

To: Linda Sheehan

From: Brenda Adelman

Concerning: State Recycled Water Policy

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I don't have time to provide backup research and specific references to the latest version of the Recycled Water Policy. I will just make comments based on many years of tracking Santa Rosa's (SR) regional wastewater treatment system. I hope some of my ideas will be helpful to you.

### **Adequate Regional Board oversight is critical**

The major focus of this proposal is on the water supply benefits of using recycled wastewater to offset potable supply. While this proposal is preferable over continued direct discharge into waterways, especially fresh water resources, the potential for increased discharges from runoff, especially in the summer when creek flows are very low and assimilation capacity is very limited, is still a major concern.

The issue of over-irrigation is persistent and may be irresolvable. On numerous occasions, I have seen runoff of wastewater from irrigation on Santa Rosa City facilities even though they want to implement an urban irrigation project and are well aware that runoff is not allowed. In fact they are now pressing for a Basin Plan Amendment allowing incidental runoff. If the City can't control their own runoff, what can be expected from private property owners in this regard? The packet of materials I sent you awhile back included articles about people over-irrigating even though there had been a lot of publicity on the need for conservation of landscape irrigation.

Once these systems are permitted, they tend to stay forever. In the meantime however, monetary cutbacks in the regulatory agencies cause a slacking off of monitoring and oversight because of inadequate staffing. While current staff of the Regional Board in our area is quite dedicated, for many years the Agency accomplished little in the way of enforcement and monitoring. In fact politically, lack of funding is the customary way for politicians to assure that regulations they dislike don't get enforced.

By switching from point source to non-point source wastewater programs, which this policy does, and by loosening up the permit process for doing so, we see this as opening Pandora's Box. Regional Boards have enough trouble regulating POTW's, let alone what could easily become a multitude of discharge points.

Irrigation practices be carefully monitored and regulated by Regional Boards. This policy is somewhat contradictory in that it demands no discharge into waterways, and then it says that “incidental” runoff will not trigger an enforcement action if dealt with within two weeks. What is the definition of “incidental” here? Why is there no consideration of cumulative effects of numerous “incidental” discharges? At what point does “incidental” become “significant” and/or a non-point discharge? None of that is defined.

This policy relies heavily on the California Department of Health Services regulation of irrigation water. This agency has always focused mainly on acute toxins and has done little to protect people and the environment from chronic toxicity. This is another case where laws seem to ignore the realities of nature.

It is critical that Regional Board staffing be adequate to regularly monitor this activity, especially where conditions are stressed. I believe this policy needs to be strengthened in this regard. I’m also concerned that although the policy calls for compliance with regional and/or watershed plans, because of its vagueness, the dischargers are likely to use this policy as a reason d’etre for changing the plans. In fact that is happening already in our area. (The ambitious goals noted in the beginning of the document, through their emphasis, give the impression of having priority over protection of our waterways.)

Santa Rosa City consultants are examining all regulatory documents with a fine-toothed comb and challenging everything. They have thus far succeeded in escaping the California Toxics Rule, getting questionable changes in their permit, and are now looking to Basin Plan amendments to chip away at the regulations piece by piece. They get away with this by threatening litigation wherever there is vagueness in the language. In the meantime, the environment suffers and the fish disappear. Federal and State Fishery agencies don’t generally consider pollutants in their guidance on “takings” and environmental agencies rely on the State and Regional Boards for this function.

The determination of “unusual circumstances” (page 7) appears to put the burden of determination on the public. It is implied that most circumstances will NOT be unusual, yet there is no guidance on how to make that determination. Furthermore, there would be no monitoring required. (Page 7, a (4)) Are CEC’s treatment systems? What happens if priority pollutants are found in the wastewater?

### **New idea for offsetting potable water supplies**

I have an idea for a major source of water supply that can be implemented through a change of wastewater management practices for probably all systems in California. I have never heard anyone talk about this idea in terms of water supply. I will use SR as an example, but I believe that it can pertain to any system.

Every winter, when there is extensive rainfall, flows to SR's treatment plant are more than double the summer flow. The City has admitted that there is a direct correlation between the amount of rain and treatment plant flows. I have the data from the last 16 years of their system to verify my statement. (I believe I sent you a copy.)

