



Version 7 Sanitary Modeling Features

Next-Generation Software for Storm and Sanitary Sewer Modeling

The uniquely powerful flow management features of Hydra® software have been raised to a new level of sophistication, once again setting the standard in collection system modeling. Hydra is a stand-alone analytical geodatabase, dynamically linking myriad flow injections with sewer alternatives to simulate any number of scenarios to meet your design criteria. Options for project organization are virtually unlimited, putting optimum modeling efficiency at your command. Hundreds of municipalities, large and small, have preferred Hydra's innovative sanitary flow features. With this exponential increase in modeling capability, there is simply no other hydraulic modeling package as flexible, powerful, and easy to use as Hydra.

Sanitary Flows on Any Layer

Hydra gives you the ultimate flexibility for organizing your flow data. You decide which layers to use, what to call them, and how to organize your flow injections. Any graphical layer in the model (including the collection system layer) can include flow injections of any type – sanitary, infiltration, stormwater, and inflow – in any combination. Layers can link directly to the collection system, or intersect with other layers to create derivate flows.

Any Number of Land Use Types

Each pipe, point, or polygon may have any number sanitary injection sets to represent different types of land uses. Each injection set uses its own diurnal curve (flow pattern over time) to represent the sanitary flow characteristic of the land use. You can create a separate sanitary injection set for office, retail, industrial, hotel, schools, single-family, multi-family, etc.

Flexible Data Fields

For each injection set, you can input data by population, units, area, flow volume, or flow rate. For example, to represent apartment buildings in an area, you might choose to organize it this way: 75 apartment units, averaging 2 people per apartment unit, with each person using 65 gallons per day. Hydra will combine this data to calculate a total daily volume. Organizing the data in this way, it's easy to update the flows as your data changes, for example when the contribution per capita changes after a water conservation effort, or as population projections change.

Scenario-Oriented Project Organization

From the start of your project you can establish analysis scenarios for your modeling project. For example, "Current Land Use", "Projected Land Use", or "Water Conservation Alternate A". Select specific layers and individual flow injections to include in each scenario, along with other analysis criteria. As input data is updated, just click the Analyze button to re-run hydraulic analyses for your pre-established scenarios. Try out any number of alternate designs for collection system improvements, and infiltration scenarios for different rain events. Create new scenarios quickly by copying existing scenarios and making necessary modifications.

