

Houston, TX – TL/TS Training

INCIDENT ACTION PLAN

Urban Forest Strike Team

Beginning Date: 6/25/18

Time: 1300

Ending Date: 6/29/18

Time: 1100

INCIDENT OBJECTIVES AND ASSESSMENT PROTOCOLS

INCIDENT NAME:

UFST Team Leader and Task Specialist Training

OPERATIONAL PERIOD (DATE/TIME):

6/25/18 1300 – 6/29/18 1100

INCIDENT STRATEGY:

To provide Team Leader and Task Specialist training for UFST and tree risk assessment of Hurricane Harvey storm damaged trees in Harris County Precinct 3 Bear Creek Park.

LEADERS EXPECTATIONS:

- Being ready and able (physically and mentally) to perform assigned duties.
- Being flexible as duties may change based on training needs.
- Conducting yourself in an appropriate and professional manner at all times.
- Interacting positively with your crew, team, training coordinators, and the community.

MANAGEMENT OBJECTIVES:

Trees in Harris County Precinct 3 Bear Creek Park are showing signs of crown dieback and significant stress caused by flooding from Hurricane Harvey, which affected Houston and Harris County Texas beginning on August 29, 2017. Most trees that posed immediate risk to the public have been addressed by Precinct 3 Parks personnel but as the trees leaf out in spring and air temperature increases, more trees are starting to show signs of stress and crown dieback from the extended inundation. The UFST Team Leader and Task Specialists training program will assist Harris County Precinct 3 in identifying trees in close proximity to picnic areas, roads and other high use areas that are in need of further assessment or risk reduction by collecting GIS data relating to storm damaged trees. Information collected will be provided to the Harris County Precinct 3 Parks Department for their use.

TRAINING AGENDA

Texas Forest Service UFST Team Leader Training

Team Leader UFST Training Agenda

Monday June 25		
1:00 – 1:15	Welcome/Introductions	Mickey Merritt, TFS
1:15 – 1:30	UFST Overview/ Updates	TL Instructors
1:30 – 1:30	Organization / Roles Storm response timeline Crew dynamics / Safety / Scheduling	TL Instructors
1:30 – 1:45	Resources (toolbox) Command Center organization EMAC, Mutual Aid and other EM issues	TL Instructors Dudley Hartel, UFS
1:45 – 2:15	Daily workflow (checklists)	TL Instructors
2:15 – 3:00	Overview of ArcGIS Online (AGOL)	Dudley Hartel, UFS
3:15 – 3:30	Break	
3:30 – 4:30	UFST protocol review <ul style="list-style-type: none"> • Tree risk • FEMA debris ANSI A300 specs and standards AGOL Hands-On	TL Instructors Dudley Hartel, UFS
4:30 – 5:00	Prepare for Task Specialist training, field exercises, mock disaster scenario; more AGOL in the field	TL Instructors Fred Fellner, LSU All participants
Tuesday June 26		
8:00 – 8:15	Questions/Review from Monday	TL Instructors
8:15 – 9:00	Set-up command center for TS training	TL Instructors All participants
9:00 – 10:30	Review field exercises; objectives and support; TL and instructor assignments	TL Instructors All participants
10:30 – 10:45	Break	
10:45 – 11:30	Familiarity with field exercise areas	TL Instructors Mickey Merritt, TFS
11:30 – 12:00	Lunch	
Noon – 5:30	Task Specialist Workshop begins	

