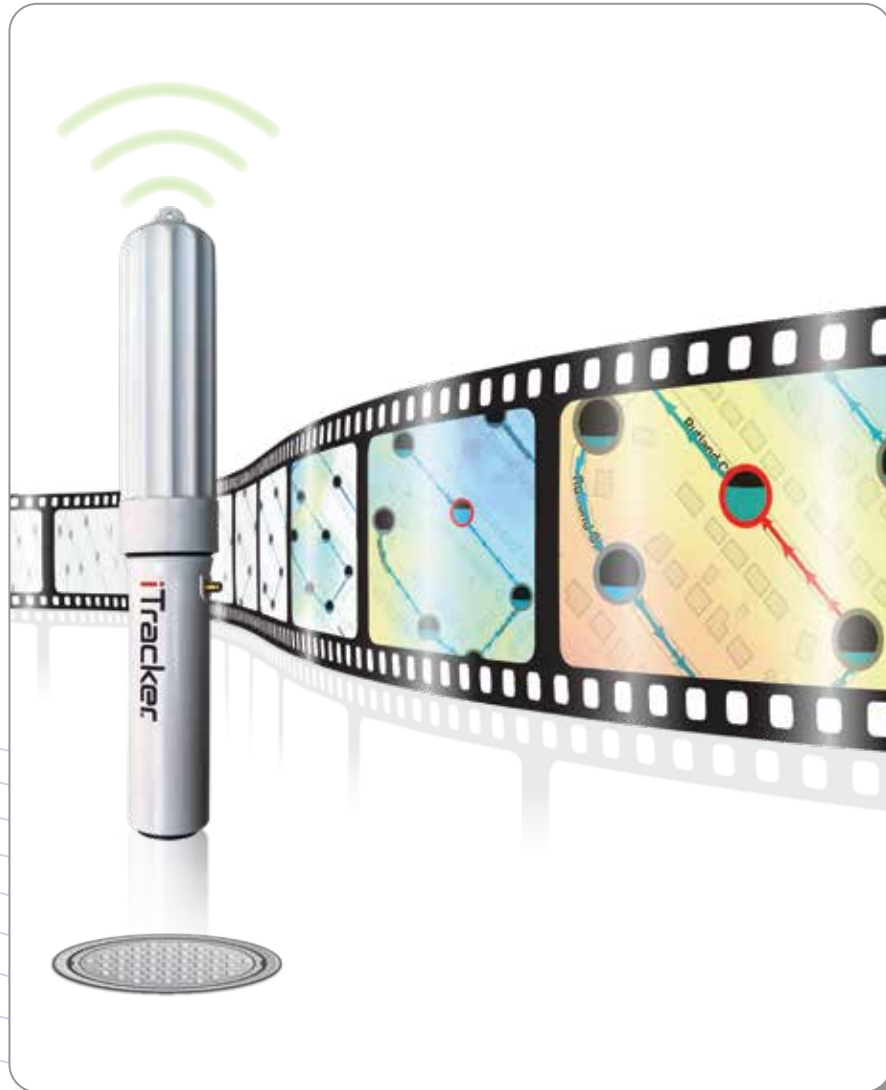# iTracking®

TRACPAC™ 7

The First AI-Powered Solution for Pinpointing I&I

EASTECH

TRACPAC™ 7

I&I MICRO DETECTION IN 2 SIMPLE STEPS

The TracPac 7 is a packaged I&I Micro Detection system designed to quickly pinpoint areas of I&I to between a set of adjacent manholes. Provided with (7) iTracker® smart sensors, accompanying hardware and auto-analytical software, the TracPac 7 in two simple to follow steps, will precisely locate major areas of I&I after just a single rain event.

TRACPAC™ 7

Provided with (7) iTracker® smart sensors, accompanying hardware and auto-analytical software.

It starts with a Smart Sensor

iTracker smart I&I Detection sensors are packed with powerful features that give you the ability to monitor, analyze and alert on a single platform. Designed with Bluetooth capability, sensors can be deployed in just 20 minutes, do not require confined space entry and are maintenance-free.

