

October 22, 2008

Mona Dougherty
North Coast Regional Water Board
5550 Skylane Blvd.
Santa Rosa, CA 95403

Dear Ms. Dougherty:

This letter conveys Russian River Watershed Protection Committee's (RRWPC's) comments and questions on your Regional Board's Order #R1-2008-0106: Waste Discharge Requirements on Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from Municipal Separate Storm Sewer Systems (MS4s).

We have read this draft permit and are impressed with the broad scope of its contents. We note with interest that most of the County will now be held accountable for non-point and storm water discharges, although we are unclear whether any of this applies to agricultural and other large properties in rural areas. (Would small towns like Guerneville have the same requirements as the cities? It's unclear how that would work.) It seems like quite an ambitious program and we will watch how it evolves with great interest.

Storm water runoff is an issue that RRWPC has not tracked in the past and our expertise is very limited in terms of knowing the history and understanding all the complex implications of this effort. We will try to put our concerns in the form of questions as much as possible, and we ask for your patience if they occasionally get repetitive or seem uninformed. We are much more aware of the issues surrounding irrigation runoff however, and have studied this document with a focus on those concerns.

We were present for the discussions on Laguna water quality (preparation for the TMDL), including interrelationships between the various impairments, hosted by the Laguna Foundation and were quite impressed with the scope of their effort. It is too bad that the process is not moving forward at this time; the quality of work produced thus far seemed quite substantial and meaningful, especially in regard to identifying the various complex pollution sources and the huge variety of possible interactions and effects. It concerns us however, that the Laguna TMDL may be a long ways off. We appreciate that this Order attempts to fill major gaps in protection of our waterways.

Yet, we cannot help but wonder if it is perhaps too ambitious, overloading permittees with new requirements at a time when budgets are being relentlessly sliced and resources to carry out the work exceedingly thin. We suggest that this Order be rewritten to prioritize and phase in these new requirements over a longer time period. Permittees have indicated a willingness to participate and cooperate, but need more consideration of the constraints under which they find themselves. (RRWPC does not usually feel such sympathy, but we believe in the sincerity of the program managers present at the Oct. 21st meeting.)

RRWPC has general overall concerns about this Order, which we review here. Then we will get into more detailed comments. In general, we felt that the LID portions on new development and methods to retain water close to the source, seemed quite good. This is an area that has caught the enthusiasm of the public and the development

community, and which we totally support. Minimizing impervious surfaces in new development and holding water on site as much as possible is important, not only for pollution prevention, but also for aquifer recharge as well. It seems like only good can come from careful development of LID techniques and we support all efforts to encourage them.

The differentiation between summer and winter conditions and the interface between stream flows and water quality are of great concern to us. This Order does not clearly differentiate between the two in most sections. Conditions in summer and winter are so different, that we believe they should be treated separately, perhaps even in separate orders, even at the expense of some repetition.

We are also disturbed by acceptance of the State Water Board's position as described in this Order, that emerging contaminants need not be addressed since standardized testing methods and numerical criteria have not yet been developed. It is assumed that, until criteria are developed, these problems need not be addressed, and for all intentional purposes, therefore do not exist. Title 22 avoids addressing them as well. Summer water quality problems need to be clearly defined, apart from winter storm water issues. In fact, in the State Board's proposed Recycled Water Policy process, this has been a controversial issue.

There is so much information flooding science journals and extensively penetrating the mainstream media, that the public is being sensitized to this issue. Cancer rates have sustained themselves over many years, in spite of the "War on Cancer", and people are becoming more aware of the body burden of toxins we all carry inside ourselves. Various substances like aspirin, caffeine, personal care product chemicals, and numerous pharmaceuticals have been discovered in many waterways and even some drinking water supplies. It has become common knowledge that modern wastewater treatment plants fail to remove many of the 80,000 toxic chemical products produced yearly. Only 126 are regulated through the California Toxics Rule. Most disturbing of all, we have little information about their synergistic effects.

We could add mountains of attachments to these comments defending our statement above. This idea that it is okay to irrigate heavily populated areas with wastewater, with which large numbers of people can come in contact, is, in our view, hubris. I could better understand it if we were living in a desert environment that of necessity required such a use, such as they are facing in Southern California. Or it might be okay if irrigators were willing to institute more highly advanced treatment. In Sonoma County we could do a lot more conservation and we could fix our leaky sewer pipes that would in turn allow millions of gallons of aquifer recharge to occur.

