

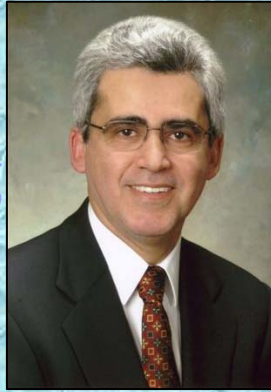


# SANTA ANA WATERSHED PROJECT AUTHORITY



One Water One Watershed: A Unified Voice for the Santa Ana Watershed August 2008

Meet the Water Recycling Pillar



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## Is Recycled Water Safe?

By EMWD

Mother Nature has been recycling our wastewater for millions of years through a long series of processes. Modern technology in the wastewater industry essentially accelerates this cleansing using advanced processes.

Recycled water is wastewater that has been processed through modern primary, secondary, and tertiary treatment for beneficial reuse following the strict standards of the California State Department of Public Health. According to these standards, disinfected tertiary-treated recycled water is safe for use except as drinking water.

In California, recycled water has been used as far back as the turn of the last century. The founders of Golden Gate Park in San Francisco began irrigating with untreated sewage in 1889 to make the park soil more productive. In 1929, the City of Pomona provided treated wastewater

from its municipal sewage treatment facility for landscape irrigation. By 1932, a treatment plant built solely for recycling and reuse had been constructed in San Francisco.

Today there are very stringent water quality laws that apply to recycled water. The State Department of Public Health standards for recycled water are referred to as "Title 22". In addition, the Regional Water Quality Control Boards have strict permitting procedures to ensure the reliability of treatment processes and controlled use of recycled water.

Recycled wastewater undergoes primary, secondary, and tertiary treatment at water reclamation plants. During primary treatment, large solids are removed. Secondary treatment uses bacteria to remove approximately 90% to 95% of the remaining solids; and tertiary treatment uses a disinfectant, such as chlorine, to destroy



### IN THIS ISSUE...

- Is Recycled Water Safe? .....1
- Bottled Water: An Environmental Justice Issue .....2
- Big Check Event .....3
- One Water One Watershed Stakeholder Meetings .....3
- SAWPA Allocated-based Conservation Water Pricing Workshop .....4

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bacteria, viruses, and other pathogens. These treatment processes duplicate and accelerate nature's own purifying actions. Given the dire water supply conditions in the State, there is a great deal of interest in using additional treatment to enhance recycled water further for use as an indirect source of drinking water supply. For example, Orange County Water District uses an advanced reverse osmosis treatment process before recharging recycled water into groundwater basins. Disinfected tertiary-treated recycled water is virtually free from all pathogens, including viruses.

**Recycled water is used in a variety of ways for growing food crops, landscape irrigation, recreational purposes, industrial processes, and other uses.**

Depending upon the level of treatment, recycled water is used in a variety of ways for growing food crops, landscape irrigation, recreational purposes, industrial processes, and other uses.



Just as you might swim in a lake or river, and not want to drink the water without additional treatment, drinking recycled water also would require additional treatment. Even drinking directly from mountain streams is not always recommended, considering the possibility of consuming parasites or unfriendly bacteria or viruses. Whether we are dealing with drinking water or recycled water, it is the permitting and regulatory processes that oversee the safety of that water.

Recycled water has been used for decades. Currently, within the Santa Ana Watershed, more than 172,000 AFY of recycled water is used to meet water needs such as landscape and agricultural irrigation, industrial and municipal uses, habitat creation and environmental enhancement, conjunctive use, and groundwater recharge. Projections indicate that this figure will increase to around 449,000 AFY in 2030.

**Recycled water has been used for decades.**

Water recycling is a safe way to preserve our natural water resource. In addition, recycled water projects are designed and operated to protect public health and safety. Careful monitoring by responsible local health authorities and water quality control agencies also ensure that recycled water is a highly treated, filtered, and disinfected product that meets the U.S. Environmental Protection Agency, and California State Department of Public Health criteria. There has never been an incident suggesting even a hint of concern about the health effects of recycled water use.

