



May 30, 2025

North Coast Regional Water Quality Control Board
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Submitted via email to: NorthCoast@waterboards.ca.gov; Brenna.Sullivan@waterboards.ca.gov;
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RE: Proposed Vineyard Order

On behalf of Russian Riverkeeper (“RRK”), we welcome the opportunity to submit these comments in response to the December 4, 2024 Errata Sheet proposal and subsequent May 2025 changes made to language of the Proposed Vineyard Order on the proposed “General Waste Discharge Requirements for Commercial Vineyards in the North Coast Region, Order No. R1-2024-0056” (“the Proposed Order”). RRK is a local nonprofit that has been successfully protecting the Russian River watershed since 1993. We actively pursue the protections and restoration of the river’s mainstem, tributaries, groundwater, and watershed through focused scientifically based advocacy, public outreach, and direct engagement with the Russian River community. Our mission is to protect and restore our watershed environment for the benefit of current and future generations.

We were members of the North Coast Regional Water Quality Control Board’s (“RWB”) Environmental TAG, along with other environmental interest groups and individuals for the drafting of this important order, and we are interested in ensuring that the water quality of North Coast Region waterways are of a high quality sufficient to meet the needs of *all* beneficial uses, especially the needs of our most sensitive salmonid species.

Throughout this process, RWB staff have been thoughtful and collaborative in trying to ensure that the needs of our waterways are protected while providing flexibility to enrollees so that vineyards are able to choose a pathway that works best for them. While we do not believe this is a perfect balance or that more cannot still be done to protect against excess sediment, we do believe this is a significant step forward towards reducing sediment impairments in our waterways. As such, we support the adoption of the Proposed Vineyard Order at the upcoming June 12, 2025 hearing—there is no time to delay in protecting our waterways from preventable harms. These comments build on our previously submitted comments and related concerns remain applicable.

I. BACKGROUND

In recent decades, vineyards have exploded in the North Coast Region with high concentrations throughout the Russian, Gualala, and Navarro Watersheds. Until now, there has been no regulatory method in place to address the negative environmental impacts of these vineyards on our regional watersheds despite being a primary pollutant contributor. As our region continues to deal with a multitude of new demands, from extreme drought and floods to increased temperatures and loss of critical habitat, it is vital that manageable water quality impairments be addressed so that our waterways and impacted species have a chance at long-term survival. For decades now, our



environment has born the burden of industrial practices, and it is time for this Board to act now to prevent continued degradation.

Our overmanaged riparian systems need their environmental functions returned so that beneficial uses and our most sensitive salmonid species are restored. To do this, a strong and transparent water quality monitoring and reporting program is necessary to inform effective adaptive management practices, ensure interim measures are met, and to protect all beneficial uses.

By adopting a strong permit program for vineyards, the most prolific agricultural industry in the Russian River Watershed, the RWB will help ensure that vineyard discharges are not continuing to contribute to ongoing pollutant impairments and harms. While we are largely in support of the program currently proposed by RWB Staff, we still have some concerns, including but not limited to, ensuring effective feedback mechanisms are in place. To help aid in achieving a stronger permit that is more protective of our environment and vital water resources, we have laid out our concerns, our recommendations, our reasoning, and our key areas of support below.

A. The North Coast Region is Home to Federally and State Listed Species that are Sensitive to Sediment and Other Impairments.

The Russian River Watershed is unique in its ability to support an expansive combination of rural, urban, agricultural, recreational, and environmental needs in a modern California. Today, the watershed encompasses 1,500 square miles of forests, agricultural lands, and urban areas within Sonoma and Mendocino Counties, of which, about 95% of lands remain privately owned. These waterways provide a vital resource to the continued well-being of the North Coast and San Francisco Bay Area Regions as they are responsible for providing: water for over 600,000 area residents and numerous agricultural uses; a favorite tourist and summer escape for over a million people each year; and key habitat for thirty-four species of fish, including three federally listed salmonid species, birds, plants, and mammals alike. Though smaller in scale, the Navarro and Gualala River watersheds are similarly home to several endangered species, including coho and chinook salmon, and steelhead trout.

Historically, these and other watersheds in the North Coast Region supported robust salmonid populations, due to the presence of cool, clean waters for spawning and juvenile rearing. However, sedimentation and warmer water temperatures caused by vineyard management practices (e.g., tilling, vegetation removal), and now exacerbated by climate change, threaten their survival. Coho and chinook salmon, in particular, are listed as endangered in the region, with only a few remaining populations.

