

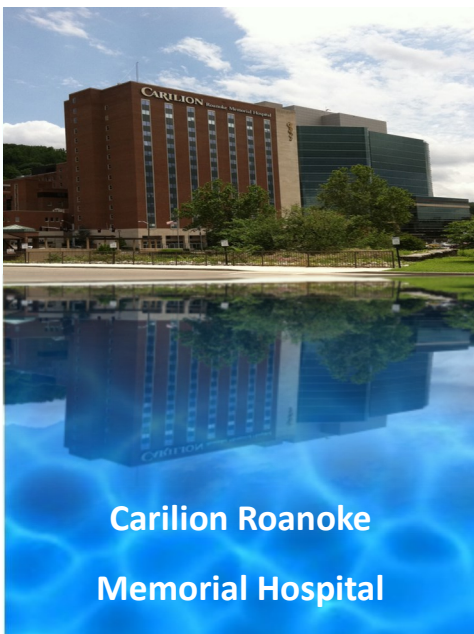
<p><b>Number of Hospitals Served:</b></p> <p style="text-align: center; font-size: 2em;"><b>64</b></p>	<p><b>Applications:</b></p> <p style="text-align: center;">Cooling Tower, Chiller, Boiler Make-up Lines Non-potable Domestic Supply</p>
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## Water Resiliency - Emergency Water Supply Systems

### The Virginia Hospitals Model

A Centers for Medicare and Medicaid Services (CMS) regulation recommends that participating hospitals have a plan in place enabling hospitals to operate in emergency situations where municipal water is not available or is unusable. A CMS draft regulation currently under consideration may make that recommendation mandatory. Hospitals face the essential reality that, while they may be able to meet that requirement from a potable water perspective by supplying their patients, staff, and support personnel with bottled water, a similar solution is simply not possible to sustain its industrial water applications, such as cooling tower, boiler and chiller make-up, fire suppression, toilet flushing, and the like.

In 2009, the State of Virginia faced this reality through the implementation of an aggressive initiative to provide water resiliency to its hospitals. The Virginia Department of Health (VDH) received funding for this initiative through Department of Homeland Security Assistant Secretary for Preparedness and Readiness (ASPR) Hospital Preparedness Program (HPP) grant funds. The funds were managed for VDH by the Virginia Hospital & Healthcare Association (VHHA).



Onsite Water Management (OWM), and the company from which OWM grew, was selected for this first of its kind, State-wide, design-implementation project for Emergency Water Supply Systems (EWSS). The project initially called for an analysis of ninety-two (92) hospitals across the State. That study considered the specific threats to the municipal water supply at each hospital (be those vulnerabilities natural disaster, aging local infrastructure, or human-induced outages), the circumstances of each hospital's existing mechanical plant, the industrial demand of each hospital in both normal and emergency operations, and the availability of alternative sustainable water sources.

Ultimately, sixty-four (64) Virginia hospitals received the systems, including two Level I, two Level II, and four Level III trauma centers. The project required systems designed uniquely for each hospital, a major component acquisition effort, the coordination and management of installation operations across over fifty (50) permitting agencies, and involved more than sixty (60) subcontractors. Systems were designed and implemented across all of Virginia's six (6) regions and touching every major hospital system in the State.