Bentley®

WASTEWATER AND STORMWATER NETWORK SYSTEMS
PROJECT WORKFLOW CHECKLIST

Communities depend on reliable sanitary and stormwater collection systems. You depend on reliable software to design them.

It's a good idea to run periodic check-ups on your wastewater and stormwater software to see where you can make improvements. Ensuring your software can successfully help you analyze, design, and operate stormwater, sanitary and combined sewer systems can make a big difference in the quality of project outcomes. A healthy software program allows you to use the best available data with hydraulic and hydrologic capabilities to make smarter decisions so you can build efficient, reliable, resilient, and economical wastewater and stormwater infrastructure systems. Your designs need to confidently manage stormwater, control runoff volume and quality, maintain the environmental quality of the water resources, and minimize damage and losses caused by floods.

Use the checklist below to compare your current software with a Virtuosity subscription of OpenFlows™ SewerGEMS.® Learn where you are saving time, improving designs, optimizing, and creating exceptional reports and where you are coming up short. Identifying improvements in your system will help you save money, build an impeccable reputation with your clients, and win more business.

The benefits of an optimized wastewater and stormwater modeling solution:	OpenFlows™ SewerGEMS®	Current Software
Use one solution to model wastewater, stormwater, and combined systems	☑	☐
Multiple solvers in one single solution that will allow you to analyze flow behavior confidently	☑	☐
Collaborate with other professionals by accessing a single, shared project data source	☑	☐
Have platform flexibility (standalone, MicroStation, AutoCAD, ArcMap, and ArcGIS)	☑	☐
Compare alternatives and scenarios for your project	☑	☐
Create and build your hydraulic model	☑	☐
Master plan system expansions with more confidence by comparing and analyzing multiple scenarios	☑	☐
Conduct "what-if" scenarios to better understand a collection system's behavior, so you can determine the correct pipe size to carry your design flow	☑	☐
Analyze and design drainage networks using the Rational Solver	☑	☐
Analyze and design sewer networks using steady-state and extended-period simulation for gradually variated flows	☑	☐
Analyze drainage and sewer networks using implicit Saint-Venant equations	☑	☐
Analyze drainage and sewer networks using explicit full Saint-Venant equations and simplifications (Dynamic Wave, Diffusive Wave, and Knematic wave)	☑	☐
Analyze utility hole overflows and flash flood impacts on drainage and sewer networks using 2D simulation	☑	☐

	OpenFlows™ SewerGEMS®	Current Software
Analyze and design Green Infrastructure such as Sustainable Drainage Systems (SuDs), Low Impact Development (LID) Controls, and/or Stormwater Best Management Practices (BMPs)	☑	☐
Identify bottlenecks and capacity issues in the sanitary systems	☑	☐
Better understand surface flooding depth and velocity, flood hazard, and inundation times with 1D/2D hydraulic analysis capability	☑	☐
Use tractive stress calculations to ensure sufficient flow and slope to keep the sewers self-cleaning	☑	☐
Access a variety of rainfall-to-catchment outflow methods, from rational method and SCS method to EPA-SWMM methods, so you can pick the hydrology calculations that best fit the problem	☑	☐
Estimate energy cost for various pump configurations to minimize energy costs	☑	☐
Import data from SCADA systems and flow loggers to ensure that your model is correctly calibrated	☑	☐
Identify and control imports from GIS and other sources to ensure your model reflects the real world	☑	☐
Quickly connect to aerial maps to align the model and convey visual design outcomes for optimal results	☑	☐
Efficiently create customizable reports with maps, graphs, tables, and other data, and output to nearly any format	☑	☐
Publish results using maps, graphs, tables, animations, and other data, then output to nearly any format	☑	☐
Confidently model ponds and infiltration basins	☑	☐
Connect a hydraulic model to SCADA signals to easily compare simulated and measured results	☑	☐
Access to customizable training and support from water experts at no additional costs	☑	☐

If any of the items above were left unchecked, you should consider Bentley's OpenFlows SewerGEMS. All of this functionality, plus the inclusion of training and support with your Virtuosity subscription, means you and your team will reap the benefits of a more optimized workflow in no time.

virtuosity

LEARN MORE >

Bentley
Advancing Infrastructure

FIND OUT MORE AT BENTLEY.COM

1.800.BENTLEY (1.800.236.8539) | Outside the US +1.610.458.5000 | **GLOBAL OFFICE LISTINGS** bentley.com/contact