

## City of Newport News Expands Use of MIKE URBAN to Include Urban Flood Modeling of Stormwater Drainage and Collection Systems

The City of Newport News, Virginia is in the heart of the historic Hampton Roads harbor at the southern end of the Virginia Peninsula. Located on the shore of the James River where it meets the Chesapeake Bay and the Atlantic Ocean, Newport News serves a growing population of more than 180,000 residents, and is part of the Hampton Roads metropolitan area, the 35<sup>th</sup> largest metropolitan area in the United States.

Since 2009 the City of Newport News has been working in cooperation with the Hampton Roads Sanitation District (HRSD) to develop and calibrate a hydraulic model of the City's wastewater collection system using DHI's MIKE URBAN software. The City's model is being used in conjunction with a regional hydraulic model being prepared by HRSD to evaluate and optimize a wet weather control plan. Building on the success of this program, the City has decided to leverage their investment in MIKE URBAN by also using it for planning and design of the stormwater drainage and collection system.



"MIKE URBAN's GIS integration allows us to transition between data preparation and modeling, and the results we have produced with the model have allowed us to fulfill our commitments for the wet weather control plan" says Everett Skipper, Director of Engineering.

"In addition, now that we have become proficient in using MIKE URBAN, it makes good sense to take full advantage of its powerful planning and analysis capability to incorporate our stormwater drainage and collection system. The ability of MIKE URBAN to dynamically incorporate two-dimensional overland flow was an attractive consideration for us because the terrain here is very flat and overland drainage paths are difficult to accurately evaluate based on elevation maps alone. The 2D overland flow coupling we get with MIKE URBAN will allow us to more accurately determine preferential drainage patterns, identify areas which are more susceptible to flooding, and to evaluate engineering solutions to these problems. We are excited about expanding our ability to serve our citizens by leveraging these additional tools within MIKE URBAN."

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For more information on how MIKE URBAN can help you to meet your collection system modeling needs, please visit [mikebydhi.com](http://mikebydhi.com), send an email to [dhi-us@dhigroup.com](mailto:dhi-us@dhigroup.com), or call our Toll Free North American number at 1-888-344-9233.