Case Study Category: MPWW

Case Study Title: Sanitary Sewer Hydraulic Model for Capacity Assessment at Baltimore County, Maryland

Utility Name: Baltimore County Department of Public Works

Case Study Abstract: This case study introduces the sanitary sewer hydraulic model and its application for capacity assessment of wastewater pipelines. The model development, calibration and validation process are introduced. The primary application of this model is to be used in capacity analysis of the entire collection system. Most other uses are also related to capacity assessment on a smaller scale. The results of this hydraulic model can be used to check the final design of capital improvement projects so that it can meet current and the future flow projections. This model provides a virtual lab in which ideas can be tested for system improvement and it can also be used to explore the possible solutions. Therefore, the model can help utilities to better understand their collection system. The hydraulic capacity of the pipe after rehabilitation activities can be evaluated based on this model, since it can predict if such rehabilitation activities are hydraulically feasible.

Case Study Link: http://waterid.org/content/sanitary-sewer-hydraulic-model-capacity-assessment-baltimore-county-maryland