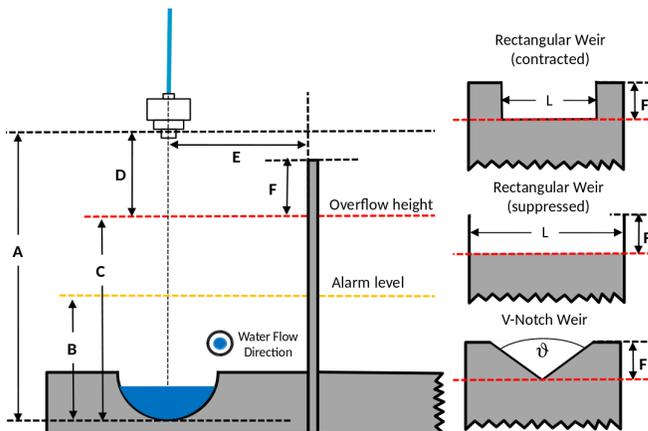


## SmartWeir™ Measuring Over a Weir

SmartWeir is a solution for determining start, stop, duration times, and overflow volume of a combined sewer overflow (CSO) event using real-time measurement of water flow over a weir in a variety of CSO and non-CSO structures. This solution is being used as an asset management tool, helping users assess and prioritize what, if any, upgrades are necessary.

### How it Works

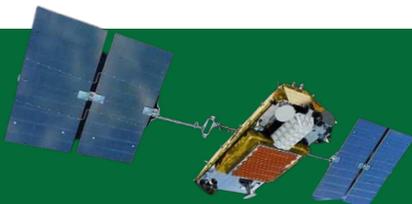
Based on the weir design, the SmartCover sensor is installed and positioned behind a weir to calculate flow rates using the classic weir formula developed, tested and approved by ASTM, ISO, and USBR. Level and flow data are transmitted to the SmartCover cloud, where it is seamlessly accessed by system users via any web-enabled device. For CSO sites, the start time, stop time, and incident flow volume can be logged and reported in real-time. Every SmartCover system supports two-way communication, allowing operational parameters to be changed by the user at any time to provide optimal results.



### Creek diversion structure mitigates downstream flooding

- Documents CSO event start time, stop time, duration, and overflow volume
- Apply weir flow formula developed and used by ASTM, ISO and USBR
- Integrate NOAA based and ground truth adjusted real-time rain data
- Gain historical and predictive insights of tidal effects on sewers with USGS data
- Real time notification of overflow conditions
- Signals when an overflow structure requires cleaning
- Shows how your system responds to rain events
- Measure mitigation effectiveness
- Fulfill public notification for regulatory compliance
- Configuration for non-CSO structures also available such as treatment plant influent or effluent, lagoons, or flumes

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



## SmartWeir™ Reporting CSO Events

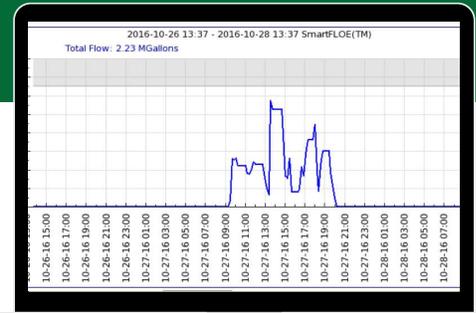
# CSO Reporting

Under typical, dry conditions, combined sewers do not overflow. In rain events of sufficient intensity, a CSO may occur. Many regulatory agencies require combined sewer system (CSS) operators to report within hours when a CSO starts, stops, the duration of the event, and the overflow volume.

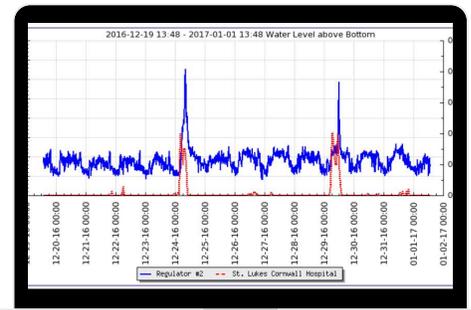
SmartCover has a proven, turn-key solution with the capability for public notification. The system is able to:

- Detect rising levels
- Notify when an overflow starts and stops
- Quantify volume discharged

Easily document a CSO event, meet critical CSO reporting deadlines and organize the data for public communications.



*Documents start and stop time, duration, and overflow volume*



*See response to local rain events*

## 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.*