



Slide 1

**Developing an
Urban Forestry Response
to Natural Disasters**

NASF U&CF Committee
Nashville, TN
June 24, 2009

Dudley R. Hartel, Center Manager
Urban Forestry South
Southern Research Station (Unit-4952)
Gainesville, Florida

Urban Forestry South
Athens, Georgia

June 24, 2009

[Presentation to the Urban & Community Forestry Committee of the NASF in Nashville, TN ; June 24-25, 2009]

Slide 2

Urban Forest Strike Team

- **Concept Background**
 - Katrina Response
 - Regional Storm Response Initiative (U&CF)
- **Project Objective**
 - North Carolina & Virginia
 - Southern Group of State Foresters
- **Initially Targeted at Incident Command System**
- **Training & Capacity**
 - Kinston, NC (2007)
 - New Kent, VA (2008)
 - Brooksville, FL (2009)
- **Responses**
 - **FEMA, Northeastern Area (USDA FS)**

Urban Forestry South
Athens, Georgia

June 24, 2009

In this presentation, I will discuss the background for the SGSF's regional urban forest disaster response, project objectives, initial development model using ICS, current training and capacity, responses in four states, and the status of UFST efforts in the Northeastern Area (USDA FS NA) and the SGSF's dialog with FEMA (Region IV).

Slide 3

Storm Response Background

- **Katrina (ISA, SMA, Others)**
 - Professional response
 - ISA
 - SMA
 - Davey Resource Group
 - Certified Arborist volunteers
 - 10 Gulf state communities
- **Landscape Scale Urban Damage Assessment**
 - Hurricanes & other wind events
 - Ice Storms

Urban Forestry South
Athens, Georgia

June 24, 2009

Soon after Hurricane Katrina, professional arborists and urban foresters organized assistance for Gulf Coast communities.

In addition to ISA and SMA, partners included: the MS Forestry Commission, LA Department of Agriculture & Forestry, local communities, Davey Resource Group, MS Cooperative Extension, ESRI, and Certified Arborist volunteers from across the country. Urban Forestry South (USDA FS) coordinated this project from December 2005 through May 2006.

In mid-2006, U&CF Coordinators agreed to pursue research that would support post-disaster debris estimation at the landscape scale. Two contracts are currently in progress to address hurricane and ice storm debris estimation at a large scale.





Slide 4

Storm Response Objective

- Develop a professional response team to assist communities with urban forestry issues following natural disasters
 - Certified Arborists
 - Formal training
- Provide additional professional opportunities for state agency employees to assist communities following disasters

Urban Forestry South
Athens, Georgia
June 24, 2009

Based on our experiences following Hurricane Katrina, southern region U&CF Coordinators recognized a need for a more coordinated professional response to disasters that affect urban natural resources.

U&CF Coordinators also see this as an opportunity to more fully utilize the professional training in their agencies and provide agency Certified Arborists with disaster response opportunities.

Slide 5

North Carolina & Virginia

- U&CF Coordinators request for training for in-state response as a prototype for regional implementation
- Kinston, NC Training Facility
 - Debris estimation procedures
 - Tree risk assessment
 - Tree planting (recovery)

Urban Forestry South
Athens, Georgia
June 24, 2009

UFST procedures and training was initiated by UFS at the request of the U&CF Coordinators in NC and VA.

The first workshop was held at the NC Division of Forest Resource's Kinston, NC training facility.

It consisted of 3 days of classroom and field exercises to support:

- ❖ debris estimation
- ❖ tree risk assessment
- ❖ recovery (i.e. tree planting)

Slide 6

ICS-Modeled Structure

Urban Forestry South
Athens, Georgia
June 24, 2009

The program was initially intended to fit within the Incident Command System (ICS) as a new specialty. Team structure followed ICS guidelines (hierarchy, span of control).

ICS adoption was abandoned in early 2008 following a discussion with Region 8 Fire Chiefs. National Wildfire Coordinating Group (NWCG) moratorium on new task specialties and focus on core objectives (restructuring) led to this decision.





