



# Fort Jackson Sustainability Success Stories



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S. Lynn Odom, Ph.D.



# Fort Jackson Sustainability Success Stories



- The Fort Jackson Sustainability Management System (SMS): an evolving and continually improving management system
- Highlight a few of Fort Jackson's Goal and Objective oriented successes



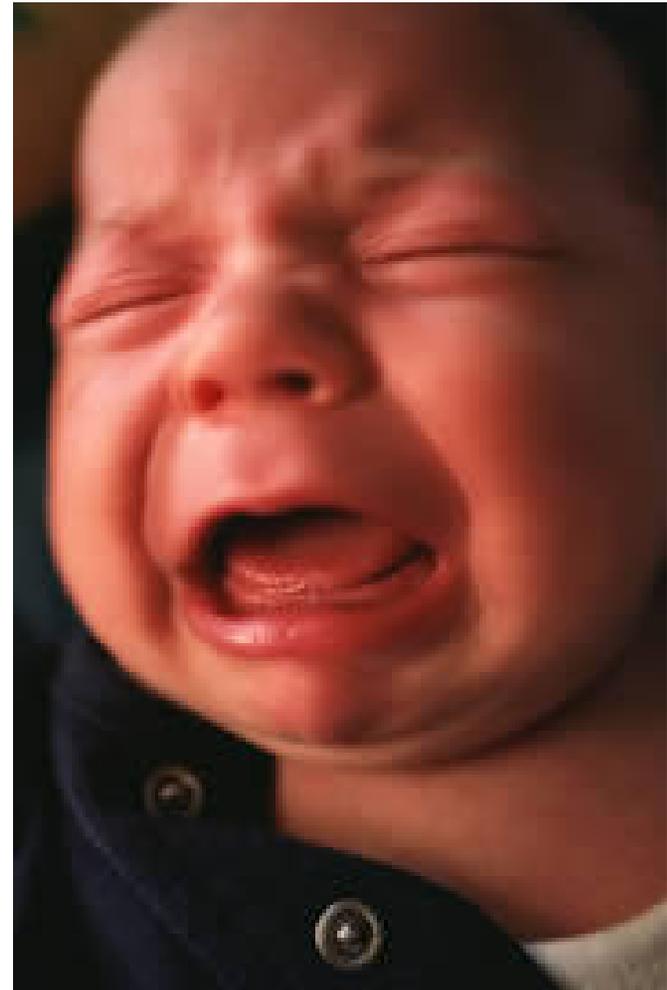
***“We will integrate sustainability into all activities using the ISO 14001 Environmental Management System Standard as a framework to improve performance and compliance.”***

*The Army Strategy for the Environment,  
October 2004*





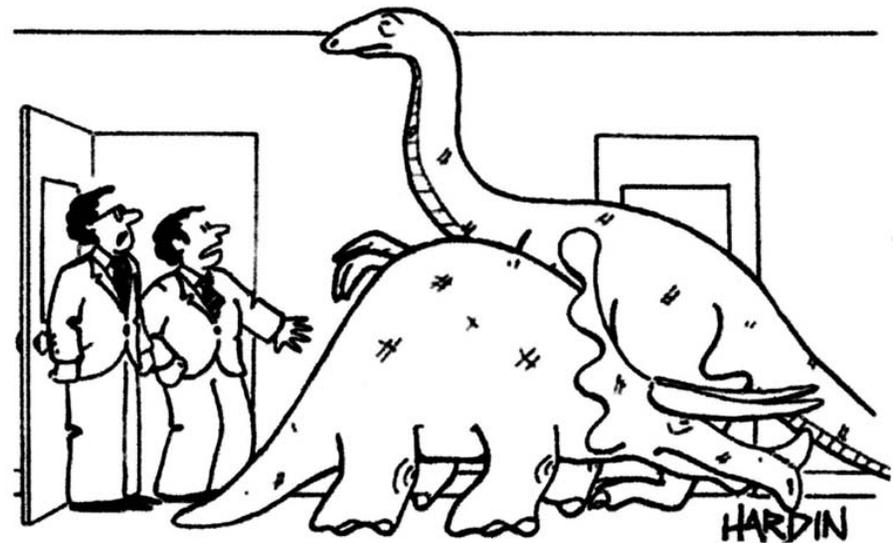
***The only human who wants change is a wet baby... and even he or she will often wail through the process.***





