



CLIENT SUCCESS STORY

Rancho California Water District Realizes Massive Savings with Meter Replacement Program

CLIENT

Rancho California Water District

GEOGRAPHY

Temecula/Rancho, California

POPULATION

150,000

TOTAL WATER METERS

≈ 45,000

CHALLENGES

Rancho Water's meter replacement criteria is currently dictated by Administrative Code and uses standard age and consumption values to determine when to perform water meter replacements. In Rancho Water's case, the criterion was to replace meters every 15 years, or when consumption exceeds 100,000 HCF (approximately 75 million gallons).

RESULTS

58% savings over 7 years / 60% savings over 10 years using Capital Predictor™



GOVERNMENT

“We had been experiencing mixed results employing different asset management products and solutions that never quite lived up to our expectations. Our results really turned for the better once we started using Capital Predictor and adopted a lifecycle approach to our long-term strategic asset management strategies.”

The Challenge & Opportunity

Rancho California Water District (RCWD or Rancho Water) is a public agency tasked with providing high-quality water and wastewater services to the communities of Temecula, Murrieta and parts of the unincorporated areas of Riverside County, California. Like most water utilities throughout the United States, Rancho Water’s meter replacement criteria is currently dictated by Administrative Code and uses standard age and consumption values to determine when to perform water meter replacements. In Rancho Water’s case, the criterion was to replace meters every 15 years, or when consumption exceeds 100,000 HCF (approximately 75 million gallons).

Based on this current strategy, Rancho Water was forecasted to spend \$11.4 million on meter replacements over the next seven years and \$94.4 million over the next 75 years. Convinced there were cost savings and operational efficiencies to be found within its meter replacement program, management set out to explore alternative approaches.

How Rancho Water Discovered Savings

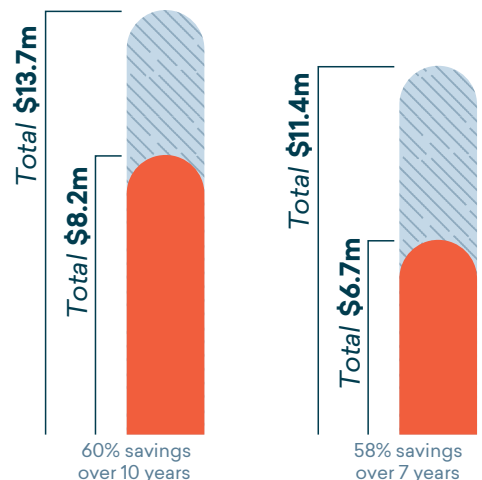
Set on the mission to discover more efficient asset management approaches, RCWD Water Resource Manager Jeff Kirshberg, PhD, PE, tested various asset management software solutions and identified Capital Predictor as the platform with the most potential to achieve Rancho Water’s strategic asset management goals due to its powerful lifecycle modeling and unique optimization capabilities.

Partnering with Dude Solutions’ strategic asset management experts, Dr. Kirshberg reviewed Rancho Water’s Meter Replacement Program through a strategic asset management lens utilizing Capital Predictor asset lifecycle models. The team developed componentized meter assembly models and tested various treatment and replacement strategies based on specific service life criteria with consideration for flow rates, meter sizes and types.

Utilizing Capital Predictor’s “what-if” analysis capabilities, the team was able to quickly and accurately compare and analyze various meter rehabilitation and replacement strategies, ultimately identifying an optimized strategy yielding total savings of \$6.7M (58%) over 7 years and \$8.2M (60%) over 10 years. **These results were presented to Rancho Water’s Board who then unanimously approved the revenue-based approach,** resulting in a new meter replacement program that produces significant savings for RCWD and improved levels of service for its customers.

Featured Results

Quick ROI Realization



What's Next

Following the success of this water meter project, Dr. Kirshberg continues to utilize Capital Predictor to identify additional opportunities to optimize Rancho Water's infrastructure investments. Upon further application of lifecycle modeling with Capital Predictor, **RCWD was able to identify a savings of \$3.4 million in anticipated wastewater pump station upgrades by diverting flow to a neighboring district and retiring the pump station.**

Now, Rancho Water is employing Capital Predictor lifecycle models to explore cost-saving strategies for its drinking water reservoirs, as well as finding other ways to leverage models and output to analyze a range of asset management decisions across their portfolio.

