

## ADS ECHO Saves the Weekend - Sinkhole Emergency Using the ECHO to Monitor an Emergency Sewer Bypass

The call came in on Thursday from Pete Martinez, Wastewater Collection Supervisor of the Oxnard Public Works Department. A sinkhole had developed suddenly along a rail line near the intersection of Wooley Road and Richmond Avenue. The record rainfall pounding this region throughout February 2017 had taken its toll, and scouring associated with storm drainage had caused the sudden development of the sinkhole, measuring approximately 20 ft. x 8 ft. Sanitary sewer mains were running through this area, and Pete knew he had to act fast to make sure he was ready to divert sewer flows around this area to reduce the risk of an SSO (Sanitary Sewer Overflow).

Pete was aware of the ADS ECHO, a quick and easy-to-deploy device that continuously monitors flow depth and provides wireless data and notifications. It was critical that the pipe receiving the bypassed flows have continuous monitoring to assure capacity was not exceeded. The local ADS office shipped an ECHO the same day (Friday) and by Saturday morning at 7:00 am, the device was installed and operational in the sewer manhole immediately upstream of the sinkhole. The ECHO installation allowed the tired work crews to go home knowing the ECHO was on the job; ready to notify them of rising water levels and keeping a constant vigil during bypass testing.



Learn more about the ECHO  
at [www.adsenv.com/echo](http://www.adsenv.com/echo)



Parked truck partially fallen in sinkhole alongside railroad tracks.

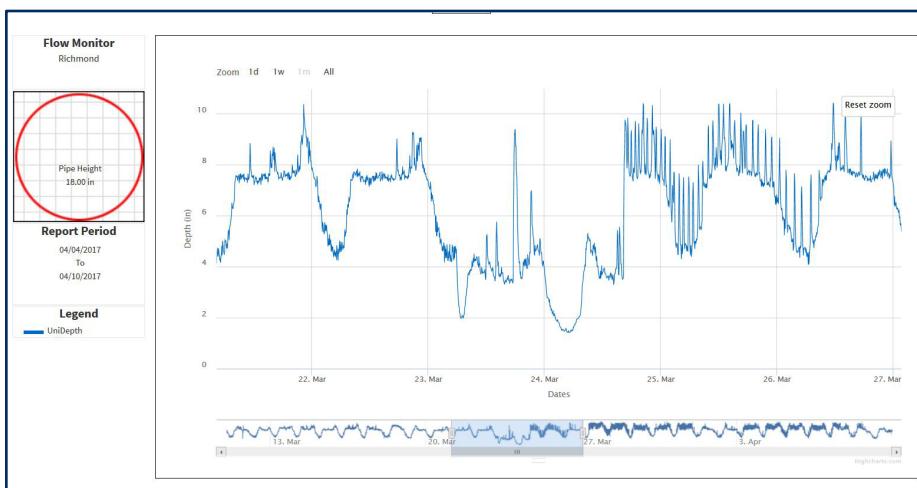


ADS ECHO installed on an adjustable mounting bar in the manhole site immediately upstream of the sinkhole.

## ADS ECHO Saves the Weekend - Sinkhole Emergency Using the ECHO to Monitor an Emergency Sewer Bypass

The ability to quickly install the ECHO and provide remote sewer level measurement, with quick and easy topside installation, provided an immediate benefit to the Oxnard Public Works Department. According to Pete Martinez, who was on the scene the day of installation, "the ECHO paid for itself by Monday with all of the overtime I would have spent with my crews working around the clock monitoring this pipe." Pete also indicated that over the following three-week period of bypass pumping during sinkhole repairs that the ECHO had likely paid for itself multiple times over. "Due to the constant changes in level from intermittent bypassing it was important to have data that is frequently updated and readily accessible. ADS's FlowView web platform provides easy access to our data, which is collected from the ECHO every five minutes and posted to FlowView every 15 minutes." Pete has since purchased two more ECHO units so he is prepared for any future sewer emergencies.

***"The ECHO paid for itself by Monday with all of the overtime I would have spent with my crews working around the clock monitoring this pipe."***



This hydrograph shows flow depth data from the ECHO and the frequent high degree of variability observed during bypass operations. The frequent interval data were particularly important in this scenario. The ECHO can store data as often as every one minute if necessary.

The Oxnard Department of Public Works is always on the lookout for leading edge technology to make their sewer systems more reliable and enable their crews to work more efficiently. This is one example of how its staff is willing to adopt a new technology to fit their needs. In addition, the low cost of the ECHO yields a very fast return on investment.

For more information about the ECHO, go to [www.adsenv.com](http://www.adsenv.com). For more information about the ECHO applications in Oxnard, contact Pete Martinez:

**Pete Martinez**  
**Wastewater Collection Supervisor**  
**Department of Public Works - Wastewater/Stormwater**  
6001 S. Perkins Road  
Oxnard, CA 93033  
Office 805.271.2214

**ADS**  
[www.adsenv.com/echo](http://www.adsenv.com/echo)