

December 5, 2014

Marin County Parks and Open Space District
3501 Civic Center Drive, Room 260
San Rafael, CA 94903



Attention: James Raives, Senior Open Space Planner
By e-mail

SUBJECT: Draft Road and Trail Management Plan, Final Tiered Program Environmental Impact Report (Final TPEIR), and Analysis of Policy-Related Comments

Dear Mr. Raives:

As the Road and Trail Management Plan approaches the final stage of review and adoption by the Open Space District Board of Directors, Marin Conservation League wishes to thank Marin County Parks Department for the opportunity to participate in the almost four-year process of preparing the Plan. The RTMP charts new territory in describing the rich and diverse natural resources and the recreational conditions in the County's 34 open space preserves, and by attempting to set broad policy and guidance for their management in coming years.

MCL has submitted numerous comments and recommendations during the planning process. Most have been addressed in the environmental documents and the Draft RTMP itself. As we have stated previously, however, critiquing the Final TPEIR (the purpose of the current comment period), has required critiquing the Draft RTMP itself, since it constitutes the "project description" analyzed in the TPEIR (CEQA Guidelines 15124(c). As the "project," the Draft RTMP is deficient in a key respect: viz., the absence of clearly stated design standards for safe sharing of multi-use trails by different user groups.

Our comments below consider: 1) the rationale underlying the need in the RTMP for design standards for safe multi-use facilities; 2) how the Draft RTMP does and does not address safety for multi-use facilities; and 3) how design standards can be included in the Draft Plan. Note that while we can point to other deficiencies in the Final TPEIR, our goal is not to gain a "better" EIR – the Final TPEIR is probably legally "adequate" as it stands – but rather to focus on a serious deficiency in the RTMP and ensure that it is corrected before the plan is adopted.

1. Why design standards are needed in the RTMP for safe multi-use trails

Safety is more than a perception, or a "state of mind." Among the myriad concerns of public land managers, dealing with "conflict" among different user groups generally ranks highest, whether it involves walkers, runners, dog-walkers, bicyclists, or horses. The literature on "conflict" among different user groups on trails in natural areas is lengthy and complicated, but is notably lacking in hard data. Although the terms conflict and safety are often used interchangeably, safety is only one facet of conflict, but it is critical to the security and peace of mind of all visitors to the county's open spaces. Because reported injury accidents between users are relatively rare, it is generally assumed that safety is not "real" – that it is a matter of perception or a state of mind rather than physical reality. For this reason, the TPEIR identifies "safety" as a social phenomenon and refuses to consider possible environmental impacts.

In the design or designation of narrow trails – or the narrowing of existing ranch roads – for multi-use by hikers, equestrians, and bicyclists, however, safety is more than a perception; it is represented by real conditions and real hazard. For a hiker on a narrow trail on a steep slope with drop-off, the sudden encounter with a mountain bicycle is a *physical* circumstance – often a “near miss” that may never be reported. For an equestrian the result could be a spooked horse and frightened rider, again going unreported. Or it could be life-threatening, as it was in Indian Tree Open Space Preserve a year ago when two mountain bikers appeared suddenly speeding down an illegal narrow trail, causing serious injury to an equestrian and her mount.

The *Analysis of Policy-Related Comments* that accompanies the Final TPEIR appears to confirm the view that safety concerns can stem from real conditions, even though actual incidents are relatively rare. Under Item I.B, it states: “*...the primary reason that mountain bikers are prevented from using most narrow trails within the open space preserves is that these trails are not constructed for safe multiple uses. Many of these trails can be narrow and overly steep, may not include appropriate turnouts and safe lines-of-sight, and may include features such as stairs that make these areas unsafe for bicycles*” (added: as well as for other users).

The RTMP will likely expand current bike usage of Marin County’s narrow trails, requiring heightened safety measures. Throughout the RTMP public process, the dominant requests for trail improvements in the RTMP have come from the mountain biking community arguing that mountain bikers have been unfairly deprived of past access to “single-track” (aka, narrow natural-surface trails, or foot paths); that in view of the growing popularity of the sport, they should be granted increased access in the future. Objectives incorporated into the RTMP make it clear this is likely to happen on the county’s open space preserves. For example, *Analysis of Policy-Related Comments*, Item I.C, states: “*The RTMP creates a process for the MCOSD to consider implementing projects that would physically modify and designate additional trails for shared uses.*” This phenomenon is not limited to Marin, where bicyclists already have access to several hundred miles of former ranch roads and fire roads as well as selected multi-use trails throughout the county. There is a growing recognition by managers of public lands that bicyclists are seeking increased access to *narrow* trails, and in an attempt to satisfy this demand, managers are responding by testing various approaches. They fall into three general categories, all of which are important¹:

- Management of the road and trail system to minimize unsafe encounters on multi-use facilities. Numerous management strategies can minimize but not eliminate safety conflicts among different users, beginning with classifying trails (appropriate for different user groups), setting rules and regulations such as speed limits, restricting use of selected trails, clear signage, separating users in space or time, employing one-way traffic, and similar tactics. To be effective, all of these actions require consistent and meaningful enforcement.
- Education and outreach programs to engage visitors in cooperative use of open space. The preferred strategy for most land managers is to encourage good etiquette (i.e., responsible, safe behavior) on trails through education and voluntary measures rather than relying heavily on rules, regulations, and enforcement – by reaching out to user groups to acquaint them with the needs of other users and their differing expectations for recreation, including safety; and by engaging volunteers in mixed groups to work together.

¹Trail Use and Conflict Study - California State Parks Road and Trail Change-in-Use Programmatic EIR, 2012

- Design new trails, or redesign (convert) existing roads or trails, for safe shared use. Research has demonstrated over and over the potential for conflicts between hikers (and equestrians) and bicyclists, particularly at higher levels of use. Differences in rates of speed and lack of room to pass are the two most often cited factors related to user safety in mixing bike use with foot or equestrian traffic. Therefore, if the intention of the RTMP is to design or redesign trails for safe multi-use, first consideration must be given to the physical conditions under which people traveling on foot or on horseback will encounter bikers, and vice-versa. Trail treads must be sufficiently wide, with turnouts or shoulders, to allow for safe passage of one traveler by another and insure adequate visibility (line of sight) to avoid near misses or collisions due to blind corners. Trail design for safety also needs to manage speed by maintaining moderate gradients (important also in design for sustainability) and, where necessary, incorporating design features to control bike speed, such as through sinuous trail layout or introducing pinch or choke points.

2. How the Draft RTMP does and does not address safety for multi-use trails.

The Draft RTMP does acknowledge the existence and need for management of conflict among recreational users, including safety concerns, in the Statement of Purpose and Goals and in Guiding Principles for Managing Roads and Trails in the MCOSD Preserves, and in numerous policies drawn from the 2007 Countywide Plan and policies developed specifically for the RTMP. The RTMP does not adequately address designing trails for safety except as noted below.

- Although not organized in this order, numerous policies among the 80-some policies listed in Chapter 4 in the RTMP address *management of safety* in the road and trail system through various prohibitions and restrictions (such as off-trail bicycle use), speed regulations, designation of trails for specified user groups, optional tools for separating user groups in time or space, signage, enforcement of rules, etc. And the RTMP contains policies that address *education and outreach* as a means to gain safe trail behavior and trail “etiquette” through voluntary cooperation.
- Numerous other policies in the RTMP are directed toward protecting sensitive resources and maintaining sustainable trails, such as through seasonal restrictions. These policies are supported and reinforced in Chapter 6 by design standards for sustainable roads and trails, and by detailed best management practices (BMPs) for both sustainability and protection of sensitive habitats.
- What the Draft RTMP does not adequately address is the importance of *design for a safe multi-use trail system*. With the exception of two policies drawn from the 2007 Countywide Plan – [TRL-2.3 **Ensure User Safety**. *Plan and maintain trails to protect the safety of trail users;* and TRL-2.e **Design Safe Trails**. *Design trails so that their surfaces, grades, cross gradients, sight distances, width, curve radii, vegetation clearance, and other specifications are consistent with anticipated uses*] – the RTMP contains no further reference to safety features such as these. Yet the *Analysis of Policy-Related Comments* (Item I.B, above) seems to affirm the need for safe design: mountain bikes are not currently permitted on most existing narrow trails because the conditions are unsafe. A core problem is that if some of these trails are “improved” (i.e., redesigned) for access to *responsible* bikers they also become available to *irresponsible* bikers, and this must be factored into both design and management of trails. Education and outreach

strategies are unlikely to change behaviors among this fraction of mountain bikers.