The apparent lack of concern about emerging contaminants in this Order is definitely not in tune with other countries, especially in Europe, where the Precautionary Principle, requiring that before a practice be adopted, safety be proved first rather than harm, is taken very seriously. As long as there is no outcry from the public to change this situation, the State Board will probably be quite content to let this issue lie in the shadows. Rather the focus is on Title 22 standards, which authorizes contact with wastewater based on limited human criteria only, and focuses mostly on prevention of acute, rather than chronic illness. These criteria simply do not address either the needs of the environment or the severe problems with proliferation of invasive species and extirpation of alarming numbers of threatened species. (see attached report on latter)

We are anxious about the Board's encouraging the application of wastewater as irrigation before fully considering and understanding all the polluting aspects of this practice. We encourage the use of Best Management Practices to keep contaminants out of naturally flowing storm water, but we do not think we know enough about the impacts of applying wastewater on lawns utilized by people, children, and pets. We can't rely on the pathogenic focus of Title 22 and State Health Department's proclamations that tertiary treated wastewater is safe for most human contact. What is also problematic is the failure of this Order to address the needs of wildlife.

We believe that this Order legitimizes expanding urban irrigation with wastewater before more is known about its health effects on humans and the environment. The summer discharge prohibition appears to be undermined by this effort. Where all discharges are currently deemed illegal between May 15th and October 1st, this Order appears to legitimize "incidental runoff" and "low threat discharges" without even defining what they are.

There are many signs that over-irrigation has already contributed heavily to the severe impairments in the Laguna. We enclose pictures of the Ludwigia at Stony Point and Rohnert Park Expressway, which has come back with a vengeance after millions were spent clearing it out. Will this Order control such proliferation from happening? The Order does not seem to contain enough of a regulatory hammer to make that happen. In fact, it appears to transfer its authority to the cities in the form of unfunded mandates. How will this all work out at a time when EVERYONE is hurting financially?

The City of Santa Rosa is contemplating spending \$150,000,000 on an urban irrigation program. We believe that the money would be much better spent fixing the worst of their old, leaky sewage collection pipes. We have been gathering information on summer and winter inflow to the system and have discovered that huge amounts of water are wasted from this leakage. We will be recommending that fixing leaky sewer pipes be credited as an offset of water resources. (For instance, treatment plant flows can easily double in winter. If that water is allowed to filter into the aquifer, it could become available as potable water supply during the summer months.)

Furthermore, this document seems to isolate the pesticide/soil amendment issue from the irrigation with recycled water issue through the encouragement of wastewater application to potentially chemically treated lawns. Is there a way to prohibit people from combining the two? How might such a chemical soup affect children and pets who might be exposed as they play on treated lawns? Is it even possible to examine all the potential interactions (cumulative effects) that this practice can bring on? We also wonder if there are ways to assurance that wastewater applications are limited to that which can be utilized by the vegetation? How would this be controlled?

Throughout this document, it is difficult to decipher whether the limits and programs are for water and/or wastewater. While the Findings clearly state that no discharges are allowed, in other sections of the document, the phrase MEP (maximum extent practicable) is utilized when referencing efforts to prohibit discharge. We think it interesting that winter discharges require as much as 100 pages to lay out all the discharge requirements, yet the possibility of a summer discharge, (when waterways are most vulnerable) as described in this permit, is barely addressed. It is mostly assumed that if the BMPs are followed, no water quality impacts will ensue. Description of

regulatory fines and penalties by the Regional Board for specific excursions are left unaddressed.

RRWPC does not share Regional Board staff's trust that the many requirements in this Order would control irrigation overflows. We believe the Ludwigia alone speaks volumes about the extent of the problem. Furthermore for years, Laguna flows ran full every summer, as the City paid farmers generous amounts to irrigate with the wastewater. Two Clean Water Act lawsuits were threatened in the late 1990's because of irrigation overflows and the City ended up settling for substantial amounts. In fact, the Laguna Foundation's preliminary work on Laguna TMDL issues was funded by one of those settlements.

Summer discharges (irrigation overflows) could have enormous consequences, especially in light of much lower stream flows. How will the monitoring and oversight programs in this Order protect against possible contamination from multiple and diverse irrigation overflows? How will cumulative impacts be addressed? Is it assumed that all wastewater will receive tertiary treatment and that will be adequate? Will fulfilling all Best Management Practices provide security that all regulations are being met and water quality is being protected? (How can this be demonstrated?) How can you define the difference between accidental spill and discharge? What are the penalties for receiving water impacts?