- **Non-Contact**
- **Lightweight: 1.9lbs**
- **12 Month Battery Life**
- **(2) - 3.6v Lithium D Cell**
- **Bluetooth Enabled**
- **Onboard Data Logger**

High Resolution Intelligence

iTracker Smart Sensors deliver a network of high resolution data points that quickly pinpoint I&I down to a set of adjoining manholes.

User-Friendly

20 Minute Setup

iTracker sensors can be installed in just 20 minutes without confined space entry.

5 Minute Data Retrieval

iTracker sensors allow for effortless setup and retrieval of data through Bluetooth connectivity.

Cloud Connectivity Makes it Simple

Our cloud connectivity allows you to instantly access actionable reports and on-demand animated videos from any location.

PLAYBACK™ AI-Powered Video Animation

Locating faulty underground wastewater infrastructure has always been a daunting task. Finally, that is all about to change. TracPac 7, along with its ground-breaking AI-Powered Computer Generated Imagery technology (Playback™), is poised to transition the complexities of Inflow and Infiltration (I&I) detection from a difficult and costly process to one that is simple and inexpensive.

With a click of the Playback™ button, users are instantly presented with an animated video showing the relationship between wastewater flows and weather events leading up to the I&I episode in question. Specifically developed AI-Powered algorithms quickly isolate and determine those sites responsible for the greatest volumes of I&I. **The top (3) I&I events at each problematic site are automatically displayed and encircled with a "red ring" for immediate identification.** I&I is quickly isolated down to a set of adjacent monitored sites.
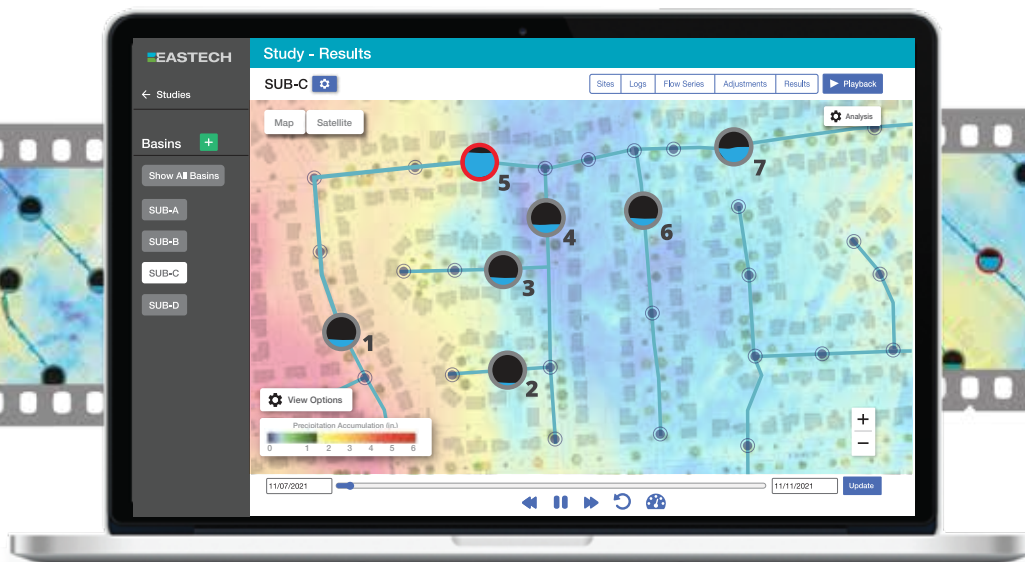
Running the gamut from "Major" to "Target" I&I Detection, TracPac 7 provides users with the ability to quickly ascertain the extent of their I&I issues within either "Major" areas of the collection network, or depending upon user preference, conducting a "Target" investigation capable of pinpointing I&I contributions down to a set of adjacent manholes.

