Simulation Time

The Simulation Time dialog box allows you to change the settings related to hydraulic time step at which an **Extended Period Simulation** is to be analyzed.

An **Extended Period Simulation** (EPS) is a hydraulic model run that evaluates system hydraulics and other analysis for a duration greater than a single hydraulic time step (i.e., **Steady State**). Many features of InfoWater Pro including SCADA, Energy Management, Water Quality are dependent upon a hydraulic model analyzed over a series of time steps (i.e., Extended Period Simulation). If you select the Steady State check box, then only a steady state model will be analyzed. A Simulation Time setting can be created for a specific scenario within InfoWater Pro.

To create, modify, or delete a Simulation Time setting, you can open up the **Simulation Options** dialog box from the **Operation tab** of the **Model Explorer** or from the **Simulation Time's Browse** button in the **Run Manager**.

Steady State Simulation

A steady state simulation does not involve time steps. It is a model run that encompasses a single snapshot of the water system as it pertains to demands, pumping data, and tank elevations.

As a result, steady state simulations do not allow you to see the big picture of what may, or may not, be occurring in a distribution system. For example, tanks cycling, water age, energy consumption, etc. While a steady state simulation does not provide this information, for some water systems (particularly closed systems with non-fluctuating demand), a steady state simulation is more than adequate.

Extended Period Simulation

An extended period simulation (EPS) is any modeling run that evaluates system hydraulics for a duration greater than a single hydraulic timestep (steady state). You are provided with many tools in InfoWater Pro that allow customization of an EPS simulation.

Many features of InfoWater Pro including SCADA, Energy Management, Water Quality, and Logic Rules are dependent upon a model being analyzed over a series of timesteps (Extended Period Simulation).