

# SMARTCOVER®

WE'VE GOT IT COVERED™

## SmartRain™ Rain Data Integration

SmartRain™ integrates your SmartCover level and flow data with Doppler radar and local rain gauge data. This integration creates an easy method to develop a comprehensive understanding of the relationship between your collection system level or flow affected by rain events. Rain data is acquired from any desired location and presented in the user interface along with level or flow data in a single display.

### How it Works

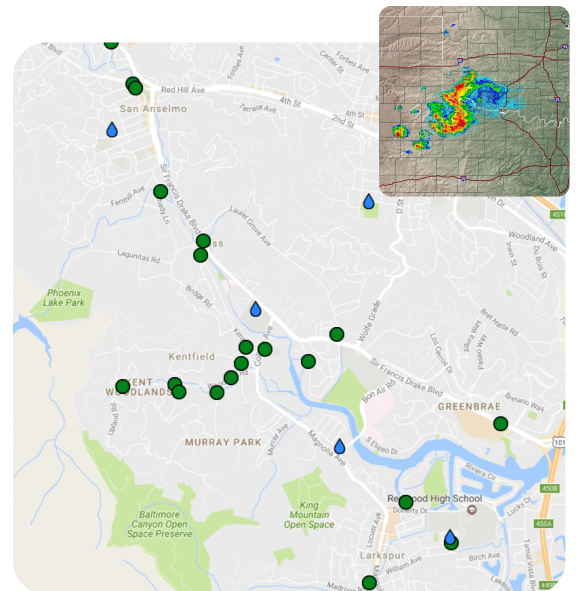
The location of SmartRain gauges is determined by specifying latitude and longitude of the desired sites in relation to National Oceanic and Atmospheric Administration's (NOAA) National Weather Service. Combining and calibrating these coordinates with ground-truth physical rain gauges, provides near-real time rainfall rates at the specified location. Locating multiple rain monitoring sites in a given sewer shed reveals 'cause and effect' relationships in the basin. Creating a 'rainfield' using a grid of rain monitoring sites is easily deployed, enabling local variability of rain events to be captured.

### What it Does

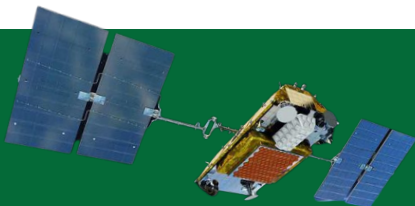
Monitoring and analysis of these multi-layered data points obtains precise timing and location of inflow and infiltration (I&I) at various points within your collection system. When SmartRain is used in concert with level or flow data it quickly reveals sources of I&I -- these data sets are powerful tools for prioritizing capital improvement projects (CIP) to mitigate I&I impact on your collection system.



*Works with current  
SmartCover level and flow  
sites*



*Blue rain drops represent  
SmartRain gauges*



*With satellite based data transmission, your sewer status connection is maintained even during cell outages and the most severe weather.*

[SmartCoverSystems.com](http://SmartCoverSystems.com)

**SmartRain™**  
I & I Impact Reporting

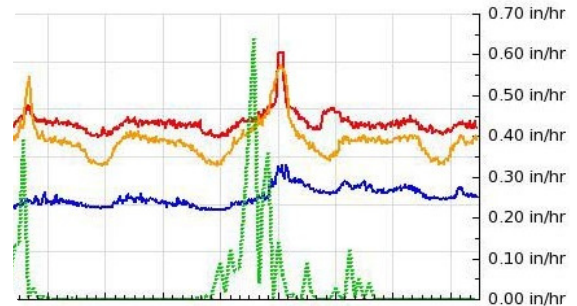
**I&I Impact Report**

When rain, tidal water or river overflow is processed as sewage, the effect can be higher treatment costs and unanticipated expenses. Analysis from an easy online tool is presented as an I&I Impact Report showing:

- Easily view level or flow data with trend analysis
- Creates a collection system rain influence profile
- Identifies and characterizes the actual sources of I&I
- Lowers the impact of treating rainwater at the plant
- Mitigates overflow risks

Our I&I Impact Report allows you to gain valuable insights into your sewer system for data-based decisions:

- Prioritize and schedule pipe rehabilitation or replacement by impact level
- Assess repair success and outcomes
- Create more accurate CapEx and O&M budgets



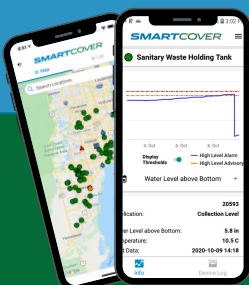
*Multi-graph view showing three SmartCover sites against rain data (green)*

- Multi-graph view of level or flow with rain data
- Advance warning for high rainfall levels
- Doppler radar with detection resolution to 0.001 inches
- Area coverage 1 km (0.62) miles radius per monitored site
- Easily export data for reports and presentations

**Featuring**

- Hardware components engineered to function in wet, humid, corrosive conditions
- Flexible patented sensor designs and deployment
- **NO CONFINED SPACE ENTRY\*** installation or service
- Reduces traffic management resources
- Secure, online dashboard with easy-to-read, visual reports
- Compact, long lasting battery
- Two-way communications permits remote settings management
- Fusion with rain, river and tide data
- Done-for-you analytics
- Works when there is no power
- Satellite coverage works with sites difficult to access and withstands cellular outages
- Variable timing options for data scan and notifications
- Built in tilt switch for real time entry detection
- Encrypted secure servers with redundancy
- Mobile app for iOS and Android
- API available
- Configurations for open channels, canals, holding tanks, lift stations, outfalls, reservoirs, and utility vaults

\*as defined by OSHA 29 CFR 1910.146b



*With the SmartCover mobile app, get the insights you want, when and where you need them. Available for both iOS and Android devices.*