Waters in the North Coast Region have been continually plagued by water quality issues with the majority 303(d) listed for temperature, sediment, and pesticide impairments, amongst others; and have been for decades. This has put our important natural, cultural, human, and tribal resources at risk for permanent degradation and possibly extinction if significant changes in land disturbance are not made soon. While some watersheds, like the Navarro, have sediment and other TMDLs in place meant to address some of these harms, the Russian River Watershed does not. However, as



vineyards are one of the last unregulated industries in the North Coast Region,¹ this proposed Order has the potential to play a significant role in addressing ongoing sediment, temperature, and other impairments throughout the region.

In particular, the adoption of this Order is meant to address the significant sediment impairments caused by poor vineyard management practices that have increased erosion and resulted in significant negative impacts to the region's salmon populations, particularly the sensitive coho and chinook salmon. Excess sediment is known to degrade critical habitat features, such as gravel beds, that are essential for reproduction and can smother salmon eggs further reducing their chances of survival. Fine particles in the water can also reduce habitat refuge areas and clog the gills of fish, impairing their ability to breathe and increasing stress levels. The turbidity caused by sedimentation also reduces the amount of sunlight reaching aquatic plants, disrupting the food web and further diminishing the overall health of a river ecosystem. Combined with other anthropogenic impacts like temperature increases and vegetation losses, these cumulative impacts have contributed to the decline of salmon populations.

Extensive conservation efforts are ongoing, including habitat restoration projects and fish passage improvements, but these efforts cannot be successful without changes in land management that result in water quality improvements necessary to support the recovery of salmonid and other sensitive specie populations.

B. Duties, Obligations, and Responsibilities of the North Coast Regional Water Quality Control Board Require Effective Feedback Mechanisms are Adopted and that the Adopted Program is Likely to Achieve Water Quality Objectives and Beneficial Uses.

The Regional Boards have been tasked with *preserving, enhancing, and restoring the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. It is the Regional Board's mission to develop and enforce water quality objectives and implementation plans that will best protect the State's waters*, recognizing local differences in climate, topography, geology and hydrology.

This means that it is the RWB's duty to develop an effective vineyard permit that will ensure water quality is protected based on the needs of all beneficial uses, not just on the long-term costs or potential business impacts of the vineyard industry in five year's time. We sympathize with current economic uncertainties, but it is also important to remember that this same industry has been allowed to benefit from the lack of water quality regulation for decades with the public and environment bearing the costs with impacts to critical habitat, fishery strength, and reduced water quality for recreation and drinking. It is also important to note that the adoption of this Order has built in several layers of requirements that do not impose an immediate cost burden on vineyards. Rather, commercial vineyards will have multiple years to ramp up to full implementation and to decide what pathway is best for their personal situation.

¹ Note: The North Coast Region is one of the most prolific grape growing areas in the state, with even more grapes than Region 2.



There is no legal right for vineyards to discharge pollutant and sediment-filled waste into public waters of the State, it is merely a privilege granted by the State that is conditioned by the need to protect all beneficial uses.

II. OUTSTANDING CONCERNS SPECIFIC TO PROPOSED VINEYARD ORDER RELEASED ON MAY 23, 2025 AND RECOMMENDED CHANGES

In response to the latest draft released, we have the following comments. To start though we would like to thank staff for the revisions made and the extensive amount of time dedicated to getting this Proposed Order to where it is now. In instances where we make a specific language recommendation, we denote additions in red and removals via a strike out.

A. Proposed Definitions

1. *“Agricultural Drainage Structure”*

Since the early drafts of this Proposed Order, the definition of an “Agricultural Drainage Structure” or (“ADS”) has been modified on multiple occasions. Following additional discussion with RWB Staff and a better understanding of how this proposed definition works at the implementation level, we would like to note our thanks to staff for clarifying how seasonal and temporary measures will be captured as part of this Order. However, we still believe ADS should include specific language that addresses a reliance on natural features to “collect, convey, and discharge” stormwaters to ensure that an accurate picture of on-the-ground activities is being captured.

This need is especially true for Counties that do not have a VESCO equivalent and for vineyard properties that pre-date any vineyard planning requirements where there is an increased likelihood of on-the-ground uncertainty due to a lack of planning documents to rely on for verification. For similar reasons we also recommend that staff consider inclusion of sheetflow monitoring in situations where a claim of no ADS is made, as it is likely that natural formations are being relied on to carry discharges off-site and that discharge is occurring via sheet-flow.

