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To: California Regional Water Quality Control Board
North Coast Region

DRAFT

Regarding:

Order No. R1-2008-0106

NPDES No. CA0025054

WDID NO. 1B96074SSON

Waste Discharge Requirements, (WDR), for the City of Santa Rosa, The County of Sonoma, and the Sonoma County Water Agency, Storm Water (Wet Weather) and (Dry Weather discharges from Municipal Separate Storm Sewer Systems-MS4) The City of Santa Rosa, The County of Sonoma and the Sonoma County Water Agency (herein after permittees) joined are requesting a renewal of their National Pollutant Discharge Elimination System (NPDES) permit

The Clean Water Act requires NPDES permits for storm water discharges from MS4, storm water discharges associated with industrial activity (including construction activities), and designated storm water discharges which are considered significant contributors of pollutants to waters of the United States. The State of California has in-lieu authority for the NPDES program, The Porter-Cologne Water Quality Control Act authorizes the State Water board, through the Regional Water Boards, to regulate and control the discharge of pollutants into the waters of the State.

The permittees' December 31, 2007 permit re-application package included the draft Storm Water Management Plan (aka Management Plan). The intent of the Management Plan is to identify specific tasks and programs to deter the discharge of pollutants in storm water to the maximum extent practicable, (MEP) in a manner designed to achieve compliance with water quality standards and objectives. The Management Plan identifies measures to effectively prohibit non-storm water discharges into municipal storm drain systems and watercourses within the permittees jurisdictions. The Management Plan was developed between the polluters/permittees and the Water Board (WB) staff. Based on

these discussions between the permittees and the WB staff, the permittees submitted a Management Plan including their recommendations on how to achieve maximum extent practicable best management practices (MEP BMP) to reduce the significant environmental impacts of pollutants reaching receiving waters and non sewer storm drains. The WB is requiring that the Management Plan be revised/modified including but not limited to: additional measurable goals, improvements in program elements to reduce pollutant discharge and modifications to implementation schedules. The Management Plan defines the actions and sets measurable goals that will meet the MEP standard, when revised. Through goals, objectives and activities the Management Plan (MP) describes a framework for management of storm water discharges during the term of this Order. Permittees are encouraged to form partnerships to improve beneficial uses. The MP is subject to periodic review and change. The existing MP requires design review and post-construction storm water treatment only for large projects (one acre or more). Consistent with the storm water program goals of requiring iterative improvements to storm water quality, this Order will require new development controls for smaller projects, based on land use categories. The MP shall also be revised during this permit term to prioritize post-construction storm water treatment best management practices, (BMP) for their efficacy in removing pollutants of concern and minimizing hydromodification. Each permittee is responsible for adopting ordinances that will effectively implement BMPs. Ministerial approvals can be required to prove compliance with pre-existing criteria before development is allowed.

REDWOOD CHAPTER COMMENTS

including

some of the Findings and status update of the North Coast National Pollutant Discharge Elimination System (NPDES) permit (for full finding refer to the North Coast Regional Water Quality Control Board's Waste Discharge Requirements Order No. R1-2008-0106, Draft MSA Storm Water Permit):

SCOPE OF THE PERMIT: Boundaries of the Waste Discharge Requirement (WDR) are being expanded from Laguna de Santa Rosa and Mark West Creek watershed to include the entire area of Sonoma County that falls within the North Coast Region and includes all or portions within Sonoma County of these watersheds: Salmon Creek hydrologic area (HA), Bodega Harbor HA, Estero San Antonio HA, and the Estero Americano HA within the bodega hydrologic Unit (HU); Lower Russian River HA, Guerneville hydrologic sub area, ((HAS) Austin Creek HAS, Middle Russian River HA, Laguna HA. Santa Rosa HAS, Mark West HAS, Warm Springs HAS, Geyserville HAS, and Sulphur Creek HAS within the Russian River HU; Gualala River HA, Rockpile Creek HAS, Buckeye Creek HAS, Wheatfield Fork HAS, Gualala HAS, and Russian Gulch HA within the

Mendocino Coast HU.

Finding: This modification to the NPDES permit will address pollutants, including sediment and nutrients that discharge to the waters of the State from permittee owned and or operated connected storm water infrastructure currently in place as well as future additions to the systems. These modifications of the order will help provide a consistent watershed-wide effort to control all MS4 sources of pollutants to receiving waters within the watershed. In making this modification to the permitted area, the Regional Water board recognizes that there will be different permittee control strategies and implementation timelines needed for different land use areas.

