

October 22, 2008

Catherine Kuhlman
Executive Officer
Regional Water Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
Via e-mail to: ckuhlman@waterboards.ca.gov
cc: mdougherty@waterboards.ca.gov

Re: Order No. R1-2008-0106 NPDES No. CA0025054 Santa Rosa & Sonoma County MS4
Permit Comments

Dear Mrs. Kuhlman,

I am submitting these comments on behalf of our over 1400 members and in support of our mission to preserve, restore and enhance water quality and biological health of the Russian River watershed through community education, scientific research, expert advocacy and enforcement.

General Comments

We strongly support the draft Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from Municipal Separate Storm Sewer Systems covering the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency contained in Order R1-2008-0106 (draft permit). Our support is driven by:

- Increased requirements to attenuate post-construction stormwater volume and pollutants and requirement that LID strategies be considered in the updated SRA-SUSMP
- Draft permit requirement that construction and post-construction stormwater controls apply to projects under one acre
- Increase in permit coverage area to the entire North Coast Waterboard jurisdiction in Sonoma County
- Requirement that stormwater controls be applied to both discretionary and ministerial projects
- Specification of minimum BMP's for construction sites and other activities that generate stormwater pollutants
- Inclusion of the illicit connections and illicit discharges elimination program
- Adherence to the Coastal Zone Management Act mandates

Our comments are informed by our activities in monitoring land use activities that increase stormwater pollution, rate and volume of flows to municipal stormwater systems and our six years of monitoring stormwater run-off. Our comments are also informed by the recently released report by the National Research Council titled, "Urban Stormwater Management in The U.S." (NRC Report) that provides an exhaustive evaluation of the role of stormwater pollution as a major cause of water quality impairment, the current municipal stormwater program and regulations and its effectiveness at preventing and reducing stormwater pollution through permit improvements. The NRC Report also provides conclusions and recommendations for improving stormwater permitting and land use controls to achieve the legal mandate of the Clean Water Act.

Stormwater in Sonoma County is a significant source of water quality and habitat degradation from increases in pollutants causing water quality impairments, increases in flow volumes and rates leading to erosion and degraded habitats in urban areas. In more rural areas sedimentation pollution from development and land use changes have resulted in increasing volumes of stormwater polluted with sediment that are impacting beneficial uses such as rare or endangered fish according to numerous reports and the draft permit fact sheet.

The NRC report examines the current permit system and concludes that, *"EPA's current approach to regulating stormwater is unlikely to produce an accurate or complete picture of the extent of the problem, nor is it likely to adequately control stormwater's contribution to waterbody impairment"*, lending strong support to the strengthening of this permit over the previous permit term. In addition the NRC report states that, *"Future land development and its potential increases in stormwater must be considered and addressed in a stormwater regulatory program"*, which supports this permits inclusion of improved post-construction stormwater controls, the requirement to consider LID and expansion of permit boundary area to more fully regulate land use impacts in non-urban areas due to the sediment impairments across the Sonoma County permit region.

We also support the comments on improving LID provisions in the permit and on Alternative Post-Construction Mitigation Programs that were submitted by NRDC.

Specific Comments on Draft Permit WDR

Finding #9 & 10

We strongly support the inclusion of the entire area of the Russian River watershed and all coastal watersheds within Sonoma County inside the North Coast Waterboard area. Increasing development outside urban areas is the primary cause of sediment impairment that covers all streams in the new permit boundary area. In light of this fact increasing the permit boundary area is critical in order to reduce stormwater pollution to levels that meet water quality standards and fully support the RARE beneficial use in non-urban areas. In the NRC Report it states, *"There is a direct relationship between land cover and the biological condition of downstream receiving waters. The possibility for the highest levels of aquatic biological condition exists only with very light urban transformation of the landscape. Even then, alterations to biological communities have been documented at such low levels of imperviousness, typically associated with roads and the clearing of native vegetation, that there has been no real "urban*

development" at all." This supports the need to regulate activities in the entire watershed not just in urban areas so the boundary expansion is warranted by the need to protect sensitive aquatic communities that already suffer from water quality impairment.

Finding #27

We are concerned that "small accidental" releases of recycled water that produce non-stormwater run-off could be considered a low threat. A major impairment of the Mark West

1. NRC, "Urban Stormwater Management in The U.S.", October 15, 2008, pg195

Creek/ Laguna de Santa Rosa watershed is for nutrients. The recycled water from the Sub-regional treatment facility in Santa Rosa is very high the nutrients nitrogen and phosphorous according to R1-2006-0045. Given the current budget climate, required maintenance of irrigation equipment using recycled water will be reduced potentially leading to larger volumes of "incidental run-off" of recycled water. This significantly contributes to the continuing impairment of receiving waters and should be addressed via strict BMP's, enforceable provisions and not given a pass due to the lower dilution factor during non-storm periods.