# FJ SMS Implementation Approach

**...to radically  
change the way  
we design, build,  
buy, transport,  
and otherwise  
perform our  
mission ...**

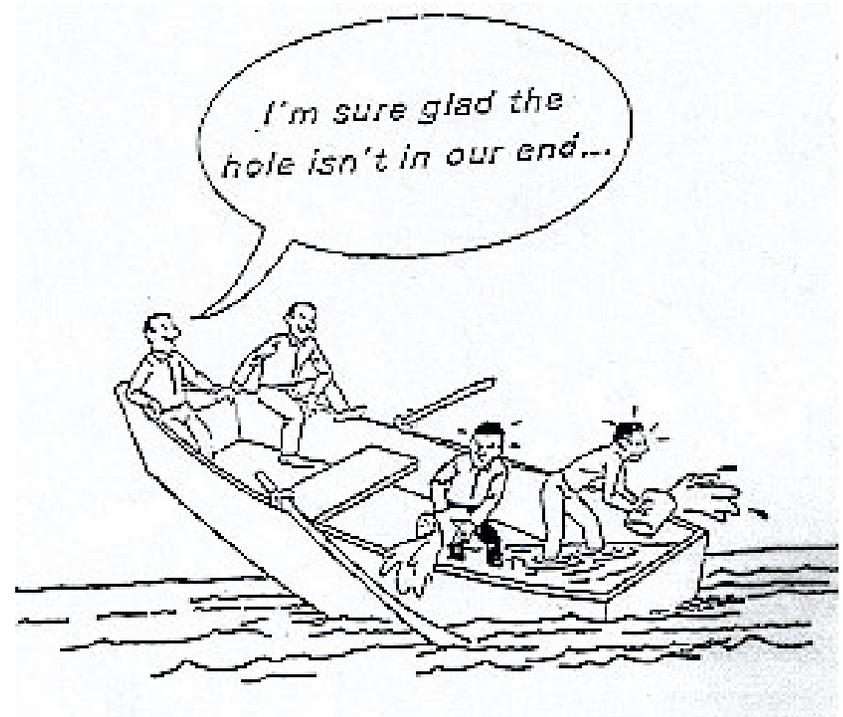


“They are extinct in the wild, but some *still* exist at Fort Jackson.”



# FJ SMS Implementation Approach

**The process  
requires us to  
become  
'systems'  
thinkers!!!**





# Fort Jackson Sustainability Success Stories



## Installation Sustainability Program (ISP) Planning and Workshop Series

February 2005 – May 2006

- Five Core Business-Operations Teams
  - Mission-Military Training
  - Transportation
  - Procurement
  - Infrastructure
  - Regional Interaction





# Concrete Waste Diversion



## Team: Procurement - Deconstruction/C&D Waste Diversion

**Goal:** *A flexible and sustainable procurement process to work towards achieving zero waste.*

**Objective:** *Reduce Building Removal Waste Generated by Projects by 40%.*

- Seven structures including the 19750 ft<sup>2</sup> cold-storage building was deconstructed in 2005.
- 100% of the concrete was stockpiled for re-use on the installation.
- As of 1QFY08 over 12,000 tons of concrete and 1,200 tons of asphalt have been stockpiled.
- 5,000 tons have been processed and ~70% has been re-used at the FOBs and for road improvements and maintenance.





# Recycled Content Paper



## Team: Procurement – Installation-wide Paper Usage

**Goal:** *A flexible and sustainable procurement process to work towards achieving zero waste.*

**Objective:** *Of the reduced amount of printing paper consumed, increase the amount that contains  $\geq 30\%$  recycled content to 50%.*

- *FJ consumers purchase printing paper products from the Lion's Club International.*
- *To ensure that only printing paper containing  $\geq 30\%$  recycled content was the only product stocked, a memo was issued.*

IMSE-JAC-LG 19 September 2007

MEMORANDUM THRU Mr. Henry Geathers, Logistics Services Division  
FOR LCI  
SUBJECT: Copier Paper

1. Effective immediately, request that you stock only recycle paper (once your current stock is depleted). This request is per AR 25-30 and FJ Policy Memo.  
2. Point of contact is Darlene Morgan, #1532.