- Chapter 6 of the Draft RTMP (Standards and BMPs) does not include any standards for design for safe multi-use trails, nor does it include BMPs for that purpose. Four trail manuals are cited at the beginning of the chapter as references for detailed design and engineering specifications. County Park staff continue to claim that these manuals will provide the necessary standards for safety and therefore there is no need to include explicit multi-use design criteria in the RTMP. On examination, one finds that three of these manuals are silent on the subject of designing for multi-use. Only one (County of Los Angeles Trails Manual) considers design for multi-use (in fact, assumes multi-use of most of the county's trails): "*A goal of trail planning is to design trails for use by hikers, equestrians, and mountain bikers . . . proper trail design should take into account the needs of expected user types, as well as the conditions of the proposed trail alignment.*" Although the 188-page Manual contains many engineering specifications for sustainable (and, indirectly, safe) trails, only two paragraphs provide guidelines specific to safety in design of multi-use trails: optimum width and/or turnouts, and minimum line-of-sight as a function of grade. Reference to two paragraphs in a Manual that must be located online and searched by the reader is not a sufficient or acceptable substitute for including key design parameters in the RTMP.
- The “Evaluation Tool”, Chapter 5 of the RTMP, will be central to establishing the open space preserves’ environmental baseline “system” of roads and trails, and in evaluating the environmental impacts of proposed projects on an annual basis. Twenty-five environmental and physical criteria, plus seven social criteria, are listed, but trail design for multi-use safety is suggested only once indirectly in connection with line-of-sight. Security and peace-of-mind as “social” aspects of safe recreational experience are not included in the list of social criteria.

In response to commenters' requests in the Final TPEIR that criteria (or standards) for safety and displacement of users be included in the Evaluation Tool, the *Analysis of Policy-Related Comments* claims that "*design standards incorporated into the RTMP contain several safety standards that address such factors as trail width, running slope, line of sight, speed control, and pull outs*" (Item V.D). This statement is patently false, although that claim is repeated under Items V.G, VII.A.3, and VII.A.8. In fact, the only such standards are those incorporated by reference in the Los Angeles Trails Manual.

- Finally, the *Analysis of Policy-Related Comments* (Item VII.E.1) states that ". . .the primary purpose of the RTMP is to assess the existing physical aspects of road and trails managed by the MCOSD and to provide guidance and standards for the future management of the road and trail system." This appears to ignore two of the three central goals of the Plan stated in Chapter 1 in the RTMP, viz., "*Reduce the environmental impact of roads and trails on sensitive resources . . .*" and "*Improve the visitor experience and visitor safety.*"

3. How the Draft RTMP can include safety design standards or criteria.

MCL recognizes that many variables enter into design for multi-use trail safety, and design must be adapted to site conditions. For example, tread width for safe passing will depend on slope and line of sight and many other factors; the term "narrow" can be measured in different ways, depending

on context. The need for techniques to slow bike speed will depend on terrain. And so on. In relying solely on two policies from the Countywide Plan and NOT including safe design in Chapter 6 (Standards, BMPs) or in the Evaluation Tool (criteria), however, the RTMP dismisses the basic parameters of safe design and in so doing fails to adequately address a central source of conflict, especially if usage of narrow trails expands to include bikes as appears likely.

Adding these components to the Draft RTMP should not be controversial. They are consistent with and intended to implement Countywide Plan policy to design safe trails. They also reflect safety recommendations listed in a comment letter in the Final TPEIR from Marin County Bicycle Coalition. Although these recommendations were taken from the California State Parks' Programmatic EIR on Roads and Trails Change-in-Use, similar approaches to designing for multi-use safety are being tested by other public land managers, with qualified success.

Opportunity exists to include recommended design standards and BMPs in the August 1, 2014 *Draft* RTMP Chapter 6 on standards and BMPs, and in the Evaluation Tool (which we have been told is a "work in progress"). The opportunity also exists to monitor the effectiveness of safe design in addressing user conflicts in the Final TPEIR's proposed "Project Development Worksheet" by adding key design standards, BMPs, and/or criteria. If the Project Development Worksheet is to function in lieu of a CEQA Mitigation Monitoring and Reporting Program, however, a column for post-implementation status must be added, indicating appropriate time periods for ongoing monitoring. The effectiveness of ALL approaches to safe multi-use should be monitored and adjusted as necessary over time.

In conclusion, MCL sees the RTMP as the "living document" that County Parks Department claims it to be – not perfect, but an extraordinary piece of work that needs to be tested. Assuming that the additions recommended above are incorporated into the Draft, we look forward to playing an active role in implementing the RTMP.

Sincerely yours,


Jon Elam, President


Nona Dennis, Chair, Parks and Open Space Committee

cc: Supervisor Susan Adams
Supervisor Judy Arnold
Supervisor Steve Kinsey
Supervisor Katie Rice
Supervisor Kate Sears
Marin County Parks and Open Space Commission
Monte Kruger, Marin Horse Council
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