

22. November. 2024

Mr. Greg Guisti, Vice Chair
North Coast Regional Water Quality Control Board
5550 Skylane Blvd STE A
Santa Rosa CA 95403-1072

Regarding Proposed Order No. R1-2024-0056 and Proposed Resolution No. R1-2024-0057 :

This letter has been submitted to the Board to highlight the importance of defining the limits and expectations associated with the terms “Planted” and “Rooted” in the Proposed Order No. R1-2024-0056 (Vineyard Order) and Proposed Resolution No. R1-2024-0057. The term “planted or rooted” occurs in Table 5 on page 47 and again in paragraph 15b on page 50; the latter instance is stated in association with “Ground Cover” which is defined on page 77 under seven categories and again where the term “Planted” is used to define “Ground Cover”. Definitions starting on page 74 do not include the terms “Planted” or “Rooted”.

Unintended Consequences of the term “Planted”

In the text of the draft, it is unclear whether distribution of seed in late summer or early fall would be classified as “Planted” Ground Cover regardless of germination success rates or timing. If Ground Cover seeds germination were required to be considered “Planted”, compliance under the Order would vary widely from year to year and depend on timely and sufficient precipitation. The timing and amount of precipitation to achieve sufficient Ground Cover seed germination to meet requirements for Ground Cover presented in this Order may not be achievable in drier years. In a situation where precipitation is insufficient, the Vineyard Order may have the unintended consequence of additional water applications in late fall, increasing the annual, per-acre water use of a given vineyard significantly.

Clarification of the term “Planted Area”

The term “Planted Area” is defined on Pages 82-83 and includes the Farm Area that is planted to grapevines. The Vineyard Order should clearly state that grapevines count towards “Planted” or “Rooted” Ground Cover. Based on the terminology for “Planted Area” defined in the Order, it may be assumed that grapevines are considered “Planted or Rooted Ground Cover” and would contribute to percent coverage required by this Order. Since undervine row surface area typically accounts for more than 10% of the total surface area in a vineyard, not including grapevines would make compliance of the 90% “planted or rooted” option challenging at the least. Ground Cover would need to be planted, seeded, and/or rooted in the undervine row in a scenario where grapevines do not count as “planted or rooted Ground Cover”. Grapevine roots have been shown to contribute to soil, mechanical reinforcement and any roots can improve soil structure and/or aggregation (Bordoni et al., 2016; Logsdon, 2013). To clarify this issue, I recommend adopting one of the following outcomes: (1) If the intention of the order is not to include the grapevines as part of the terms “Planted” or “Rooted” then the text is adequate and should be kept as it is; or (2) If the intention of the order is to include the grapevines as part of the terms “Planted” or “Rooted” then the text should be modified to reflect this in Section II: Definitions beginning on page 74.

It is my suggestion that the terms “Seeded”, “Germinated”, “Planted”, and “Rooted” be well defined and delineated in Section II: Definitions beginning on page 74 of the Proposed Order No. R1-2024-0056 with respect to seed distribution and vine coverage before full adoption of this Order.

Sincerely,



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Cited References

- Bordoni, M., Meisina, C., Vercesi, A., Bischetti, G. B., Chiaradia, E. A., Vergani, C., Chersich, S., Valentino, R., Bittelli, M., Comolli, R., Persichillo, M. G., & Cislighi, A. (2016). Quantifying the contribution of grapevine roots to soil mechanical reinforcement in an area susceptible to shallow landslides. *Soil and Tillage Research*, 163, 195-206.
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