Specific language changes are in red:

Agricultural Drainage Structure. ~~Man-made~~ ~~or naturally~~ constructed features, including but not limited to pipes, ditches, and channels, that work to collect, convey, and discharge stormwater from Farm Areas and Appurtenant Agricultural Roads to surface waters or to off-farm points of delivery. Agricultural Drainage Structures include ~~both~~ permanent, temporary, and seasonally constructed features (see Seasonal Agricultural Drainage Structure). Agricultural Drainage Structures ~~are~~ ~~can be either~~ permanent ~~and-or~~ semi-permanent features. Temporary ~~features that are not and non-recurring features that~~ ~~and~~ are constructed to collect, convey, and discharge stormwater from Farm Areas and Appurtenant Agricultural Roads to immediately protect life or property are considered Emergency Agricultural Drainage Structures and shall be prioritized for repair or management practice implementation in accordance with Section II.C of the Order. It is not an expectation

under this Order that Emergency Agricultural Drainage Structures be sampled for turbidity (see Emergency Agricultural Drainage Structure).

2. “Ground Cover”

We do not have a specific language suggestion for this definition; however, we would like to note that it is currently confusing as drafted and would recommend formatting changes to improve clarity in both the definition and throughout the Proposed Order. One suggestion would be to format as numbered bullets with use of semi-colons and “or” prior to the last number in the list. It would also be helpful to have each sub-definition to be clearly identified to improve clarity in use elsewhere in the Proposed Order. For example, each sub-definition (i.e., “cover crop,” “perennial cover crops,” “annual cover crops,” “low-till crops,” etc) could be italicized or underlined at the beginning of each bullet to make clearer its use elsewhere as a term of art.

B. The Use of an Effective and Verifiable Covercrop Incentive is Key to Achieving Long-Term Water Quality Improvements.

We are supportive of the inclusion of “Option D: No-Till Ground Cover” as it is a method of vineyard practice known to have little to no negative impact on water quality when done properly. Through our own sampling events and a variety of scientific studies, there is clear support demonstrating how permanent cover crops in conjunction with no-till practices sufficiently acts to hold soil in-place during qualifying storm events. As identified in a recent CAFF study, there are multiple other benefits as well—from a reduction in water use to increased water infiltration.² As such, it is appropriate that this option be included as an incentive to vineyards as it has the potential to help encourage a change in long-term management practices that are multi-beneficial to our watershed.

However, in order for this incentive to work appropriately, the compliance requirements must accurately reflect the practice without room for interpretation or abuse. It is also important that the RWB have a method of verifying compliance with Option D under Key Element #4 of the Non-Point Source Implementation Policy (“NPS Policy”).

1. Ensuring the “Option D: No-Till Ground Cover” Compliance Route Provides Known Benefits to Water Quality Requires Compliance Requirements and Exceptions be Accurate to the Practice as a Whole.

As currently proposed, we understand this option to allow for tilling when necessary for “periodic maintenance.” Specifically, the proposal appears to allow tilling and other methods of mechanical soil disturbance for periodic maintenance that encompasses anything from gopher intrusions to invasive weed management. There appears to be no restriction on this allowance except for replanting to occur by the winterization period. As such, we believe this unnecessarily opens the door to a wide range of implementation methods that do not comport with the typical understanding of the “no-till” vineyard practice and its associated water quality benefits.

² <https://caff.org/wp-content/uploads/2025/05/Cover-Cropping-in-Californias-Water-Scarce-Environments-5.2.25.pdf>



We have proposed language below to address this discrepancy such that tilling is no longer permitted as a “periodic maintenance” option without confines under the no-till incentive, while still allowing other maintenance methods more associated with typical “no-till” vineyard practices to continue.³ This proposal is in furtherance of NPS Policy Key Element #2 and would ensure that tilling does not regularly occur in a way that negates the benefits of this incentive option by removing the ambiguity in what is allowed. As we discuss further below, the removal of this ambiguity is particularly important considering there is currently no clear verification process available to the RWB or to otherwise provide the public some limited consolation that the Proposed Order is being complied with.

Specific language changes are in red:

Option D Requirements: No-Till Ground Cover

Enrollees who choose Compliance Option D must implement No-Till Ground Cover in the Planted Areas and Seasonal Roads of each applicable parcel or Sediment Management Area that meets the following standard:

- a) Maintenance of non-tilled, permanent Planted or Rooted Ground Cover at 90% coverage between December 15-April 1 of each year.
- b) No mechanical soil disturbance or herbicidal application in either the interrow or undervine areas as a regular, seasonal, or recurring cultural practice. **Regular maintenance of the No-Till Ground Cover may include non-tillage types of weed control (i.e., mowing, rolling, and undercutting).**
- c) **Periodic maintenance of the No-Till Ground Cover (i.e., gopher damage, control of invasive weeds, etc.) cannot exceed 30% ground disturbance in the No-Till Planted Areas and Seasonal Roads over a five-year period.** Areas of soil disturbance for periodic maintenance must be re-vegetated between December 15-April 1 of each year.

