

25 August 2008

Santa Barbara County Board of Supervisors 123 E. Anapamu Street Santa Barbara, CA 93101

## Subject: Review of Grassland Sampling/Vegetation in the Santa Barbara Ranch Revised DEIR (04EIR-00000-00014)

Dear Supervisors:

The California Native Plant Society (CNPS) recently became aware of a proposed plan for the Santa Barbara Ranch Revised DEIR by the local Channel Islands Chapter of CNPS. In particular, we are concerned with the evaluation of grasslands onsite; it appears that consultants did not perform adequate quantitative measures and qualitative descriptions of grasslands. Also, the vegetation classification system (Holland 1986<sup>1</sup>) used in the report is outdated and inadequate; this classification system has been replaced by CNPS and California Department of Fish and Game (CDFG) state classification system, as described in the CNPS' Manual of California Vegetation (Sawyer and Keeler-Wolf 1995<sup>2</sup>) and CDFG (2003<sup>3</sup>), and by the National Vegetation Classification System (NVCS 2008<sup>4</sup>).

The Coastal Commission considers native grassland habitats ESHA, and all developments are prohibited when they result in direct and indirect impacts to ESHA and when they are not associated with improving or enhancing ESHA. In addition, Santa Barbara County's Thresholds Manual finds that grasslands are rare in Santa Barbara County, and that native grasslands (grasslands with at least 10 percent cover by native grassland species) is a sensitive and important habitat type, ESHA.

The grasslands onsite have not been identified properly because the timing of the surveys was not adequate to capture completely native forb and grass species. In addition, the method/evaluation of field surveys did not adequately identify native forb species. Grassland surveys in particular need to be conducted in to different seasons (spring and summer) to identify which grass and forb species are present and when

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<sup>&</sup>lt;sup>4</sup> U.S. Geological Survey National Vegetation Standard (NVCS). 2008. The vegetation classification and mapping standard used by all federal agencies (and CDFG). Available: http://biology.usgs.gov/npsveg/nvcs.html.



<sup>&</sup>lt;sup>1</sup> Holland, R.F. 1986. Preliminary Description of the Terrestrial Natural Communities of California. California

Department of Fish and Game, Sacramento, CA. <sup>2</sup> Sawyer, J.O., and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento, CA.

California Department of Fish and Game (CDFG). 2003. List of Terrestrial Natural Communities Recognized by the California Natural Diversity Database. California Department of Fish and Game, Sacramento, CA. Available: http://www.dfg.ca.gov/whdab/pdfs/natcomlist.pdf.

they are abundant. Thus, surveys at any given location need to be conducted more than once per year, and possibly across more than one year since the grassland species varies as climate varies each year. Also, surveys need to be conducted at multiple locations with multiple samples per type because micro-site variation exists regularly in grassland habitats.

In areas identified as annual grasslands, non-native Mediterranean grasses dominate and are favored at certain times of the year and certain years, while native wildflower species (such as *Deinandra fasciculata* and *Eremocarpus setigerus*) and grass species (such as *Nassella pulchra* and *Vulpia microstachys*) are favored at other times of the year and certain years. If sampling was conducted later in the spring or summer (which was not done), and if all the forb species were accounted for in the sampling, a greater area of grassland would have been identified at more than 10 percent cover by native grassland species. Sampling procedures were not adequate onsite because they sampled each grassland area in a single sampling effort (or at a single time), instead of sampling across the spring and summer seasons.

Vegetation sampling methods need to identify all plants (including forbs/wildflowers) that are identifiable from the current year's growth (even if they flowered earlier in the season or will flower later in the season). Since annual and perennial grassland species are present/active at different times of the year, sampling methods for evaluating grassland features on a proposed project site need to include sampling across the spring and summer seasons and usually across more than one year, so to record accurate information on the different species that occur at a site and to estimate (relative) accurate cover. The summer dominance of annuals known to the site, such as *Deinandra fasciculata*, definitely exemplifies the need to sample in summer as well as spring.

With the project site using transect (or even plot-based) sampling as their primary method, they need to capture all the species that may hit/occur along a line or along set intervals along a transect. This was not apparent and was not recorded adequately onsite. The sheer number (abundance or frequency) of native species was lower than what is actually present onsite, and therefore, the consultants did not adequately identify and evaluate for native grasslands.

Also, survey efforts need to be rigorous enough to include an adequate number of samples across the grassland landscape to capture the variation or patchiness of grassland types. Since micro-site patterning of soils, natural disturbance, and topography typically occurs in grasslands, the sheer presence (as well as cover of annual and perennial vegetation cover) needs to be addressed. Some sites provide a diversity of native species, and they may display low to high cover estimates depending on the micro-site. Thus, a more rigorous sampling at multiple locations is necessary to capture this detail.

In addition, the EIR and the County should identify and evaluate any sensitive grassland resources without relying solely on a 10% cover threshold for native plants. Grasslands are important biological habitats, regardless of which species are dominant. Reports by Davis et al. (1995<sup>5</sup>) and by Jones & Stokes Associates (1989<sup>6</sup>) support the fact grasslands [referring to non-native grasslands] can be rich in native plant species and are important habitat to many animal species, including birds, invertebrates, reptiles and small mammals, and grasslands of any nature can have the highest biodiversity of any plant community (next to riparian) in California.

The term "Non-native Grassland" used for grasslands dominated by non-native grasses is inaccurate and imparts a bias against this complex of herbaceous plant communities dominated by Mediterranean grasses as not worthy of consideration as biologically important. Consequently, CNPS and CDFG do not use the terms "Non-native Grassland" and "Native Grassland" to denote different grassland types. We think it is more appropriate to use the terms such as "California Annual Grassland" (Sawyer and Keeler-Wolf 1995).

Sincerely,

Amanda Jorgenson Executive Director

<sup>&</sup>lt;sup>5</sup> Davis, F.W., P.A. Stine, D.M. Stoms, M.I. Borchert, and A.D. Hollander. 1995. Gap Analysis of the Actual Vegetation of California: 1. The Southwestern Region. *Madroño* 42: 40-78.

<sup>&</sup>lt;sup>6</sup> Jones & Stokes Associates, Inc. 1989. Sliding Towards Extinction: Reassembling the Pieces. A report to The Nature Conservancy. Jones & Stokes Associates, Sacramento, CA.