Thomas Jefferson University Hospital strives to provide its patients and visitors with excellent service, while making sure facility money is well spent. Water Management, Inc.’s (WMI) reputation as a leading water conservation company led the Philadelphia hospital to subcontract WMI to find unique ways to decrease the annual water expense. Aside from installing toilets, showerheads, and aerators to reduce domestic water use consumption, WMI addressed several non-domestic features. The most notable and challenging feature focused on was the design and installation of a new steam condensate harvesting system. This measure was able to provide a unique alternate water reuse with a large savings opportunity; however, from concept to deliverable, this measure presented quite a challenge.

The project consists of eight storage tanks with a total capacity of 15,200 gallons of steam condensate some of which was previously going to drain after passing through a preheater for the domestic hot water at the facility.

The HDPE tanks had to be cut and sectioned off to fit in the elevator and then re-welded by a specialty firm from Pittsburg, PA in the basement of the hospital. The condensate is now being used to feed a Watts-Getinge RO system that supplies pure water for a tunnel instrument washer. The RO system is capable of supplying 9600 gallons of pure water a day, and its use can easily be expanded due to the storage capacity.