BMPs can certainly improve some situations, but nonetheless, does not substitute for the complex monitoring requirements demanded in NPDES point source discharges. Linda Sheehan provided extensive comments to the State Board about the issue of "incidental runoff", and need for a joint NPDES/WDR permit. Linda was also part of a small committee put together to hammer out the compromise language of the State's Recycled Water Policy. They agreed on all points but the definition of "incidental runoff". It was Linda's strong belief that runoff is a discharge to the Waters of the State and therefore should be subject to a combined NPDES/WDR permit. I attach her letter to the State Board of June 26, 2008, in which she does a far more comprehensive job than I ever could in defining the issue. (Attached) I request that you address the issues raised in that letter.

Comments on Specific Sections:

Section 15: Does this refer to winter storm water? It would be helpful to clearly differentiate between winter and summer MS4 discharges in each of these sections.

The National Marine Fisheries Service recently released the Biological Opinion, about ten years in the making. It will call for revisions of Decision 1610 and a lowering of flows at Hacienda from 125 cfs in a normal year to 70-85 cfs. Lowered flows can have a much greater impact on water quality when spills do occur. Studies will take many years and much is not known about possible water quality impacts. It seems that this should be considered in the permit, which does not address cumulative impacts. Identification of Laguna flows is also problematic as there is limited historical information on this.

This could also have an impact on the amount of recycled water used in the summer time. The Biological Opinion only addresses current operations. It anticipates that habitat restoration in six miles of Dry Creek will be attempted to slow the water down so that more supply can be obtained from Lake Sonoma. NMFS suggested that it would

take about ten years to determine whether a pipeline is necessary in order to get more water.

Yet SCWA's EIR/EIS that examines this issue regarding possible future supply, has already included study of a pipeline down Dry Creek. It is not yet known if, or when, that EIR might be released. Yet there is no doubt that water supply will be a topic of great concern for a long time to come. Unfortunately, this Order makes no attempt to quantify the extent of the situation. Rather, it relies on future policies to be written that would address these issues. Greater limits on water availability could impact the amount available for irrigation. We also wonder about the impact of spills, when irrigation is occurring, on streams containing much lower flows.

Sec. 5: This section talks about CWA requiring MS4 permits to reduce discharge of pollutants to the maximum extent practicable (MEP). How does this interface with Sec. 25 where it states, "*Wet weather and dry weather discharges are subject to the conditions and requirements established in the Basin Plan for point source discharges.*" How is this determined in this plan? Also, in Sec. 46 where it states that, "*...storm water runoff is a significant contributor of pollutants to impaired waters.*" Then in Sec. 49 it states, "*...the CWA requires NPDES permits to effectively prohibit non-storm water discharges into MS4s.*" And Sec. 52, "*...federal requirements to effectively prohibit non-storm water discharges,...*" "*Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements.*" Doesn't this imply that each discharge should have a separate permit? Can this permit serve the function noted above for Santa Rosa's Subregional System?

Can you further explain the statement in Sec. 52, "*...this Order does not require strict compliance with water quality standards....This Order therefore, regulates the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.*" This has me very confused. Can you explain further? Also, here the term "storm water" is used. Does "storm water" always refer to winter conditions?

Santa Rosa is allowed "*no net increase*" in nutrients in their winter permit. Would this permit have the same requirement? In fact, would all requirements in this permit be comparable to that one? Does the MEP meet the same standard as the winter NPDES permit? How does the Anti-Degradation Policy apply here? How are the loadings mentioned in Sec. 24 get quantified if there are multiple spills in different locations?

In fact, Sec. 60 states, "*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.*" This statement seems to support our concerns in regard to non-storm water discharges. How can this Order reconcile with this statement?

The answer supposedly comes in Sec. 61, giving us the extenuating circumstances, which in turn takes us back to our prior questions. How can we intelligently answer those questions as to the quality of the waters if numerical limits are not required? How can we know for sure whether BMPs actually prevent water quality conditions from worsening without numerical limits? (Sec. 75) How is this segment (61), which seems to provide for the possibility of a weakening of water quality requirements, maintain

consistency with the requirements of the permit process? These are statements open for interpretation (and legal argument), whereas numerical standards are much more finite and easy to prove.

