

July 3, 2009

Mr. Robert Anderson and Members of the Board
Regional Water Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403
Via e-mail to: mdougherty@waterboards.ca.gov

Re: Order No. R1-2009-0050 NPDES No. CA0025054 Santa Rosa & Sonoma County MS4 Permit Comments

Dear Mr. Anderson,

I am submitting these comments on behalf of our over 1400 members and in support of our mission to work with the community to advocate, educate, and uphold our environmental laws to ensure the protection and restoration of the Russian River for the health and benefit of all who use and enjoy it. In general we commend the Regional Water Quality Control Board (Board) staff for working to revise this Draft MS4 Permit (Permit) to respond to economic issues while retaining elements that meet the iterative improvement goal.

We strongly support the following elements of the Permit:

- Requirement for outfall monitoring
- Expansion of Permit boundary for the four elements listed
- Inclusion of the Commercial/ Industrial Facilities Program
- Requirements for Hydromodification Controls and use of LID

We however are very concerned about the following in the Permit:

- Lack of strong performance criteria for hydromodification controls
- The current Monitoring Program cannot measure TMDL compliance
- Detection limits employed by Permittees is far greater than level that causes impairment

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 U.S. stormwater 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 impairment¹”*, 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.

Specific Comments

Waste Discharge Requirements

Finding #17

We recommend based on available evidence this sentence be revised as follows:

The discharges from the Co-Permittees’ MS4s as detailed in the Fact Sheet, contribute to violations of water quality standards and are a contributor of pollutants, *including impairing pollutants*, to the Laguna watershed.

Finding #22 Permit Boundary

We strongly support the expansion of the permit boundaries with respect to the four elements as a cost effective means of addressing discharges to the MS4 outside the current boundary in particular the implementation of post-construction treatment controls such as LID. As stated above in the NRC Report language pertaining to new development this is critical to addressing 303(d) listing impairments such as the existing impairments across almost all streams for sediment, which is closely related to development. The county, state and federal government are spending millions each year to improve habitat for ESA listed Coho and Chinook Salmon and Steelhead Trout so this issue needs to be addressed to prevent new development from causing or contributing to the existing sediment impairment. As noted in finding #21 permittee monitoring reports and other data sources show continued pollution issues occur.

For efficiencies sake in light of Sonoma Counties request to account of the current economic climate we question whether having a separate regulatory program for the four program elements makes sense. We urge both Sonoma County and the Board to place these elements within this Permit.

Finding #26 Land Use Authority

We support the need for the permittees to consider stormwater pollution impacts prior to making land use decisions and this follows the mandate of CEQA as well.

Discharge Prohibitions

Section A, Table 1

We support the removal of sidewalk rinsing as an allowable non-stormwater discharge. The entire purpose of sidewalk rinsing is to clean dirt and other potential pollutants from sidewalks and regardless of whether high pressure- low volume methods are used it still results in polluted non-stormwater discharges or launches the pollutants that will be entrained in future flows and enter receiving waters.

Section C: TMDLs

In reviewing the Monitoring Program for this permit, we wonder how the permittees can reasonably assure compliance with the TMDL wasteload allocations or net loads given the current monitoring program? It will be impossible to accurately determine whether the net loads are being met with monthly monitoring at one location that isn't even a compliance point for the net loads.

Section D Stormwater Quality Management Program Implementation

Part 2 – Legal Authority

We recommend changing the wording in 1. (b)(7) to include concrete sawcutting as follows:

- 10) Concrete truck cement, pumps, tools, *sawcutting waste fluids* and equipment washout;

Concrete cutting fluids contain very fine sediment that is an impairing pollutant within the current MS4 boundary and can be contained with simple BMP's such as vacuum pumps that we see some sawcutting firm's use.

Part 3 – Fiscal Resources

Section 1.(a)(3)(B) We support the inclusion the "storm water related activities only" as in our opinion activities already required under NPDES permits for POTW's are added to the budget in annual reports, such as grease disposal prevention programs that are already mandated under sanitary sewer overflow prevention programs. If any cost is incurred to satisfy a separate legal or other permit requirement the entire amount should not be counted as part of the Permit budget as it leads to inflating the budget and supports claims of economic burden that are not valid.

Section E Special Provisions

Part 2 – PIPP

Section 2(a)(1): Residential Program

We support the requirement to label all stormdrains by 2013. In our field observations many drains are labeled with 3-4" diameter adhesive backed raised labels that have some clear plastic protective material covering the actual image. We have these labels oxidize or get worn down in less than two years and recommend permittees using either embossed metallic labels or larger (covering drop-box lid) painted stencils. It seems apparent that a 3-5" label would not be noticed nearly as well as a large 1 ft x 2ft stencil painted in durable easily read colored paint. If they can't read it, it's a waste of time.

Part 3 – Industrial/ Commercial Facilities Program

We strongly support this programs inclusion in the Permit. Although industrial/ commercial facilities often have individual or general stormwater permits almost all discharge into the permittees MS4 so have a responsibility to work with and support the Board and State Board staff in inspecting these facilities and reporting violations. If the permittees ignored these facilities how could they assure compliance with water quality standards, it is in their best interest to support this program.

Part 4 – Planning and Land Use Development Program

In general we strongly support this section of the Permit as most critical to turn the tide on stormwater pollution by eliminating or reducing any new sources of pollution. The reason stormwater is the largest cause of impairment in the state is the past methods of building roads, buildings and parking lot drainage systems. If we do not change this problem will only get worse and water quality impairments would increase contrary to the mandate of this Permit.

