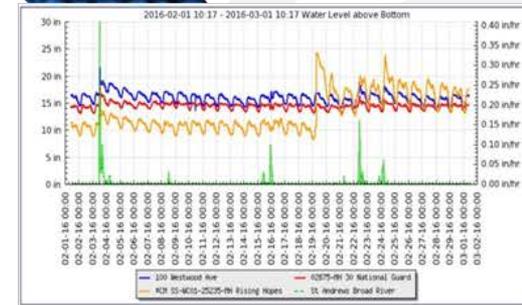




Region 9

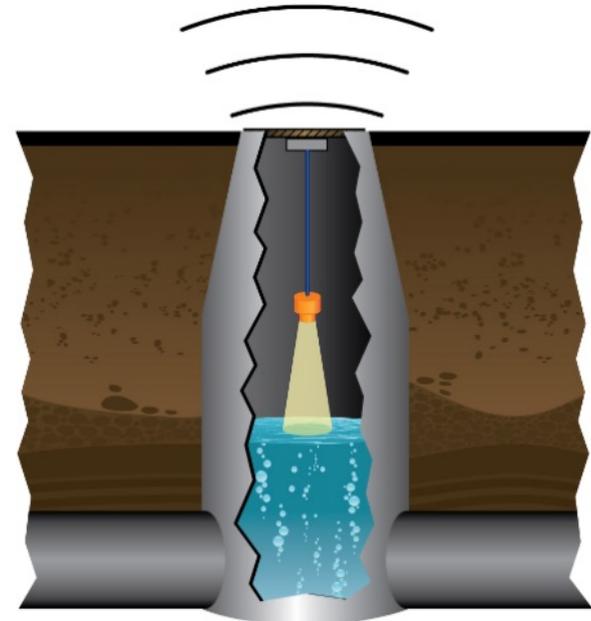
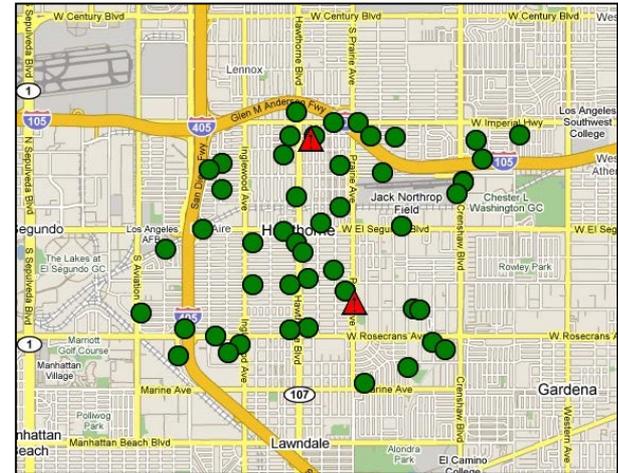


# SmartCover Systems

## April 12, 2017

# About SmartCover Systems

- San Diego technology company
- Serving water industry with smart infrastructure and IoT
- 13<sup>th</sup> year of operations
- >3,000 installations, >140 million operating hours (16,000 years)
- 15 patents, US and international
- Solutions for:
  - SSO monitoring and prevention
  - Optimized cleaning: operational savings
  - Real-time CSO monitoring and reporting
  - Stormwater monitoring
  - I&I detection
  - Capital project prioritization



