A FAST READ!

The iTracking®

Tracpac 7

Quick Guide

First Edition

I&I Detection with the Click of a Button!

EASTECH

www.smartwastewater.com

The Sensor

State-of-the-art iTracker® wireless sensors monitor wastewater collection system performance on a 24/7 basis without the need for confined-space entry, continuous maintenance and hazardous "in the road" data retrieval.

Using EPA Guidance for Conducting a Quick and Cost-Effective I&I Study

EPA PUBLICATION 97-03

Instead of going through the time and expense of utilizing maintenance-prone flowmeters to ascertain increases in wastewater volume during wet weather events, simply use iTracking's TracPac 7 with Auto Analytics and Computer-Generated Imagery to locate with just one click of a button each micro-basin (branch) responsible for excessive contributions of I&I.

EPA's Inflow and Infiltration I/I Analysis and Project Certification brochure (Publication 97-03) uses wet weather flows (Rain-Derived I&I) totaling greater than 275 gallons per person per day as a basis for determining excessive I&I.

When compared to the EPA's recognized 60 gallons of water usage per person per day, the 275 gallons per person per day represents an increase of **4.5 times** the expected 60 gallons per person per day.

TracPac 7 uses the EPA's I&I Guidance recommendations (total wet weather flows exceeding **4.5 times** the 60 gallons per person average daily usage) as the primary benchmark for instantly identifying each area within the collection network contributing excessive volumes of I&I.

TracPac 7 with Playback Video Analysis

To begin, select a single Major Basin or multiple Major Basins within the collection system for initial investigation as to the ingress of I&I. Once you are ready to initiate a **TracPac 7** Study, in 20 minutes without the need for confined-space entry, install an Tracker sensor at the most downstream manhole of each Major Basin under evaluation (depicted below).

Then, after one or two rain events, return to each site, retrieve the iTrackers and using any mobile device upload the collected data directly to the Eastech Cloud. **Playback™** and **Auto Analytics** will do the rest.

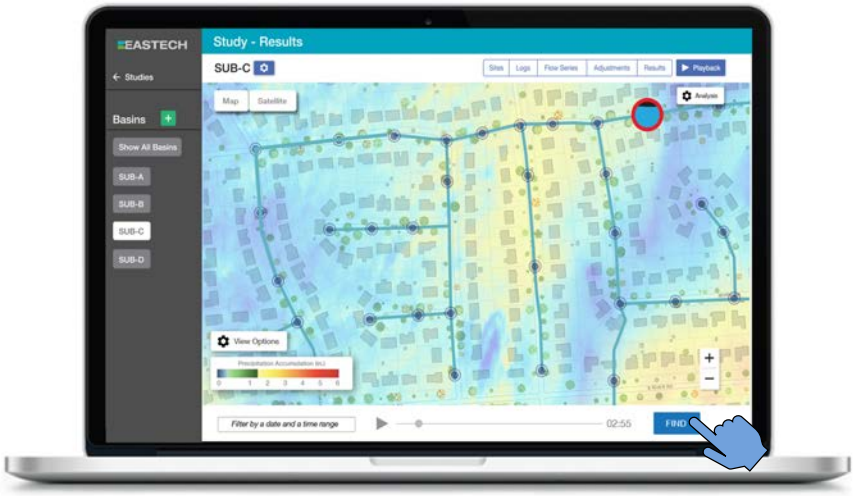
MAJOR BASIN

iTRACKER

Just Click the “FIND” Button

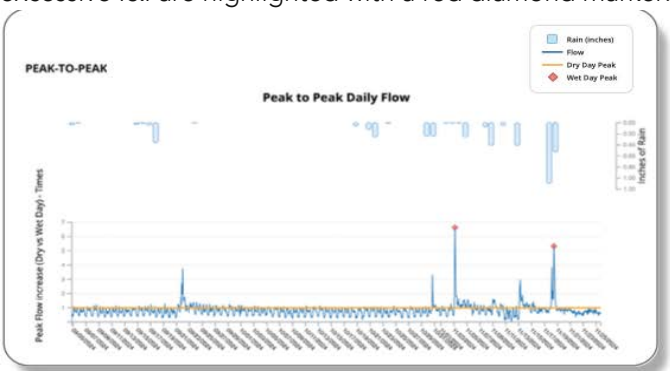
With **TracPac 7’s** unique **Playback**™ feature, the I&I discovery process becomes as simple as watching an animated video of the performance of your collection network under both normal and adverse weather conditions. Simply by clicking the **“FIND”** button, users can view in historical real-time mode wastewater volumes rising or receding in relation to storm intensity and follow along as dynamic visuals provide a moving timeline of I&I contributions for each monitored location.

