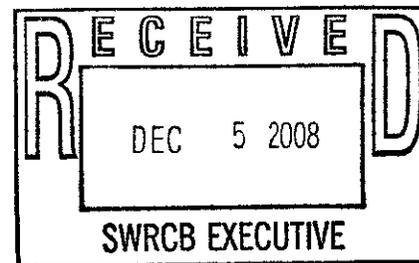


Public Comment  
Recycled Water Policy  
Deadline: 12/22/08 by 12 noon

**From:** "Kaumil H. Parghi" <khvparghi@yahoo.com>  
**To:** commentletters@waterboards.ca.gov  
**Date:** Fri, Dec 5, 2008 9:29 PM  
**Subject:** Comments on the Recycled Water Policy



Jeanine Townsend, Clerk to the Board, Executive Office  
State Water Resources Control Board  
P.O. Box 100, Sacramento, CA 95812-0100.  
Fax: 916-341-5620

Dear Ms. Townsend,

Following are my comments on the California State Water Board's Recycled Water Policy dated 09/04/08.

[http://www.waterboards.ca.gov/water\\_issues/programs/water\\_recycling\\_policy/docs/draft\\_recycled\\_water\\_policy\\_110408.pdf](http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/docs/draft_recycled_water_policy_110408.pdf)

[http://www.waterboards.ca.gov/water\\_issues/programs/water\\_recycling\\_policy/](http://www.waterboards.ca.gov/water_issues/programs/water_recycling_policy/)

1. Policy Item # 6.b.(1).(a) Adoption of Salt/Nutrient Management Plans, line 190: '....stormwater is typically lower in nutrients and salts....'

Is it? I was under the impression, based on my reading of various research papers and articles, and actually, it is a well-known fact that since stormwater flows through fields, landscapes, parks, etc., having fertilizers and/or pesticides, it is typically higher in nutrients and salts and not lower. That's the main cause of dissolved-oxygen-depleted "dead-zones" in the receiving waters - oceans and rivers.

If untreated stormwater containing salts, nutrients, pesticides, and such pollutants, is recharged into the aquifers, it will cause two main problems. First of all, the salts in the stormwater will clog up the recharge basins and prevent adequate recharge. Secondly, many stormwater pollutants, like for example, nutrients, will not be removed by the soil filtration/treatment as and when the stormwater percolates into the aquifers during the recharge process, resulting in contamination of the aquifers.

Therefore, it would be best to first treat the stormwater and remove the salts, nutrients, pesticides, and all other pollutants from it through a separate stormwater treatment plant in case of a separate storm sewer system, or through a wastewater treatment plant in case of a combined sewer system, before recharging it into an aquifer.

2. Policy Item # 7. Landscape Irrigation Projects, Lines 280 - 355

I think that we should start moving away from the practice of irrigation using recycled water (treated wastewater effluent or stormwater). Following are my concerns with the use of recycled water in landscape irrigation.

In most places, wastewater effluent containing nutrients, or that which is treated only up to secondary treatment levels will be permitted for landscape irrigation. The vegetation that is irrigated with recycled water, after it is cut, a large portion of it is usually turned into compost that is used as a fertilizer for growing other vegetation that may be used as food by humans or animals. So, ultimately, it will be us who will end up consuming the pollutants in the recycled water.

Also, since the effluent applied will be only up to secondary treatment levels, and will not have passed through any type of filtration process, it will contain all the emerging constituents/chemicals of concern, making it more polluted, and more of concern. In case of recharge, the constituents/chemicals of concern will get removed as the effluent percolates through the soil and gets filtered in the process.

And, finally, as expressed in Policy Item # 9.c. Antidegradation, lines 432, 433, 434:  
'Nonetheless, the State Water Board finds that the use of water for irrigation may, regardless of its source, collectively affect groundwater quality over time', we will end up polluting our aquifers on the long run, when we irrigate with recycled water.

Therefore, instead of using recycled water for irrigation, we should use it entirely for recharge. Recharging aquifers will especially help us during periods of water shortage or drought.

3. Policy Item # 9.c. Antidegradation, lines 398, 399, 400:

'Nonetheless, the State Water Board finds that groundwater recharge projects using recycled water have the potential to lower water quality within a basin.'

The above problem can be solved by including minimum treatment technology requirement in the policy. The minimum treatment technology should be that which treats the wastewater to produce recycled water having drinking water quality standards - tertiary treatment consisting of nutrient removal, and various types of filtration. Such a treatment technology is not new, not far-fetched, not expensive on the long-run, and is very doable. Orange County, CA is doing it.

If you make it a law and require everyone to do it, everyone would find a way and do it.

Sincerely,

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