

Perris Valley Regional Water Reclamation Facility



WHAT GOES AROUND...

Water treatment and sewer treatment are two sides of the same coin.

EMWD sees sewage treatment as a way to convert wastewater, which costs money to treat, into a resource that extends water supplies in many ways. Every gallon of water that is used at least one more time means one more gallon that can be left in the ground, or one less gallon that would need to be imported through aqueducts from hundreds of miles away.

The advanced technology used to process wastewater is based on what occurs in nature - after solids have settled, and organisms consume remaining nutrients. Simply put, a treatment plant speeds up the natural water recycling process.

EMWD uses the highest level of treatment, an advanced process called tertiary treatment, which removes bacteria and viruses and virtually all suspended solids. Water at this level can be used for most any purpose short of direct human consumption.

PERRIS VALLEY OPERATIONS

- Typical daily flows:
15.5 million gallons per day
- Current capacity:
22 million gallons per day
- Ultimate capacity:
100 million gallons per day

EASTERN MUNICIPAL WATER DISTRICT

P 951.928.3777

T 800.426.3693

F 951.928.6177

2270 Trumble Road
Perris, CA 92570

PO Box 8300
Perris, CA 92572-8300

www.emwd.org

IN THE BEGINNING...

Originally built in 1982 as a 1 million gallon per day (mgd) facility, its capacity was doubled in 1988, and “optimized” to 3 mgd in 1991. A newer 8 mgd tertiary treatment plant started operations in May of 1994. Additional expansion projects were necessary to keep up with population growth and increasing flows.

TODAY...

Centrally located in the Eastern Municipal Water District service area, the Perris Valley Regional Water Reclamation Facility (PVRWRF) is the largest of four operating plants, which receives 128 mgd of sewage combined. The plant produces tertiary-treated water and can store more than 2 billion gallons of recycled water for use by surrounding agricultural, sports fields, parks and landscape customers. The facility is located on approximately 300 acres just west of I-215 and south of Case Road.

In March 2014, EMWD completed the most recent expansion of the PVRWRF. With an ultimate capacity of 100 mgd, the facility is poised to meet the current and future demands of the region as well as help to meet the increasing demand for recycled water throughout EMWD’s service area.

Before the expansion, its capacity was 14 mgd and typical daily flows were 12 mgd. The \$180 million expansion took seven years to complete and is the largest capital improvement project in EMWD’s history.

The most recent expansion allows EMWD to not only meet the projected demands of anticipated development in the region, but also to meet more stringent environmental requirements for wastewater treatment and recycled water quality.

The facility also includes two 300 kilowatt fuel cells powered by methane gas from three anaerobic sludge digesters. Those methane-gas powered fuel cells provide roughly 30 percent of the power needed to run the facility, significantly reducing EMWD’s reliance on the region’s power grid and stabilizing future energy costs. In addition, the facility has a 1 megawatt (1,000 kilowatts) solar array that has reduced electrical energy needs for the plant.

IT’S A 24/7 OPERATION...

Specially trained and state-certified staff attend the plant 18 hours every day. During off-hours, alarms connect with EMWD’s Central Control in Perris. If necessary, individuals can be called out for emergencies.