The reason for this leakage is twofold. First, the City (along with Sebastopol, Cotati, and Rohnert Park, which are also part of their system) has many old leaky pipes that are way beyond their life expectancy. Clean water leaches into the pipes and joins the polluted water, which then needs to be treated and discharged along with the sewage.

Secondly, there are many bad pipes and/or connections coming from private laterals. SR has a pretty good record of tracking those and repairing them, but many leaks probably go undiscovered until they are causing an obvious nuisance. These leaks may then result in groundwater contamination, sometimes undiscovered for long periods of time. What is needed here is an ordinance to force periodic examination and maintenance of these laterals. Santa Rosa has refused to develop such an ordinance. Maintaining clean groundwater is another water supply issue as acknowledged in this proposed policy.

What is most relevant for this state policy is the leaking pipe issue however. In SR's case, their summer flow is a little over 15 million gallons a day (mgd) and winter flow can go to 30 or 35 mgd. THAT'S 15-20 MILLION GALLONS OF CLEAN WATER A DAY BEING WASTED during the rainy period. At the current time, SR repairs about .8% of their system annually. I have read that the standard is normally 2% minimally, since most pipes have a 50-year life expectancy.

When I raise this issue, the City's response is that they can't afford to fix their system. Yet in the last 4 years, they have spent \$15 million on consultants to plan a new wastewater discharge into our drinking water supply that would be totally unnecessary if they would step up their pipe repair program after identifying and prioritizing the pipes most in need of repair. (Construction costs of the new alternatives described ran from about \$50 million to \$500 million.) They were supposed to do a cost-benefit analysis, which has not been done. What is the amount of money saved by not having to treat and dispose of that water? These systems need to be repaired anyway if we are to preserve water quality. The emphasis here is in the wrong place!

I would suggest some wording that, in a few sentences, calls attention to this issue. (I think that offering incentives in the form of water-offset credits for more aggressively pursuing pipe repair would be a worthy goal.)

**Possible language:** Repair leaky sewer collection system pipes in most serious need of repair, to allow no more than 30% infiltration beyond dry weather flow.

Perhaps someone can do some research and put some State-wide numbers on this. The 30% number is just my rough estimate of what can be accomplished. It would be very interesting to find out the difference between dry weather flow and wet weather flow around the State. That would be a good indication of how much water could be saved in this manner. Has anyone looked at this?

**I realize that this recycled water policy may not be the appropriate context to bring this up, but I'm hopeful you will present this idea to people at the State level as another possible solution to California's water problems.**

### **Salt and Nutrients:**

I am glad this policy addresses the issues of salt and nutrients, but I am concerned that they appear to only be in regard to groundwater. Most of the time nutrients aren't regulated by Regional Boards in POTW NPDES permits. I am concerned that the nutrient issue will fall through the cracks in regard to surface water, especially when the policy emphasis is on Title 22 requirements.

People put all kinds of nutrients and pesticides on their lawns which, when over-irrigated will cause runoff of these constituents into streams and creeks at a time when assimilation potential of toxins is minimal. In our area, millions of dollars were put into eliminating the invasive plant *Ludwigia* from the Rohnert Park area. It had been determined that excessive nutrients was the primary cause. The project improved conditions, but this summer the problem is back full force.

The source of nutrients is twofold. It is in the wastewater and in the top soils being irrigated. Rohnert Park irrigates extensively with wastewater. We strongly suspect that runoff from nutrient rich lawns in that city is common.

Irrigation is at least partially responsible for this extremely serious impairment.  
IRRIGATION PROGRAMS UTILIZING WASTEWATER SHOULD NOT BE  
ALLOWED IN PROXIMITY TO AN AREA WHERE A NUTRIENT PROBLEM  
HAS ALREADY BEEN IDENTIFIED. (The Laguna in Sonoma County is listed on 303(d) for nutrients.) In fact, a nutrient TMDL is anticipated for the Laguna in the next five years. While this policy leaves it open for the Regional Board to make the determination of legitimate nutrient loadings, how much better it would be if there were state policy language included here to reinforce it.

