The Economics of GSI in Atlanta

Green stormwater infrastructure (GSI) has been found to be more affordable that traditional grey infrastructure in many instances across the country, especially when considered at the outset of a project. With some of the highest water and sewer rates nationally, there's a partially strong incentive for developers in Atlanta to invest in reuse to offset operations and maintenance costs.

Stormwater Master Plan at Georgia Institute of Technology (Atlanta, Georgia)

Photo: Georgia Institute of Technology



- Stormwater Master Plan covers 180 acres, aiming for 1.2" runoff reduction when 1.0" is required
- Estimated cost is \$2 million less than simple compliance
- Received the National Recognition Award from American Council of Engineering Companies

Rainwater Harvesting at Grand Hyatt Atlanta (Buckhead, Georgia)



- Initial \$100,000 investment had an anticipated return on investment (ROI) of 3.84 years
- Project expanded in 2013, with a new ROI of 2.36 years and an annual savings of \$42,331
- Received national recognition and was featured in five industry publications

Hypothetical Rainwater Harvesting at Aspen Heights Development (Atlanta, Georgia)



- Earth Economics analyzed GSU's Aspen Heights development and found potential for significant savings
- A \$550,000 investment and \$35,000 in maintenance would provide \$70,000 in savings annually
- ROI of less than 11 years

NCR World Headquarters (Atlanta, GA)



- A \$420,000 system (<0.5% of project) provides \$140,000 annual savings in water and sewer costs, a 3-year ROI
- Rainwater and groundwater are recycled to supply cooling tower, toilets, and irrigation, up to 20,000 gal/day
- 35-60% expected reduction in water use building-wide

A rainwater harvesting system at the GSU Baseball Field would establish GSU as a leader and a good neighbor in the watershed, potentially save \$100,000+ annually in water bills, and help reduce flooding in downstream communities.