Quickly Evaluating the Extent of the Problem

By utilizing just one of the smart TracPac 7 sensors in a specific area of the collection network and then uploading the resulting data to the Eastech Cloud, iTracking® analytics will automatically generate animated videos (Playback™), Volumetric Change in Flow Graphs and EPA-Guided graphical interpretations detailing the severity of I&I within the area selected for initial investigation.

Select
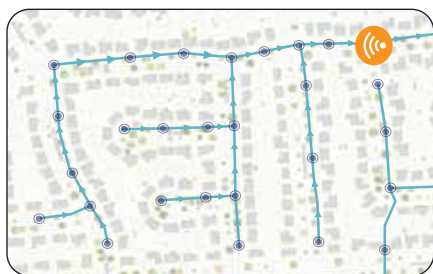
Before initiating a "Target" I&I Study (see pages 10 & 11) within a 1 – 2-mile area of the collection network, it is suggested that a single iTracker smart sensor be installed at the base of the proposed study area to quickly confirm the volumes of I&I presently infiltrating the system while additionally familiarizing utility personnel with the primary features of the TracPac prior to conducting a "Target" investigation

Install

iTracker smart sensor installation is accomplished in 20 minutes without the requirement for confined space entry. Simply hang the sensor weighing less than 2 lbs. from a factory supplied spanner bar, via Bluetooth enter manhole number, pipe size and water level into the calibration screen displayed on your mobile phone and the iTracker is ready to begin collecting data. It's as simple as that!

Upload

After one or two rain events, return to the site, retrieve the iTracker by pulling up the stainless chain attached to the sensor housing and with any Bluetooth-enabled mobile device upload the collected data directly to the Eastech Cloud where immediately upon receipt iTracking® analytics will automatically generate animated videos (Playback) and EPA-Guided graphs.

Now... Stop Wondering and Start Watching as Animated Videos and Flow Graphs Automatically Provide Actionable Results

PLAYBACK™

Discovering the location of I&I is as easy as viewing an AI-Powered animated video of the performance of your collection network using any mobile device. Easily watch the effects weather-related I&I has on your wastewater system (updated every 5 minutes). Manhole segments contributing the highest volumes of I&I are automatically highlighted by red rings.

EPA-Guided Results

TracPac 7 uses the EPA's I&I Guidance recommendations (Wet Weather Flows exceeding 4.5 times the 60 GPD per person average daily flow) as the primary benchmark for identifying each major and micro basin within the wastewater collection network responsible for contributing excessive volumes of I&I.
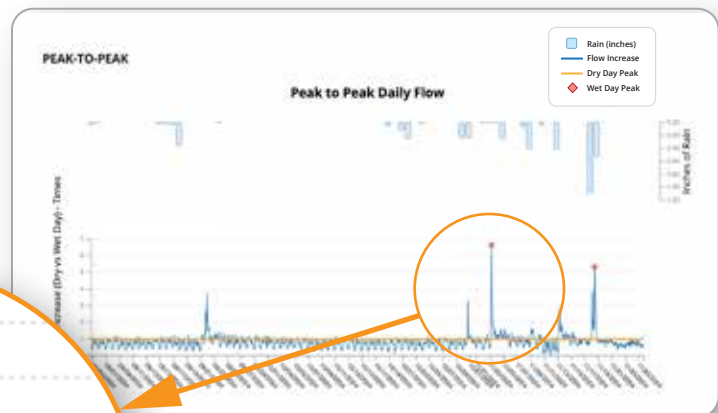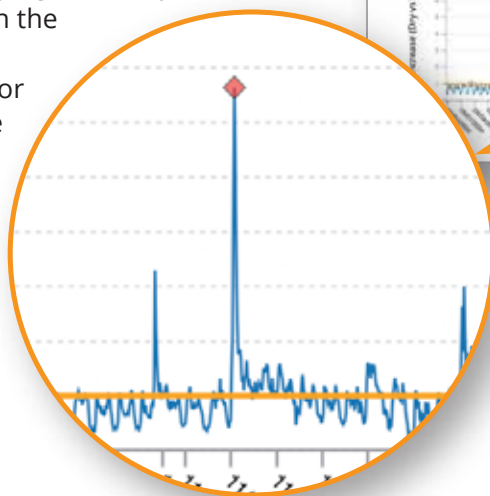
A Red Diamond highlights each RDII event exceeding the "4.5 times increase" EPA benchmark.