Part 5 New Development/ Redevelopment Integrated Water Quality Resource Plan

We support the efforts in address hydromodification in this section and the requirement that new projects employ LID strategies. In the past five years we know that using LID strategies can lower building costs and better protect water quality and beneficial uses than traditional building methods according the information published by the EPA (Reducing Stormwater Costs through LID Strategies and Practices, EPA Pub#841-F-07-006).

Part 6 Section 5 Standard Urban Stormwater Management Plan

There is no date for completion for adding the information/ standards listed in Section 5.(a) and it should have one to require this section is completed in a timely manner.

Part 8 Section 2 Grading Restrictions

The requirements spelled out in this section are vital to ensuring that construction sites cease the constant release of sediment due to grading activities conducted during the rainy months as has occurred at most construction sites we inspect (see NRDC/Waterkeeper Alliance v. USEPA that details our inspection results).

Subsection (c)(1-3) we strongly support imposing numeric limits on ay projects granted a grading Prohibition Variance, there is no other means to

Section 3 Construction Sites Less than 1 Acre

While we believe that construction site requirements should be uniform regardless of size since pollution is pollution and every source causes or contributes to continuing impairment for sediment, we strongly support the slate of *minimum* BMP's for sites under 1 acre.

Monitoring Program:

Support new stormdrain outfall monitoring to ensure BMP's meet MEP

We strongly support the increase in monitoring requirements specifically for stormdrain outfalls. In reviewing Finding #18 of the Permits WDR, it states, "BMPs must be evaluated for success and, when necessary, additional BMPs implemented to provide required water quality protection." So we see the addition of outfall monitoring necessary to evaluate BMP's to ensure they meet MEP.

Section A.1 – Support Required Outfall Monitoring

We have always supported stormwater permittees including outfall monitoring as part of the MS4 permit system. Russian Riverkeeper has extensive experience in stormwater monitoring through the First Flush program, Compliance Monitoring project, Urban Creeks Pesticide Survey and Healdsburg Stormdrain Filter Test project. I have personally spent dozens of hours sampling urban streams and outfalls for both stormwater and non-stormwater flows. I am certified in Stormwater Investigation and Monitoring by Professor Rich Horner at the University of Washington. In our experience it is impossible to detect all impacts or nuisance pollution by sampling only receiving waters and should include monitoring of water quality of stormdrain outfalls and sediments.

In the attached article in Environmental Science and Toxicology it is demonstrated that toxicity frequently occurs in non-stormwater flows in sediments directly adjacent to outfalls caused by residential and professional use of pyrethroid insecticides. In our Urban Pesticide Monitoring Project study in 2004-2006 we detected the pyrethroid insecticide Bifenthrin in creek sediments that resulted in 75% mortality to test subjects and only 23% growth rate for survivors compared to controls. This information demonstrates that ONLY sampling receiving water as in past permit terms will never give a complete picture of stormwater impacts that occur in proximity to outfalls or in sediments near outfalls.

Indeed how can the Permit ensure compliance with WDR Receiving Water Limitations (RWLs) in section B. 1 & 2 without outfall monitoring? As illustrated above, toxicity and violations of water quality standards occur locally adjacent to and immediately downstream of outfalls. How can this Permit ensure compliance with RWLs by only monitoring on mainstem creeks well downstream of the Permit area? Due to mixing and other factors violations of water quality standards could occur near many outfalls but not be detected by current monitoring.

We strongly support the inclusion of outfall monitoring in the Permit outlined in Monitoring Program A.1 (a)(b)& (c) as it provides a means to evaluate more localized impacts of stormwater that receiving water monitoring would not detect.

Detection limits for impairing pollutants in current annual reports too low

In the Annual Report for Santa Rosa in 2007-2008 Part V, Monitoring Results in Table V.I it shows what appears to be a detection limit of 1.0mg/L of Phosphorous. We ask why the compliance point for nutrients doesn't follow EPA Region IX criteria used in establishing the 2006 303(d) list for nutrient impairment of the Laguna de Santa Rosa? (see attached caEPA303final response.pdf) The limit for Phosphorous was 0.1 mg/L – *ten times lower* than Santa Rosas reporting limit! The net effect of allowing the permittees to use such high detection limits is that Santa Rosa claims that there is no problem with nutrients but the receiving waters could have Phosphorous levels that cause and contribute to the current CWA 303(d) impairment of the Laguna de Santa Rosa for Phosphorous and Low Dissolved Oxygen.

We strongly urge the Board to specify the detection limits for the Monitoring Program that are protective of beneficial uses and can start by requiring a Phosphorous detection limit of 0.1 mg/L, which is economically and technologically feasible. For example the USEPA website for Volunteer Monitors details an analytical method that volunteers can use that yields a detection limit of 0.01mg/L over a HUNDRED times lower than Santa Rosa. We know Santa Rosa has a very capable laboratory at the Laguna Treatment Plant that should be able to match or exceed the capability of volunteer monitors.

Each pollutant monitored should have the detection limit reviewed before this permit is approved to ensure that detection limits are at levels that can determine if beneficial uses are impacted and if water quality standards or other objectives are met.

Thank you for your consideration of our comments.

Sincerely,

Don McEnhill
Riverkeeper

References:

Weston, D. et al, Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides, Environ. Sci. Technol. 2005, 39, 9778-9784

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

NATURAL RESOURCES DEFENSE COUNCIL; WATERKEEPER ALLIANCE v. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; STEPHEN L. JOHNSON, US 9th Circuit Nos 07-55183, 07-55261 CV-04-08307-GHK Opinion