The Difference Between iTracking® and Conventional Level Monitors

- **Conventional level monitoring systems primarily provide alerts for impending overflows.**

- **iTracking adds "smart" algorithms to level sensing making I&I Micro Detection possible.**

HERE IS WHAT MAKES THE DIFFERENCE!

Conventional Level Monitoring

As collection system volumes fluctuate, conventional Level Monitoring Systems record these changes. This works fine when providing alerts for impending overflows but falls short when attempting to isolate the individual mini and micro basins responsible for contributing major volumes of I&I. In order to Micro Detect I&I, one must have the ability to convert changes in levels to flow in gpm thereby providing the means to independently assess I&I activity within each manhole segment.

Because "level" is the only information available and subtracting one level reading from another has no correlation to actual flows, it makes it impossible for conventional level monitoring systems to determine which pipe segments within the collection network are responsible for the greatest volumes of I&I.
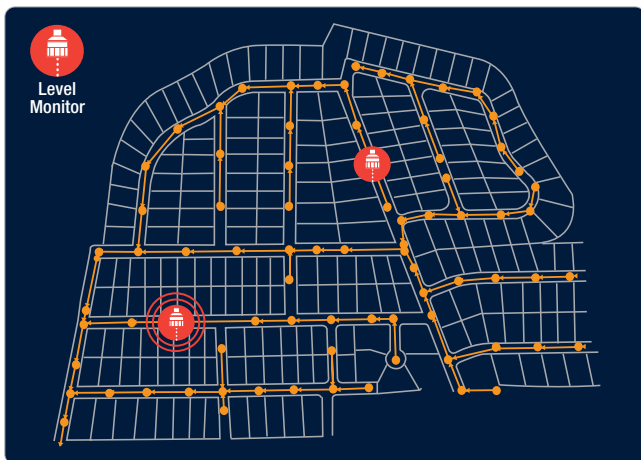
Conventional level/overflow monitors lack the analytics to isolate I&I down to mini and micro-basins.

iTracking® I&I Micro Detection

iTracking solves the "level sensing only" problem by adding a series of powerful differentiation algorithms to the I&I discovery process. The addition of these algorithms allows for subtraction of flows between neighboring mini and micro basins resulting in the ability to pinpoint I&I down to a set of adjacent manholes.

As can be seen from the diagram below, iTracking isolates mini and micro segments of a basin from one another ultimately determining the volume of I&I residing within each one. This is accomplished by iTracking algorithms having the ability to convert level readings to flow in gpm thereby resulting in being able to subtract flow in any micro basin from the one directly upstream of it. By simply repeating the process, areas of I&I are micro-detected down to adjacent manholes.

"At a glance" iTracking analytics automatically identify the micro basins (1 & 5) responsible for contributing the highest percentages of I&I.