



Hospital Emergency Water Supply System Presentation

Company Overview



Onsite Water designs and installs **innovative stand-alone industrial & potable water systems** that ensure an uninterrupted supply of water during municipal water outages due to natural disasters, municipal infrastructure failures and other unforeseen events.

Although our systems are adaptable to any industrial setting they are of particular value to healthcare facilities where continuity of supply and by extension patient care is critical.



Our Healthcare Experience

Onsite Water has designed and installed over 75 major systems in the Southeastern United States.

Our experience extends from Level I Trauma Centers to Community Hospitals.



Some of Our Healthcare Clients

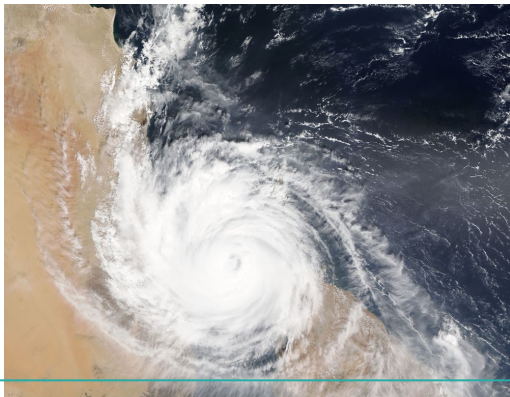


Protecting Your Water Supply in a Healthcare Facility

WHY? To ensure continuity of supply and patient care during:

Natural Disasters

Hurricanes/Tornadoes



Municipal Infrastructure Failures



Natural Disasters

“

“The most expensive hospital
is the one that fails.”

2008-2009 World Disaster
Reduction Campaign

“

HURRICANE SANDY

“third-world conditions, with no hot
water, no lab or radiology services and
pails of water hauled up the stairs to
use for flushing toilets...”

by Alan Aviles, the president of the Health and Hospitals
Corporation, which runs Bellevue.

Source: New York Times, October 31, 2012



NOAA expects 13 to 20 named storms during the 2021 season, including 6 to 10 hurricanes.

Natural Disasters

Excerpts from the Joint Commission “Lessons Learned”

“

“For the most part, hospitals were able to quickly obtain water from various public and private sources. However, the challenge came when trying to figure out how to get water from a tanker truck, into their piping system, and up to patient care areas throughout the hospital.”

“

“Whether it was a hurricane, power outage, tornado or act of terrorism, when in need people will follow the blue “H” sign looking for warmth, shelter, food, electricity or in this case, water. Disaster plans need to reflect this inevitability.”

“

“People will always gravitate to the local hospital during a community crisis.”

Municipal Infrastructure Failure

**Natural Disasters Are NOT the Biggest Threat
Aging Infrastructure Is Far More Often the Cause of Outages**

“

“... an average **700 water main breaks** nationwide that experts say occur **each day.**”