  
DOUGLAS E. BURCHETT  
Director of Logistics and Engineering



# E-85 Installation at Victory Fueling Station



## Team: Transportation - Vehicle Fuel Usage

**Goal:** *Efficient transportation of materials and personnel provided using renewable energy sources for all mobility systems*

**Objective:** *Reduce Annual Petroleum-based Fuel Consumption of Non-tactical Vehicles by 10% and reduce Mobile Source Air Emissions by 25%*



- Negotiated with Southern Terminal Services, Inc. to convert an existing UST to start receiving and dispensing E85 at the Victory Fueling Station for GSA vehicle fleet usage in June 2006.
- To-date GSA vehicles that are capable of using E85 as a fuel source are keyed so that drivers are only able to re-fuel at the E85 pump.
- Personnel have been trained on the use of this fuel.



# “Gateway to Fort Jackson”



## Team: Regional Interaction

**Goal:** *Sustainable, long-term economic development in the Fort Jackson region.*

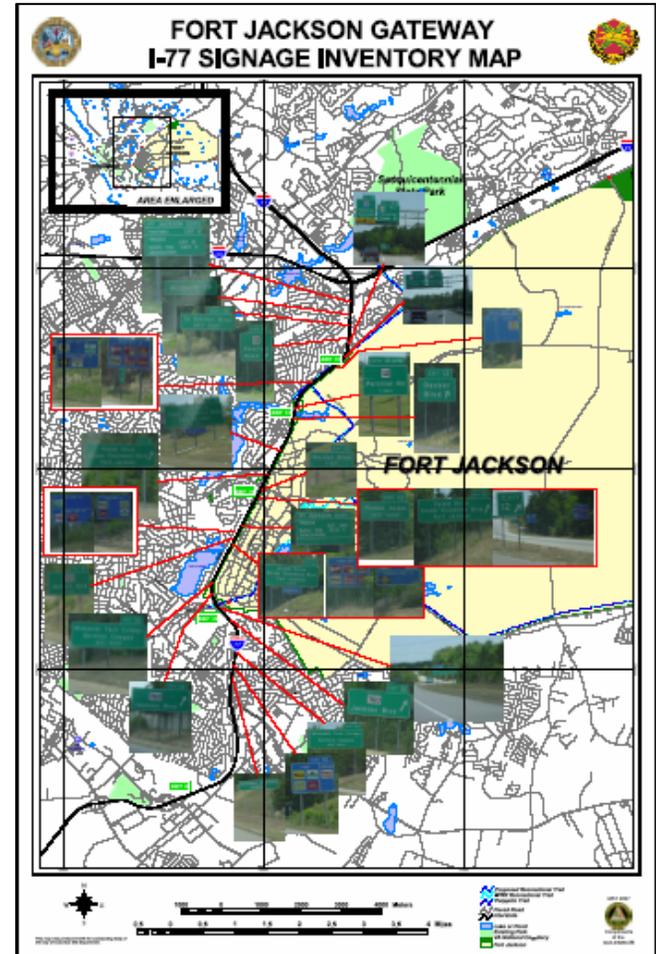
### Objectives:

- *Working Regional Partnerships for Sustainable Economic Development*
- *Cooperative Research and Development activities supporting Sustainable Economic Development*
- *Expanded Joint use of regional recreational resources*

**Goal: (Infrastructure):** *An integrated, sustainable water system.*

### Objective:

- *Conserving Water*





# “Gateway to Fort Jackson”



The Richland County Appearance Commission (RCAC) “Gateway to Fort Jackson” project was initiated in April 2007.

The major elements include:

- New SC Department of Transportation (SCDOT) signage along I-77
- Interchange and Gate Beautification
- I-77 Corridor Roadside Beautification
- Percival Road “Pathway to Graduation” Beautification & Signage
- 16 Acre Park and Recreational Trail Expansion
- A Welcome Center Study, and
- A 100th Anniversary Celebration in 2017.





