



25 August 2014

Honorable Board of Supervisors  
**COUNTY OF LOS ANGELES**  
500 Temple Street  
Los Angeles, CA 90012

**Re: SANTA MONICA MOUNTAINS LOCAL COASTAL PROGRAM, ITEM 6**

Dear Honorable Board of Supervisors:

This letter is written on behalf of the Coastal Coalition of Family Farmers, who requested that a review and commentary on recent literature pertaining to agriculture, and viticulture in particular, in context to environmental consequences of agricultural practices.

First, the County of Los Angeles (“County”) and the California Coastal Commission (“CCC”) are to be commended in crafting an updated Local Coastal Program for the Santa Monica Mountains (“LCP”) that implements well the Coastal Act’s obligation to protect fragile coastal resources for the benefit of the public (Coastal Act Section 30502).

The Coastal Act also includes policies to protect agricultural lands within the coastal zone.<sup>1</sup> The County and CCC have carefully incorporated provisions in the LCP under your consideration to allow agriculture to continue in the Coastal Zone of the Santa Monica Mountains provided such agriculture is sustainable and incorporates best management practices, emphasizing that organic or biodynamic farming practices be followed. These agricultural methodologies prohibit the use of pesticides and other synthetic chemical products, mandates the use of Integrated Pest Management techniques for the control of crop pests, require drip irrigation to minimize the use of water, and curtail the use of traditional tillage practices (ground disturbance) in order to limit the potential for soil erosion. The LCP defines crops as a plant or plant product that can be grown and harvested for profit or subsistence, which applies to cultivated plants including field, tree, bush, berry, and row crops, including nursery stock. However, the LCP presently prohibits the cultivation of grapes in vineyards, known as viticulture, a crop that can easily conform to the organic and biodynamic farming practices mandated within the LCP.

The March 27, 2014 CCC staff report originally prohibited any new crop-based agriculture citing that steep slopes and the presence of sensitive habitats in the Santa Monica Mountains are unsuitable or inappropriate for agriculture. In addition, the staff report commented that only the King Gillette Ranch along Mulholland Highway possessed prime farmlands as

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<sup>1</sup> California Coastal Commission. Local Coastal Program (LCP) Update Guide, Part I. Section 5. Agricultural Resources. July 31, 2013. [http://www.coastal.ca.gov/lcp/LUPUpdate/LUPGuidePartI\\_5\\_AgriRes\\_July2013.pdf](http://www.coastal.ca.gov/lcp/LUPUpdate/LUPGuidePartI_5_AgriRes_July2013.pdf)



recognized by the State of California. The report continued with “Given the steep topography, poor soils, limited water availability, and constrained access within the plan area, the Santa Monica Mountains have never been an area particularly conducive for agriculture.” However, after further consideration, limited agriculture subject to the provisions described above is permitted in this LCP because those provisions specified under Section 22.44.1300 of the Local Implementation Plan (“LIP”) address the stated concerns articulated in the CCC staff report.

The LCP itself does not provide an explanation of why vineyards in particular should be the only agricultural crop prohibited from cultivation in the Santa Monica Mountains. In addition to the comments applied to agriculture in general in the March CCC staff report, CCC staff at the April 10, 2014 public hearing on the Land Use Plan commented that viticulture contributed to soil erosion and the use of fertilizers that alter water quality. While these statements may accurately apply to some vineyards in general, they are no less true for other forms of agriculture such as the cultivation of strawberries, which would be allied under the LCP as currently written. Yet, both crops can be grown using organic or biodynamic practices that would minimize the potential for soil erosion or the impact on water quality.