Team Leader UFST Training Agenda

Texas Forest Service UFST Task Specialist Training

Task Specialist UFST Training Agenda

Tuesday June 26		
11:30 – 12:00	Lunch	
12:15 – 12:30	Welcome, Introductions, Workshop Schedule/Logistics	Mickey Merritt, TFS TS Instructors
12:30 – 2:00	An overview of the UFST initiative	TS Instructors
2:00 – 3:00	Overview of Storm Characteristics & Damage (Jim McGlone's slides)	TS Instructors Team Leaders
3:00 – 4:15	FEMA Debris Criteria (Tom Chamberlain's material)	TS Instructors Team Leaders
4:15 – 5:00	Safety – Review current UFST Job Hazard Assessment (JHA)	TS Instructors Team Leaders
Wednesday June 27		
8:00 – 8:15	Review first day – Defects, debris, and safety Assign TS to crews	TS Instructors Team Leaders
8:15 – 9:15	Tree Risk Assessment Specifications and UFST Level 1	(Eric Mueke presentation material NOT Eric per se)
9:15 – 10:30	Tree Risk Assessment - Outside Group & Crew Field Exercise – No equipment	TS Instructors Team Leaders All participants
10:30 – 10:45	Break	
10:45 - Noon	UFST Data Collection –How crews work and what data is collected	TS Instructors Team Leaders
12:00 – 12:45	Lunch	
12:45 – 2:45	Smartdevice data collection – ArcGIS Online overview and slide presentation on using smartdevices – getting devices ready	TS Instructors Team Leaders
2:45 - 3:00	Break	
3:00 - 4:30	Data Collection Field Exercise – First hands-on with smartdevices and Collector	TS Instructors Team Leaders All participants
4:30 – 5:30	Crews collect UFST data in Hurricane Harvey areas.	TS Instructors Team Leaders All participants
Thursday June 28		
8:00 – 8:15	Review first 2 days – Defects, debris, and safety	TS Instructors Team Leaders
8:15 – 8:30	Organize in crews; Safety today	
8:30 - Noon	UFST Data Collection –How crews work and what data is collected	TS Instructors Team Leaders
12:00 – 12:45	Lunch	
12:45 – 5:00	Crews collect UFST data in Hurricane Harvey areas.	TS Instructors Team Leaders
Friday June 29		
8:00 – 8:30	Review yesterday – data collection, data, issues	TS Instructors Team Leaders
8:30 – 10:30	A look at the data	GIS – Shruthi All participants

Task Specialist UFST Training Agenda

ASSESSMENT PROTOCOLS (on following pages):

1. FEMA Vegetative Debris
2. UFST Tree Risk Cheat Sheets
3. UFST Tree Risk Specification

1. FEMA Vegetative Debris

FEMA Hazard Tree and Limb Removal Criteria Overview

Eligible Debris Removal

Eligible debris removal work under the Public Assistance Program must meet the following criteria:

1. The debris was generated by the major disaster event;
2. The debris is located within a designated disaster area on an eligible applicant's improved property or rights-of-way; and
3. The debris removal is the legal responsibility of the applicant.

Whole Tree Removal

ALL of these must be met:

1. The tree is an immediate threat to lives, public health and safety, or improved property
2. On maintained, public property (or affecting that property or the public)
3. It is greater than 6" DBH

AT LEAST ONE of these must be met:

1. Split trunk
2. Canopy is damaged (broken)
3. Greater than 30 degree lean angle
4. Fallen or has been uprooted within public-use area

Hazard Limb Removal

Hazard limb is:

1. Greater than or equal to 2" diameter at point of breakage
2. Broken limbs or branches extend over the public ROW
3. Can be removed from the public ROW

Hazardous Tree Stumps

A stump may be determined to be hazardous if it meets ALL of the following criteria:

1. Root exposure and diameter as measured 24 inches above the ground determine FEMA PA reimbursement
2. It is on improved public property or a public right-of-way
3. It poses an immediate threat to life, and public health and safety

2. UFST Tree Risk Cheat Sheets Matrices

Urban Forest Strike Team
Tree Risk Rating Aids

September 15, 2016

Tree Risk Rating Criteria

Tree Risk Assessment Best Management Practices criteria are used to estimate a tree risk rating for trees. For more detail see the publication, Tree Risk Assessment: Best Management Practices, available from the International Society of Arboriculture at www.isa-arbor.com

These criteria are used in the matrices below to estimate a tree risk rating for storm-damaged trees. The ultimate objective of this estimated rating is to provide the urban forest manager with a means to prioritize mitigation treatment.

Likelihood of Failure and Impact - Matrix used to estimate the likelihood of a tree failure impacting a target. Use the results from the "Likelihood of Failure" and "Likelihood of Impacting a Target" assessment to determine the likelihood of failure and impact.

Likelihood of Failure	Likelihood of Impacting a Target			
	Very Low	Low	Medium	High
Improbable	Unlikely	Unlikely	Unlikely	Unlikely
Possible	Unlikely	Unlikely	Unlikely	Somewhat Likely
Probable	Unlikely	Unlikely	Somewhat Likely	Likely
Imminent	Unlikely	Somewhat Likely	Likely	Very Likely

Tree Risk Rating matrix used to indicate the level of risk for a tree. Use the results from the "Likelihood of Failure and Impact" table and the consequences assessment to determine the tree risk rating.