# Geographic Information System (GIS) Collaboration



## Team: Regional Interaction

**Goal:** *Integrated compatible regional land use.*

**Objective:** *Integrated regional enterprise system for geospatial data*

- **Geographic Information System (GIS) Training**

- Joint ArcGIS I and ArcGIS II were conducted this past year for Fort Jackson, SCARNG and City of Columbia employees.
- By coordinating these training efforts over \$84,000 of tax payers money has been saved.

- **MOU**

- An official signing ceremony to establish a MOU between the city, SCARNG and Fort Jackson was held 14 November 2007 (National GIS Day).



# Research & Demonstration Partnerships Development



## Team: Regional Interaction

**Goal:** *Sustainable, long-term economic development in the Fort Jackson region.*

**Objective:** *Cooperative Research and Development activities supporting Sustainable Economic Development*

- Corrosion protection for remote monitoring to detect leaks in underground natural gas piping (installation-wide). (\$600K)
- Portable Fuel Cell Canister Demo
- Stationary Hydrogen Fuel Source at Central Energy Plant.
- Electrical Metering
- Water Metering



# Sustainable Interiors Showcase Why at Fort Jackson?



## Team: Procurement (and Regional Interaction)

**Goal:** *A flexible and sustainable procurement process to work towards achieving zero waste.*

### Objectives:

- *Compiling standards, criteria, and resources supporting sustainable procurement ...that support procurement opportunities for sustainability and reduce waste.*
- *Providing education, training and awareness for sustainable procurement ...that support employees, soldiers, contractors and vendors.*
- *Establishing effective sustainable procurement policies that implement positive incentives, compliance methods and enforcement.*
- *Nurturing Sustainable Procurement Partnerships that provide avenues to leverage purchasing power, share knowledge, and influence suppliers.*

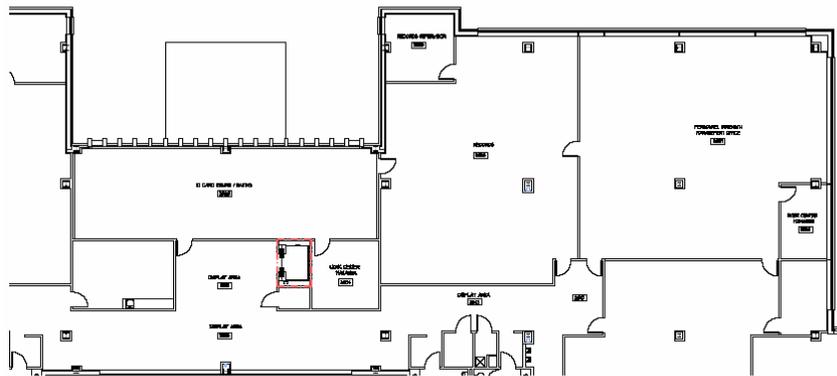




# Sustainable Interiors Showcase Where? What?



Fort Jackson has established, for testing and evaluation purposes, a sustainable interiors showcase in the “In/Out Processing” section of the Directorate of Human Resources.



Manufacturers/vendors have installed furniture, flooring and wall covering products to exhibit the quality and durability of their products that are manufactured in a sustainable manner.

# SHOWROOM VENDORS



SHERWIN-WILLIAMS.



GREGORY GRIER, INC.



CONTRACT SERVICES OF S.C.



CarolinaBusinessInteriors



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# Midlands Area Joint Installation Consortium (MAJIC)



