SewerWatch®

Videocentric Sewer Monitoring



Condition, Weather, Videos and Alerts all in the Palm of Your Hand



SewerWatch®

Sewer Monitoring as Simple as 1-2-3

1. Install SewerWatch® Monitor

SewerWatch® smart cellular-enabled monitors provide users the ability to observe, alert and visualize collection system behavior all within a user-friendly application.

- Lightweight: 1.9 lbs
- Deployed in 20 minutes
- 12 Month Battery Life
- Sensor Range: 8ft
- Maintenance-Free

2. Wait for an Alert

Upon wastewater levels reaching a user-defined height, a text message alert is dispatched along with an animated video detailing current conditions initiating the alert.

- Surcharge and Blockage Events
- Inflow & Infiltration Detection
- Cleaning and Capacity Issues

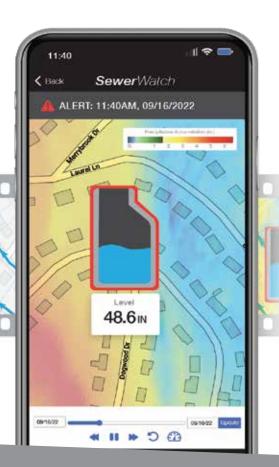
3. Start Watching

SewerWatch's Playback™ feature visually integrates location, weather, collection system performance and alerts into one clearly understandable animated video. Events leading up to each alert, including present conditions, are visually upgraded on a continual basis.

- Watch what led up to surcharges and blockages
- Watch effects of I&I relative to weather
- Watch for cleaning and capacity issues



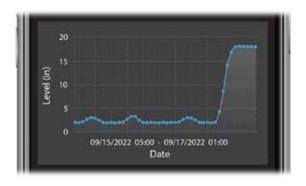




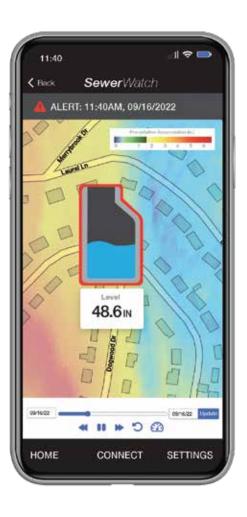
Watch What Led Up to Surcharges and Blockages

SewerWatch® transforms the ability of wastewater utility field and office personnel to manage their constantly evolving collection network assets. Its videocentric mobile-first architecture empowers those individuals tasked with maintaining operational integrity with the ability to proactively monitor, capture and visualize collection system infrastructure performance at-a-glance.

With SewerWatch's Playback™ feature, as quickly as a surcharge or blockage text alert is received, an animated video appears providing a clear visual explanation of current conditions initiating the alert along with changing conditions as the situation evolves.



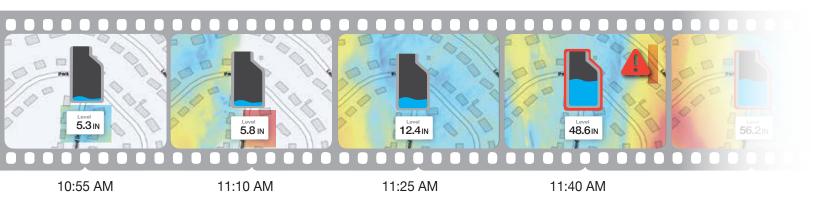
Upon completion of video review, further analysis of alert episodes may be conducted through a graphically based historical assessment of fluctuations in wastewater levels.



SewerWatch® visually integrates location, weather, performance and alerts into one quickly understandable video of collection system performance.

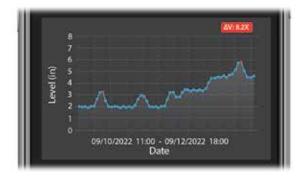
With SewerWatch's unique Playback™ feature, alert-based sewer monitoring becomes as simple as watching an animated video of your collection network. Users are able to follow along, either in historical or real-time mode, as dynamic visuals provide a moving timeline of wastewater manhole levels.

Within just a few minutes of watching Playback[™], O&M personnel are not only armed with the ability to clearly understand events leading up to each alert but continually stay informed by viewing present conditions. Updated once every 5, 10 or 15 user-selectable minutes, videocentric monitoring technology brings collection system performance awareness to an entirely new level.