For instance, how does one measure “maximum benefit to the people of the State”? Or, “Maintain the highest water quality consistent with the maximum benefit to the people of the State.”?

Sec. 53, page 20 refers to effective implementation of BMPs. How will this be determined/quantified? Who decides?

Sec. 8: This lists some of the many programs implements in the first phase of MS4 permitting. What is not explained is whether there is any quantification of the programs’ effectiveness? Will there be any quantification with the new programs? How is success demonstrated?

Sec. 19: What programs can be instituted to increase riparian habitat?

Sec. 71, 75, 76: (Forgive the jumping around, but I am now running out of time to complete these comments. I will try to just go through in order from now on.) Do the same narrative limits apply to the non-storm water season? Given that there may be irrigation runoff, (I have attached my letter to the State Board on their Water Recycling Policy where I address the issue.) at a time when there is little flow, how will beneficial uses be protected? How do BAT/BCT protect beneficial uses? Shouldn’t the Precautionary Principle be considered in this instance, rather than assuming that these BMPs will work effectively?

If they don’t work, what are the long-range impacts to our waterways from allowing these discharges? What measures could/would be taken to assure that the BMPs are truly working? This section sites studies by industry officials. Who paid for these studies? Usually the group paying controls the outcome of the study. Industry journals are often influenced by those having a stake in the reports’ findings. Similarly, it’s hard to trust reports by the State Water Board on the efficacy of BMPs when they can’t effectively regulate water diversions, their prime responsibility. (Please forgive my cynicism.)

Sec. 77: Does this mean that BMPs will protect us from illegal discharges that shouldn’t be happening in the first place? Is this the purpose of implementing BMPS, an admission that dischargers can’t comply with current regulations? Does this apply to non-storm water discharges as well?

Sec. 78 ©: What are appropriate and sustainable water management strategies? How is this defined?

Sec. 87: “...the preliminary loading analysis has identified.....urban non-storm water discharges in the dry season as a potentially significant source of impacts for all parameters of concern.” If this is the case, how can you advocate authorization of urban irrigation with wastewater at this time? (Please see attached Ludwigia pictures as a case in point.)

(RRWPC supports many of the concerns expressed by County representatives at the Oct. 21st meeting on this Order, especially in regard to the scope of enforcement in the

rural areas. How will this work out? We don't necessarily oppose regulation for rural areas, we just don't see how it will be implemented and enforced. We don't think this document addresses it in a feasible way. Please explain your views in more detail.)

Page 36: A. Discharge Prohibitions

#4: What is meant by "effectively prohibit non-storm discharges"? What constitutes a violation under this language? What is the system/range of penalties?

Comments on Table 2 (Pages 37-41)

At the top of page 37 it states that the Executive Officer can authorize discharge of numerous types of non-storm water flows that are not a source of pollutants. (I'm not familiar with most of these but for wastewater, so I will only comment on that.)

The required/suggested BMPs for irrigation with wastewater include setbacks to waterways. What amount of setback would be required? Would controls be implemented to assure that only appropriate amounts would be applied in a manner that assures no runoff? What would those include? This section states that irrigating entities would be in charge of enforcement, yet the City of Santa Rosa has stated that they would not promise to turn off the water source of people who are multiple violators. Does the Regional Board agree with this approach? What can you do about it? Would the permit include provision for mandatory penalties? Who will set the amounts? Does Regional Board have any say in this? Can it be part of the agreement? What kind of monitoring will be required?

Page 42: Receiving Water Limitations

Number 1 and number 3 seem contradictory. One says that discharges that cause a violation of water quality standards are prohibited. The other states that permittee should REDUCE pollutants in storm water discharges. Please explain seeming contradiction.

Page 71: Please add Water Resources to the list of General Plan Elements.

Page 84: (Section B (3)) Does this mean that wastewater irrigation shall not take place on surfaces that have had pesticide applications? Of not, why not? (Sounds like a good idea.)

This completes our questions and comments. We would like to request that you address all the issues raised in Linda Sheehan's comments that are pertinent to this issue, even though we have not referred directly to all of them in this letter.

Thank you for the effort you have put into this document. There are many good things in here that would help protect water quality; it's just unfortunate that many are impractical in today's economic climate. I am aware that your agency has nothing but good intent in attempting to get a handle on very difficult pollution problems, but I am concerned that in the process you are legitimizing activities that have dubious benefits and may even ultimately cause harm.

Sincerely,

