

SUCCESS STORY

Optimizing Reverse Osmosis System

Large California beverage company saves water and energy while minimizing waste and maximizing cost savings

CLIENT

West coast
beverage producer

PRODUCTS + SOLUTIONS

RO systems audit

Filtration study

Effective pre-treatment +
efficient Reverse Osmosis
+ concentrate RO systems

THE CHALLENGE

- Water limitations from drought and regulatory restrictions
- Reduce water needs across production process at five plants
- Maintain production capacity and water purity standards

THE SOLUTION

- Audit current Reverse Osmosis systems to identify improvements
- Conduct filtration study to assess treatment processes
- Design new treatment and RO system to meet both water saving and production needs

THE RESULTS

- New pre-treatment and RO system saves 80 million+ gallons of water per year across five facilities
- New RO equipment delivers 14% reduction in energy costs
- 60% reduction in RO membrane replacement needs saves \$200,000 per year in new membrane expenses

THE CHALLENGE

Drought and impending water regulations and restrictions compel a large California beverage company to reduce water use across five locations.

They needed a new approach to producing purified water with Reverse Osmosis (RO) filtration in their facilities.

THE SOLUTION

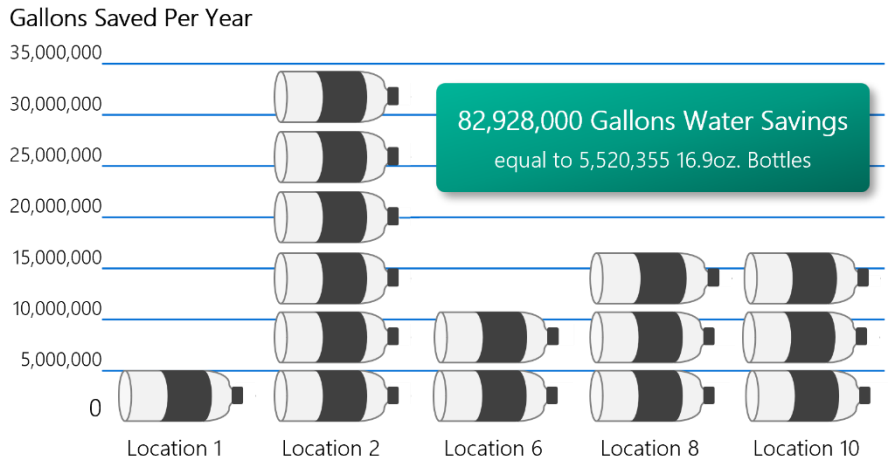
Puretec audited the client's RO systems and identified changes to effectively reduce waste and costs without impacting production volume. While a filtration study offered new options for supply feed pre-treatment to reduce waste and streamline system and service costs.

Additionally, we installed a concentrate RO system to effectively recover 50% of the waste RO concentrate stream and add the formerly wasted water back into their production process.

EXCELLENT RESULTS

Water Savings

Optimizing the facilities' RO pre-treatment system and recovery rates saved the company 80 million gallons of water per year across the five facilities.



Energy Savings

New RO system reduced energy costs 14%.

While previously operated at 75% recovery, Puretec's new pre-treatment chemistry and targeted system modifications boosted the recovery rate to >85% delivering significant water and energy savings.

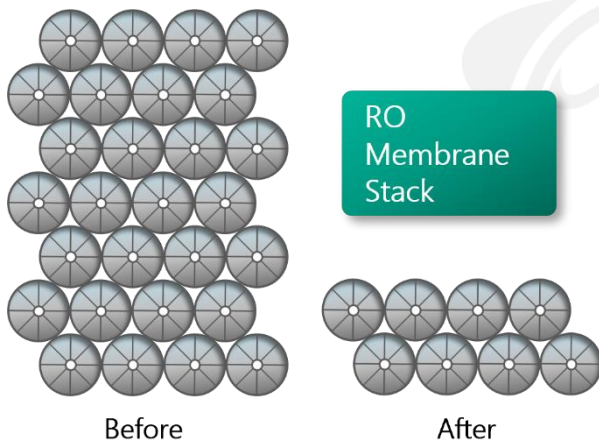
Location 1	88.0%
Location 2	80.0%
Location 6	94.7%
Location 8	93.0%
Location 10*	76.0%
Average Recovery	86.35%

*Location 10 has extremely high silica in the water feed.

Waste Reduction


An average RO membrane delivers a five-year service life. Yet, some client facilities replaced membranes several times a year as inadequate pre-treatment and cleaning severely impacted RO membrane lifespans.

Effective anti-scalants and a new cleaning regimen, based on normalized operating data, reduced membrane replacement by 60% preventing 300+ RO membranes from going to the landfill each year and saving \$200,000 in replacement costs.




Let's Build Something Together


Puretec has strategically located facilities in the Southwest to provide immediate service for your high purity water needs.

 **Oxnard, California**


3151 Sturgis Road
Oxnard, CA 93030

 **Anaheim, California**


1815 S. Lewis Street
Anaheim, CA 92805

 **San Diego, California**

7151 Ronson Road
San Diego, CA 92111

 **San Jose, California**

1291 Oakland Road
San Jose, CA 95112

 **Gilbert, Arizona**

1440 N. Hobson Street
Gilbert, AZ 85233

ABOUT PURETEC

We're an innovative industrial water service company providing high purity solutions with hundreds of uses across dozens of industries. Our pure water solutions include deionized water service, water softening, reverse osmosis, mobile trailers, and many other advanced filtration solutions.

An independent, family-owned business, Puretec believes in doing our best in everything we do, acting with integrity, and treating our clients and employees with respect. We're proud to be a certified "Great Place to Work."

It's not just water.

It's Puretec!

800.906.6060

contact@puretecwater.com

www.puretecwater.com