Utilities and engineering consultants are under increasing pressure to do more with less, and to develop more efficient and effective engineered designs. Faced with aging infrastructure, capital constraints, and increasing stormwater and wastewater issues, you need solutions that will help increase your productivity and efficiency.

Autodesk® Storm and Sanitary Analysis Extension is a comprehensive hydrology and hydraulic analysis application for planning and designing urban drainage systems, highway drainage systems, storm sewers, and sanitary sewers. This extension integrates stormwater and wastewater analysis during planning and design, helping you improve overall project productivity and increase your engineering capabilities.

Key features and benefits include:

- Bidirectional exchange of data with AutoCAD Map 3D 2011 software and Civil 3D 2011 software
- Widely accepted hydrology analysis methods, including NRCS (SCS) TR-55/TR-20, Rational Method, Modified Rational, HEC-1, and EPA SWMM
- Networks of unlimited size
- Hydraulic analysis of pipes, open channels, streams, culverts, roadway inlet catch basins, and more
- Advanced hydrodynamic routing that handles backwater, surcharging, flow splits, and more
- Analysis and design of detention and retention ponds
- Analysis of stormwater best management practices (BMPs)
- Stormwater quality modeling based on NPDES requirements
- Customizable report generation for regulatory review
- GIS interoperability
- Ability to work in either U.S. or metric (SI) units
**Improve Planning and Decision Making**

AutoCAD Map 3D software can provide direct access to data needed for infrastructure planning. AutoCAD Map 3D helps engineers, planners, surveyors, and GIS professionals working on transportation, land development, water, and power projects to create better designs, enhance productivity, and improve data quality. AutoCAD Map 3D enables users to more easily aggregate cadastral, utility, topographic, environmental, image, LIDAR, and asset data; better visualize and evaluate existing conditions; improve decision making by performing corridor, network, and site analysis; and exchange information with government agencies, utilities, and contractors in both CAD and GIS data formats.

Take your AutoCAD Map 3D model into Autodesk Storm and Sanitary Analysis Extension to better understand existing conditions; enhance the creation of exhibits and reports; help identify necessary permits; and create impact studies. This extension provides bidirectional data exchange, multiple analysis options, and widely used models and methods. Its robust analysis capability improves planning and outputs for multiple project types, including:
- Simple to complex watershed and drainage studies
- Stormwater and wastewater master planning
- Interconnected ponds, including loops and flow reversals
- Combined sewer overflows (CSO) and sanitary sewer overflows (SSO) control strategies

**Extend the Design Model**

AutoCAD Civil 3D software, the building information modeling (BIM) solution for civil engineering, helps project teams deliver higher-quality transportation, land development, and environmental projects faster. Explore design ideas and analyze what-if scenarios to help optimize performance before projects are built. Extend Civil 3D model data to perform geospatial and stormwater analysis, generate quantity takeoffs, and support automated machine guidance during construction. Civil 3D provides the BIM advantage and tools you need to deliver more innovative design solutions.

Take your Civil 3D model into Autodesk Storm and Sanitary Analysis Extension to incorporate and better understand planning information; develop detailed alternatives; balance the needs of stakeholders; and optimize design. With this extension, dynamic model elements are no longer limited to design and construction documents. Move data between Civil 3D and this analysis tool to create more design scenarios while keeping the model up to date. This enables you to perform analysis much earlier in the design process for many types of projects, including:
- Urban stormwater drainage network systems
- Highway storm drain catch basins and culverts
- Sustainable stormwater management, including water quality
- Detention pond and outlet structure analysis and design
- Sanitary sewer systems, pump lift stations, and force mains

**Autodesk Storm and Sanitary Analysis Extension** is more user-friendly, flexible, and powerful than other programs out there. It can handle everything from pipe and ditch networks to ponds and wetlands.

—William Douglass, P.E.
Water Resources Manager
Bolton & Menk, Inc., Mankato, Minnesota

**Using Autodesk Storm and Sanitary Analysis Extension,** our review time is 30 seconds instead of two hours, helping us to get the plans out—and the work done—more quickly.

—Douglas White, P.E.
Project Manager
Greengard, Inc., Lincolnshire, Illinois