



# OpenFlows™ Water Comparison Checklist

	OpenFlows Water Ultimate	OpenFlows Water Advanced	OpenFlows Water Standard	OpenFlows Water Essentials
Sizing	Unlimited Pipes	≤5,000 pipes	≤1,000 pipes	≤100 pipes
<b>Interoperability</b>				
Run OpenFlows Water within AutoCAD*, MicroStation**, or a stand-alone interface	◆	◆	◆	◆
Run OpenFlows Water (WaterGEMS** application only) within ArcGIS* and ArcGIS Pro*	◆	◆		
<b>Model Building and Connection</b>				
Develop and assign demands from GIS shapefile data (customer meters, land use, population, or metered areas)	◆	◆	◆	◆
Build models and/or assign demands using data from CAD, GIS shapefiles, spreadsheets, Oracle Spatial, and other databases	◆	◆	◆	◆
Node elevation assignment from digital terrain data in Bentley DTM, DXF, LandXML, and shapefile formats	◆	◆	◆	◆
Assign unaccounted-for water demands using the unit line method	◆	◆	◆	◆
Build models from geodatabases or ArcGIS Online data sources	◆	◆		
Automated model skeletonization through Skelebrator*	◆	◆		
Real-time modeling through SCADAConnect® Simulator	◆	◆		
Connect to SCADA data to initialize model run from current or historic element status or compare actual and modeled values	◆	◆	≤25 signals	≤25 signals
<b>Model Building and Connection</b>				
Comprehensive, unlimited scenario management	◆	◆	◆	◆
Query-based active topology	◆	◆	◆	◆
Custom engineering libraries	◆	◆	◆	◆
Dynamic and static selection sets	◆	◆	◆	◆
Orphaned nodes and dead-end pipe queries	◆	◆	◆	◆

Hydraulics, Operations, and Water Quality	OpenFlows Water Ultimate	OpenFlows Water Advanced	OpenFlows Water Standard	OpenFlows Water Essentials
Run hydraulic analysis for steady-state and extended-period simulations	◆	◆	◆	◆
Automated fire flow analysis	◆	◆	◆	◆
Water quality analysis (age, constituent, trace, and MSX)	◆	◆	◆	◆
Pressure zone identification and flow balance calculation	◆	◆	◆	◆
Pump energy cost analysis	◆	◆	◆	◆
Conventional and unidirectional flushing analysis	◆	◆	◆	◆
Criticality assessment for pipe/segment shutdown and valve isolation studies	◆	◆	◆	◆
<b>Results Presentation</b>				
Thematic mapping with property-based color coding, symbology, and annotations	◆	◆	◆	◆
Scenario and element comparison	◆	◆	◆	◆
<b>Optimization</b>				
Pipe vulnerability rating through Pipe Renewal Planner	◆	◆		
AI-powered model calibration using genetic algorithms	◆	◆		
AI-powered pipe sizing using genetic algorithms	◆	◆		
AI-powered pump schedule optimization using genetic algorithms	◆	◆		
Orphaned nodes and dead-end pipe queries	◆	◆		
<b>Transient Simulation and Analysis</b>				
Transient analysis using method of characteristics	◆	◆		
Extended period simulation	◆	◆		
Periodic head/flow	◆	◆		
Surge protection devices	◆	◆		
Wave speed calculator	◆	◆		