By combining location, weather and performance data, the top I&I event for each Major Basin is automatically presented in an animated video format with color-coded rings (yellow, orange, red) depicting the severity of the episode.



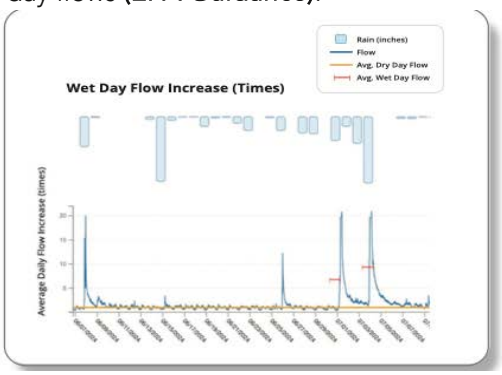
PEAK TO PEAK HYDROGRAPH

Compares the hourly wet day increase in peak flow in “X times” to the average dry day peak flow. Events with excessive I&I are highlighted with a red diamond marker.



I&I SEVERITY HYDROGRAPH

Marks each day where the total daily flows reach or exceed 4.5 times the normal dry day flows **(EPA Guidance)**.



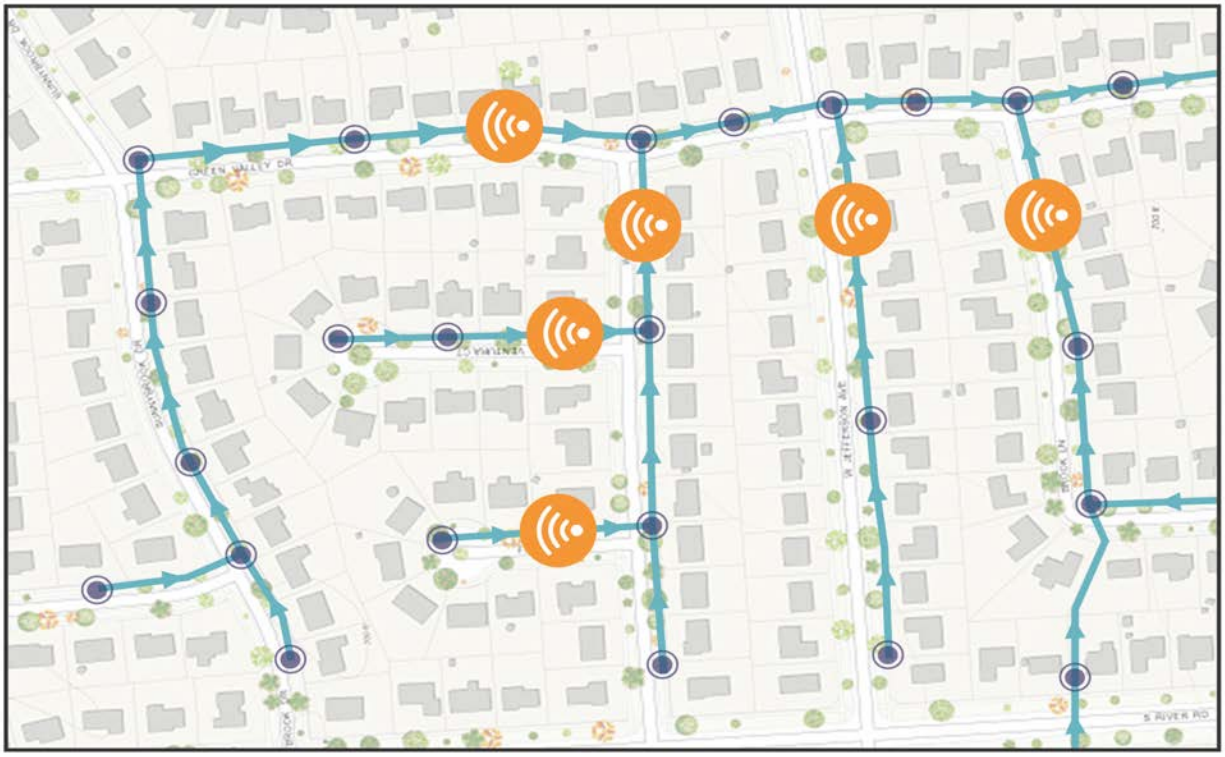
Which Branches are Responsible for I&I?

If the Major Basin selected for investigation proves out to be a substantial contributor of I&I, **TracPac 7** sensors are positioned at the base of each independent Branch making up the Major Basin (depicted below).

It has been proven over thousands of I&I Studies that 80% of I&I resides in just 20% of the collection network. By placing **TracPac 7** sensors at the base of each independent Branch, the 20% of the system contributing 80% of the I&I can usually be discovered after just a single major rain event.