www.cnn.com/2011/US/01/20/water.main.infrastructur
e/



Municipal Infrastructure Failure

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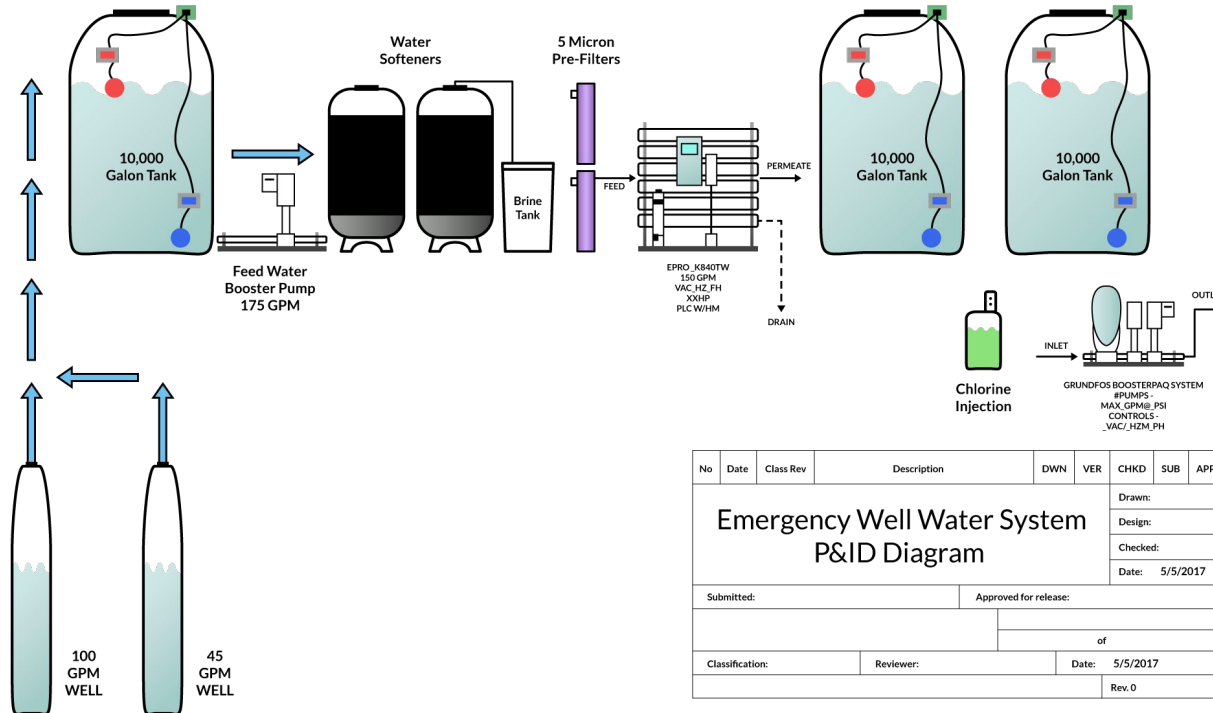
“Southside Regional Medical Center in Petersburg, VA is without city water, per a hospital spokesperson. The City notified hospital officials on Monday.

“An Onsite Water Emergency Water Supply System was utilized at SRMC during this crisis allowing the hospital to operate and serve the public during the water outage.”



How Do Our Systems Work?

Example of a Well Based System



No	Date	Class Rev	Description	DWN	VER	CHKD	SUB	APP
Emergency Well Water System P&ID Diagram						Drawn:		
						Design:		
						Checked:		
						Date: 5/5/2017		
Submitted:				Approved for release:				
				of				
Classification:			Reviewer:			Date: 5/5/2017		
						Rev. 0		

Potential Applications



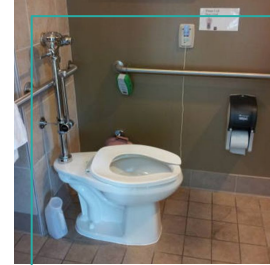
Evaporative Cooling
Towers



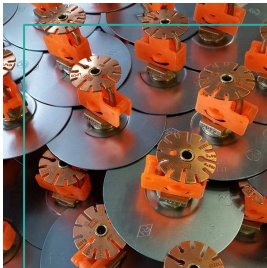
Decontamination
Station



Laundry



Toilet Flushing
Station



Fire Suppression

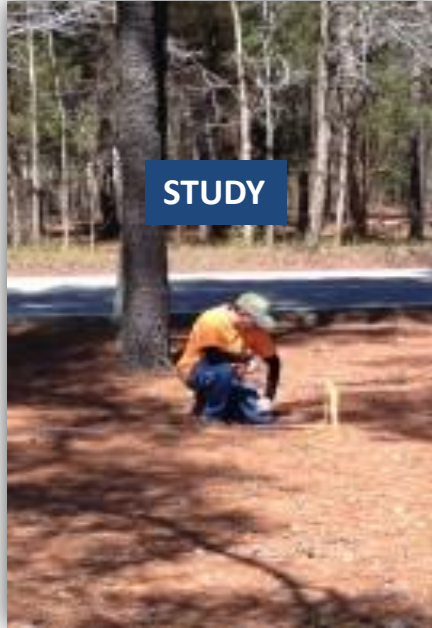


Equipment
Sterilization



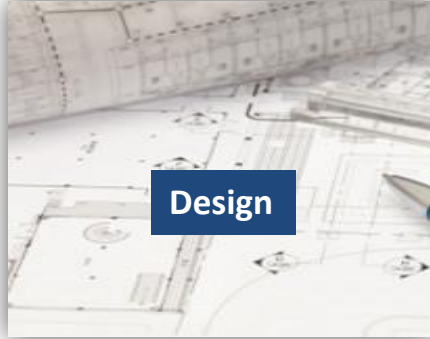
Boilers

Our Exclusive Process



STUDY

OWM will complete a comprehensive Water Resource Needs Assessment.



