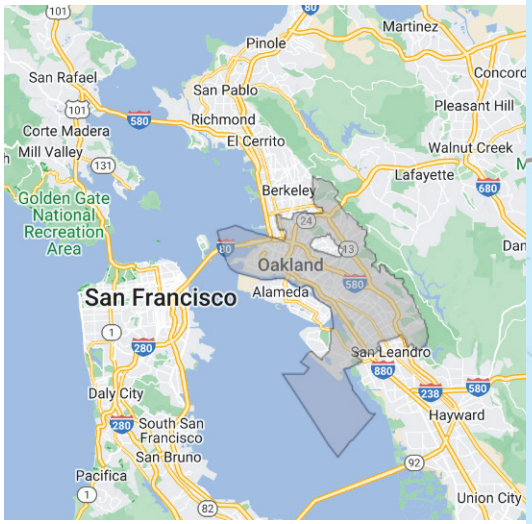
Case Study
Oakland, CA Uses ADS® Turnkey Services to Avoid Spills and Reduce Costs

Oakland California is the largest city in the East Bay region of the San Francisco Bay area. With a population of over 440,000 residents, Oakland is a major trade center with the tenth busiest port in the US and a total area of 78 square miles.

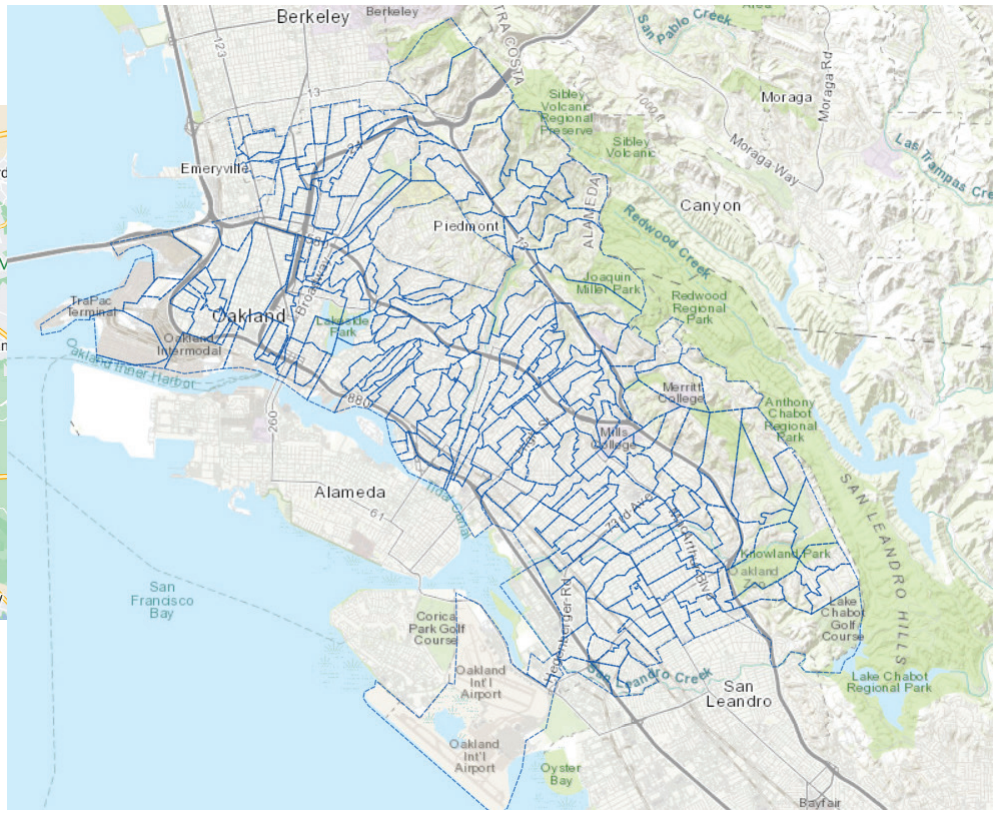
The Oakland Public Works Department owns and operates over 932 miles of sewer mains, ranging from six inches to over 66 inches in diameter, 28,554 sewer structures, and 11 pump stations. Nearly 20 percent of the system has been rehabilitated within the past 25 years but much is still older than 50 years old, and some parts are as old as 100 years.

Wastewater from homes and businesses collected through Oakland's sewer collection system flows into the East Bay Municipal Utility District's (EBMUD) interceptor system, where it is conveyed to the EBMUD treatment plant.

Management of Sanitary Sewer Overflows (SSOs) is a key concern area for Oakland, both because of the environmental consequences and because the city of Oakland is a signatory along with five other cities or districts on a Consent Decree between the EBMUD, the California State Water Resources Control Board and the US Environmental Protection Agency. The Consent Decree includes a number of provisions that mandate the monitoring, management and reporting of SSOs.