Slide 7

Capacity to Respond

UFST – Training & Capacity

Training (as of today)	(Kinston & New Kent)
9 Team Leaders (TL)	NC, VA
31 Task Specialists (TS)	AL, AR, KY, NC, TN, TX, SC, VA
5 trained in NA	
Florida 2009 Training	(Brooksville)
9 Team Leaders	AR, FL, GA, NC, TX, VA
24 Task Specialists	FL, GA, KY, MS, NC, OK, SC, VA
2009/2010 Storm Season Capacity	
18 Team Leaders	
46 Task Specialists	

Urban Forestry South
Athens, Georgia
June 24, 2009

With two training workshops completed and third planned for July 2009, the SGSF's UFST capacity includes 18 Team Leaders and 46 Task Specialists; 75% of the trained arborists (to date) have been to at least one response.

In addition, during our disaster responses, an additional 10 state agency foresters and municipal foresters have been introduced to the UFST concept.

Slide 8

Disaster Response Summary

UFST – Responses

- Oklahoma Ice Storm (4 communities)
- Baton Rouge – Gustav (2 agencies)**
- N. Arkansas Ice Storm (6 communities)
- W. Kentucky Ice Storm (6 communities)

Urban Forestry South
Athens, Georgia
June 24, 2009

Oklahoma was our first test of the system; this response worked well with the state agency, the municipalities, and FEMA debris managers.

Baton Rouge of our "watershed" event in that Team Leaders functioned directly with the state agencies and local contacts as designed. The "proof of concept".

During the 2009 ice storm responses (Arkansas & Kentucky), Team Leader, city liaison through the state agency, and data handling and reporting were all improved.

Slide 9

Oklahoma Ice Storm Response

- Four communities requested assistance from Oklahoma Department of Forestry
 - Bixby
 - Nichols Hills
 - Tulsa
 - Edmond
- Risk assessments and debris inventory in parks and along trails
 - Worked closely with FEMA debris managers

Urban Forestry South
Athens, Georgia
June 24, 2009

Four Oklahoma communities were assisted by OK Forestry Services staff and UFST.

There was close coordination with the local FEAM debris managers under a Region V (Denton, TX) "pilot program" for debris reimbursement.





Slide 10

Louisiana Gustav Response

- Baton Rouge
 - City Arborist
 - Parks
- No direct contact with FEMA

Urban Forestry South
Athens, Georgia June 24, 2009

Two teams completed "many months" of work in the two deployments. Both parks and city street trees were assessed.

Slide 11

2009 Ice Storm Response

- Six communities in Northern Arkansas
 - Street tree debris estimates to assist city with FEMA/ACOE response
 - Tree risk assessment and debris inventory in parks
- Six Communities in Western Kentucky
 - Park tree risk assessments
 - Short-term recovery in Henderson

Urban Forestry South
Athens, Georgia June 24, 2009

Teams worked effectively in these communities, which can be credited to U&CF staff in each state and team leadership.

Slide 12

Future of UFST

- Region 8 – Response Funding
 - FEMA Region IV (Atlanta) – Scope of Work
 - Task through ACOE & USAD FS (ESF 3)
 - EMAC – Packages
 - State EM Coordination
- Northeastern Area
 - Tree Wardens
 - Consultants

Urban Forestry South
Athens, Georgia June 24, 2009

Funding disaster responses and logistics (not training workshops) is the biggest hurdle to overcome in the southern region.

To that end, the SGSF's met in Atlanta with FEMA staff to introduce the UFST concept and discuss future collaboration (i.e. funding).

A sub-committee (Leslie Moorman, NC, John Cavin, USDA FS, and FEMA ATL & WO) is developing a "scope of work" that may help UFST fit within FEMA response mechanism; that is, as a task through Army Corps of Engineers and USDA Forest Service under ESF-3 (Public Works).

At the same time, we are looking at the EMAC model and developing an urban tree storm response package that would be available through that network.






Slide 13

**Developing an
Urban Forestry Response
to Natural Disasters**

Urban Forest Strike Team
www.UFST.org

Technical Support
by

Dudley R. Hartel, Urban Forestry South
dhartel@fs.fed.us
706.410.5568 cell



Urban Forestry South
Athens, Georgia

June 24, 2009

For additional information, contact UFS in Athens (GA) or visit www.UFST.org

