



Napa County Resource Conservation District

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September 13, 2016

San Francisco Bay Regional Water Quality Control Board

Attn: Mike Napolitano

1515 Clay Street, Suite 1400

Oakland, CA 94612

(via email: MNapolitano@waterboards.ca.gov)

RE: Proposed General Waste Discharge Requirements for Vineyard Properties located in the Napa River and Sonoma Creek watersheds

Dear Mr. Napolitano,

The Napa County Resource Conservation District (RCD) appreciates the opportunity to comment on the draft environmental impact report (DEIR) for the proposed General Waste Discharge Requirements for Vineyard Properties in the Napa River and Sonoma Creek watersheds (Vineyard WDR). RCD staff and Directors have committed a considerable amount of time working with Water Board staff over the past decade during formation of this program and the associated Total Maximum Daily Load for sediment in the Napa River Basin. We commend Water Board staff, particularly you and Mr. Ponton, for your efforts to work with local organizations such as ours to create local capacity to assist vineyard property managers with implementation of the proposed WDR.

For context, as you know, the RCD is a non-regulatory, Special District that was established in Napa County in 1945. We serve community through providing technical assistance for implementation of conservation practices, offering natural resource education opportunities, and conducting science-based monitoring of watershed conditions. We also operate a small demonstration vineyard so are intimately familiar with the interface of natural resource and vineyard management. We have been engaged in the topic of water quality in the Napa River watershed for over three decades and we share your goal of ensuring quality waters to support a myriad of beneficial uses.

While the current draft of the Vineyard WDR reduces some of the complexities that existed in previous iterations of the proposed Conditional Waiver of Waste Discharge for vineyards, we seek clarification regarding some requirements and we continue to have concerns related to implementation of the proposed WDR program, specifically related to requirements for third-party approval, BMP effectiveness monitoring, stream setback requirements, and the economic hardship this program may have on small family operations.

We continue to support adoption of a reasonable vineyard program but do not support adoption of the proposed Vineyard WDR as currently drafted. Please consider the request for clarification and preliminary comments below.

Please clarify the following:

- Related to coverage under the Vineyard WDR, what acreage is included when calculating acres “planted in grapevines”? Does the calculation include only the area planted in grapevines or does it include associated access roads and avenues?
- How often are Tier 1 Dischargers required to provide certification reports to the Water Board? Attachment E appears to be somewhat inconsistent. One area indicates that certification for Tier 1 dischargers is required once every five years and the annual certification form indicates that Tier 1 discharges may need to report annually.
- Is there a timeline by which certification for Tier 1 must be reported?
- Can someone move from a Tier 2 Discharger to a Tier 1 Discharger as they progress through farm planning and implementation? If so, please consider that as currently drafted, the financial strain to Tier 2 growers to comply with group monitoring may significantly increase over time.
- Are individual “annual certification forms” required for each enrolled discharger or can approved third-party groups or individuals collect, aggregate, and report aggregated results from their members “annual certification forms”?

In addition to the clarifying questions, please consider the preliminary comments below:

RCD fully supports inclusion of Qualified Professionals in the role of developing and certifying farm plans for compliance with the Vineyard WDR program. However, the current required documentation for an individual to be approved is unrealistic and will significantly limit the number of approved qualified professionals.

Growers deserve a multitude of options in selecting whom to work with in development and implementation of farm plans. It is extremely important that qualified professionals be approved by the Water Board and available to meet grower demand for technical assistance. The RCD commends Water Board staff for including an avenue for qualified professionals to become approved by the Water Board but requests that the documentation required of those individuals not reflect what is required of a “Program” seeking approval. Required documents for individuals should demonstrate the qualification of the individual and not presuppose or require individuals to have an established program and process with associated templates, workbooks, guides, etc. We encourage Water Board staff to work with qualified professionals, as defined in the proposed Vineyard WDR, to develop more realistic required documentation.

BMP Effectiveness Monitoring should be replaced with monitoring to evaluate progress toward meeting TMDL Targets and supporting sensitive beneficial uses.