Finding #36

We disagree with the general idea that MEP is determined by economic conditions of the permittees. Under the Clean Water Act poverty is not a defense for lack of compliance so we wonder why meeting permit mandates is contingent upon budgets as a blanket statement. We do agree that the burden of proof for economic hardship lies with the permittees and agree that prioritizing MEP requirements is a good idea so that when defensible economic hardship is claimed MEP requirements with lower cost/benefit or requirements producing less actual pollutant reduction are delayed before requirements that yield the greater cost benefit ratio. We are concerned that even though the City of Santa Rosa has a stormwater utility fee that they are cutting out MEP activities like street sweeping, isn't this covered under the fee which hasn't changed? If fees are lower temporarily discontinuing public education should be employed before discontinuing a direct pollutant reduction activity such as street sweeping as priority has to be given to activities that reduce pollutants of concern.

Finding #40

We strongly support the inclusion of construction projects less than one acre in the SRA-SUMP and the requirements to adopt LID strategies in an updated SRA-SUMP. All development projects create stormwater pollution regardless of size. As developable land amounts decrease smaller infill projects of less than one acre will become more common as well as the economic climate reducing larger developments in favor of smaller ones with less risk so requiring stormwater controls is necessary to meet the mandates of this permit.

We also support the requirements for LID as they not only control stormwater pollutants but also flow rates and volumes unlike most structural post-construction BMP's. As the NRC report concludes, *"Nonstructural SCMs such as product substitution, better site design, downspout disconnection, conservation of natural areas, and watershed and land-use planning can dramatically*

reduce the volume of runoff and pollutant load from a new development”², which supports the use of LID for post-construction controls.

Finding #46

Again we agree with the permit expansion across the entire RB1 jurisdiction of Sonoma County as it allows adherence with the Coastal Zone Management Act requirements that EPA permits assure the recovery of ESA listed species. To be proactive in addressing stormwater pollution in new development the county will actually benefit from cost savings associated with more costly solutions if water bodies do not improve to meet water quality standards.

Finding #72

Since sediment is the most significant impairing pollutant to threatened steelhead and

2. NRC Report, pg 374

salmon the new requirements for construction site stormwater control are especially vital to any effort to meet water quality standards and meet the recovery goal of the Federal and State Endangered Species Acts.

Finding 78 & 79

We strongly support the use of LID strategies as BMP for post-construction stormwater controls to MEP. LID not only addresses pollutants but also volume and rate of discharge which if not addressed can lead to significant habitat degradation in spite of pollutants of concern being controlled.

Finding #88

SW mitigation required for ministerial projects, the permittees land use authority should require ministerial projects to meet SW mitigation requirements to be qualified as ministerial. If a ministerial project does not employ stormwater control BMP's then the project will likely lead to stormwater related impacts to water quality standards and beneficial uses and therefore should be discretionary due to the unmitigated impacts from stormwater. To avoid a ministerial project from being discretionary the use of stormwater control BMP's and LID strategies should allow continued designation of projects as ministerial.

#101

In reviewing the attached EPA Region IX MS4 Inspection Report of Sonoma County and Santa Rosa it is apparent that construction site inspections and adherence with the permittees own regulations governing construction sites are deficient. Our own field inspections have concluded that same result particularly our inspection of the Montage subdivision in Santa Rosa on November 2, 2006 that resulted in a Notice of Violation. The EPA MS4 report shows that the inspection and compliance system is not functioning and staff needs to receive additional training and guidance to complete their responsibility to ensure compliance with construction site stormwater controls.

Section C

Part 2.2

This section is important as from the EPA Region IX MS4 Inspection Report it is clear that the permittees are not using their authority to control construction site stormwater pollution or require adequate BMP's to meet MEP. The inclusion of stop-work orders and referrals to the DA have not occurred due to either lack of training or lack of willpower to enforce the permit on builders. It should be noted that not one single stop-work order has been issued and no referrals to the DA for prosecution despite the documented violations of permittees own regulations even on their own projects as highlighted in the attached EPA MS4 Report. A requirement that annual reports include documentation of enforcement activities should be included to monitor progress to meeting the mandate of this section of the permit.

Part 3 -Fiscal Resources

It would be useful and feasible to include in this section revenue sources and amounts that support permit activities as well as a report on external funding sources sought by the permittees such as grant funds or similar to fully evaluate program effectiveness as allocating resources especially in light of the current economic climate and already stated desire of the permittees to delay or waive implementation of program activities.

Section D

Part 2 - Public Information and Participation Program

In light of limited resources we suggest that education and outreach programs be reviewed with priority given to the education efforts that produce the most direct reduction in stormwater impacts such as prioritizing educating employees from certain stormwater pollution generating industries or businesses over general public education. In addition in light of the conclusions in the EPA MS4 Report priority should be given to educating inspection and enforcement staff and permittees own development project staff to set the example for the public to follow. Failure of permittees own staff to meet permit requirements will lead to an erosion of public support for stormwater pollution control so the messenger should be the first to be educated.

Part 4

In light of the conclusions and recommendations of the NRC Report the requirements in this section are vital to meeting MS4 permit mandates and to fully meet water quality standards and support beneficial uses.

