of concern, the affected preserves, work that has been accomplished, and recommendations for ongoing or future work. Informative though it is, it does not describe the current extent of plant infestations, both as an estimated number of acres infested, and as a percentage of the overall preserve acreage under

management. (And it is unclear whether the acreages in Table 4 are cumulative or overlapping.) This information is necessary to convey the extent and severity of current plant infestations, and to facilitate an understanding of the impacts that would result if the No Project alternative were adopted. It will also be necessary in order to assess the success or otherwise of the Plan in achieving its goals. The data in these tables, and in Tables C.1 (Non-Native Plants in the Preserves), and C.2 (Priority Invasive Plants in the Preserves) are a start in the right direction.

**In order to fully account for the impact of doing nothing (the No Project Alternative), and to establish a baseline for work to be undertaken in the Plan, the Final TPEIR should provide an overall quantification and a meaningful narrative, including acres infested, expected rate of expansion, and the exponential nature of plant invasions generally. This should replace the vague qualitative statements in Chapter 6 and Table 6.0-1.<sup>1</sup>**

The List of Significance Criteria for impacts on biological resources should include “substantial” loss of ordinary native habitat acreage to fire, pathogens and plant invasions. The focus of the Biological Resource Impacts listed at page 126 is exclusively on special status wildlife and high value habitats. This is unduly restrictive. The total quantity of native habitat in the preserves, regardless of its “quality,” is itself an important value to be considered and protected. The TPEIR should acknowledge the significance of loss of native habitat to fire, pathogens or invasive plants, regardless of whether the habitat lost is of high value. This is necessary to clarify to decision-makers and members of the public that any limitations imposed on the management strategies proposed in the Plan could result in significant habitat loss and trigger necessary mitigation measures or consideration of alternatives. Section 15064(b) of the CEQA Guidelines and the cases interpreting it authorize lead agencies to adopt project-specific or plan-specific standards of significance.

**The Final TPEIR should include an additional Significance Criterion for loss of native habitat as a likely significant impact of the No Project Alternative and possibly the Minimal Management Alternative. In addition, the Cumulative Impact discussion should consider the significance of cumulative loss due to the co-occurrence of more than one of the various threats to which the preserves are subject.**

Impacts of fuel management activities on wildlife habitat and movement opportunities are not adequately mitigated in chaparral communities. Impact 5.1-4 *Wildlife Habitat and Movement Opportunities* identifies activities associated with creating fuel breaks and defensible space as being disruptive to vegetation and wildlife habitat. These include thinning of trees, creating separations in canopy, and breaking up continuous vegetation. As mitigation, BMP-Fuel Management-13 has been augmented to include giving consideration to “...limiting excessive thinning or disruption of continuous canopy to native woodland and forest cover.” Omitted from consideration are several vegetation alliances that, together, constitute “chaparral.” Chaparral subtypes are present on many of the preserves, often in association with serpentine alliances. The

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<sup>1</sup>Another bit of information is unclear. Non-Native Forest and Scrub is described as a habitat type at p. 111, and 41.4 acres of eucalyptus are noted as existing on preserve lands at Exhibit 5.1-1 (p. 107). It is unclear if this acreage includes other plant species in the Non-Native Forest and Scrub category or only eucalyptus, and what the acreage of the other plants in this category is.

Draft TPEIR acknowledges that chaparral is a “sensitive natural community” (P. 114), and Table B.2 in the VBMP lists occurrences of “chaparral” alliances on many preserves, but considers them sensitive only in relation to the special status plant species they host. Chaparral plays a vital role as habitat for diverse wildlife. It is particularly rich in wildlife species along ecotones with other scrub communities, and woodland or forest. (Chaparral also is important as watershed cover, requiring little water for survival while effectively holding soil, dissipating the energy of rainfall, and regulating storm runoff.) Chaparral is also a typical target of fuel management activities, due to its flammability, and too often is viewed solely in those terms. The Draft TPEIR estimates that only 0.8 acres of mixed chaparral might be affected by fire fuel management activities. (p. 138) This seems to be an unrealistically low estimate, in view of its prevalence along ridgelines that are the target of fuel break planning.

**The Final TPEIR should expand the description of the role played by chaparral alliances on the preserves as wildlife habitat, reassess the anticipated losses considering its vulnerability to fuel management, and should augment BMP-Fuel Management-13 to include giving consideration to avoiding excessive thinning and other reduction of this important vegetation cover type.**

Consider adding an alternative for invasive plant management without glyphosate as a tool. Since a limitation or prohibition on the use of glyphosate resulting from the recent IARC designation of glyphosate as a “probable carcinogen” is a possibility, and decision-makers and members of the public need to be informed about the consequences (“impacts”) of such an action before it is given serious consideration, consider adding an alternative, or modifying an alternative to consider what the impacts of a limitation or prohibition of glyphosate use would be.