Watch the TRACPAC 7 Video at smartwastewater.com

As described above, the TracPac 7 provides users with the option of confirming the need for an I&I Study prior to initiating an in-depth investigation (See Pages 10 & 11).

The TracPac 7 I&I Micro Detection system is designed to quickly pinpoint areas of I&I to between a set of adjacent manholes. In two simple to follow steps, the TracPac 7 will precisely locate major areas of I&I after just a single rain event.

Pinpoint I&I in 2 Simple Steps

STEP 1
Place (7) iTracker sensors within a 1 – 2-mile section of the collection system selected for I&I investigation.

PLAYBACK™

Discovering the location of I&I is as easy as viewing an animated video of the performance of your collection network using any mobile device. Easily watch the effects weather-related I&I has on your wastewater system (updated every 5 minutes). Manhole segments contributing the highest volumes of I&I are automatically highlighted by red rings.

Site Selection

By installing one iTracker every 3-5 manholes (approx. 2 miles) within the area selected for investigation, a high-resolution iTracking grid will uncover the piping segments responsible for the largest contributions of I&I.

Data Retrieval

Immediately following the 1st or 2nd rain event, with any Bluetooth-enabled mobile device upload the collected iTracker data directly to the Eastech Cloud.
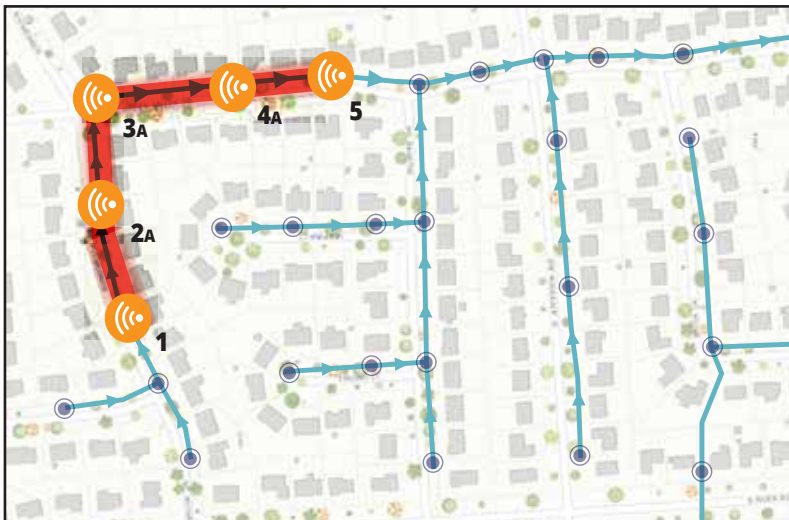

AutoAnalysis Results

Data is automatically analyzed on the Eastech Cloud with I&I results presented in animated video and "easy to understand" graphical formats. [MAJOR I&I DISCOVERED BETWEEN iTRACKER SITES 1 & 5].
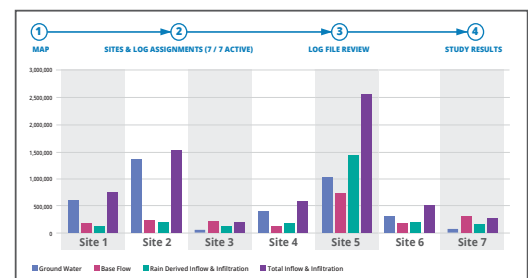
STEP 2

As discovered in STEP 1 and highlighted in red below, the greatest amount of I&I is coming from between Site 1 and Site 5.


