Rancho Water Realizes Massive Savings in Its Meter Replacement Program

Client
Rancho California Water District

Geography
Temecula/Rancho, California

Population
150,000

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 fifteen years, or when consumption exceeds 100,000 HCF (approximately 75 million gallons).

Results
58% savings over 7 years / 60% savings over 10 years
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 fifteen 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.

Assetic & Rancho Water

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 Assetic 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.

Featured Results

Quick ROI Realization

Partnering with Assetic’s strategic asset management experts, Dr. Kirshberg reviewed Rancho Water’s Meter Replacement Program through a strategic asset management lens utilizing Assetic Predictor life-cycle models. The team developed componentized meter assembly models and tested various treatment / replacement strategies based on specific service life criteria with consideration for flow rates, meter sizes and types. Utilizing Assetic 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 seven years and $8.2M (60%) over ten 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.
**What’s Next**

Following the success of this water meter project, Dr. Kirshberg continues to utilize Assetic Predictor to identify additional opportunities to optimize Rancho Water’s infrastructure investments. Upon further application of lifecycle modeling with Assetic 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. Further, Rancho Water is currently employing Assetic Predictor life-cycle models to explore cost-saving strategies for its drinking water reservoirs, as well as finding other ways to leverage Assetic Predictor models and output to analyze a myriad of asset management decisions across their portfolio.

Learn more: Brightlysoftware.com

“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 Assetic Predictor and adopted a life-cycle approach to our long-term strategic asset management strategies.”

Jeff Kirshberg, PhD, PE
RCWD Water Resource Manager