While RCD sincerely appreciates the need to evaluate the effectiveness of best management practices (BMPs) to achieve desired results, we strongly believe that it should be done in a very coordinated and thoughtful way with academic oversight and not tied directly to this regulatory program. As currently proposed in the Vineyard WDR, it is conceivable to have multiple groups from Tier 2 and many individuals from Tier 3 proposing and implementing different BMP effectiveness monitoring programs with different protocol and oversight in an uncoordinated way. We think this is extremely inefficient, not particularly cost-effective, and ultimately not a reasonable means to address the very important question at hand. We are also concerned that the BMP effectiveness monitoring, as proposed, appears to be requiring existing hillslope vineyards to have the same soil infiltration capacity as paired sites under natural cover and, in cases where there is significant difference, further requiring that vineyards implement additional BMPs, apparently until the difference between the paired sites is not significantly different, where

“significantly” is not defined. We are concerned that this monitoring requirement may be setting the Vineyard WDR program up to fail. We suggest the Water Board avoid conducting this type of monitoring under a regulatory program and we urge the Water Board to work with academia and other institutions to research and understand the effectiveness of BMPs to meet desired environmental goals, to better inform realistic expectations, and to better define “significance”.

If monitoring is a necessary component of the Vineyard WDR, we recommend that the Water Board consider inclusion of a monitoring program to track the progress toward 1) meeting TMDL Targets (i.e., gravel permeability and streambed scour) and 2) supporting sensitive beneficial uses identified in the TMDL (e.g., preservation of rare and endangered species, fish spawning, and fish migration). The local municipalities, through their MS4 stormwater permit, are already providing partial funding to support such a program, local capacity to perform this type of monitoring is strong, and this type of monitoring is generally recognized as valuable by the community. In addition, the Water Board and EPA have contributed significantly, with financial grant program resources and staff time, to the development of a scientifically-defensible plan for monitoring of TMDL targets (Monitoring Plan). Developed by Stillwater Sciences and the RCD in 2012, the Monitoring Plan and associated Quality Assurance Project Plan (QAPP) identifies a suitable number of sampling sites and outlines detailed methods for monitoring streambed conditions at those sites to assess attainment of the targets set forth in the Sediment TMDL. The Monitoring Plan has been implemented at a pilot scale for two years and improvements to the monitoring protocol have been developed. The RCD, EPA, Water Board, local municipalities and other local partners and volunteers have contributed significant time and matching funds to pursue this line of monitoring, and we feel it would be counterproductive to require new, additional monitoring activities as a requirement of the Vineyard WDR.

The criteria for demonstrating an “established and maintained” stream setback should be modified to allow for maintenance of pipelines and pumps.

We appreciate inclusion of a tiered system to recognize stewardship efforts in the current draft of the Vineyard WDR. However, to be more inclusive, we suggest a slight modification to the criteria used to define “established and maintained stream setbacks.” As with many land uses, vineyards require a certain amount of infrastructure to manage water supply and stormwater runoff. Infrastructure in vineyards often includes water management pipelines and pumps that occur in proximity to streams and through riparian areas. It is unreasonable to expect that vineyard operations will not have this type of infrastructure in riparian areas and it is irresponsible to suggest that they not maintain the infrastructure that may exist. With proper maintenance, the existence of pipelines and pumps in a riparian setback area sized to ≥ 1.5 times bankfull width, allows for a functioning riparian area and therefore should be allowed in established and maintained stream setbacks.

For efficiency, improved coordination, and for data quality control, Tier 3 Discharges should be allowed to join a third-party monitoring group.

The type of monitoring currently proposed in the draft Vineyard WDR, and even the alternative monitoring proposed in this letter, is much more complex than water quality testing for typical constituents of concern and would most efficiently and effectively be done in a coordinated manner. While we recognize that the Water Board may be trying to encourage dischargers to seek assistance from a Water Board approved program or qualified professional in creation of their farm plan, the incentive should not happen at the expense of implementing a coordinated, robust and meaningful monitoring program. Requiring individual dischargers to conduct site specific BMP effectiveness monitoring (or the alternative TMDL target and beneficial use monitoring) seems unreasonable and will lead to an inefficient

use of limited financial resources. We encourage you to allow Tier 3 Discharges to join a group monitoring program.