Watch Effects of I&I Relative to Weather

Surcharges and SSO's are primarily the result of either blockages or I&I. With SewerWatch's unique PlaybackTM feature, the I&I discovery process becomes as simple as watching an animated video of the performance of your collection network under both normal and adverse weather conditions. By coupling PlaybackTM with our proprietary peak volume comparison algorithms (ΔV), the cause and severity of a sudden increase in volume can easily be confirmed to be due to the effects of I&I.



Introducing Peak Volume Comparisons (ΔV)

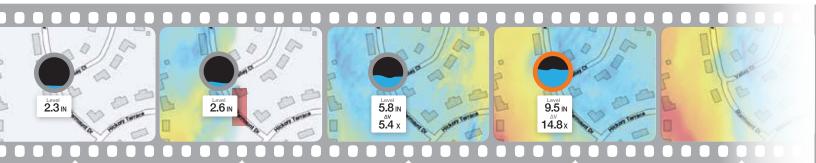
The portable SewerWatch® Monitor not only functions as a smart level sensor but also as a state-of-the-art Volumetric Comparator. It has the added capability for measuring and graphically displaying on any mobile device peak volume changes (ΔV) between dry and wet day wastewater flows. For purposes of ascertaining the gravity of issues pertaining to I&I, actual volumetric differences in flow are inherently more "relatable" to an impending problem than level-only data sets. This can be seen when a 2X (times) increase in wastewater level often results in a greater than 5X (times) increase in volume.



Watch the SEWERWATCH Video at smartwastewater.com

I&I Detection at a Glance

With Playback™, utility personnel are now are able to view, either in historical or real-time mode, wastewater volumes rising or receding in relation to storm intensity. Follow along as dynamic visuals provide a moving timeline of I&I contribution for each monitored location.



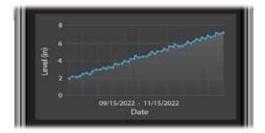
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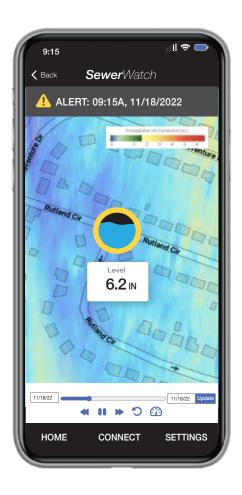
Watch for Cleaning and Capacity Issues

Blockages, the main cause of surcharges, SSO's and residential back-ups, are many times the result of a lack of cleaning or an unidentified capacity issue. Upon receiving a SewerWatch alert, Playback^M animated videos quickly show the primary cause for initiation of an alarm. Historical level records synced with coinciding weather patterns instantly provide visual confirmation of events leading up to the problem.



Notification of Cleaning

Sewer lines are primarily cleaned according to a preset schedule. But in many cases, the need for cleaning does not adhere to a specific timetable. SewerWatch, in addition to proactively alerting utility personnel of the need for cleaning, provides confirmation through historical data that the alert was initiated by a gradually increasing downstream problem.





Operating Capacity Evaluation

As communities grow, the carrying ability of sewer lines can become unknowingly stressed. SewerWatch algorithms compare original design parameters to actual volume flowing through the system in order to inform operating personnel of the need for investigation regarding potential problems related to capacity issues.

A Visual Tool for Determining the Problem

Gradually increasing diurnal flow patterns designating the necessity for cleaning due to the probable build-up of fats, oil or grease or the presence of collection system capacity issues are both immediately brought to attention by the ability of Playback® to visually confirm their existence.



10/28/2022 11/04/2022 11/11/2022 11/18/2022

PRICING

SEWERWATCH®

3-YEAR SEWERWATCH® PURCHASE PROGRAM

\$2,855.00

3-Year Program includes SewerWatch Monitor, Cellular Connectivity, Playback™, AutoAnalysis Software, Text Alerts, Batteries.

RE-UP FOR ADDITIONAL 3 YEARS

\$1,080.00

Cellular Connectivity, Playback™, AutoAnalysis, Text Alerts.