Also, mentioned at the April CCC public hearing was an indirect reference to an article authored by Dr. Rebecca Shaw, currently Associate Vice President and Senior Lead Scientist with the Environmental Defense Fund, and the environmental impacts of vineyards. The only recent publication found including viticulture as a subject and Dr. Shaw as an author is entitled “*Climate change, wine and conservation*” and written by a team of respected authors.<sup>2</sup> The article makes no specific reference to environmental consequences of vineyards but rather selects viticulture as an example of how climate change would affect where agricultural crops might be cultivated in the year 2050. In general, the conclusion is that in most areas where viticulture is now a common practice, primarily in Mediterranean climates, future areas conducive to viticulture would be at higher latitudes or further north in the Northern Hemisphere. Using the conclusion in this article, one could presume that vineyards and other agricultural crops in the Santa Monica Mountains would not be possible by the year 2050 as a consequence of water shortages and warmer temperatures, which would make the current LCP prohibition of vineyards a moot concern.

The Resource Conservation District of the Santa Monica Mountains sponsored, with the National Park Service, a 2012 senior practicum research endeavor at UCLA that postulated the potential maximum extent of vineyards in the Santa Monica Mountains titled “*Potential Extent of Vineyard Development in the Santa Monica Mountains National Recreation*”

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<sup>2</sup> Lee Hannah, Patrick R. Roehrdanz, Makihiko Ikegami, Anderson V. Shepard, M. Rebecca Shaw, Gary Tabor, Lu Zhi, Pablo A. Marquet, and Robert J. Hijmans. 2013. Climate change, wine and conservation. Proceedings of the National Academy of Sciences 110(17): 6907-6912.



Area.”<sup>3</sup> The research endeavor utilized available Geographic Information Systems (“GIS”) data for a number of parameters, including property ownership, vegetation types, topographic slopes, land use and zoning categories, and sensitive resource overlays for environmentally sensitive habitat areas (“ESHA”) and significant ecological areas (“SEA”). Using GIS software to exclude areas that are publicly owned, too steep or where zoning does not allow agriculture, the research concluded that more than 30,200 acres of the Santa Monica Mountains within Los Angeles County, about 22,300 acres of which are located within unincorporated areas of either the Coastal Zone or the North Area Plan, have the potential for vineyard development. While the study did not include practical considerations like availability of water or accessibility from public or private access roadways, the conclusion presents a worst case scenario of potential habitat loss if vineyards, or any other agricultural crop, were allowed to be developed without land use restrictions. The paper also indicates that the only 38 existing vineyards in the Santa Monica Mountains, totaling 165 acres (0.34% of the study area), were found and the majority of these (22) comprising areas of less than one acre each. With such a small current area for viticulture, it does not seem likely that the 30,000 acres identified as potentially suitable for vineyards would be developed anytime soon but only a small portion of which might become developed. A tripling of the existing vineyards would impact less than 1% of extant vegetation.

A recent publication entitled “*Impact of Development on Aquatic Benthic Macroinvertebrate Communities in the Santa Monica Mountains of Southern California*”<sup>4</sup> carefully documents the diversity of benthic macroinvertebrates (bottom dwelling invertebrates visible without magnification) present through sampling of a number of Santa Monica Mountains watersheds. This research found a negative correlation between development, primarily impervious surfaces, and benthic macroinvertebrate diversity. In order to improve water quality in these watersheds, it is recommended that low impact development measures to reduce runoff and increase permeability be incorporated into both new development and redevelopment. Because agriculture does not typically increase impervious surfaces, it can be presumed that sustainable agricultural practices, including those of vineyards, would not appreciably contribute to reduction of benthic macroinvertebrates diversity. This is supported by the study that found Solstice Canyon, in which limited agriculture occurs, to be rated in the highest biological integrity category. Unfortunately, this study did not sample in Zuma Canyon where agricultural farming occurs in the upper portion of the watershed.