Likelihood of Failure & Impact	Consequences			
	Negligible	Minor	Significant	Severe
Unlikely	Low	Low	Low	Low
Somewhat likely	Low	Low	Moderate	Moderate
Likely	Low	Moderate	High	High
Very Likely	Low	Moderate	High	Extreme

Matrix Definitions

Urban Forest Strike Team
Tree Risk Rating Aids

September 15, 2016

Tree Risk Rating Criteria - Definitions for Matrix Categories

Likelihood of Failure

Improbable – The tree or branch is not likely to fail during normal weather conditions and may not fail in many severe weather conditions within the specified time period.

Possible – Failure could occur, but it is unlikely during normal weather conditions within the specified time period.

Probable – Failure may be expected under normal weather conditions within the specified time period.

Imminent – Failure has started or is most likely to occur in the near future, even if there is no significant wind or increased load. This is a rare occurrence for a risk assessor to encounter, and may require immediate action to protect people from harm.

Likelihood of Impacting a Target

Very Low – The chance of the failed tree or branch impacting the specified target is remote. This is the case in a rarely used site fully exposed to the assessed tree, or an occasionally used site that is partially protected by trees or structures. Examples include:

- a rarely used trail or trail head in a rural area, or
- an occasionally used area that has some protection from being struck by the tree failure due to the presence of other trees between the tree being assessed and the targets.

Low - It is not likely that the failed tree or branch will impact the target. This is the case in: an occasionally used area that is fully exposed to the assessed tree; a frequently used area that is partially exposed to the assessed tree; or a constant target that is well protected from the assessed tree. Examples are:

- a little-used service road next to the assessed tree, or
- a frequently used public street that has a street tree between the street and the assessed tree.

Medium – The failed tree or branch may or may not impact the target, with nearly equal likelihood. This is the case in: a frequently used area that is fully exposed on one side to the assessed tree, or a constantly occupied area that is partially protected from the assessed tree. Examples include:

- a suburban street next to the assessed street tree or
- a house that is partially protected from the assessed tree by an intermediate tree.

High – The failed tree or branch will most likely impact the target. This is the case when a fixed target is fully exposed to the assessed tree or near a high-use road or walkway with an adjacent street tree.

Matrix Definitions

Urban Forest Strike Team
Tree Risk Rating Aids

September 15, 2016

Consequences of Failure & Impact

Negligible - those that involve low-value property damage or disruption that can be replaced or repaired, and do not involve personal injury. Examples of negligible consequences include:

- a small branch striking a fence,
- a medium-sized branch striking a shrub bed,
- a large part striking a structure and causing low monetary damage,
- disruption of power to landscape lighting.

Minor - those that involve low-to-moderate property damage, small disruptions to traffic or a communication utility, or very minor injury. Examples include:

- a small branch striking a house roof from a high height,
- a medium-sized branch striking a deck from a moderate height,
- a large part striking a structure and causing moderate monetary damage,
- short-term disruption of power at a service drop to house,
- temporary disruption of traffic on a neighborhood street.

Significant – those that involve property damage of moderate-to-high value, considerable disruption, or personal injury. Examples:

- a medium-sized part striking an unoccupied new vehicle from a moderate - high height,
- a large part striking a structure and resulting in high monetary damage,
- disruption of distribution primary or secondary voltage power lines (individual services and street-lighting circuits)
- disruption of traffic on a secondary street.

Severe – those that could involve serious personal injury or death, damage to high-value property, or disruption of important activities. Examples include:

- injury to a person that may result in hospitalization,
- a medium-sized part striking an occupied vehicle,
- a large part striking an occupied house,
- serious disruption of high-voltage distribution/transmission power line, disruption of arterial traffic or motorways.

3. Urban Forest Strike Team Post-Disaster Rapid Tree Risk Assessment Specifications

These specifications conform to **ANSI A300 (Part 9)-2011 Tree Risk Assessment; a. Tree Structure Assessment** and have been prepared for Urban Forest Strike Team (UFST) deployments that include natural disasters, mock exercises, and training workshops.

Purpose

These specifications define the context and scope of the UFST post-disaster rapid tree risk assessments that provide information to communities to support effective mitigation of storm-related tree risk.

Definitions

Controlling

Authorityan agency, individual, organization, or corporate entity with the legal authority and/or obligation to manage individual trees or tree populations (i.e. the “owner”).

DBHDiameter at Breast Height (4.5 feet above ground line) as commonly measured by arboricultural standards.