Site Selection

In STEP 1, TrackPac 7 Auto-Analysis determined that 60% of I&I within the study area was generated between Site's 1 & 2. To pinpoint the cause to between a set of manholes, the iTrackers in Sites 1 & 5 are kept in place and (3) iTrackers from the STEP 1 study are removed and relocated to Sites 2A, 3A and 4A.

## CCTV or Smoke Testing Confirmation

In STEP 2, TracPac 7 Auto-Analysis determined that 50% of I&I within the study area encompassing manholes 1, 2A, 3A, 4A and 5 was generated between Site's 2A and 3A.

For confirmation of TracPac 7 results, CCTV camera inspection or smoke testing is initiated between Sites 2A and 3A.
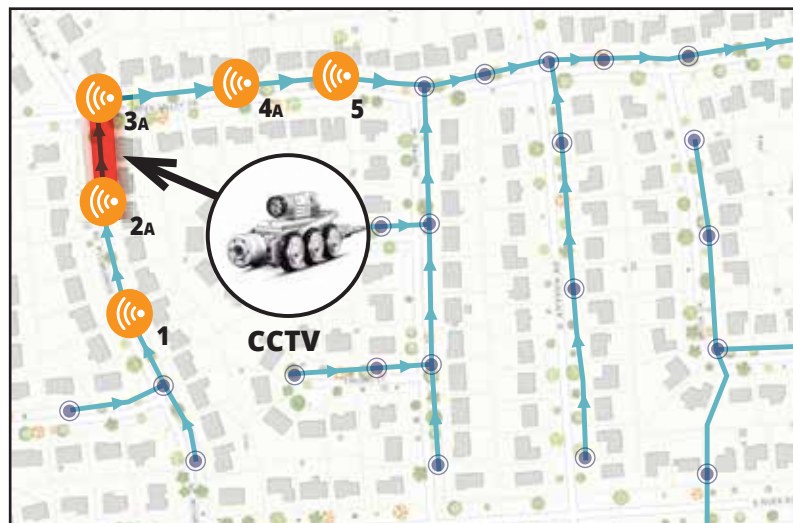
AutoAnalysis Results

iTracker data is again automatically analyzed on the Eastech Cloud with I&I results presented in visually "easy to understand" Playback™ animated video and graphically generated formats.
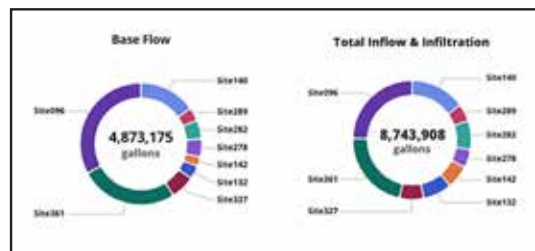
Pinpoint I&I Detection

The I&I results presented by both Playback™ and graphical visualizations provide users with the ability to precisely detect I&I to between adjacent manholes. [MAJOR I&I DISCOVERED BETWEEN iTRACKER SITES 2A & 3A].

Watch the TRACPAC 7 Video at
smartwastewater.com

PRICING

TRACPAC 7™

TracPac 7™ I&I DETECTION PACKAGE   **$19,775.00**
Provided with (7) iTracker® smart sensors, accompanying hardware
Playback™, AutoAnalysis Software and AutoReporting.

Additional iTracker® Smart Sensor (Bluetooth Enabled).   **$2,825.00**

To initiate the Cellular Connectivity Option on any TracPac 7 iTracker, please add the following:
Cellular Upgrade (one time charge)   **$150.00**
Cellular Connectivity (annual charge)   **$360.00**

The above pricing is based upon the first year of TracPac 7™ purchase and implementation. The pricing includes everything listed above and everything required to conduct a successful I&I Detection Study. No hidden or additional costs.

Each following year, the only costs incurred will be $3,360/annum for the Cloud-Based Analytical Software platform that includes AutoAnalysis, AutoReporting and Playback.