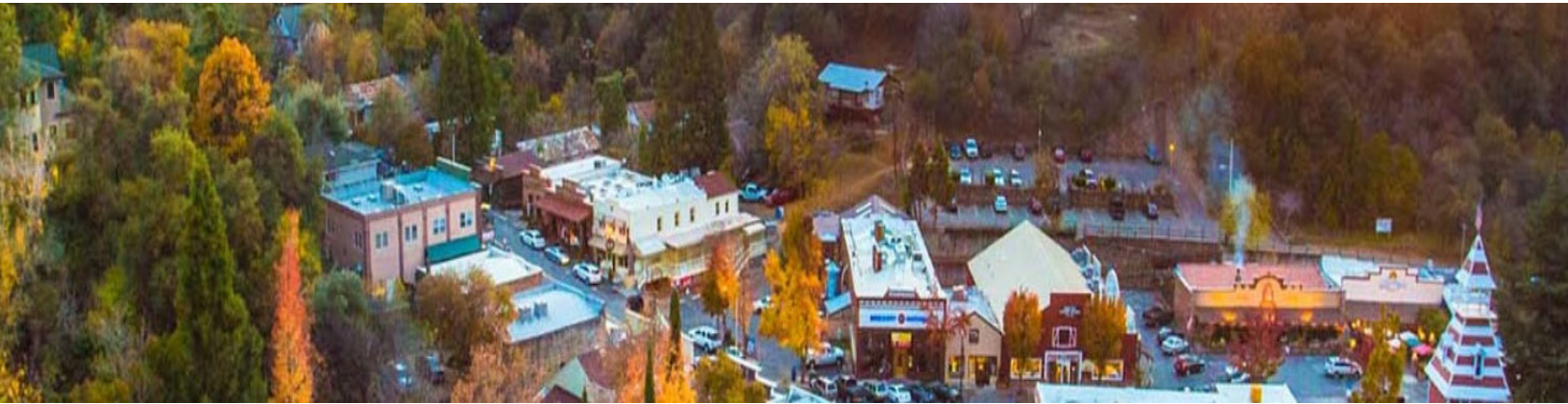


SMARTCOVER

WE'VE GOT IT COVERED™



TARGETED SEWER CLEANING SAVING MONEY AND SPILLS IN NORTHERN CALIFORNIA

BACKGROUND

Originally established in 1956 as the Rocklin-Loomis MUD and renamed South Placer Municipal Utility District (SPMUD) in 1988 as a result of expansion, SPMUD provides sewer collection services for over 21,000 connections, serving a population of approximately 75,000 just outside Sacramento, CA..

SPMUD's customer base has tripled over the last 25 years from 10,000 to over 31,000 homes.

THE CHALLENGE

SPMUD was looking for a more cost-efficient method to maintain at-risk sewer sites as an alterna-

tive to their high frequency cleaning (HFC) program. HFC programs typically can be very expensive because all sites on the schedule are cleaned on a regular and frequent basis, whether there is an actual risk of spills or not.

Because "blind cleaning" is not data driven, HFC may require many unnecessary cleaning cycles that consume significant amounts of staff time and truck rolls without clear metrics of actual risk mitigation. Frequent cleaning can also do damage to the sewer pipes over time and therefore reduces the life of installed capital infrastructure. SPMUD had a "hot-spot elimination" program that was focused primarily

on repairing or reconstructing problem sites but the time and expense involved was significant and often repairs were not a practical option.

THE SOLUTION

SPMUD began using SmartCover with two remote field units installed in 2014, so staff were comfortable with the technology. In 2017, the SmartClean program was introduced, using five remote sensors at targeted, high-risk sewer sites.

THE RESULTS

The selected sites had been on HFC cycles of 1, 2 or 3 months per site. By continuously monitoring the locations, operators issued cleaning work orders based on real-time sewer conditions.

In addition, they are assured of SSO protection since the ongoing sewer monitoring provides AI-based analysis that detects potential problems and alarms are issued when unusual changes are happening inside the sewer.

"SmartClean gives us clear visibility on when to clean these pipelines, which historically have been troublesome, virtually eliminated blind cleaning, while avoiding any spills. This enabled us to significantly extend cleaning cycles"

-- Eric Nielsen, SPMUD Engineer

REDUCING HIGH FREQUENCY CLEANING PROVIDES ON-GOING SAVINGS

SUMMARY:

Real-time monitoring enabled SPMUD to significantly extend cleaning cycles, such as pushing 1-month and 2-month sites out to 12-month schedules. Further examination continues to inform how other sites using HFC routine cleanings can be included in the SmartClean program.

SPMUD is experiencing significant, sustainable savings with the SmartClean program and expect ROI with \$25,000 in savings per site over seven years. Visibility is better in between cleanings resulting in a lower environmental impact, reduced truck rolls, extended life of sewer assets, and on-going spill warnings.

ROI achieved within 1-2 years of deployment depending on previous HFC

