







Mile Beach. The original facility consisted of four, large, waste stabilization ponds. "But since 2005, we have a Sequencing Batch Reactor plant with a capacity of 2.5 million gallons a day, and that's actually the first phase out of four; it's designed to ultimately treat 10 million gallons a day," van Zanten states. "So, hopefully, in the future, we'll expand our collection system. Our mandate dictates that we'll have to do that. But it's going to be a gradual process."

Other items on the Authority's immediate and ongoing agenda include a new water distribution pump station in George Town equipped with variable frequency drives that adjust the speed of the pump motor to fit the water demand at any given time, thus saving energy and money; the installation of bulk water meters at strategic places, where the net inflow of water can be compared against water sales; and the replacement of older water meters to ensure that all water used by

customers can be properly and accurately registered. "The next step would be to go to smart meters," says van Zanten. AMI (Advanced Metering Infrastructure) uses wireless water meters that send data on water use from each customer to a central monitoring location. "The system is capable of logging the water usage and alerting the Water Authority if a customer has a sudden or unusual spike in water usage (either in real time or using historical data, in the event of a customer dispute), or if there are localized low pressure areas, which are possible indicators of a leak.

This could help the Water Authority identify the location of pipe breaks, allowing for quicker repairs and less lost water," say van Zanten. "It will give us a lot more data, our customers can see their own usage to see if there's anything amiss, and we can do the same thing. Plus, our staff won't have to go out and operate a valve."