

Frequently Asked Questions (FAQs)

What is the San Ramon Valley Recycled Water Program?

The San Ramon Valley Recycled Water Program (SRVRWP) is a water-recycling project jointly created in 1995 by the Dublin San Ramon Services District (DSRSD) and the East Bay Municipal Utility District (EBMUD). The City of Pleasanton became a partner in 2014. The SRVRWP provides a tertiary-treated supply of recycled water to large landscape irrigation customers, including municipal parks, golf courses, school grounds, business parks, greenbelts, and common-area landscaping maintained by homeowners associations and apartment complexes. EBMUD currently serves parts of San Ramon and will eventually also serve parts of Blackhawk and Danville. DSRSD serves Dublin and the Dougherty Valley area of San Ramon. Pleasanton serves customer sites within its city limits. The use of recycled water conserves limited drinking water and provides users with a drought-resistant irrigation supply.

What is recycled water used for?

Recycled water produced by the SRVRWP is used primarily for irrigation. Other typical uses for recycled water include industrial and commercial processes, such as cooling towers and toilet flushing in high-rise office buildings, dust control during construction, surface cleaning, and habitat restoration.

Where does recycled water come from and how is it treated?

Recycled water is produced from wastewater that goes through a stringent purification process. Regulations require that wastewater be cleaned with primary and secondary treatment processes before it can be discharged safely into the San Francisco Bay. For unrestricted non-potable uses, recycled water must be cleaned to a higher level: tertiary treatment. Primary treatment involves prechlorination (for odor control), screening (to remove large objects), grit removal, and primary sedimentation, (separating out 99% of settleable solids and 50 to 70% of suspended solids). Secondary treatment uses "beneficial" bacteria to remove approximately 95-98% of the remaining solids and organic material. Tertiary treatment filters the water to remove any remaining solids and provides disinfection, using chemicals and/or intense ultraviolet light, to destroy or inactivate bacteria, viruses, and other pathogens, such as cryptosporidium.

Is recycled water safe to use?

Yes. Recycled water is strictly monitored and regulated by numerous agencies (including the State Water Resources Control Board Division of Drinking Water, Regional Water Quality Control Boards, and local health departments) to protect public health, landscape workers and the environment. Customers must be trained in the safe and proper use of recycled water, regularly monitor their irrigation sites and submit self-monitoring reports on a required schedule.

Do we drink recycled water?

There are many different types of recycled water, some for non-potable uses (irrigation, dust control, industrial processes), some for indirect potable reuse (groundwater recharge) and some for direct potable reuse (drinking water). The

technology exists to purify wastewater to any level, including to drinking water standards. However, recycled water produced by the SRVRWP is only used for non-potable uses at this time.

Who tests to make sure the water is safe? How often?

Trained plant operators take samples of treated recycled water at least once a day to test for total coliform bacteria. An state-accredited laboratory must analyze the samples. Testing equipment and a recorder automatically and continuously monitor levels of “turbidity” in the recycled water after it has been treated. (Turbidity is a cloudy appearance in a naturally clear liquid as a result of fine particles or tiny undissolved droplets being suspended in the liquid. Turbidity that exceeds the standard may be an indication of other problems that require immediate attention.)

Who is leading this regional recycled water program?

The SRVRWP is managed by a Joint Powers Authority (JPA) created in 1995 by DSRSD and EBMUD. The JPA is referred to as DERWA (**DSRSD–EBMUD Recycled Water Authority**) and is led by a four-member Board of Directors (two from each agency) and an Authority Manager.

Why did these agencies embark on this program?

Water is a scarce and vital resource in California. Using recycled water for non-drinking purposes helps conserve limited potable (drinking) water and provides a drought-resistant water supply.

What did the basic joint facilities cost?

The DERWA “backbone” infrastructure cost approximately \$82 million. The backbone infrastructure includes a recycled water treatment plant, 16.5 miles of transmission pipelines, 3 pump stations, and 2 storage tanks. DSRSD, EBMUD and Pleasanton fund their individual distribution pipeline systems and any separate pump stations and storage reservoirs required.

Who pays for this program?