Comments are underlined: The major land use in this region is agriculture or vineyards and in many projects within this area it first involves deforestation, deep ripping of soils and removal of roots that hold slopes in place. Vineyards do not hold slopes in place during the wet season. Severe erosion does occur carrying with it nutrients, pesticides and herbicides from vineyard operations. This constitutes a significant storm water discharge as described in this staff report/findings.

Mendocino has no grading ordinance.

Sonoma County has a limited and ineffective grading ordinance that is a ministerial permit not allowing discretion.

These gaps in environmental protection are severely polluting the waters of the State and degrading aquatic ecosystems including spawning habitats for salmon and steelhead.

Finding: Storm Water runoff and non-storm water discharges that enter the permittees' MS4s are regulated by this Order. Provisions of this Order apply to the urbanized areas of the municipalities, area undergoing urbanization and areas which the Regional Water Board Executive Officer determines are discharging storm water that causes or contributes to the violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States pursuant to the Clean Water Act.

Vineyard projects are in this region expanding into fragile sloped landscapes and many are on steep slopes. Erosion control plans may be used and encouraged by the Sonoma and Mendocino. If underground perforated pipes, check dams, drop inlets are used to drain the slope of storm water this constitutes infrastructure or storm water drainage to a point source and or sheet flow to receiving waters. The pipes divert the water off project to down slope causing a point source that receives 'hungry water' (channalized and fast water ready to engage soil and transport). This 'hungry water' causes severe erosion and bank failure in streams. Installation of underground infrastructure is urbanization of

wildlands. This NPDES permit update must include all urbanization causing polluted storm water.

Finding: This Order will not restrict or control local land use decision-making authority, however, the permittees, are responsible for storm water and non-storm water impacts when making planning decision in order to fulfill the CWA requirements to reduce the discharge of pollutants to municipal storm water facilities and receiving waters of the State to maximum extent practicable (MEP).

Vineyard conversion of wildland creates urbanization by developing slopes with underground pipes, drop inlets, sediment basins and rock check dams that then collect storm water from sheet flow. Illicit discharges of sediment nutrients, pesticide residues and mercury are carried via these structures to receiving waters of the State entering and other MS4 structures.

Finding: The North Coast Regional Water board has adopted a Water Quality Control Plan for the North Coast Basin (Basin Plan). Regional Water Board staff is currently working on a Basin Plan amendment that will address threats from discharges to surface waters and municipal storm water facilities. The Storm Water Permit required for permittees to discharge pollutants to receiving waters and municipal facilities will include the practice of best management practices (BMP) to the MEP.

Sonoma is lacking a discretionary grading ordinance and both Mendocino County and Sonoma County underperform best management practices, BMP, to the maximum practicable, (MEP) as evidenced by stream listings on the 303 (d) list of the Clean Water Act, further listings on the Endangered Species Act of Salmon and steelhead with rising temperatures in most North Coast streams.

Findings: The State Water Board Resolution No. 68-16 contains the State Antidegradation Policy, titled "Statement of Policy with Respect to Maintaining High Quality Waters in California (Resolution 68-16); this policy applies to all waters of the State, including ground waters of the State, whose quality meets or exceeds (is better than) water quality objectives. Resolution No. 68-16 incorporates the federal Antidegradation Policy (40 CFR section 131.12) where the federal policy applies, (State Water Board Order WQO 86-17). Both, state and federal antidegradation policies acknowledge that an activity that results in a minor water quality lowering, even if incrementally small, can result in violation of antidegradation Policies through cumulative effects, for example, when the waste is a cumulative persistent, or bioaccumulative pollutant.

Groundwater resources lack any protection in the project area.

Finding: The State Water Board adopted a revised Water Quality Control Plan for

ocean Waters of California (Ocean Plan in 2005). The Ocean Plan establishes water quality objectives for California's ocean waters and provides the basis for regulation of waste discharged into the States coastal waters. It applies to point and nonpoint sources.

Vineyardization/urbanization of wildlands is vastly degrading this regions streams. Minor slopes, under 5% have no erosion protection. Sheet wash discharges pollutants to MS4 and municipal water supplies that discharge to receiving waters including ocean confluences.

