

# COMMITTED TO QUALITY OF LIFE

## Cutting-edge wastewater treatment in the southeastern U.S.

Gwinnett County, Ga., is one of the fastest growing communities in the metro Atlanta area and in the nation. CH2M HILL has proudly assisted the community since 1988 with water and wastewater-related master planning, permitting, public participation, regional coordination and other related activities.

During the preparation of the County's Water and Wastewater Master Plan in 1992, CH2M HILL identified indirect potable water reuse as a potential option for maintaining this county's quality of life during this unprecedented growth, and accomplishing it in a way that respects the environment and sustains economic development.

The treatment plant, the F. Wayne Hill Water Resource Center, consists of a Phase 1 facility that occupies approximately 150 acres and is located in a heavily developed area. Despite its size, it is nestled back and hidden from the many tourists and shoppers who now frequent the popular Mall of Georgia in the area. CH2M HILL's chief design engineer, Jim Hawkey, said, "The objective for the site selection was to maintain

**Phase 2, Construction Contract 1 activities are under way and on schedule.**



**Exhaust air from the preliminary treatment building is routed through wet chemical scrubbers to remove odorous gases.**



isolation from the mainstream — no view of the facility, no sound, and no odor."

This plan was successful. As you tour the site, there is little to no sound of pumps, only the current construction and earth moving. The odors commonly experienced at wastewater treatment facilities are contained within facility structures, and off-gases are scrubbed.

The highly treated effluent from the Phase 1 facility is pumped through a 20-mile pipeline for discharge into the Chattahoochee River. After the

Phase 2 expansion is completed, treated effluent will be pumped through a 9-mile pipeline into Lake Lanier — Georgia's primary drinking water supply source and highly visible park and resort. This year, CH2M HILL is proudly leading the same winning team in the construction management of the Phase 2 construction.

The current facility can process over 20 million gallons of wastewater daily that is reclaimed and returned to the Chattahoochee River. Only six plants in the nation can equal this advanced treatment facility's capabilities. One of the most unique features of the facility is that everything (water and solid) is reused or recycled.

The most important return residents of Gwinnett County will realize on their infrastructure investment in coming years will be the protection of local water resources. The most important return for our employees is maintaining the quality of life in our community and researching the latest and most sophisticated advanced wastewater treatment technologies.

## A history of commitment to the community

**1988:** CH2M HILL INITIATES TALKS WITH GWINNETT COUNTY. RECOMMENDS INTEGRATED WATER/WASTEWATER PLAN FOCUSED ON POTABLE REUSE TO LAKE LANIER. COUNTY AWARDS MASTER PLAN CONTRACT TO CH2M HILL.

**1989:** MASTER PLAN EFFORT LAUNCHED BY CH2M HILL OUTLINING \$2.2 BILLION (1990 DOLLARS) IN POTABLE REUSE INFRASTRUCTURE.

**1992:** MASTER PLAN COMPLETED. CH2M HILL PURSUES NPDES PERMIT FOR DISCHARGE TO LAKE LANIER.

**1995:** TEAM OF JORDAN, JONES AND GOULDING (JJ&G), CH2M HILL, AND PRECISION PLANNING, INC. (PPI) SELECTED AS PHASE 1 PROGRAM/ CONSTRUCTION MANAGER OF THE 20 MGD F. WAYNE HILL WATER RESOURCES CENTER. CH2M HILL PROVIDES PERMITTING ASSISTANCE TO ACQUIRE NEW NPDES PERMIT.