



Project Profile

**University of Georgia
PVAC
Athens, GA
800 Tons HVAC Cooling**

2014 Results:

- Energy savings **\$4,884**
- kW / ton savings **\$5.17**
- kWh consumption reduced **69,767 kWh**
- kW Demand reduced **113 kW**
- Water & Sewer savings **\$14,298**
- Water & Sewer consumption reduced **1,444,220 gallons**
- Total Water, Sewer and Electric savings **\$19,182**
- Eliminated condenser water chemicals: **770 gallons**
- Excellent corrosion rates are verified by corrosion coupon analysis by a third party.
- Chiller efficiency increased from **87% to 95+%**
- Annual inspections of chillers reveal clean tubes and do not need brushing.
- Long term savings in extended life of equipment is increased due to absence of harsh chemicals previously used.

In the Summer of 2010, the University of Georgia decided to test "non-chemical" water treatment alternatives for its campus cooling towers. Four companies, including Flozone, were invited to participate. Buildings of similar tonnage were chosen for each vendor to run for 120 consecutive days. Flozone installed its E3 Sentinel unit on an 800 ton system at the Performing and Visual Arts Center. UGA had a rigid protocol with regards to reducing water/sewer/energy consumption, corrosion rates, and scale/bacteria within the HVAC condenser water system. The Flozone Integrated Management System performed flawlessly.

In the first week alone, the unit detected an idle chiller pulling excess kilowatts, and within the first month, it balanced the PH and raised the cycles of concentration from 2.5 to 6.5. After the second month, while two competing companies were already dismissed for apparent fowling situations, Flozone caught a "stuck float" in the tower, which saved the University thousands of gallons of water usage.

At the conclusion of the testing, Flozone was awarded the contract and now has multiple units installed throughout the Campus, including new construction specifications for using the Flozone (IMS) with 24/7 monitoring.

Total Facility Savings with Flozone Services Since August of 2010

Water & Sewer Reduced	6,768,955	gal
kWH Reduced	275,392	kWH
kW Demand Reduced	593	kW
Condenser Chemicals Reduced	3,478	gal
Carbon Footprint Reduced	241	tons CO2
Maintenance & Extended Mech Life Savings	\$ 53,350	
Water & Sewer Expense Savings	\$ 56,063	
Energy Expense Savings	\$ 19,277	
Total	\$128,690	