Finding: On May 6, 2008, the State Water board adopted Resolution No. 2008-30 Requiring Sustainable Water Resources Management. It was resolved that the State Water Board: a) continues to commit to sustainability as a core value for all Water Boards' activities and programs b) Directs WB's staff to require sustainable water resources management such as low impact development, (LID) and climate change considerations, in all future policies, guidelines and regulatory actions; and c) Directs Regional Water Boards to aggressively promote measures such as recycled water, conservation and LID BMP where appropriate and work with dischargers to ensure proposed compliance documents include appropriate, sustainable water management strategies.

This region's predominate vegetation is coastal temperate rain forest and vast oak woodlands and chaparral. Wildland conversions to vineyards are destroying the carbon sequestration capacity of the region. Loss of trees to vineyardization of forests is not sustainable and continues to severely degrade our watersheds.

Finding: On May 15, 2008, The California Ocean Protection Council adopted the Resolution Regarding Low Impact Development. This resolves to promote policies that new developments and redevelopments should be designed consistent with LID principles so that storm water pollution and the peaks and durations of runoff are significantly reduced. This is implemented through the NPDES permit.

When it comes to vineyardization of wildlands, LID should include preservation of tree canopy and sensitive biological areas. Sonoma and Mendocino County lack LID alternative project designs. Vineyards projects in this region are not discretionary.

Findings: TMDLs are numerical calculations of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing points (Waste Load Allocation (WLA) and non-point sources (Load Allocation (WL)). Storm water (wet weather) and non storm water (dry weather) discharges from MS4s are considered point sources.

Finding: All permittees through this Order shall implement all necessary control measures to reduce pollutants which cause or continue to cause or contribute to water quality impairments, but for which TMDLs have not yet been developed or approved to eliminate the water quality impairments.

Most streams in this permit region lack any TMDL implementation plans.

Findings: The action to adapt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) in accordance with section 13389 of the California Water Code, (CWC). The renewal of this NPDES permit is also exempt from CEQA pursuant to Title 14, California Code of Regulations, section 15301, because it is for an existing facility.

Given the scope of this NPDES permit and the case being made by the Redwood Chapter that vineyardization of slopes constitutes infrastructure carrying polluted water, this permit includes future development of storm water infrastructure. Therefore, CEQA applies. This permit should undergo CEQA review.

Finding: Under 6217 (g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Coastal States with approved coastal zone management programs are required to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: 1) agriculture; 2) silviculture; 3) urban; 4) marinas; and 5) hydromodification. This Order addresses the management measures required for some of the categories identified in the CZARA.

Given CZARA, what is the nexus with NPDE/WDR programs?

Finding: On May 2000, the US. EPA established numeric criteria for priority toxic pollutants for the State of California. This policy requires that discharges comply with TMDL derived load allocations as soon as possible.

The WB considers that all new development and significant redevelopment activity in specific categories, that receive approval or permits from a municipality (CEQA or ministerial) are subject to storm water mitigation requirements.

Erosion control plans/projects for vineyards in sloped wildlands often consist of pipes carrying polluted storm water. NPDE/WDR should include these projects new and old.

Finding: Urban development changes the quantity and flow characteristics of storm water runoff as compared to undeveloped conditions. Increases in the volume and velocity of storm water runoff due to development have the potential to greatly accelerate streambank erosion and impair stream habitat in receiving waters. Studies have demonstrated a direct correlation between the degree of

imperviousness of an area and the degradation of its receiving waters. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious surfaces. Percentage of impervious cover is a reliable indicator and predictor of potential water quality degradation expected from new development. Added flow modifications from land clearing and grading, stream alteration and runoff channelization can exacerbate impacts from impervious surfaces.

Deforestation, and conversion to vineyards is the largest land use in Sonoma and Mendocino Counties. Fresh water niche habitats are essential to salmon and steelhead. These niche habitats are being degraded by this land use and NPDES/WDR shall protect water quality in these fragile stream ecosystems. Increased rate of runoff from removal of tree and understory canopy causes significant cumulative impacts to down stream receiving water. Bank failure and bed erosion are destroying stream geomorphology exacerbating the decline of special status aquatic species. Additionally, grading of fragile slopes, installation of pipes, drop inlet, check dams and channalization of stream networks causes severe hydrologic modifications that increase runoff rates off site of the project. While WB may see these erosion control methods as BMP, off site hydrologic impacts from these erosion control plans (often directed by the Resource Conservation Districts) or BMPs should be re-evaluated.

Finding: The WB places a high priority on planning to address water quality in the region with the highest environmental improvements available.