## Team: Mission/Military Training

**Goal:** *Optimal utilization of all existing Fort Jackson lands for training purposes.*

### Objective:

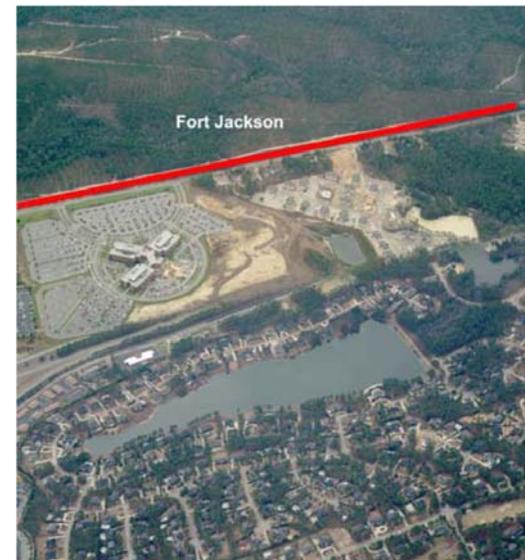
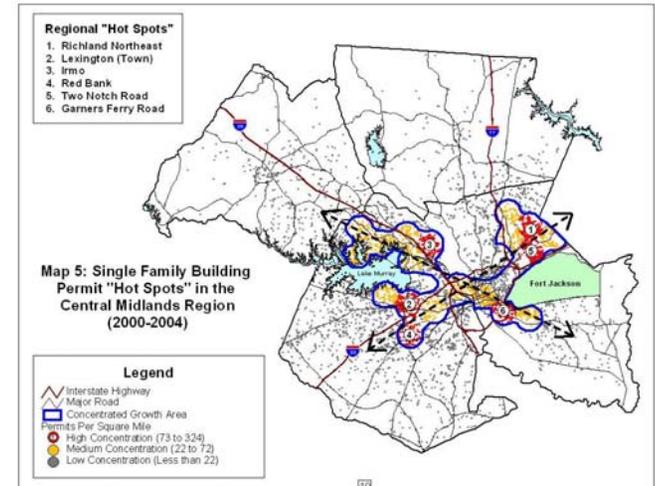
- *Convert internal buffer areas to training areas by securing conservation easements immediately outside the fence (e.g., ACUB).*

### Goal: (Regional Interaction):

*Integrated compatible regional land use.*

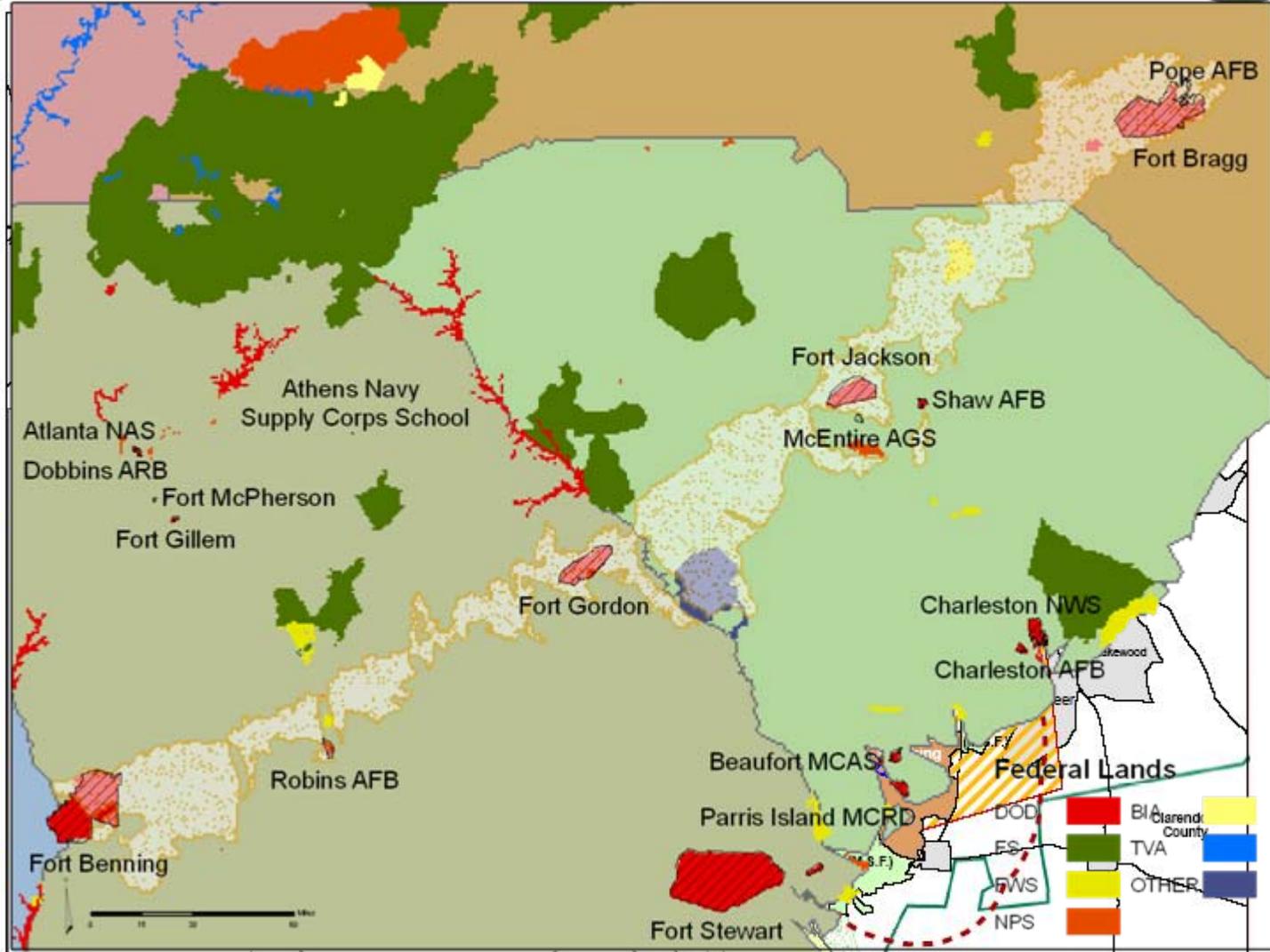
### Objective:

- *A Regional Land Use Plan Approved by Partners (including JLUS, ACUB and Regional Ecological Plan).*





# MAJIC Scope





# MAJIC Partners



- Military

- SC Military Department
- Fort Jackson
- Shaw Air Force Base

- Non-Governmental Organizations

- Congaree Land Trust
- The Conservation Fund

- Governmental

- Richland County
- Sumter County
- City of Columbia
- City of Sumter
- SC Department of Health & Environmental Control
- SC Department of Natural Resources
- Central Midlands Council of Governments



# Rainwater Harvesting



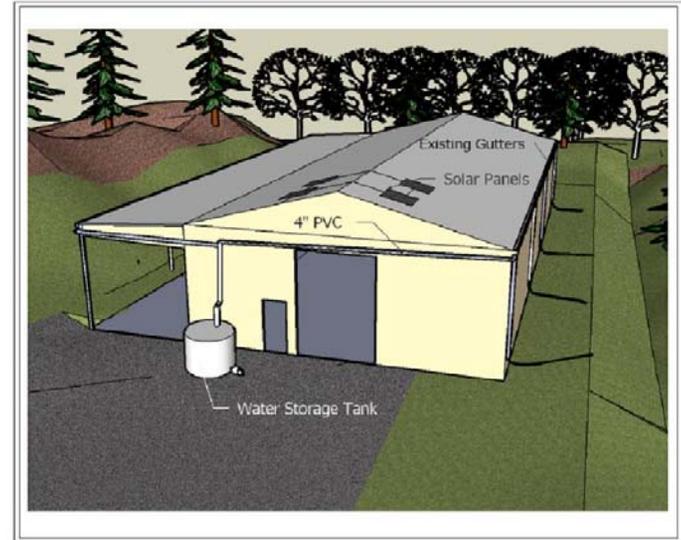
## Goal: (Regional Interaction):

**Goal:** Sustainable, long-term economic development in the water system.  
Fort Jackson region

## Objective:

## Objective:

- Conserve water.
- Cooperative Research and Development activities supporting Sustainable Economic Development
- Install technology to fix problems
- Obtain command support and funding for implementation of green building standards (SPiRiT/LEED) for both new construction and renovation including xeriscaping, gray water reuse, and rainwater harvesting technologies



Rainwater Harvesting ITAM Building  
Fort Jackson  
March 2010 - December 2010





# Fort Jackson Sustainability Success Stories



*The most important question in life is what to do next.*

## Questions?

**S. Lynn Odom, Ph.D.**

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Concurrent Technologies Corporation (CTC)