Once the Branches responsible for the majority of I&I are located, a further investigation can be initiated that employs either **smoke testing, CCTV or additional TracPac 7 sensors** to pinpoint the cause of the problem to between a set of manholes within each Branch.

BRANCHES

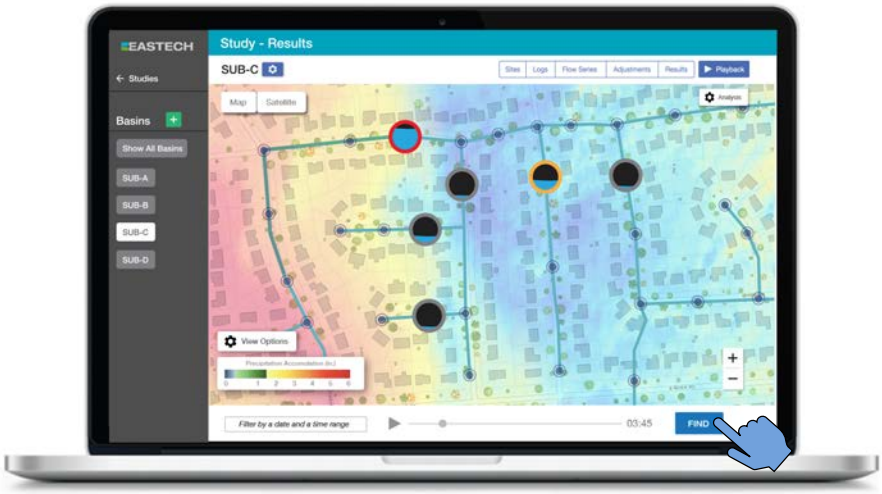


iTRACKER

Again, Just Click the “FIND” Button

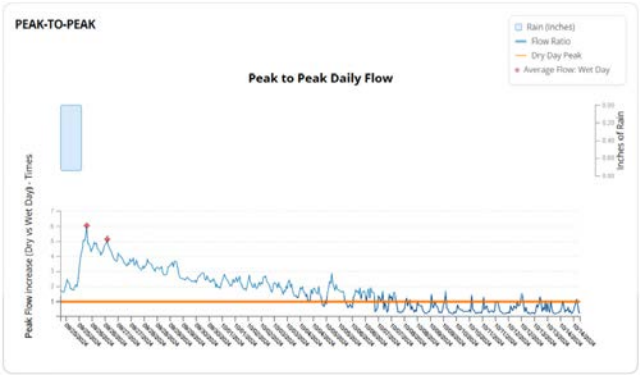
With **TracPac 7’s** unique ***Playback™*** feature, the I&I discovery process becomes as simple as watching an animated video of the performance of each Branch within a Major Basin under both normal and adverse weather conditions. Simply by clicking the **“FIND”** button, users can view in historical real-time mode wastewater volumes rising or receding in relation to storm intensity and follow along as dynamic visuals provide a moving timeline of I&I contributions for each monitored location.

By combining location, weather and performance data, the top I&I event for each independent Branch is automatically presented in an animated videos format with color-coded rings (yellow, orange, red) depicting the severity of the episode.



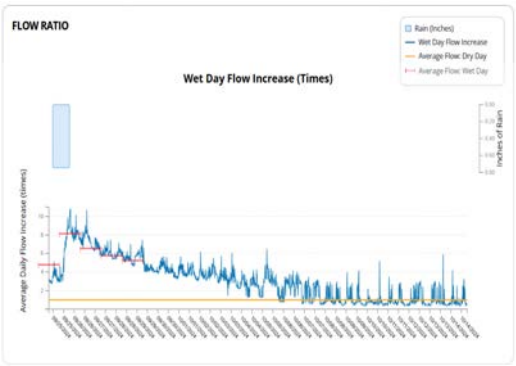
PEAK TO PEAK HYDROGRAPH

Compares the hourly wet day increase in peak flow in “X times” to the average dry day peak flow. Events with excessive I&I are highlighted with a red diamond marker.



I&I SEVERITY HYDROGRAPH

Marks each day where the total daily flows reach or exceed 4.5 times the normal dry day flows **(EPA Guidance)**.



Success Program

More Than Your Typical Support

We take pride in delivering the best customer service and the highest level of support. Your 100% satisfaction is our promise.

TracPac 7 Online Training

Eastech offers comprehensive training services through multiple channels to ensure 100% success of TracPac 7 I&I Study projects.

Project Support

- One-on-one hardware, connectivity and software familiarization and training.
- TracPac 7 sensor field installation training session.
- Web-based I&I Study analysis assistance.

EASTECH
800-226-3569 • 918-664-1212
Fax: 918-664-8494
info@eastechflow.com
6737 East 12th Street
Tulsa, OK 74112
www.smartwastewater.com