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<sup>3</sup> Casey Goepel, Katherine Hoerberling, Fabrice Keto, Rogelio Pardo, Jake Palmquist, Melissa Traverso, and Ashton Yoon. 2012. Potential Extent of Vineyard Development in the Santa Monica Mountains National Recreation Area. Environment 180 – Senior Practicum. Institute of the Environment & Sustainability, UCLA. June 2012

<sup>4</sup> Katherine M. Pease, Sarah Sikich, Marissa Maggio, Sarah Diringer, Mark Abramson, and Mark Gold. 2013. Impact of Development on Aquatic Benthic Macroinvertebrate Communities in the Santa Monica Mountains of Southern California. Urban Coast 4(1): 52-62.



Heal the Bay submitted their April 4, 2014 letter in support of the LCP to the CCC for the LUP public hearing. The letter cited a number of factors, including agricultural uses, contributing to the degradation of natural resources in the Santa Monica Mountains. Heal the Bay recommended the prohibition of agricultural development on steep slopes and this is one of the provisions in the LCP under which agriculture may occur. The letter also expressed concern about water use associated with vineyards, in addition to the potential for sedimentation resulting from vineyards on steep slopes. To address these concerns, the LCP mandates the use of drip irrigation to reduce water consumption and the use of cover crops to minimize soil erosion. Therefore, the primary concerns expressed by Heal the Bay are addressed with the requirement to farm using sustainable agriculture practices including organic and biodynamic techniques.

Based on the above studies and a sampling of other relevant literature, no credible scientific study could be found that provides evidence that viticulture practices cause greater environmental harm than any other agriculture crop cultivation. Therefore, there is no reason why the County LCP should prohibit vineyards with the understanding that vineyards be subject to the same provisions as other agricultural crops as specified under Section 22.44.1300 of the LIP. This conclusion is corroborated by the 2012 UCLA senior practicum research effort titled "*Vineyards in SMMNRA*."<sup>5</sup> This research project was specifically undertaken to make recommendations for sustainable viticulture in the Santa Monica Mountains in order to mitigate the effects on native habits. The paper provides recommendations for fertilizers, pest control, efficient water use, and reduction of runoff. These recommendations are mostly addressed in the provisions of the LCP for agricultural crops in general and equally apply to vineyards. Based on records from the California Department of Water Resources, vineyards for wine, table or raisin grapes had one of the lowest acre-foot per acre (1.70) water usage for all of the crops monitored in 2005, the last year for which data was available.<sup>6</sup>

The County has the ability to place safeguards on the vineyards just as is required for agricultural crops in general. The County may adopt a manual similar to that of Sonoma County to address concerns of erosion control.<sup>7</sup>

In conclusion, vineyards impart no greater impacts on the environment than do other agricultural crops, and in some instances have less, and there is no scientific evidence to support a prohibition of viticulture over other agricultural farming endeavors.

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<sup>5</sup> Kyle Cerniglia, Molly Cornfield, Nicole Grucky, Kris Holz, Michelle Honda, Amanda Martin, Harriet Torosyan, and Taylor Zisfain. 2012. *Vineyards in SMMNRA*. UCLA Senior Practicum in Environmental Science. June 2012.

<sup>6</sup> [www.water.ca.gov/landwateruse/docs/annualdata/2005/Ag\\_State\\_2005.xls](http://www.water.ca.gov/landwateruse/docs/annualdata/2005/Ag_State_2005.xls)

<sup>7</sup> Sonoma County Agricultural Commissioner's Office. *Best Management Practices for Agricultural Erosion and Sediment Control*. December 2013. Available at: [http://www.sonoma-county.org/agcomm/pdf/bmp\\_handbook3.pdf](http://www.sonoma-county.org/agcomm/pdf/bmp_handbook3.pdf)

Honorable Board of Supervisors  
**COUNTY OF LOS ANGELES**  
25 August 2014 - Page 5



Sincerely,  
**PCR SERVICES CORPORATION**

A handwritten signature in black ink that reads "Daryl Koutnik". The signature is fluid and cursive, with the first name "Daryl" and last name "Koutnik" clearly legible.

Daryl Koutnik, PhD  
Principal