Management Plan additional Comments:

1. The findings for the revised MP fails to say why the current NPDES permit failed to succeed in the current MP goals. The public would like to understand the scope and gaps of the current permit that necessitated the revision of the NPDES permit.

2. Permittees and agencies enter into discussions about the permits to discharge pollution to the waters of the State. How can the WB make this more transparent and inclusionary for the public who must pay for the impacts of polluted water? Polluters and agencies are highly politicized. Not having the public at the table of crafting permits lacks full disclosure and puts the 'fox in the hen house' or the polluters setting their own permit restrictions.

2. The monitoring element of the revised MP appears insufficient. We need bioassessment monitoring and data results that are transparent and open to public access for scrutiny. Monitoring should be by an independent entity. Benthic Macro Invertebrate monitoring and snorkel surveys for salmon and steelhead along with adult and juvenile trapping are suggested methods of bio-

monitoring. Electro shocking is not recommended as it later kills the fish. Long term monitoring is essential to track the trends of ecosystems over time. Bio-monitoring is essential to determine if BMP MEP are working.

3. State budgets may cause constraints making this revised MP cost prohibitive. However, the price of doing nothing and/or minimal is a heavy price to pay when the public must loose water quality and pay for expensive infrastructure to clean water for public beneficial uses. Water resources are essential to quality of life and if left with inadequate funding and staffing this becomes a National security issue.

4. Detention and retention basins are often times engineered for the 2-10 year storm event. The engineers have no plan for protecting down stream resources when these basins overflow beyond the engineered storm event. The permittee should post a bond in the event the basins fail and cause illicit discharge s to receiving waters. Engineers must guarantee that their work to within a small margin of error. The project applicant and lead agencies who approve erosion control plans/BMP must be aware that detention have a high probability of failure. During predicted large storm events, owners of projects should be prepared to maintain overwhelmed basins.

6. Many BMP structures lack adequate maintenance. BMPs structures like, silt fences, straw swaddles, detention and retention basins, drop inlets, pipes etc. can fail to prevent pollution to receiving waters when maintenance is lacking or large storm events overwhelm storm systems. WDR need to build into the MP adequate maintenance provisions, with self monitoring and monthly reports during the wet period.

7. In the case of cover crops vineyards where BMP include 75-80% cover crop, often the cover crop fails and is not preventing erosion. If cover crop does not establish then the project should be re-evaluated. Projects could demonstrate cover crop viability prior to project construction. Incentives could be offered to projects that succeed in year around over 80% cover crop.

8. While MP encourage preservation of environmentally sensitive sites, staff reviewing storm water plans have few incentives to offer a permittee. MP could encourage preservation of environmentally sensitive sites and inclusion of incentives for good storm water management and success.

8. Enforcement is lacking in failure of BMP allowing pollution events to continue throughout the wet season. The permit process needs to include hard and fast enforcement of failed projects, restitution and rehabilitation to the land and streams must be required by the WB. Failed BMP due to negligence, improperly installed erosion control structures should require mitigations and fines.

9. Sheet runoff will eventually enter receiving waters or point sources (MS4). Therefore, sheet runoff or non-point source pollution must require NPDES/WDR permits. Much of the sediment, nutrient and pathogen discharges are from agricultural projects that have necessitated the 303 (d) listing of this regions streams. While agricultural projects under 5% slope fall outside most ordinances and regulations, this category of storm water discharges are highly under scrutinized by regulatory agencies yet these discharges are laden with sediment, nutrients, pesticides and herbicides etc. Year around cover crop with coverage of at least 80%, crop rotation and biodynamic farming could be alternatives to highly industrialized single row crops. Farming incentives could encourage agri-business to change their pattern and practices

10. Post construction BMP should have a framework of inspection, reporting, maintenance and repair of erosion control devices that is easily monitored by the agency enforcing BMP.

11. The public should be able to have access to enforcement of BMP MEP. Repeat offenders should post ponds and the public should have access to mitigation measures, restoration etc.

12. Construction projects should be made to show that their projects will be complete or have BMP erosion control in place by the end of the grading period Oct. 15th.

13. Waivers after August 15th should not be allowed unless the project proponent posts a bond large enough to cover the damage to the environment should rain set in and the project is exposed.

14. Pattern and practice in the development world uses the least amount of straw to cover a disturbed landscape. Rilling occurs under the straw. The WB should require higher levels of coverage over disturbed soils.

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