Requirements of the Vineyard Waiver may be an economic hardship for property owners.

We are concerned that the Vineyard WDR, as currently drafted, may pose a significant financial hardship to many land owners, particularly small property owners and operations that continue to be run as a family business. The cost of farm plan implementation, particularly treatment of unpaved roads and modification of stormwater runoff, is likely to be quite expensive. Based upon rural road improvement projects that we have implemented, we estimate the cost will be between \$50,000 to \$150,000 per mile. A very experienced contractor we are currently working with says that road upgrade costs to meet the performance standards of the draft Vineyard WDR, will likely range between \$50,000 to \$300,000 per mile, depending upon the complexity of the site and the number of stream crossings. In addition, given current and projected State and Federal budgets, it is not realistic to assume, as stated in the Basin Plan Amendment, "that at least 75 percent of the cost of these actions will be paid for with public funds." It is critical that the Water Board continue to provide financial assistance, but assuming that 75% of the cost will be available from public funds is not realistic or practical.

We are also concerned about the economic hardship that may arise to conduct BMP effectiveness monitoring, either within or outside of a "group monitoring" effort. With no coordinated or approved monitoring plan in place, the cost is very difficult to estimate but we are fairly confident that it will be expensive to develop and implement the extensive current monitoring requirements of the draft Vineyard WDR.

Beyond the cost of implementing the draft Vineyard WDR, we also recognize that the regulatory program is only being implemented in the Napa River and Sonoma Creek watersheds and therefore it creates a disproportionate economic burden on a very small subset of the vineyard industry within the San Francisco Bay Region.

We urge you to remember that Napa County is at the forefront of implementing conservation ordinances and voluntary vineyard programs for water quality and environmental protection.

Napa County and its agricultural community have long been at the forefront of implementing resource conservation practices that have reduced sediment inputs to streams and improved water quality in the Napa River watershed. In 1991, the County enacted the Conservation Regulations, which require engineered erosion control plans for new and replanted hillside vineyards and preclude new development near streams. In 2008, the County updated its General Plan and adopted policies and practices to avoid increases in peak runoff and soil loss from new hillside vineyards, and provided for increased attention to wetlands, oak woodlands, and other sensitive species through California Environmental Quality Act review. These regulations on agricultural practices, for the primary purpose of resource protection, are among the strongest in the nation and certainly the strongest within the San Francisco Bay region. In addition, the agricultural community in Napa and its industry groups are leaders in supporting, participating in, and operating programs and projects that promote resource protection and sustainability (e.g., Rutherford Restoration Project, Oakville to Oak Knoll Restoration Project, the Napa River (Living River) Flood Project, fish barrier removal projects, Napa Green, Fish Friendly Farming, LandSmart®, etc.). Implementation of local regulations and voluntary actions undertaken in the Napa River watershed are working to protect and enhance the resources in the Napa River watershed. We remain concerned that the Vineyard WDR will be an additional complex regulatory requirement that will

undermine and be counterproductive to current voluntary conservation actions that address a myriad of conservation challenges in a complex watershed.

We continue to urge you to take into account the results of ongoing fisheries monitoring.

As you know, the RCD coordinates a fish monitoring program within the Napa River watershed focusing on salmonids (steelhead and salmon). The purpose of the monitoring program is to better understand steelhead and Chinook populations as well as the overall composition of the fish community in the Napa River watershed. Specifically, the program aims to understand the health and condition of those target species, explore the genetic makeup of salmonid populations in the system, and track ecological responses to ongoing habitat restoration. Monitoring has included:

1. Outmigrant (smolt) trapping with a rotary screw trap (RST) in the mainstem Napa River and fyke nets in Milliken, Napa, Sulphur, and York Creeks
2. Adult salmon and steelhead spawner surveys
3. Juvenile distribution surveys