**The Final TPEIR should evaluate a sub-alternative that excludes glyphosate from the IPM tools currently used by MCOSED to manage invasive plants. In addition, the Final TPEIR should expand the discussion in Appendix E and Chapter 5.5 Hazards and Herbicide Use to include the latest information on the IARC listing of glyphosate as a probable human carcinogen.**

Additional mitigations for herbicide exposure should be considered. Additional mitigation measures to protect preserve users from herbicide exposure should be considered in the Final TPEIR. Public meetings have shown strong public opposition to herbicide use in the preserves. The Draft TPEIR refers the reader to the BMPs in the Plan at page 7-20, Table 7.5. Of these, BMP-1 lists BMPs to address potential herbicide exposures to applicators and preserve users. These include posting the treatment site four days in advance of application, posting a map of the site showing the area to be treated, and removing the notification four days after application. See also TPEIR at p. 269.

**In addition to these measures, the Final TPEIR should include the following mitigation measures: 1) Maintain the notification maps in place for at least six months following treatment; and 2) Post on the county parks’ website for at least six months after application the locations that have been treated, including the site map and the treatment date.**

These additional measures would address users' concerns about post-application exposure to treated foliage and would provide preserve users with a reasonable certainty that they could avoid contact with herbicides.

The Mitigation Measures to protect preserve users from herbicide exposure to impacted waters are not well explained. In the TPEIR, Exhibit 2.0-1 (p. 21) presents a Summary of Impacts and Mitigation Measures. Impact 5.2-3 is Degraded Water Quality and Substantial Additional Sources of Polluted Runoff (p. 33-34). The explanation for this impact states that foliar spray application of herbicides, as analyzed in the risk assessment at Section 5.5, would result in significant impacts to "preserve user exposures" (sic) originating as either ingestion or dermal absorption. The listed mitigation measure is 5.2-1 (p.30), which incorporates Mitigation Measure 5.5.1 (p. 39). This includes two mitigation measures, both of which focus almost exclusively on protection of water quality and ecological receptors, not preserve users.

**While the measures cited above may indirectly protect preserve users, the mechanism by which they would do so should be clearly explained in the Final TPEIR.**

Impact 5.5.2 in Exhibit 2.01 is Applicator and Preserve User Exposure to herbicides. It states that by following label requirements, Pest Control Advisor recommendations and BMPs in the Plan, the impacts would be less than significant, and no mitigation measures would be required. It doesn't state which BMPs apply or where to find them in the Plan. Presumably the BMPs referred to are those on p. 7-20 of the Plan, namely: BMP-1 (follow Integrated Pest Management (IPM) practices, i.e. use of licensed professionals and posting prior notification with a site map).

**The Final TPEIR should identify clearly for readers which BMPs are applicable to avoid or minimize exposure of applicators and preserve users to herbicides, and where they can be found in both documents.**

Consider adding exposure of preserve visitors to herbicide as a major issue. Considerable public interest has been raised about herbicide use in the preserves. The analysis in the Draft TPEIR concludes that with implementation of the listed mitigation measures/BMPs, such use poses no significant impact in the form of exposing preserve visitors to herbicides (p. 269, Impact 5.5-2).

**Based on the evaluation and mitigation measures and BMPs provided in the impact analysis, consider adding to the list of Major EIR Conclusions at p. 45 that exposure of public visitors in the preserves to herbicide use poses no significant impact.**

Reference the Vegetation Management Programs and Policies of Other Leading Agencies. The TPEIR explains that one of the objectives of the Plan is to "work with adjacent public landowners and partner agencies to create a consistent approach to vegetation management issues; establish, prioritize, and standardize vegetation management actions." P.54. The VBMP devotes Chapter 3 to *Assessment of Regional Trends, Practices, and Science*, based on consultation with a dozen land management agencies and organizations. The Draft TPEIR fails to discuss the importance of these consultations, or reference documents that explain how other agencies are handling vegetation management issues. Reassuring readers that the approaches in the Plan and TPEIR are standard among leading agencies in the field of vegetation management, particularly the National Park

Service and State Parks, provides support for the management actions discussed in the Plan and Draft TPEIR.

**Consider incorporating by reference some of the reports on vegetation management and herbicide use generated by the Marin Municipal Water District, particularly:**

**1) Interim Background Report No 1: Non-chemical Weed Control Techniques (which explains why these techniques are generally not cost-effective).**

**2) Interim Background Report No. 2: Chemical Weed Control Techniques (which support the cost-effectiveness of using herbicides).**

**3) Final Report: Environmental decay of glyphosate in broom-infested Mt. Tamalpais soils and its transport through stormwater runoff and soil column infiltration (which supports statements in the TPEIR regarding the non-persistence of glyphosate in soils).**

If you have questions, please address them to Nona Dennis or Paul Minault, c/o MCL. MCL appreciates the opportunity to comment and looks forward to reviewing the Final TPEIR and Response to Comments in coming months.

Sincerely yours,

A handwritten signature in blue ink that reads "Kate Powers". The signature is written in a cursive, flowing style.

Kate Powers, President