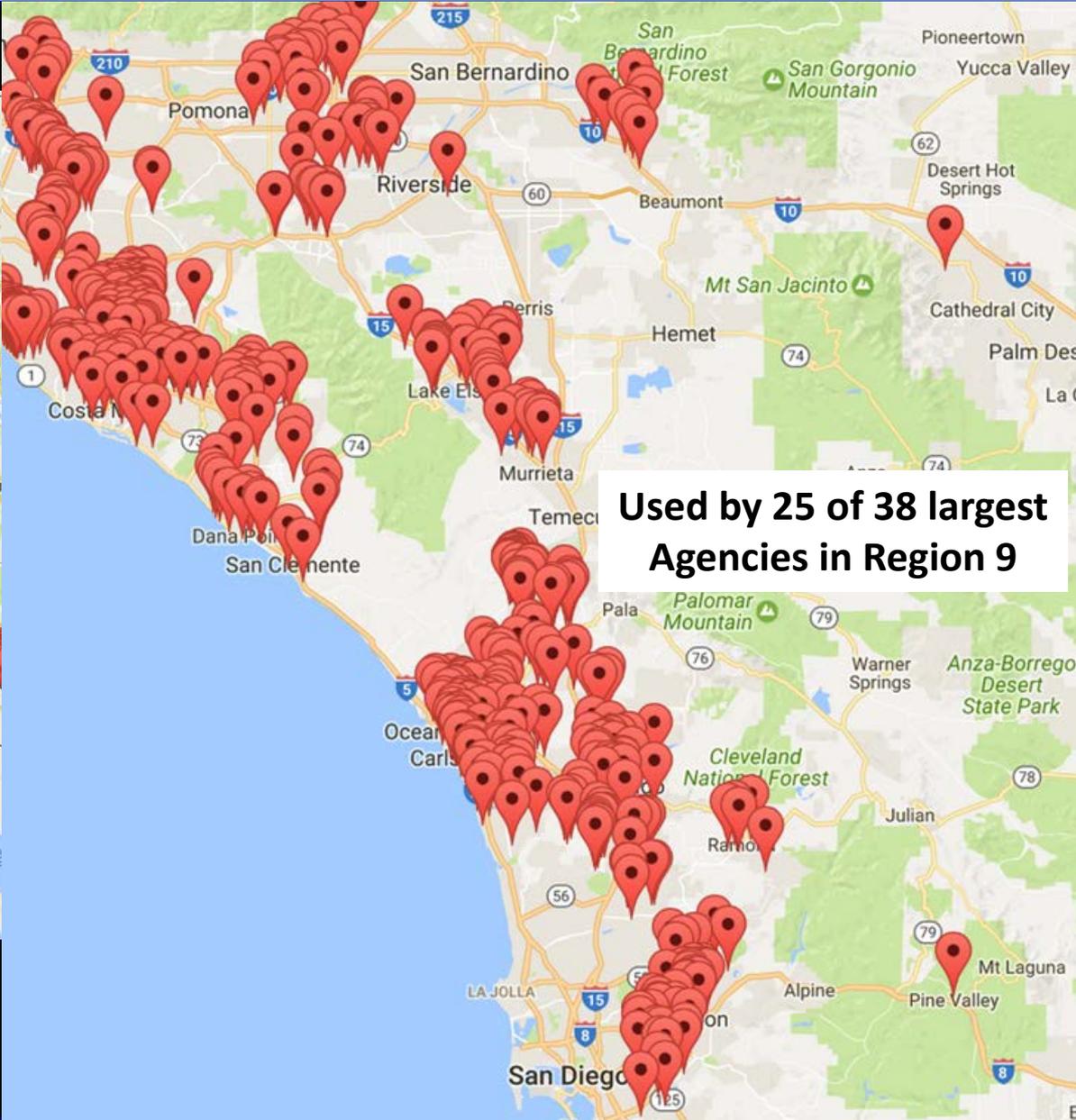
# Our Mission

*SmartCover Systems provides end-to-end real-time monitoring systems to our customers who benefit:*

- *Internally, through lower costs, improved performance and lower risk; and*
- *Externally, by safeguarding our water, public health and the environment.*



