

# PROJECT PROFILE

## An Affordable Wastewater Treatment Solution for Government Properties

### POINTES WEST RECREATIONAL AREA, GEORGIA

**Problem** A failing sand filter at an Army recreational area urgently needed to be replaced with a system that could handle seasonal flows.

**Solution** The U.S. Army Corps of Engineers chose to sole-source Orenco's AdvanTex® Treatment System as a preferred technology. As a result, an experienced construction bidder was able to complete the installation within 120 days.

### Corps of Engineers Turns to Orenco® for Solutions

The Pointes West Recreational Area on Georgia's Lake Thurmond serves the U.S. Army's nearby installation, Fort Gordon. Pointes West includes cabins, campsites, boating facilities, and a motel.

In late 2008, officers with the U.S. Army Corps of Engineers needed to remediate or replace a failed sand filter, which treated wastewater at the site. The sand filter had been constructed using the wrong grade of sand (which is not uncommon since it is sometimes difficult to obtain the proper grade of sand within a reasonable trucking distance).

The Corps needed a reliable wastewater treatment system that would work well, even with a wide variation in flows. Pointes West experiences highly variable seasonal flows, from around 4,000 gpd (15.1 m<sup>3</sup>/d) in winter to upwards of 50,000 gpd (189 m<sup>3</sup>/d) in July.

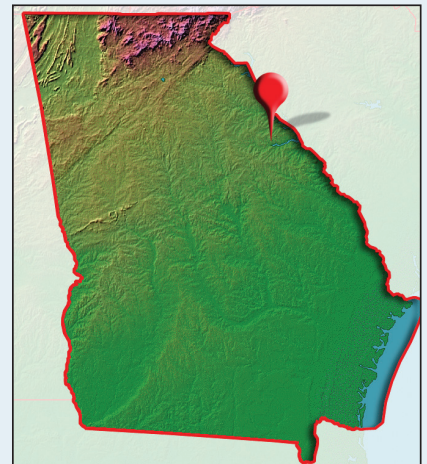


The U.S. Army Corps of Engineers was under time pressure to replace a wastewater treatment facility on Lake Thurmond.

### Commercial — Government Market

#### Project Overview

#### FORT GORDON, GEORGIA



#### Design Parameters

- Wastewater treatment for cabins, campsites, boating facilities, motel
- Variable flows:
  - ~ 4,000 gpd (15.1 m<sup>3</sup>/d) winter
  - ~ 50,000 gpd (189 m<sup>3</sup>/d) peak of summer

#### Installation and Start-up

- Spring 2009

#### Treatment

- Two 30,000-gal. primary tanks
- One 20,000-gal. recirculation tank
- 12 Orenco AdvanTex AX100 filter pods

#### Dispersal

- Onsite discharge to wetlands

#### Treatment Requirements

- 30 mg/L cBOD<sub>5</sub>
- 30 mg/L TSS

#### Operation

- Maintained by Augusta Utilities

#### Controls

- Orenco TCOM™ remote telemetry control panel

**POINTES WEST RECREATIONAL AREA, GEORGIA**

The officers selected Orenco's AdvanTex AX100 Treatment System for its reliability and outstanding wastewater treatment. The AX100 uses an engineered textile as the filter media, eliminating the need to source a particular grade of replacement sand. As an added benefit, the AX100 units could be installed directly on top of the sand filter, so it was not necessary to dispose of the existing sand.

The AX100 system was designed to handle an average of 30,000 gpd (113.6 m<sup>3</sup>/d) and peak flows of 60,000 gpd (227 m<sup>3</sup>/d). And it was designed so that half of the treatment could be taken off-line during the slower winter months, reducing the treatment capacity to 15,000 gpd (56.8 m<sup>3</sup>/d). Because of its modular nature, AdvanTex also allows the system to be easily expanded to handle peak flows of 100,000 gpd (378.5 m<sup>3</sup>/d) in the same space as the original sand filter.

Since the Corps decided that AdvanTex was the best solution for the situation, they chose to sole-source the technology. Construction was put out for competitive bid.

The system was professionally designed and constructed by Integrated Water Services, Inc. (IWS), a design-build firm with nationwide experience installing AdvanTex Treatment Systems. The project went from design to completion in just 120 days from Notice to Proceed, earning IWS an "outstanding" rating from the Army Corps of Engineers for being on time and on budget.

**Commercial —  
Government Market**

*Whether for a permanent site or a temporary camp, seasonal or year-round usage, AdvanTex is a versatile treatment solution.*

For information about Prelos™ Sewer, AdvanTex® Wastewater Treatment, or Orenco Controls™, contact Orenco Systems®, Inc.



800-348-9843 • +1 541-459-4449  
www.orenco.com

*Data used by Orenco to derive the representations and conclusions contained within this Project Profile were current as of March 2011.*