**Water recycling is a safe way to preserve our natural water resource.**



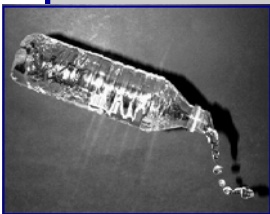
*Is recycled water safe?*

**The answer is YES.**



## **Bottled Water: An Environmental Justice Issue**

**L**ooking for an easy way to save \$1,400 dollars a year? Drink tap water! Want you and your family to drink the cleanest, healthiest water? Drink tap water! Want to be eco-friendly? Drink tap water!



Bottled water is a phenomenon that is harming our environment and our health. 2.7 million tons of plastic are used each year to make water bottles but only 20% of that will be recycled. The remaining 80% will pollute water-ways and fill up our landfills costing cities 70 million dollars in clean up. To meet the demand of bottled water, 17 million barrels of oil are required which is enough fuel for one million cars. Not only does the production of water bottles use excessive amounts of oil, it creates 2.5 million tons of carbon dioxide. Further, bottled water is harmful to the environment, is costly, and could be potentially unhealthy.

If you reach your recommended eight glasses a day by drinking bottled water it will cost you \$1,400 a year, when tap would cost you \$0.49 a year. Why pay money for a resource that flows from your faucet? Water providers have to perform tests on the water to ensure there is no bacteria that could cause intestinal problems but bottled water companies are not. Tap water also contains chlorination, which kills bacteria making it safe to drink tap water.

Bottled water is unnecessary and avoidable so do not let it harm our environment!





## Big Check Event

On Wednesday, July 23<sup>rd</sup>, elected officials representing SAWPA, Inland Empire Utilities Agency, Western Municipal Water District, Eastern Municipal Water

District, and Cucamonga Valley Water District gathered to receive a \$25 million check from State Water Board Member, Fran Spivy-Weber. The \$25 million grant will help inland water agencies fund programs that will decrease the area's reliance on imported water. The grant comes from the Proposition 50 water bond that voters passed in 2002.

This event was held at the Etiwanda Avenue Reservoir and Pump Station in Rancho Cucamonga, which is a project component of IEUA's Regional Recycled Water Program. The treated wastewater from this system can be used for outdoor landscaping and will directly reduce imported water demands.

This event is the first of five to showcase the exciting projects planned for our Watershed.



## One Water One Watershed Stakeholder Meetings

SAWPA staff recently conducted three stakeholder meetings, which showcased unique points of interest throughout our watershed – the California Theatre in San Bernardino, the Muth Center in Newport Beach, and the Citrus State Historic Park in Riverside.



These meetings provided an opportunity for interested stakeholders to share their ideas about project integration strategies being developed by the ten Pillar Leaders. The Pillar Leaders have used a series of matrices to encourage the development of multi-purpose projects by project proponents. All attendees were invited to participate in a

collaborative exercise of attaching comments onto these matrices.

The meetings were well attended and many ideas and thought-provoking comments were received.



## SAWPA Allocated-based Conservation Water Pricing Workshop

On July 24<sup>th</sup>, SAWPA held a workshop for local water retailers in the Santa Ana River Watershed to get the word out on the benefits of allocated-based conservation water pricing.

The workshop was well attended representing over 30 local retailers. Speakers included:

- SAWPA General Manager, Celeste Cantú, who discussed the need for conservation in the Watershed and provided a brief update on the legislative process of AB 2882 (Wolk);
- Fiona Sanchez from Irvine Ranch Water District, who provided an update of the California Urban Water Conservation Council's BMP 11 conservation rate structure, as well as an overview of Irvine Ranch Water District's successful Allocation Based Rate Structure;
- Pam Pavela from Western Municipal Water District, who instructed the audience on the importance of integrating evapotranspiration into your allocated-based conservation water pricing system; and
- Meggan Reed from Rancho California Water District, who presented an overview of the District's newly implemented allocated-based conservation water pricing structure, and the challenges they encountered in implementing tiered rates in a predominately agricultural region.



**SAWPA, along with IRWD, is a proud co-sponsor of AB 2882 (Wolk) - Allocated-Based Conservation Water Pricing, which, if passed, would offer volunteer allocated-based tiered water rates.**



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Click the water icon  on SAWPA's homepage for more information about One Water One Watershed.

