Regional Collaboration Addresses Modeling Approach

By Richard Stahr, Brown & Caldwell

Hampton Roads Sanitation District (HRSD), the Virginia Department of Environmental Quality (DEQ) and the thirteen localities that are part of the Special Order by Consent (SOC) met on June 3, 2008 along with their engineering consultants to begin a dialogue on modeling of the sanitary sewer system. The meeting was sponsored by the Hampton Roads Planning District Commission (HRPDC). The SOC requires that each locality model its system and that HRSD, in collaboration with the localities, model the regional system.

The regional sanitary sewer system in Hampton Roads consists of local collector lines serving homes and businesses, locality-owned pump stations and force mains and regional pump stations and large diameter pipes owned by HRSD. Overall, there are approximately 1100 points of connection into the HRSD system, primarily through the locality pump stations. The pipes in the system extend for more than 2000 miles across the region.

The SOC requires that the system be modeled to understand where there are capacity challenges in the sewer network. The system currently conveys wastewater without major issues during dry weather conditions. When there is substantial rain, some places in the system are challenged to convey the wastewater. The model will be used to identify these locations, test scenarios, and evaluate options.

The meeting included a discussion of modeling techniques and how the efforts of localities and HRSD will be coordinated throughout the process. Development of the model will take several years and requires the collection of huge amounts of information regarding sewer flows, rainfall and the physical attributes of the pipes and pumps in the system.

This meeting will be the first in a series of technical discussions on the modeling approach. One outcome of the meeting was the formation of a Regional Hydraulic Model Users Group that will meet periodically to collaborate on the technical approaches to modeling. This process will promote a regionally consistent approach and address issues as they arise.
Regional Wet Weather Management Plan
Quarterly Update

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Help Protect Our Waterways by Reporting Suspected Sanitary Sewer Overflows (SSO)

Please call the number listed for your locality if you observe an SSO.

<table>
<thead>
<tr>
<th>Locality</th>
<th>During Business Hours</th>
<th>After Business Hours</th>
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<tbody>
<tr>
<td>Chesapeake Public Utilities</td>
<td>757-382-CITY</td>
<td>757-382-3550</td>
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<tr>
<td>Gloucester Public Utilities</td>
<td>804-693-4044</td>
<td>804-693-3890</td>
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<td>Hampton Public Works</td>
<td>757-727-8311</td>
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<td>Isle of Wight Public Utilities</td>
<td>757-365-6284</td>
<td>757-357-2151</td>
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<td>James City Service Authority</td>
<td>757-229-7421</td>
<td>757-566-0112</td>
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<td>Newport News Public Works</td>
<td>757-269-2750</td>
<td>757-247-2500</td>
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<td>Norfolk Public Utilities</td>
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<td>Poquoson Public Works</td>
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<td>757-514-7000</td>
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<td>Town of Smithfield</td>
<td>757-365-4272</td>
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<td>757-385-1400</td>
<td>757-385-3111</td>
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<td>Williamsburg Public Works</td>
<td>757-220-6140</td>
<td>757-220-6196</td>
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<tr>
<td>York Environmental &amp; Development Services</td>
<td>757-890-3773</td>
<td>757-890-3773</td>
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