If this proposal were accepted, the definition for “No-Till Ground Cover” would also need updated to reflect changes in red.

2. Option D Requires the RWB have a Mode of Verification For Non-Point Source Implementation Policy Compliance.

As the Proposed Order is currently drafted, Option D is the only one with no verification method in place. This is in contradiction with Key Element #4 of the NPS Policy which requires that the RWB have the information necessary to ensure and verify implementation of proper management practices, and compliance and enforcement actions by the RWB not be hindered or unnecessarily delayed. In contrast, Options A and C are verified via monitoring and reporting

³ <https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf> Please note that “Practice 329” denotes how the “no-till” system of management includes “non-tillage types of weed control” and “no-till fallow.” This management method can create a mulching effect, reducing erosion and acting as a weed control while improving soil health, all without tilling.



requirements, while Option B is verified by the Qualified Professional and their related licensing and regulatory duties.

Under the NPS Policy, the RWB must have effective feedback loops and related requirements in place to evaluate whether the Proposed Order is working. This means that an order must be able to “verify the degree to which the [management practices] are being properly implemented and are achieving the program’s objectives, and/or to provide feedback for use in adaptive management.”⁴ That is, the Proposed Order must do more than report what management practices are at work; it must also allow the RWB, enrollees, *and* the public to determine “whether and when additional or different [management practices] or [management practice] implementation measures must be used, or other actions taken,” to ensure that water quality objectives are met. In effect, this means that the RWB must have a method of verifying enrollee compliance with Option D.

Here, the RWB lacks visibility into who is enrolled in Option D at any given time, making it impossible to independently verify compliance—even if desired. As such, the public cannot objectively assess whether Option D is effectively protecting water quality through proper implementation methods given the lack of transparency. Moreover, the public has no assurance that the RWB can make sound compliance determinations by relying on third-party assertions because independent verification does not occur for Option D and necessary photo-point monitoring is kept at the vineyard property. Instead, the RWB is effectively relying on trust, without any separate verification mechanism, which introduces room for potential abuses and errors. This lack of clarity also creates unnecessary burdens for the RWB, which may need to expend significant time and resources responding to public complaints or interpreting incomplete information—particularly when it is unclear whether a specific vineyard is enrolled in Option D or subject to a different compliance pathway.

To address the deficiencies caused by data aggregation and lack of transparency, we strongly recommend that the Proposed Order include a separate, minimal verification mechanism for Option D. Such a mechanism is essential to ensure that the RWB can confirm regulatory compliance and provide the public with confidence that water quality protections are being upheld. In the interest of achieving a balance between ensuring the RWB has necessary information and the goal of encouraging expansion of no-till practices throughout our region, we make the following proposals:

Proposed Addition to follow ¶ 21 on pg. 52:

Parcel-Level Reporting Requirement for Option D Enrollees

All enrollees electing to comply under Option D, an incentive-based compliance pathway, are required to submit parcel-level information as part of their Annual Compliance Reporting to the Regional Water Board. This requirement is necessary to support verification of compliance and to evaluate the effectiveness of Option D in protecting water quality. This information is used to support transparency, improve

⁴ NPS Implementation Policy, Key Element #4.



program accountability, and help demonstrate the success of incentive-based approaches.

Photo-Monitoring Reporting Requirement for Option D Enrollees

All enrollees shall submit photo monitoring documentation as part of their Annual Compliance Report to the Regional Water Board. At a minimum, photo documentation must include dated, geo-referenced images that clearly depict key management areas relevant to erosion control, vegetation cover, sediment basins, buffer zones, or other applicable best management practices (BMPs). Photos must be taken from consistent vantage points over time to support visual assessment of site conditions and implementation effectiveness. This requirement is intended to enhance transparency, support compliance verification, and provide supplemental evidence of ongoing efforts to protect water quality.

C. Tying Adaptive Management Requirements and Adoption of Management Practices to an Objective 250 NTU Threshold is in the Best Interest of our Waterways and is Feasible to Achieve.

We would also like to reiterate our strong support and appreciate the continued use of 250 NTU by the RWB in this Proposed Order to be used as threshold for measuring effectiveness of management practices and determining subsequent adaptive management measures.