# Where to be loved – Region 9

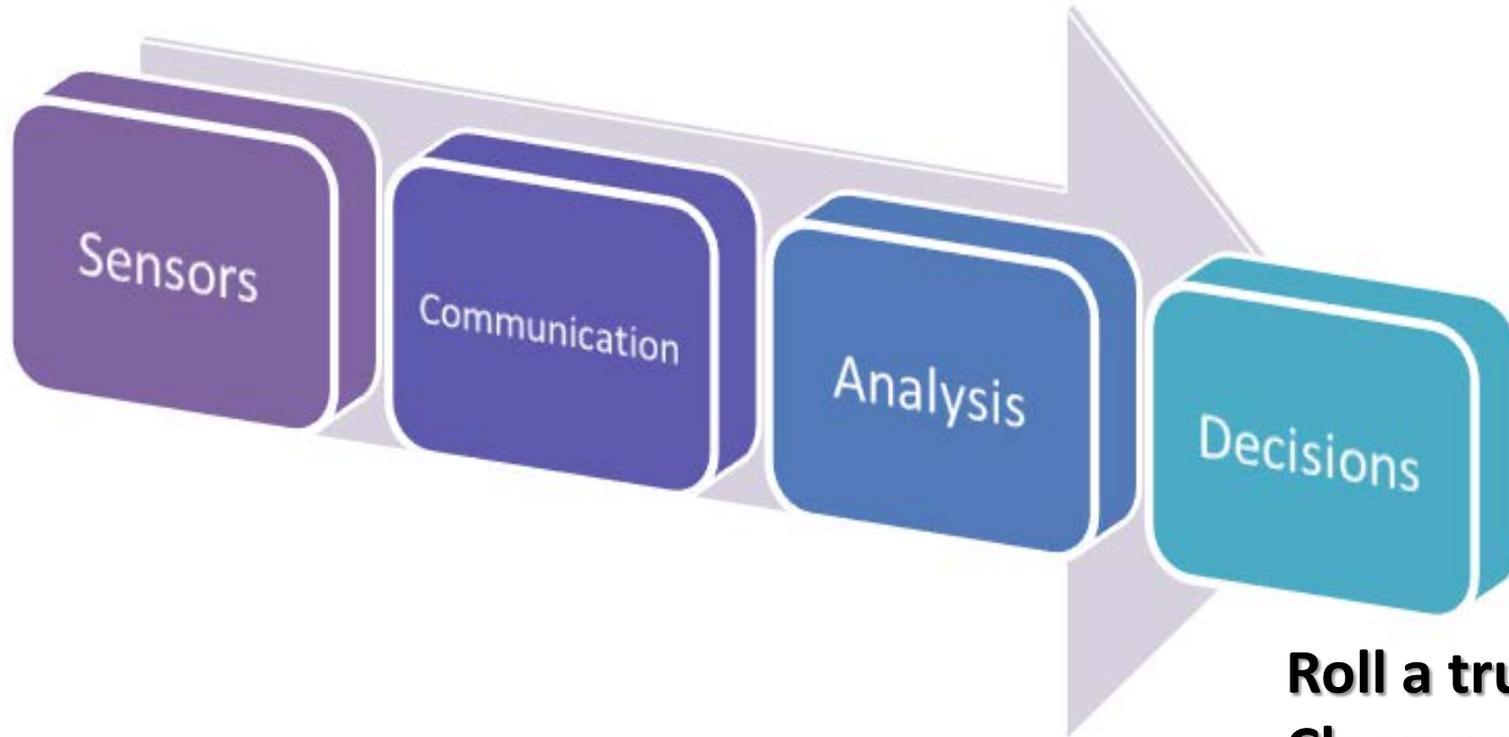


**Used by 25 of 38 largest  
Agencies in Region 9**



# The Internet of Things

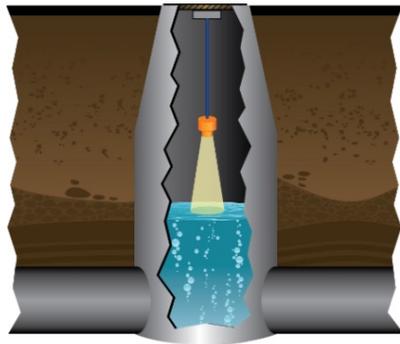
## SmartCover® Integrated Solution Delivery Model



