

1.5 MILLION GALLONS PER DAY DELIVERED IN 92 DAYS



Case study:

Providing a quick, alternative supply to allow a major overhaul of equipment in the USVI

SUPPLY CHALLENGES

The Virgin Islands Water and Power Authority (WAPA) was experiencing challenges meeting the water demands on the island of St. Croix because of interruptions in supply caused by older desalination equipment that required significant refurbishment. As part of a plan to repair its existing thermal equipment, WAPA sought the supply of a temporary source of 500,000 gallons per day (GPD) of potable water for St. Croix. The short term supply was necessary to mitigate continued water shortages during the planned rehabilitation of the existing facility.

FLEXIBLE SOLUTIONS

Seven Seas Water (SSW) proposed a solution which utilized mobile seawater reverse osmosis (SWRO) units, that would not only satisfy the immediate needs in the shortest time possible but provided sufficient additional benefits to warrant pursuing a longer term water supply solution that would allow WAPA to refurbish additional thermal units.

NO CAPITAL COSTS

With no up-front capital required from WAPA, SSW quickly deployed the mobile SWRO units under a build-own-operate (BOO) arrangement. SSW would also manage and operate the water facility, guaranteeing a reliable water source at a fixed cost per gallon over the entire term of the agreement.

When WAPA concluded that the SSW SWRO proposal, utilizing membrane technology, could produce guaranteed quantities of water at a measurably lower cost than estimated, without the risks or the responsibilities of operating their own equipment, SSW was asked to expand the scope of supply from 500,000 GPD to 1,500,000 GPD.

FAST RESULTS

Within a record-breaking 92 days from the date the agreement was signed, six (6) sets of mobile seawater reverse osmosis units were shipped to the site, installed and producing 1,500,000 MGD of potable water.

The SSW plant was designed with installed redundancy to maximize on-line time and is producing potable water (permeate) with a salinity of less than 300 ppm TDS from 35,000 ppm TDS feedwater. The plant design is the most energy efficient commercially available with an energy consumption of the RO portion of the plant under 10 kWhr/kgal, about half the energy consumption of most containerized RO units. This ultra efficient design provided a low cost, temporary supply of water to WAPA and the people of St. Croix as well as operating in an environmentally sustainable manner, promoting good stewardship of the precious resources in the USVI.

Learn more: 813-855-8636, ext. 1200
www.sevenseaswater.com



DID YOU KNOW?

Even after factoring in “free” waste heat from inefficient hydrocarbon and coal based power generating facilities, the life-cycle cost to purchase, operate, and maintain even the most modern thermal desalination units is significantly higher than that of seawater reverse osmosis desalination.

As more and more municipalities look to decrease their dependence on unpredictable, expensive, imported fuels and incorporate renewable energy sources such as solar, wind turbines, and bio-diesel generators, the benefits in obtaining water from SWRO become even greater.



Seven Seas Water is your total water solution company.

Dependable, affordable and focused on you.

Learn more:

813-855-8636, ext. 1200

www.sevenseaswater.com

Seven Seas Water Corporation
14400 Carlson Circle, Tampa, FL 33626
Email: Info@7seaswater.com

