



## ***SEWER MONITORING IDENTIFIES ILLEGAL DUMPING, PINPOINTS PERPETRATOR***

### ***BACKGROUND***

The City of Rohnert Park's sewer system has two primary functions which are to first collect the City's wastewater and then to transport it to the Subregional Water Reclamation System of Santa Rosa for treatment.

The City's sanitary sewer system includes 83 miles of gravity sewers, 7.5 miles of force mains, 16 inverted siphons, and three pump stations. From the pump stations the wastewater is directed to the Santa Rosa Subregional treatment facility on Llano road.

During a typical 24-hour period the amount of wastewater entering the system fluctuates from 1 to 7 million gallons per day.

The average dry weather wastewater flows are 3.5 MGD (million gallons per day), and up to 15 MGD during winter months.

### ***THE CHALLENGE***

Over the past few years, Rohnert Park public works staff had been dealing with a series of mysterious intermittent blockages of sewer lines in a specific neighborhood. The sewer backup incidents were first seen in December 2015. A thorough cleaning of the associated sewer main seemed to resolve the problem. However, analysis during the process also indicated an unusual presence of the type of grit commonly found in septic tanks.

### ***THE SOLUTION***

When the problem continued in 2016, the city launched a targeted search for the culprit in January 2017 by placing SmartCover sensors in underground sewer lines to monitor flow levels and detect suspicious changes in the flow. The Santa Rosa Police Department also got involved because of the impacts on the Santa Rosa Treatment plant.

### ***THE RESULTS***

The SmartCover monitoring units helped identify a specific home whose owner ran a septic tank servicing business as the most likely source of the discharges. A search warrant was obtained, and video monitoring cameras were placed on city light poles to watch traffic to and from the home.

According to the warrant, each time the homeowner returned from a job over the next two months and parked his tanker in the back, "the sewer flow would increase substantially indicating a large discharge to the sewer system."

Further investigation under the search warrant determined that the suspect was using a secret pipe installed in his backyard to drain his 2,800-gallon commercial septic tanker into the city sewer pipes an average of six days per week.

The illegal dumping perpetrator was arrested by Santa Rosa Police and charged with over 300 counts of illegally dumping septic waste.

# ***ILLEGAL DUMPING IS A MAJOR CHALLENGE***

## ***SUMMARY:***

SmartCover monitoring data from January through December 2017 indicated that the culprit made an estimated 326 illegal dumps of sewage into the Rohnert Park sewer system. A criminal complaint was filed alleging that he deprived local government of money by failing to use a waste treatment site to dump sewage. Estimates indicate that he should have paid over \$350,000 (and possibly as much as \$500,000) to properly dispose of the waste at Santa Rosa's plant.

*Flow monitoring is key to identifying unauthorized dumping*



More than \$350,000 in fees were evaded by the perpetrator prior to being caught.



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