**Technology enables  
TRANSFORMATIONAL CHANGE**

**Roll a truck?  
Clean a pipe?  
Repair a pipe?  
Fix I&I?**

# How it Works

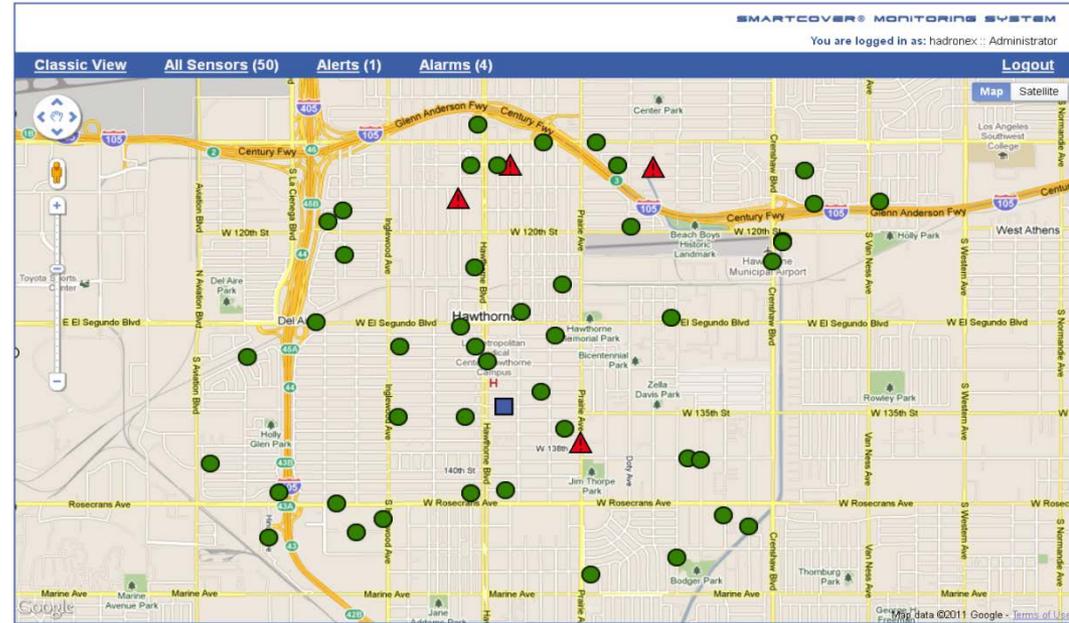


**SmartCover<sup>®</sup> :**  
**Remote Site**  
**Direct to Satellite**  
**Communication**

# Case Study: Hawthorne, CA

## Eliminating Spills

- 2 Full-time field staff
  - 90 miles of pipeline
  - 2,000 manholes
  - 0 Lift stations
- ~ \$400K per year in fines  
**PLUS** clean up and litigation



Historical average spills/year - **10**

Since installation of 50 unit monitoring system (11/06):

**1 SPILL** (at unmonitored location)

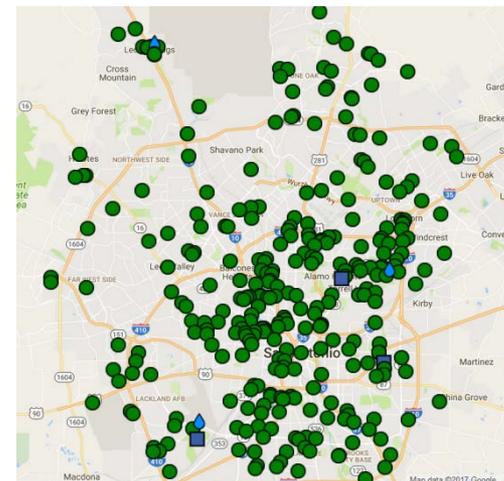
**99% reduction of overflows**

Estimated program savings: > \$2.5MM

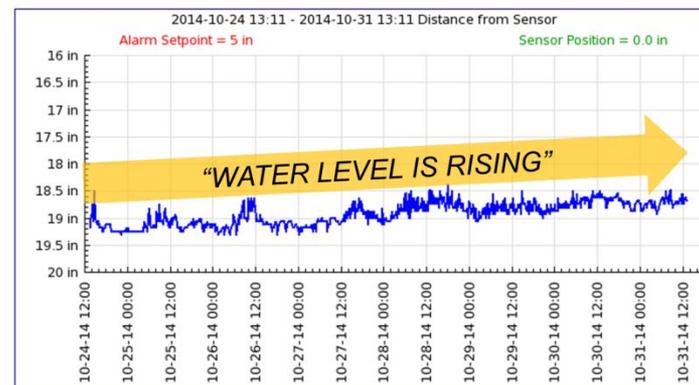
# Case Study: SAWS (TX)