Part 5.3,4 &5

We strongly support the following reasons for the requirements in these sub-sections which are supported by the EPA Region IX MS4 report;

"To facilitate the oversight and enforcement process, it is strongly recommended that the County formally designate and require the implementation of a minimum set of specifications and design criteria for construction site BMPs. Formal adoption of such minimum BMP standards would provide a more enforceable basis to the County staff in making inspection determinations and would alleviate the burden of providing compliance assistance in an ad-hoc manner. Adoption of minimum BMP standards on a countywide basis would ideally serve as a coordinated interdepartmental standard and may deliver a

clear message to the development community on the County's expectations for BMP implementation."³

As stated earlier, the NRC Report concludes that, *"Individual controls on stormwater discharges are inadequate as the sole solution to stormwater in urban watersheds. SCM implementation needs to be designed as a system, integrating structural and nonstructural SCMs and incorporating watershed goals, site characteristics, development land use, construction erosion and sedimentation controls, aesthetics, monitoring, and maintenance. Stormwater cannot be adequately managed on a piecemeal basis due to the complexity of both the hydrologic and pollutant processes and their effect on habitat and stream quality. Past practices of designing detention basins on a site-by-site basis have been ineffective at protecting water quality in receiving waters and only partially effective in meeting flood control requirements.*

Nonstructural SCMs such as product substitution, better site design, downspout disconnection, conservation of natural areas, and watershed and land-use planning can dramatically reduce the volume of runoff and pollutant load from a new development.

Such SCMs should be considered first before structural practices. For example, lead concentrations in stormwater have been reduced by at least a factor of 4 after the removal of lead from gasoline. Not creating impervious surfaces or removing a contaminant from the runoff stream simplifies and reduces the reliance on structural SCMs. SCMs that harvest, infiltrate, and evapotranspire stormwater are critical to reducing the volume and pollutant loading of small storms. Urban municipal separate stormwater conveyance systems have been designed for flood control to protect life and property from

3. USEPA Region IX MS4 Inspection Report, County of Sonoma and the Sonoma County Water Agency, Nov 2007, pg3

*extreme rainfall events, but they have generally failed to address the more frequent rain events (<2.5 cm) that are key to recharge and baseflow in most areas. These small storms may only generate runoff from paved areas and transport the "first flush" of contaminants. SCMs designed to remove this class of storms from surface runoff (runoff-volume-reduction SCMs— rainwater harvesting, vegetated, and subsurface) can also address larger watershed flooding."*⁴

Part 8 Development Construction Program

This section is vital to meeting water quality standards for sediment and fully supporting beneficial uses as required by this permit, the Basin Plan and the CZMA. In light of the previously mentioned documented failures to ensure proper construction stormwater permit compliance the use of strict BMP's will provide the tools needed for inspectors to determine compliance.

PART 10 – Illicit Connections and Illicit Discharges Elimination Program

We strongly support the inclusion of this program in the permit. This program will reduce stormwater pollution that will reduce the impairments of receiving water bodies and reduce the permittees burden to address these contributions to impairment.

Monitoring and Reporting Program

General Comments

In the permittees annual report the compliance point for nutrients should follow EPA Region IX criteria used in establishing the 2006 303(d) list for nutrient impairment of the Laguna de Santa Rosa. These limits were 0.1 mg/L for Phosphate and 1.0mg/L for nitrate-nitrogen and

any use of drinking water standards should be abandoned as the EPA limits were established to protect aquatic beneficial uses that are more sensitive than drinking water standards.

In the NRC Report a great amount of information is presented on atmospheric deposition of pollutants that are entrained in stormwater. Some of the conclusions were that most phosphate deposition was linked to sediment deposition and the majority is from local sources. Some pollutants such as nitrogen and mercury can have a significant amount or majority from distant sources.

We wonder in light of the economic climate whether this particular study is a priority. Whether or not a pollutant comes from distant or near sources or whether they are under control of the permittees does not seem material to this permit. Stormwater regulations require all pollutants be addressed via the permit regardless of source.

If any lessons are to be learned by the NRC Report that apply to this permit area it is the findings that depositional sediment and phosphate are from primarily local sources indicating that non-rain season windblown dust should be a priority from this permit as any windblown sediment and attached phosphate will add to the pollutant load during the rainy season. Dust control in the dry season should be addressed as part of the permit activities.

In conclusion this permit as written will lead to reductions in stormwater pollutants, stormwater amounts and rates which will lead to meeting water quality standards and reduction in impairing pollutants. In spite of the current economic climate the permit is fair and reasonable as allowing continued water quality degradation places a larger cost for reversing that degradation. This permit is an investment in future water quality benefits at a

4. NRC Report, pg 374

much lower cost that if certain permit activities were either not required or delayed due to current economic conditions.

I reiterate our strong support for additional development mitigations especially use of LID and reduced size for land use controls, hydromodification controls, illicit discharge program, specific BMP's to strengthen inspection controls and the expansion in permit boundaries.

Thank you for your consideration of our comments.

Sincerely,

Don McEnhill
Riverkeeper

Attachments:

National Research Council, "Urban Stormwater Management in The U.S.", October 2008
City of Santa Rosa Municipal Separate Storm Sewer System (MS4) Inspection Report
County of Sonoma and the Sonoma County Water Agency Municipal Separate Storm Sewer System (MS4) Inspection Report