

The use of the various units is further complicated when projects are delivered on a BOO or BOT basis and a plant's production capacity is expressed on a per-year, rather than per-day or per-hour basis. When projects are described in terms of million cubic meters per year (MCM/y) – or when US plants are referred to in terms of acre-feet per year (AFY) – the volumes do not reflect the actual production capacity of a plant, but rather, the amount of water the plant has been contracted to furnish over the course of the year; the actual production capacity is usually significantly higher (see “Energy Cost” story, this issue).

In most *WDR* articles, a secondary unit is routinely included, parenthetically, as a reference. Some frequently used volumetric units and their conversions are:

- 1 cubic meter = 264.2 US gallons, or 1,000 liters
- 1 US gallon = 3.785 liters
- 1 Imperial gallon = 1.2 US gallons, or 4.546 liters
- 1 acre-foot = 325,900 US gallons, or 1,233.6 m³
- 1 megaliter (ML) = 1,000 cubic meters
- 1 gigaliter (GL) = 1 million m³
- 100 million m³/y = 72.4 MGD (avg)
- 1 MGD = 1,120 acre-feet/year (AFY)
- 1 gigaliter = 1,000,000 cubic meters

Texas

DESAL ADVOCACY GROUP FORMED

Prompted by the state's recent drought and the resulting water shortages, desal boosters have formed the Texas Desalination Association (TDA), a non-profit trade organization that will focus on developing mechanisms for making desalination more accessible.

Kyle Frazier, an agent for the group, told *WDR* that the Austin-based organization will advocate on behalf of desal technology before the Texas Legislature and regulatory agencies and will work to streamline the regulatory process. “We will bring together experts in desal technology with those who need new sources of water,” he said.

The TDA is now finalizing the organization's by-laws and establishing a nine-member board of directors. Membership is open to public utilities, municipalities, desal companies and technologists, academics and private citizens.

For more information, contact Kyle Frazier at jkfl@texas.net. The website, www.TexasDesal.org, should be online later this week.

IN BRIEF

New York's Department of Environmental Conservation (DEC) has accepted United Water's Draft Environmental Impact Statement (DEIS) for the proposed 7.5 MGD (28,385 m³/d) **Haverstraw Desalination Plant** as complete. Public hearings are scheduled for 28 February and, last week, the DEC agreed to extend the public comment period by an additional month, to 18 April. United Water has conducted a one-year pilot study at the plant site in Haverstraw, on the Hudson River's western shore, 35 miles north of New York City. The plant is planned to be operational in 2015.

Earlier this month, the **Environment Agency-Abu Dhabi** (EAD) announced that it had completed the construction of 22 solar-powered BWRO plants across the Emirate. Each unit consists of 300m² (3,230 ft²) of solar panels that generate approximately 35 kWh to produce 30 m³/d (8,000 GPD) of fresh water. The pilot project is intended to provide findings that will help reduce the capital cost and increase the efficiency of future units.



A Solar-powered BWRO Plant

The **National Water Research Institute** (NWRI) will accept nominations for its 19th Annual Athalie Richardson Irvine Clarke Prize for excellence in water research. The Prize is awarded to individuals contributing towards the discovery, development, improvement and/or understanding of the issues associated with water quality, quantity, technology or public policy. Last year's recipient was Duke University's Mark Wiesner. Nomination procedures are available at: www.nwri-usa.org/nominations.htm.

Zulal Water Technology's Tripoli office has announced that it has resumed full operations in Libya. The company said that it has already restored water and wastewater operations for a major oil company and has received an order to supply emergency water at another oil production facility.

NanoH2O has released Version 1.2 of its *Q+* membrane projection software. The new version provides an option for permeate split flow calculations and the ability to convert the results report into PDF formats. The software can be downloaded at www.nanoh2o.com/software-tools.