## Saving Operational Expenses

- **Pilot Question:** Can technology reduce cleaning frequency & expense with no increased risk?
- **SAWS' Pilot Set-up (8/15 through 7/16)**
  - 10 monthly cleaning sites selected
  - Sites cleaned prior to start
  - SmartTrend<sup>TM</sup> trend analysis performed daily
  - Cleaning based on level trends only



PS 639 MH 11



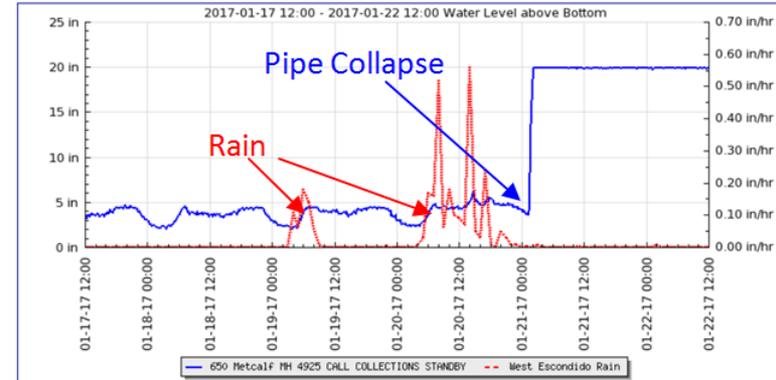
**94% reduction of cleaning (NO SPILLS)**

**Estimated program savings: \$3.1MM**

# Case Study: Escondido

## The Spill that Didn't Happen

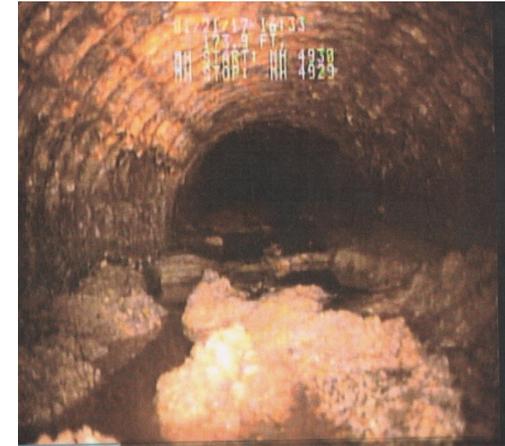
- “Atmospheric river” storm, January 2017
- Inflow from storm prompts large line collapse



- SmartCover® positioned 5 MH upstream
- Detected anomalous level & alarmed
- City staff responded
- Performed near-term fix
- Pipe currently being replaced

**NO SPILL**

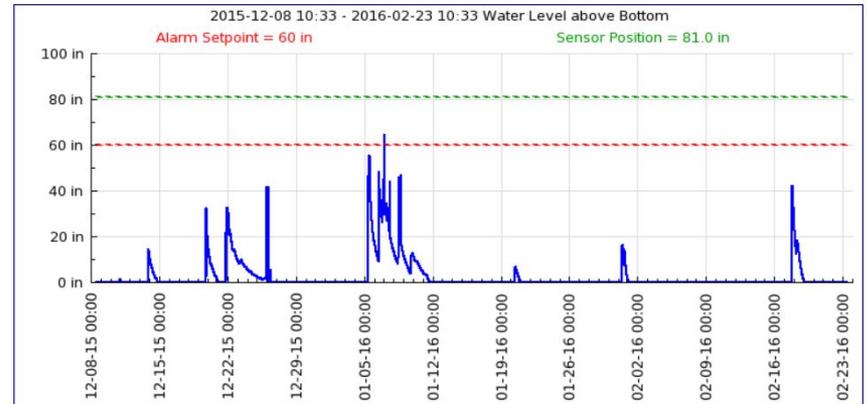
**Estimated savings: “Millions”**



# WaterWorld®

**EDITORIAL SPOTLIGHT  
WEFTEC 2016**

# Urban Stormwater



**Los Angeles CA storm water monitoring**  
**Data used to verify nets and gates are properly operating**

## Real-Time Continuous Monitoring Technology

- Is here and it works
- Allows transformational change, e.g.
  - 99% reduction in spills
  - 94% reduction in cleaning
  - Millions in savings for decaying infrastructure
- Operational savings
- Capital savings
- Lower risk

**= A BETTER ENVIRONMENT**

**THANK YOU !**