Turbidity, measured in NTU, is a critical water quality parameter that can significantly affect salmonid species when found at high levels and is an effective measure to determine sediment pollution because it directly reflects the concentration of suspended particles in the water. Further, monitoring turbidity provides a quantifiable metric to track sediment levels in real-time, making it easier to assess whether water quality is improving or deteriorating due to sediment runoff. Therefore, turbidity is a useful, readily measurable indicator of sediment pollution coming off a vineyard property that can effectively help guide both immediate adaptive management actions and long-term restoration strategies.

Adoption of a 250 NTU threshold provides a clear measure for evaluating the success of sediment and erosion control measures, stormwater management, and riparian habitat restoration efforts. It also allows for targeted interventions when turbidity levels exceed the set limit, ensuring that corrective actions can be implemented in a timely manner. Therefore, a defined NTU threshold ensures that management practices are continually refined based on measurable outcomes, directly contributing to the protection and recovery of salmon populations in the watershed which is required by NPS Policy Element #4.

Further, a turbidity threshold of 250 NTU is a feasible and attainable benchmark for vineyard operations through the implementation of standard, well-established management practices. Practices such as cover cropping, no-till, vegetative buffer strips, contour farming, and proper drainage management significantly reduce soil erosion and sediment runoff, which are primary contributors to today's sediment impairments. Many vineyards across varied soil types and slopes



have successfully maintained turbidity levels below this threshold by integrating these practices into their routine operations—we have even collected samples from vineyards that are below 250 NTU.

Moreover, 250 NTU provides a practical balance—representing a level that is more protective of downstream water quality while remaining achievable without requiring prohibitively expensive infrastructure changes. With proper planning and adherence to best management practices, vineyards can consistently meet or exceed this target; and can then use this showing to further demonstrate their commitment to sustainable land stewardship and regulatory compliance.

Due to known and ongoing sediment impairments, risk to our sensitive ecosystems, conformity with other discharge programs, and available management practices, we will not support any vineyard program that allows for a higher benchmark.

III. Conclusion

Adopting a strong vineyard permitting order is essential to protect water quality resources in the North Coast from the adverse effects of non-point source water pollution. By implementing a comprehensive permitting system, vineyard operations can be required to adopt sustainable practices that minimize environmental impacts, such as erosion control, responsible pesticide use, and improved irrigation techniques. This approach will not only safeguard the integrity of water resources but also help preserve, enhance, and restore the health of aquatic habitats that are vital for both biodiversity and local communities. A well-enforced vineyard permitting order, with strong adaptive management and effective feedback loops, represents a proactive and necessary step toward balancing agricultural growth with environmental stewardship, ensuring that the watershed's water quality is protected for future generations.

In conclusion, while we believe that more monitoring and increased transparency can and should be required as part of this Order, we also believe that there is no time to waste and that this Order should be adopted now with our recommended changes.

We appreciate the opportunity to provide comment and welcome any questions that you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "Jaime Neary".

Jaime Neary
Policy Director & Staff Attorney
Russian Riverkeeper

A handwritten signature in black ink, appearing to read "Don McEnhill".

Don McEnhill
Deputy Director
Russian Riverkeeper

**NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD
EX PARTE COMMUNICATIONS REGARDING GENERAL ORDERS
DISCLOSURE FORM**

Note: This form is intended to assist the public in providing the disclosure required by law. It is designed to document meetings and phone calls. Written communications may be disclosed by providing a complete copy of the written document, with attachments. Unless the board member(s) provided you with a different contact person, please send your materials to: NorthCoast@waterboards.ca.gov. Use of this form is not mandatory.

1. Pending General Order that the communication concerned:
2. Name, title and contact information of person completing this form:
Note: Contact information is not mandatory, but will allow the Water Board to assist you if additional information is required. If your contact information includes your personal residence address, personal telephone number or personal email address, please use a separate sheet of paper if you do not want that information posted on our website. However, this information may be provided to members of the public under the Public Records Act.
3. Date of meeting, phone call or other communication:
Time:
Location:
4. Type of communication (written, oral or both):
5. Names of all participants in the communication, including all board members who participated:
6. Name of person(s) who initiated the communication:
7. Describe the communication and the content of the communication. Include a brief list or summary of topics discussed at the meeting, any legal or policy positions advocated at the meeting, any factual matters discussed, and any other disclosure you believe relevant. The Office of Chief Counsel recommends that any persons requesting an ex parte meeting prepare an agenda to make it easier to document the discussion properly. Attach additional pages, if necessary.
8. Attach a copy of handouts, PowerPoint presentations and other materials any person used or distributed at the meeting. If you have electronic copies, please email them to facilitate web posting.