Oakland Location



Oakland Sewer System

www.adsenv.com

Turnkey Services Enable End-to-End Monitoring and Management of SSOs

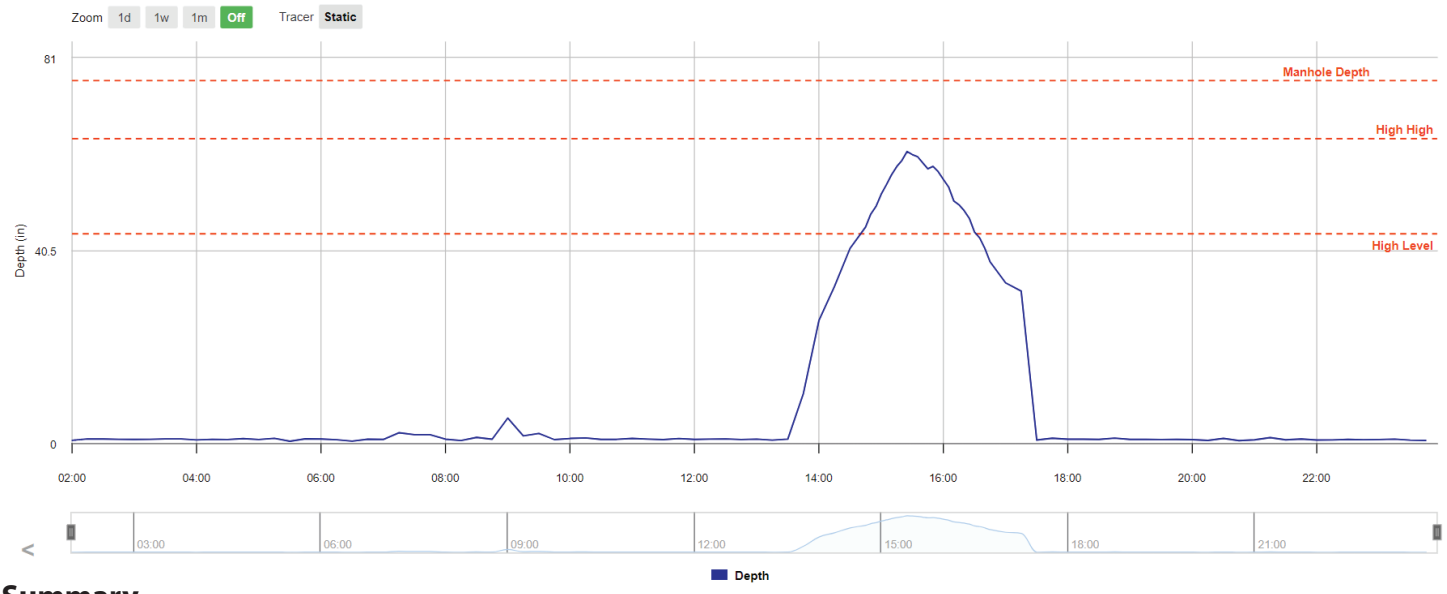
As part of their ongoing SSO management program, Oakland Public Works wanted to measure full depth in a manhole. They had been using monitors with float alarms at fixed heights but found these required a significant amount of time for maintenance.

Five years ago, Oakland began a pilot project using ECHO™ narrow-beam ultrasonic depth monitors from ADS Environmental Services®. ECHO is a next-generation, ultrasonic monitoring system that uses patented "narrow-beam" technology. Unlike conventional ultrasonic sensors, which must be suspended on a flexible cable to within a few feet of the invert flows, ECHO is installed at the top of the manhole.

The ECHO's narrow-beam technology gives it a full 20-feet of dynamic measurement range. Moreover, its stabilized mounting means that there is no sensor movement as occurs with cable-type ultrasonic sensors, which are prone to movement and can cause false alarms. The ECHO monitors also feature both low and high flow alarms. These configurable alarms can be adapted to the exact requirements for a given manhole.

Oakland expanded the ECHO monitor deployment to include 45 sites, and to take advantage of ADS' comprehensive services, termed D-SiTE, thereby relieving the City of any maintenance requirements. For a single, monthly subscription fee, D-Site covers the level monitor, installation, configuration, maintenance and 24/7 online data delivery - including alarms and early alerts regarding any emerging issues.

For example, as shown below, on September 20, 2022 the D-site monitoring service helped avert a spill by alerting staff to a surcharge in what was termed a "good catch". According to City of Oakland wastewater management, "the line was surcharging, the guys broke the stoppage, so it saved us from another SSO!"



Summary

By using a proven turn-key service for monitoring and managing their sewer system, the city of Oakland has been able to both improve their ability to avoid SSOs and reduce their overall costs. The D-Site approach relieves internal staff from the hassles of hardware installation, maintenance and monitoring while assuring they have a continuous 24/7 stream of comprehensive data for alerts, alarms and long-term analysis.

ADS Creating the Future Today

Learn more about ECHO:
www.adsenv.com/echo

Access PRISM:
https://www.adsprism.com

Call: 800.633.7246
Email: adssales@idexcorp.com

Specifications subject to change without notice.