In the section on nutrients (page 5), the comment is made that storm-water is generally low in nutrients. I have consistently heard the opposite. Upon what is that statement based? I am interpreting storm-water to be the same as storm-water runoff that has had contact with urban streets and sidewalks. I am wondering if rainwater is really meant here? At what point does potable rainwater become polluted storm-water? (Please clarify definitions here.)

In general, this policy focuses on human health issues as regulated in Title 22. I am extremely concerned that runoff will occur regularly due to human carelessness and that little focus has been given in this policy to aquatic life

impacts when that occurs. Furthermore, in our area summer wastewater discharge is not allowed because of extensive use of our river as a drinking water supply and recreational resource. We also have three threatened/endangered fish species.

Because of many complicating factors, summer flows have been greatly diminished of late and are likely to get worse. Therefore, any runoff can have serious consequences not only on human health as people recreate in the river and depend on it for a drinking water supply, but also potential impacts on aquatic life, when wastewater pollutants can't be assimilated by the very low flows. In fact, Decision 1610 which regulates flows in the lower Russian River is likely to be changed soon (lowered) as a result of the Biological Opinion about to be released by NMFS.

This policy implies that summer discharges will no longer be prohibited (if incidental runoff is allowed and there is no way to determine cumulative impacts). Consequently flow levels should be considered in determining impacts. It might be helpful to include required setbacks from streams in the policy where impaired and/or low flow circumstances occur.

### **Possible future regulations on emerging contaminants**

The regulatory system is glacially slow in developing new requirements even as scientific information has been speeding up at a dizzying pace regarding the increased rate of species endangerment and extirpation, the feminization of frogs, birds, alligators, and other species, the increased rates of certain cancers in dogs and humans, etc.

When numerical toxic standards do exist, they are often disturbingly less stringent than what science has shown to cause problems. Case in point: Copper! This has a very deleterious effect on salmon and current standards are much less stringent than what has been shown to cause harm. Runoff during the summer months could have a very deleterious effect on endangered fish species.

### **Miscellaneous Comments:**

- In general, voluntary best management practices work when they are easy to accomplish, or where plenty of money is available to assist with implementation. Much of the time, one or both of those circumstances is lacking, and polluting continues. While BMP's should be utilized, we do not think that strong reliance on them is wise.
- Advocacy for money to accomplish the goals contained in the policy is promised on page 3 #c, but no mention is made about the dire fiscal circumstances the State now finds itself in. It is likely that the current status will get worse. Is there any substance to that promise? Also, what happens to this policy if funding does not materialize?

- The Policy claims to provide independence from draught factors, yet the amount of wastewater available for recycling is to some extent dependent on the amount of rainfall. When there is less water, people have to conserve more. The fact is however, that people who use recycled water for gardens and landscaping and agriculture will come to depend on it. What will happen when/if the water is not available? This is the case in our area. It would be helpful to address the water balance issue in this regard.
- Why does this policy not address recycled water policy in areas with impaired water bodies?
- Why is there no policy regarding the use of pesticides on irrigated lands? Why is the Department of Pesticide Regulation not included in this policy? If not controlled, how will pesticides and soil amendments be prevented from entering waterways when runoff occurs?
- I am very nervous about (4) on the top half of page 7. It can be interpreted to mean that irrigation projects take priority over new regulations for toxic pollutants in Basin Plans. What if “new laws” allow for more stringent standards in future Basin Plans? This wording seems to say they can only make changes by using “existing law”. I think more clarity is needed.
- It is critically important that irrigators that are repeat offenders have their water turned off, if not forever, then for a specified period of time. Determination of wastewater delivery cut off should be addressed in the policy, but specific implementation can be addressed by Regional Boards.
- How will spills be monitored and regulated? This policy is so weak in regulatory language, that I am fearful of the ultimate consequences of its implementation. It favors irrigation projects so strongly and contains so few regulatory requirements, that I don't think it will work as intended. Once the horse is out of the barn, watch out! 3(b) on page 8 assumes that all spills will be reported.
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