

TUFLOW-SWMM 1D/2D

Urban Drainage Modeling

TUFLOW has been a global leader in 1D/2D catchment flood and integrated urban drainage modeling for three decades. It uses high order solution schemes and advanced topography sub-grid sampling routines to achieve exceptional accuracy. It also uses advanced GPU compute technology to achieve simulation speeds orders of magnitude faster than competitors.

New in 2023, TUFLOW linkage with the 1D EPA Storm Water Management Model (SWMM) was added as a supported feature. Developed by the USA Environmental Protection Agency (EPA), SWMM is one of the most used 1D stormwater runoff and water quality analysis tools in North America.

SWMM's primary uses include designing and evaluating stormwater systems and planning and assessment of Low-Impact Developments (LIDs). Joining it with TUFLOW couples the best features of both software in one.

Unique to TUFLOW-SWMM, are several value-added functionalities, including GIS model setup and visualization, powerful scenario and event management features, and a suite of GIS based tools for maximum modeling efficiency.

The software is designed by modelers for modelers who require reliable, workflow efficient tools for engineering and flood management

XPSWMM users should note that TUFLOW is the XPSWMM 2D engine. TUFLOW-SWMM is an excellent upgrade, while giving like for like answers for converted models.

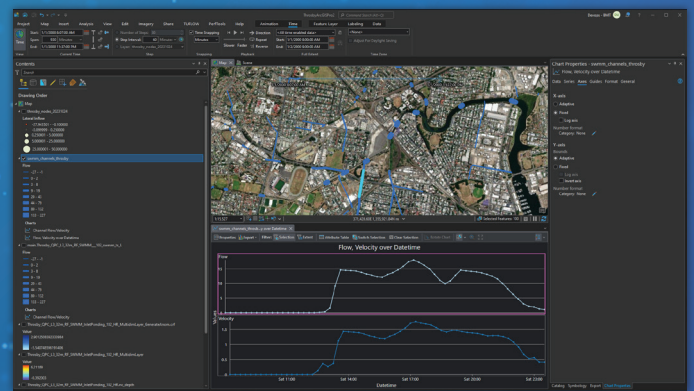
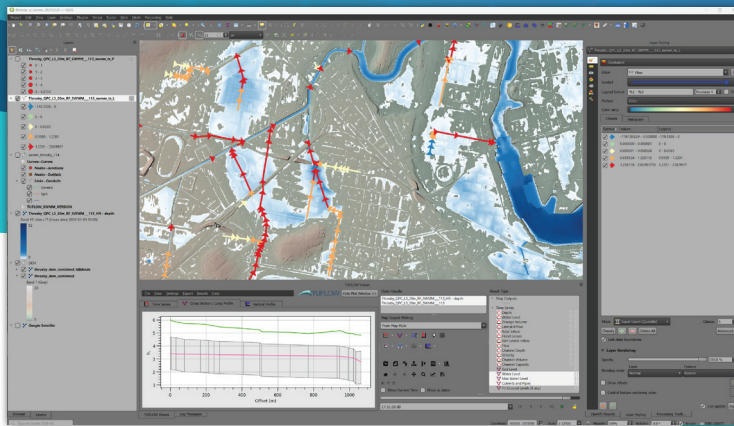
Past XPSWMM license holders are eligible for a TUFLOWCare discount to the listed TUFLOW purchase price.

TUFLOW is unrivalled for speed, accuracy, and setup efficiency. TUFLOW-SWMM brings those benefits to EPA SWMM linked models.

Why Choose TUFLOW-SWMM?

- TUFLOW solves the full 2D shallow water equations, using a second order scheme with sub-grid sampled topography to achieve excellent accuracy. No limits to model size! Build bigger higher resolution models with more than 100,000,000 2D cells.
- TUFLOW uses GPU acceleration. Model situations including over 10 million 2D cells faster than competing software.
- TUFLOW-SWMM is a unique GIS integrated solution enabling unmatched workflow efficiency.
- TUFLOW licenses are flexible, less costly than comparable products, and not needed for model setup or post-processing. Perpetual and Subscription licenses are available.
- Because they share the 2D engine, TUFLOW-SWMM is the only product that can achieve like for like model conversions from XPSWMM.

QGIS



ArcGIS Pro

TUFLOW is integrated with GIS. The tools within the free QGIS TUFLOW Plugin have specifically been designed to create a user friendly, workflow efficient TUFLOW-SWMM modeling environment:

- Convert existing text based SWMM INP model files into GIS GeoPackage format for easy visualisation, and back.
- Numerous data integrity tools have been created to support data input quality review, ensure error free model inputs.
- Automated model build tools have been created to avoid repetitive manual tasks.
- Tools and documented workflows are available for converting models from XPSWMM to TUFLOW- SWMM.
- Dynamic 1D and 2D result visualization tools are included; including 1D time-series and long profile plots, 2D map, and the ability to animate both together.

Several free tutorials are available to help new TUFLOW-SWMM users learn the software. All education material has been configured to use a license free mode of TUFLOW so you can try TUFLOW-SWMM before committing to purchase the software.

TUFLOW email support is included with a license. The Support team is staffed by modelers and developers who can quickly answer your questions.

Within the USA, TUFLOW is FEMA certified in various regions, including Region 3, Simi Valley and Ventura County. If your community would like assistance with FEMA certification of TUFLOW, we can help.

If you would like more information, see www.tuflow.com. If you wish to speak with a TUFLOW representative, please email info@tuflow.com.

