Most combined sewer communities struggle with regulatory and budgetary concerns for necessary collection system flow, rainfall, and wet weather monitoring programs. ADS has developed the most cost-effective, highly efficient, technology-based system for CSO monitoring and reporting. This includes measurement and reporting of overflow duration and quantity for individual events.

ADS offers the latest flow and level monitoring technology, unparalleled CSO field experience, and the most comprehensive data management, reporting, and notification tools for a one-stop Great Lakes compliance monitoring solution.

CSO monitoring is complicated by tidal or receiving water intrusion, as well as overflow events. These create hydraulic complexities that require experience to set up an effective monitoring plan. Data interpretation also can be highly complex, requiring expert hydraulic analysis and comprehensive software tools to report CSO events. ADS has developed a monitoring system incorporating all of these features, including the ability to automate these features on a site-by-site basis.
Hardware
ADS flow monitoring systems include a wide range of flow monitoring equipment, rainfall gauging systems, and depth-based alarming systems. Based upon decades of research and design experience, ADS monitoring systems have been found to be the most adaptable and versatile monitoring systems available. With a wide variety of durable, multiple-technology sensors, single and dual pipe monitoring capabilities, Intrinsic Safety certification, and various communication options, ADS monitoring equipment is ideal for operating in combined sewer systems.

Service
Whether a small network of five monitors or a large network of 500, ADS offers comprehensive field services to support the proper installation and operation of all flow monitor networks. Our field procedures are managed under ISO9001 Quality Management Systems. All field technicians and managers undergo extensive training programs requiring individual certification prior to eligibility for ADS field work.

Software
ADS offers the most versatile software options in the industry. From traditional desktop flow monitoring software to field-friendly activation and configuration software to Web-accessible flow information applications, ADS software solutions mirror industry trends in data management, consolidation, and sharing to maximize information processing, speed, and efficiency to staff and project partners. For administrators interested in accessing the latest flow performance information, FlowView is a web-accessible, real-time software alternative featuring real-time alarms to alert operators to abnormal conditions. This Web-based software provides customized overflow calculations based on sensor configuration and system response to wet weather.

Notification
ADS FlowView software will send email or text alerts to designated individuals when customer established thresholds are breached, and will provide immediate notification when an event starts and stops. FlowView’s alarms are designed for warning operators of impending SSO or CSO flow anomalies, providing an early warning mechanism for proactive maintenance. FlowView can differentiate between wet and dry weather events when rain gauges are integrated into the system. In addition, alarms from FlowView can be used to trigger existing Great Lakes’ public notification systems.

Reporting
In support of our flow monitoring projects, our staff specializes in statistical analysis and data interpretation reporting services capturing system-wide and sub-basin sewer performance intelligence for a myriad of applications. These comprehensive, capacity-based reports fall into the general areas of collection system flow and rainfall data, correlation studies, and a multitude of Sewer System Evaluation Surveys. ADS has assisted numerous CSO communities with collecting, analyzing, and preparing the flow data necessary for discharge monitoring reports. ADS will provide all the data necessary to complete the Great Lakes reporting requirements.

ADS helps CSO communities meet the EPA’s Nine Minimum Control Requirements:
1. Proper operation and regular maintenance programs for the sewer system and CSO outfalls
2. Maximum use of the collection system for storage
3. Review and modification of pretreatment requirements to ensure that CSO impacts are minimized
4. Maximization of flow to the POTW for treatment
5. Elimination of CSOs during dry weather
6. Control of solid and floatable materials in CSOs
7. Pollution prevention programs to reduce contaminants in CSOs
8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts
9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls