

FACT SHEET

WATER RECYCLING PROGRAM

SOUTH COUNTY AG

Sacramento Regional County Sanitation District

Comparing Recycled Water to Groundwater in Sacramento County

INTRODUCTION

Regional San is proposing to use recycled water from our wastewater treatment plant to offset groundwater pumping, replenishing aquifers.

Regional San compared its recycled water quality with other regional wastewater treatment facilities, current drinking water quality standards, and local groundwater sources. The results indicated that by comparison, Regional San's recycled water supply is of high quality.

Trace element concentrations in our recycled water are well below maximum levels considered safe for agricultural irrigation, far exceeding allowable limits.

SUCCESSFUL RECYCLED WATER IRRIGATION

Neighboring sanitation agencies commonly use recycled water for crop irrigation. These crops include maize, sudangrass, oats, winter feed, barley, alfalfa, sorghum, permanent pasture, cotton, almonds, grapes, wheat, seed beans and forage crops. Growers sometimes need less applied fertilizer when using recycled water. Recycled water use is well proven in California with a long track record and there are no documented instances of adverse health problems associated with the use of recycled water.

SOIL SALINITY

Salinity accumulation in soils can sometimes be a concern in parts of California. However, typical winter rainfalls are sufficient to remove 80 percent of accumulated salts, reducing the risk of long-term buildup. The balance can be managed with irrigation practices (periodic leaching of salts through the root zone) and other best management practices.



A study compiled by the Agriculture and Consumer Protection Department investigates the effects of using recycled water for irrigation. The following districts integrate recycled water into their irrigation systems and report positive results of this water management program:

- Santa Rosa, CA
- Tuolumne Utilities District, CA
- Bakersfield, CA
- Calistoga, CA
- Fresno, CA
- Windsor, CA

For more information about the Water Recycling Program, please visit www.regionalsan.com/south-county-ag-program or contact Terrie Mitchell at mitchellt@sacsewer.com or (916) 876-6092.

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COMPARING RECYCLED WATER TO GROUNDWATER IN SACRAMENTO COUNTY

Parameter	Units	Upper Limit for Drinking Water	Regional San Recycled Water ¹	South Sacramento County Groundwater ²
Ammonia	mg-N/L	1.8	<0.08	0.6
Nitrate	mg-N/L	10	6.6 – 10	3.1
Salinity (TDS)	mg/L	1000	420 – 510	128
Arsenic	ug/L	10	1.1 – 1.8	2.1
Boron	mg/L	1	0.21 – 0.25	0.18
Cadmium	ug/L	5	<DL – 0.017	NT
Calcium	mg/L	NA	24 – 27	14
Chloride	mg/L	500	75 – 100	9.1
Copper	ug/L	1300	2.2 – 3.6	0.003
Lead	ug/L	15	<DL – 0.063	NT
Magnesium	mg/L	NA	11 – 12	7.9
Nickel	ug/L	100	2.3 – 3.0	<DL
Potassium	mg/L	NA	4.5 – 5.6	NT
SAR (adj)	–	15	3.1 – 4.1	NT
Selenium	ug/L	50	<DL – 1.3	<DL
Sodium	mg/L	NA	78 – 110	13.7
Total Alkalinity	mg/L as CaCO ₃	NA	54 – 90	72
Total Coliform	MPN/100 mL	2.2	<2	NT
Total Phosphorous	mg-P/L	NA	4.5 – 5.6	0.14
Turbidity	NTU	2	<2	17.7
TSS	mg/L	NA	<DL (3)	NT
Zinc	ug/L	30	54 – 61	44.3

Sources:

1. Based on pilot testing effluent water quality results for five filtration and disinfection combinations per Advanced Treatment Technology Pilot Project Report, Appendix M (July 2013).
2. Data represents average of existing water quality data from 7 wells in South Sacramento County with multiple samples from each between 2000 and 2014.

Key:

NT = Not Tested

TDS = Total Dissolved Solids

NA = Not Applicable

TSS = Total Suspended Solids

DL = Detection Limit

SAR = Sodium Absorption Ratio

<DL = Below Detection Limit