This type of monitoring and analysis is consistent with the "Key Questions to be considered in the course of Adaptive Implementation" as adopted in the Water Board's Basin Plan Amendment. Detailed monitoring data were not available at the time when the TMDL was written and the Basin Plan Amendment adopted. We urge that you take into account the results of our ongoing monitoring and analysis efforts, bulleted below:²

Steelhead smolt production was stable or slightly increasing from 2009 through 2012, then declined in 2013 and remained low through 2016 – a pattern that is consistent with annual rainfall totals. This pattern suggests that climatic conditions (i.e. rainfall amounts and timing), and the associated streamflow conditions in any given year, may account for substantial changes in steelhead and salmon production in the Napa River watershed. The sediment TMDL purports that decreased spawning success due to excessive fine sediment and streambed scour are likely major drivers in the overall production of salmonids in the watershed. However, our smolt production data (although limited for this purpose) suggest that spawning success may be a lesser limiting factor, and that more focus should be directed on the effects of changing climatic conditions and long-term reductions in streamflow.

Steelhead smolts in the Napa River watershed are relatively large, and likely experience high ocean survival rates. It is well-established that there is a positive correlation between smolt size and ocean survival, with larger smolts (>150mm, 5.9 inches) having increasingly higher survival rates. RCD's monitoring has demonstrated that steelhead smolt length during the past eight years of sampling (2009-2016) has averaged 189mm (7.4 inches). It is also worth noting that smolts were consistently large during all eight years of sampling, despite significant variability in rainfall and streamflow patterns. Additionally, Stillwater Sciences conducted a two-year steelhead growth study from 2005 to 2007 in the Napa River watershed and found that juvenile steelhead attained an average size of 171mm (6.7 inches) prior to smolting from tributary streams into the mainstem. Based on these data, we feel there is now sufficient evidence to dismiss the hypothesis that Napa River steelhead smolts are undersized, as suggested by the Napa River Limiting Factors Analysis and Napa River Sediment TMDL.

Adult Chinook salmon spawning in the Napa River have been highly variable during the past 12 years. RCD has conducted adult Chinook salmon spawner surveys from 2004-2015 and has observed substantial variation in their abundance and distribution. Adult Chinook enter the Napa River estuary in fall (typically September – November) before winter baseflow has been established. As a result, the upstream migration and spawning of Chinook salmon is significantly limited, both temporally and spatially, by low-

flow or dry conditions common in the lower mainstem Napa River during this time. It is therefore important to recognize that climatic variability presents a major limiting factor for the Chinook population, and expecting consistently high runs each year may not be realistic given the life history of this species in this watershed.

Chinook smolt catch rates during the past eight years show significant variability, including several years when no Chinook smolts were captured. The variability in Chinook abundance from year to year suggests that the population is relatively small and may be comprised of a significant percentage of "strays" – fish that were born in other river systems. The RCD has been involved in ongoing efforts to study the origins of Chinook salmon in the Napa River through otolith micro-chemistry and genetic analysis. However, due to the very small numbers of Chinook observed during the past several years, we have been unable to collect enough tissue samples from spawned adults to draw meaningful conclusions. Additional genetic and otolith analysis are needed to justify the TMDLs stated goal of "establish[ing] a self-sustaining Chinook population," particularly given current available information and lack of historic information.

Thank you again for the opportunity to comment on the draft environmental impact report (EIR) for the General WDR for Vineyard Properties in the Napa River and Sonoma Creek watersheds and to provide additional information related to the status of important fish species and conditions in the Napa River watershed. As we continue to review and consider the Vineyard WDR, we reserve the right to provide additional comments prior to potential adoption by the Water Board. Please do not hesitate to contact me or our Executive Director, Leigh Sharp, if you have any questions about these comments.

Sincerely yours,



Beth Painter
President of the Board of Directors
Napa County Resource Conservation District

cc: Dyan Whyte, San Francisco Bay Regional Water Quality Control Board
Alfredo Pedroza, Chair, Napa County Board of Supervisors
Senator Wolk
Assemblymember Dodd