The project receives a combination of local, state, and federal funding via DSRSD, EBMUD, Pleasanton, and other agencies. Most recently, the California Department of Water Resources, Division of Integrated Regional Water Management awarded a \$9 million in grants to expand SRVRWP pipelines in the DSRSD and EBMUD service areas and construction of new pipelines in Pleasanton. The city also received \$12 million in low-interest loans from the State Water Resources Control Board (SWRCB). In the past, the SWRCB provided a \$5 million grant and a low-interest loan for \$25 million. Federal funding was authorized by the Water Resources Development Act (WRDA) of 1999 with annual federal appropriations placed in the budget of the U.S. Army Corps of Engineers (USACE). The USACE uses the WRDA federal funding for SRVRWP design and construction purposes, including a pump station and 1.25 miles of pipeline in San Ramon. The initial WRDA authorization was for \$15 million and has been almost fully appropriated. EBMUD continues to seek renewed federal support with a new project authorization request under WRDA for \$20 million.

When were the SRVRWP facilities constructed?

Construction for Phase 1 began in 2003, was completed in 2005, and the system became operational in 2006. Additionally, construction from 2008 - 2010 of 1.25 miles of transmission pipeline and one pump station completed DERWA Phase 2 facilities.

Has there been any recent expansion?

In 2016, the SRVRWP increased the capacity of the water recycling plant from 9 to 10.32 million gallons per day. An \$18.2 million improvement project now under construction will boost water recycling plant capacity to 16.2 million gallons per day by 2018 to meet projected demand.

In 2014, the City of Pleasanton signed agreements with the DERWA partners that allow the city's treated wastewater to be used to produce recycled water. The agreements pave the way for a recycled water program in Pleasanton and expansion of the DERWA water recycling plant.

Between 2012 and 2016, DSRSD added 6.0 miles of recycled water pipelines to convert landscape irrigation customers in central and western Dublin, including parks, schools, the Santa Rita Jail, and a large apartment complex. DSRSD also requires developers to establish recycled water service at appropriate sites as they build new developments in eastern Dublin and Dougherty Valley.

In 2015-2016, EBMUD constructed approximately 3.6 miles of distribution pipeline in the Bishop Ranch Business Park area of San Ramon. The distribution pipeline will serve 39 customer sites including Bishop Ranch Business Park, the City of San Ramon, the Town of Danville, and Crow Canyon Country Club.

Why is using recycled water important?

Drinking water supplies in California are under pressure by increasing population demands, recurring droughts, and environmental constraints. By appropriate use of recycled water, we save our limited drinking water supplies for domestic and business use and also benefit the environment by recovering a scarce resource from wastewater.

Is recycled water used anywhere else?

Yes. Recycled water is safely and routinely used throughout California, other parts of the nation, and in other countries for irrigation, industrial processes, groundwater recharge, wildlife habitat, and other uses.

What is the impact of recycled water on landscaping?

It thrives! Recycled water is used successfully at thousands of locations throughout California, including irrigating agricultural crops, urban landscapes, golf courses, and other sites. Proper management practices ensure that agricultural crops and urban landscapes thrive when irrigated with recycled water. DSRSD, EBMUD and Pleasanton provide training, useful landscape management information, and assistance as needed and requested by their customers.

What are the design requirements for recycled water irrigation systems?

Irrigation systems for recycled water are nearly identical to those using well water or drinking water. Guidelines set by the State Water Resources Control Board require that recycled water facilities be clearly distinguishable and completely separate from potable water facilities to avoid mixing the two supplies. Pipes, sprinkler heads, valve box covers, and other devices for recycled water systems are colored purple and labeled with the words "Recycled Water – Do Not Drink."

How do recycled water and potable water costs compare?

Locally, recycled water is available at a discount compared to potable rates. DSRSD currently offers a 10% discount from potable water irrigation rates. (Schools benefit from a slightly larger cost savings.) EBMUD provides a 20% discount from the non-residential potable water rate. A substantial reduction in connection fees also is available for new DSRSD and EBMUD customers.

Whom should I contact with any questions or concerns?

For DSRSD questions please contact Sue Stephenson, Community Affairs Supervisor at (925) 875-2295 or email at Stephenson@dsrsd.com.

For EBMUD questions contact Ben Glickstein, Office of Water Recycling, at (510) 287-1631 or email at ben.glickstein@ebmud.com.

For City of Pleasanton questions please contact Rita Di Candia, Water Resources Manager, at (925) 931-5513 or email at rdicandia@cityofpleasantonca.gov.