



Reclaimed Water



WaterOnline.com
(<http://wateronline.com>)

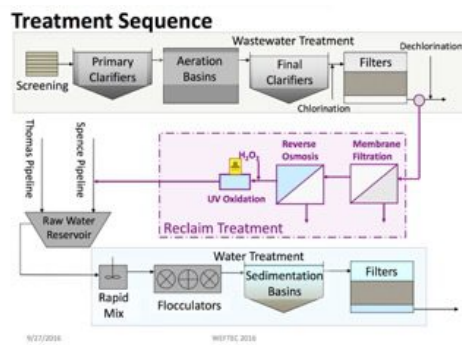
While the proactive development of reservoirs and groundwater well fields provide critical water, efforts to save and reuse water are essential to meeting the future needs of a growing region with limited resources. In response to this growing challenge, CRMWD constructed the nation's first "direct potable reuse" facility to reclaim and clean previously used water for municipal use.

CRMWD's \$14 million Raw Water Production Facility began operation in 2013. It was the first facility of its kind in the country. The CRMWD plant produces about 1.5 million gallons of reclaimed water per day. Water is treated using a combination of microfiltration, reverse osmosis and ultraviolet disinfection.

The water is then added to a raw water pipeline that also sources water from area lakes. The mix (50 percent recycled, 50 percent raw water) is then distributed to five water treatment plants in the region, where it is treated again using conventional drinking water cleaning techniques.

The process used to reclaim water is the same process used to desalinate or treat salty water. CRMWD is investigating salt water sources in its service area that may be reclaimable using this innovative technology.

The water is carefully monitored for safety levels by both the state and District. The plant's treatment process has proven highly effective in removing contaminants, cleaning its water to drinking level quality. CRMWD aims to explore further use of this promising treatment technology in other facilities to meet future water needs in West Texas.



Process overview



Microfiltration



Reverse Osmosis



Ultraviolet Disinfection