



## Storm System Design Solution

### EFFECTIVE STORMWATER MANAGEMENT FOR A RESILIENT FUTURE

Designing stormwater systems is challenging due to managing increasing runoff from urbanization, unpredictable weather events, water quality concerns, aging infrastructure, space limitations, regulatory hurdles, and the balance between cost, performance, and maintenance. Bentley's multiplatform hydraulic and hydrologic modeling storm engineering solution addresses these challenges by providing accurate analysis and design capabilities for various stormwater systems.

With Bentley's Storm System Design Solution, you can design and analyze all aspects of stormwater systems, including rainfall and runoff modeling for urban watersheds, inlet capture and bypass flows, gravity storm sewer and pressure piping, 2D surface flows, ponds and outlet structures, open channels, low impact development features, and culverts. Engineers can incorporate risk analysis to identify potential risks and prioritize improvement projects and investments, allowing them to manage stormwater systems resiliently.

The solution helps engineers reduce design errors, save design time, and simulate predictive emergency scenarios during the modeling phase. They can see how flooding impacts river systems and urban areas, ultimately helping them improve planning and response strategies, preventing flooding, and reducing construction costs. By improving workflow efficiency, optimizing system design, minimizing capital investments, and reducing stormwater flooding risk, Bentley's solution ensures regulatory compliance and enhances overall system performance.

Products in this solution include OpenFlows™ Storm, OpenRoads™ Designer, and ProjectWise®.

### KEY BENEFITS

- ◆ Integrated catchment modeling in a CAD and BIM-ready platform
- ◆ Hydraulic modeling workflows integrated into other civil disciplines
- ◆ 1D and 2D hydraulic modeling of stormwater networks
- ◆ Hydraulic calculations for network elements (channels, weirs, gutters, etc.)
- ◆ High-level detail drawing production

