## **TNTmips Newsletter — EPANET Pipe Networks**

#### September 2013

# Map water supply networks and run EPANET hydraulic and water quality simulations in TNTmips 2014.

In TNTmips 2014 you can create and maintain vector maps of water supply systems as part of a full infrastructure GIS and also use them to perform hydraulic and water quality simulations. TNTmips supports the data model used in EPANET, a public-domain program developed by the U.S. Environmental Protection Agency that simulates hydraulic and water quality changes in pressurized pipe networks such as city water-supply systems. You can import, create, georeference, and edit vector objects that conform to the EPANET data model and even run EPANET simulations within TNTmips.

#### Import and display EPANET pipe networks.

All EPANET network attributes are converted to database tables with records attached to the relevant vector elements and with appropriate relationships between tables.

Existing EPANET options and simulation settings are maintained.

EPANET element styles for tanks, reservoirs, pumps, and valves are automatically replicated using CartoScripts set up by the Import operation.

Use any network element attribute as the basis for selection queries.

### Georeference, create, and edit EPANET pipe networks.

Georeference imported pipe networks to register with other GIS layers.

Use TNTmips Editor or TNTedit to create new pipe network vector objects with the full EPANET database schema.

Modify, add, or delete pipe network elements and set up hydraulic attributes as needed.

#### **Run EPANET Simulations.**

Run EPANET hydraulic and water quality simulations that use the EPANET toolkit library installed with TNTmips.

Process window allows modifying hydraulic and water quality options for each simulation run.

Simulations model flow conditions and water quality through a series of timesteps.

All timestep results are recorded in Simulation Results tables in the input vector object.

Run repeated simulations with option to overwrite or maintain previous results.

Simulation summary reports are automatically saved in a text file.

#### New and Updated Technical Guides.

EPANET Pipe Networks in TNTmips
Run EPANET Pipe Network Simulations