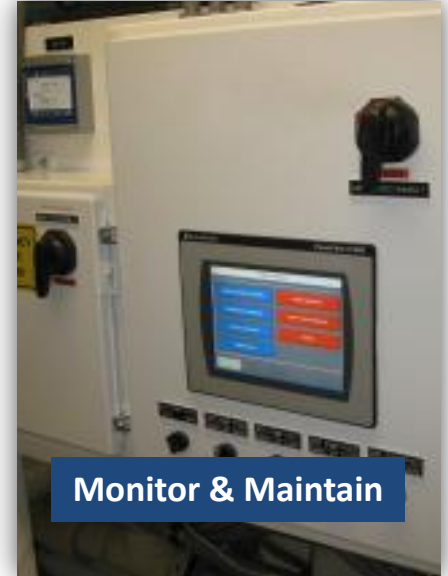
Design

OWM not only develops a design to incorporate all potential new viable water sources, including well development, but we listen to our clients and provide aesthetically pleasing designs to fit your unique facility space.



Install

From start to finish, we are committed to remaining engaged in the installation process to ensure your system meets your needs.



Monitor & Maintain

OWM is committed to keep your system running optimally by providing contracted maintenance services.

Example Project



Cape Fear Valley Medical Center, located in Fayetteville, North Carolina, is the robust, 483 bed regional medical center of Cape Fear Valley Health.

In October 2016, Hurricane Matthew hit southeastern North Carolina and knocked out all water pressure to the medical center for nearly a week. Bottled water was brought in by the truckloads and toilets had to be flushed by hauling buckets of water.

In 2017, Onsite Water began its exclusive process to study, design, install, and maintain (SDIM) an emergency water supply system (EWSS) to provide the complete water needs of the hospital during emergency outages. The installed system is comprised of multiple wells, filtration equipment, disinfection equipment and over 20,000 gallons of potable water storage. It can provide water to the hospital at over 200 gallons a minute.

“We’re really excited about the new system,” said James Bullard (*pictured*), Cape Fear Valley Health’s Emergency Management Coordinator, “especially since all the water will be potable.”

BladenOnline.com

Emergency Water Supply System vs. Contracted Tankers



Advantages

- simple sign up



Disadvantages

- expensive when needed, potentially millions of dollars
- not reliable because you are competing with others for supply and during natural disasters roads may not be open and accessible
- even if you get the water to the hospital you still have to get it into your system

In 2016, a hospital in North Carolina that lost municipal water during Hurricane Matthew spent almost \$1.5 million for tanker water during the outage. The deliveries were delayed due to flooded road conditions. Water still had to be manhandled into flushing toilets.

Onsite Water Offers Both Fixed Site And Mobile Solutions

Advantages of Fixed Site Installations

- Lower cost compared to mobile systems.
- Always ready- Up and running in 15 minutes.
- Fast ROI if you choose to use your onsite water supply system to provide your industrial (non-potable) water needs

Advantages of Mobile Solutions

- May be a better choice for facilities with multiple or satellite locations.
- Ideal for hospitals with minimal space for permanent system.



you!

Summary & Conclusion

What can an Onsite Water Emergency Water Supply System do for your facility?

- Provide you with a **100% reliable source** of industrial and potable water when municipal systems fail ensuring continued operations.
- Our systems are **cost effective and always ready**.
- We offer fixed site and mobile options.
- Our systems can actually **save you money**.



In today's environment of increasingly severe weather and aging infrastructure it's less a question of if but when will your municipal water supply will fail.

Can your facility afford a shut down during normal operating loads let alone during a catastrophic event? Would the community you serve be able to cope with the shutdown of their principal healthcare facility during a natural disaster or other general crisis?

Onsite Water has the solution.

Contact us today to learn more.





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