Facilityis an improved property; can be a natural feature (improved), or a public feature including parks (FEMA Category G).

Improved property.....is property that undergoes regular maintenance (i.e. infrastructure maintenance, tree and other landscape maintenance, e.g. mowing, brush/weed control).

Mitigation.....activities designed to reduce or eliminate risk to persons or property or to lessen the actual or potential effects or consequences of an incident.

Natural DisasterA storm event that causes tree damage that affects public risk; may or may not be a federally or state declared disaster (e.g. ice storm, hurricane, straight line winds, tornado).

Private tree(s)tree(s) growing on privately-owned parcel(s), or on ROWs that are legally maintained by the land-owner (may be FEMA Category A).

Public tree(s)tree(s) growing on publicly-owned land and legally maintained by the controlling authority (FEMA Category A).

Residual defect.....A defect that remains after disaster (storm) mitigation activities; may be disaster or non-disaster related.

Risk.....the combination of the likelihood of an event and the severity of the potential consequences.¹

Stump.....the portion of the tree trunk remaining (usually from 6" to 2' above ground line, but may be longer) after a tree removal; may be in the ground, uprooted, or laying on top of the ground

Targets (risk targets)are people, property (i.e. physical assets), or activities that could be injured, damaged, or disrupted by the failure of a tree or tree part¹.

Organizational context

Urban Forest Strike Teams (UFST) are self-contained, professionally trained Certified Arborists or urban foresters from state forestry agencies, other state and municipal agencies, consulting and commercial arboricultural firms, the USDA Forest Service, and other federal agencies that are specifically trained to assess risk on storm-damaged trees. These teams are deployed to document trees that meet FEMA debris management criteria for Public Assistance reimbursement, assist communities with risk mitigation of storm-damaged trees, and retain as many viable trees as possible. The municipality (i.e. the controlling authority) has requested UFST assistance with the disaster recovery through the state forester, will identify and prioritize² / has identified and prioritized public property for tree risk assessments, and will work / has worked with the UFST Team Leader to evaluate target characteristics in those priority areas.

Tree risk assessment objectives

[93.1]³

The objective of the Urban Forest Strike Team (UFST) post-disaster rapid tree risk assessment is to identify the risk that storm-damaged trees pose to people and property on publicly managed land (i.e. parks, rights-of-way, public buildings, etc.) in areas designated by the controlling authority and to make professional recommendations to mitigate that risk. The risk assessment and other data collected are

¹ Source is: Best Management Practices: Tree Risk Assessment, 2011, ISA, Champaign, IL.

² Team Leader should circle the appropriate phrases.

³ Numbers in brackets on the right-hand side of the page refer to the section in the ANSI A300 (Part 9)-2011 Tree Risk Assessment; a. Tree Structure Assessment.

provided to assist the controlling authority with prioritization of the recommended mitigation, and to apply for Public Assistance (PA) under FEMA guidelines based on “immediate threats”.

Professional credentials [93.2]

The UFST team members assessing tree structure and failure potential shall have the title Task Specialist and/or Team Leader. They shall have appropriate, post-disaster tree risk training through a hands-on UFST Task Specialist or Team Leader training workshop and periodic continuing education via webinar, e-Learning, and/or regional disaster training scenarios. The UFST Task Specialist shall be required to have adequate tree risk assessment and Incident Command System (ICS) experience or training before participating in the UFST Task Specialist or Team Leader training workshop. UFST Team Leaders shall be Tree Risk Assessment Qualified (TRAQ) by the International Society of Arboriculture. [93.2.1]

Scope of work [93.3]

The UFST Task Specialist shall perform tree risk assessments only on those trees specifically identified in this scope of work.

Tree risk assessments shall be conducted on trees that: [93.3.1]

- are ≥6” in diameter, **AND**
- are within the boundaries designated by the controlling authority, **AND**
- represent a risk to **improved**, public property or users of that property, **AND**
- that have been damaged by the current natural disaster.

And also for stumps that:

- are the result of the removal of storm damaged trees during disaster response to clear streets for initial emergency access and response activities.

Assessment Protocol

To help the controlling authority prioritize mitigation efforts, the arborist shall use an **assessment protocol** as described in *Best Management Practices: Tree Risk Assessment* (2011, Smiley, E.T., and N. Matheny, S. Lilly, International Society of Arboriculture, Champaign, IL) that includes:

- 1) identification of the likelihood of failure,
- 2) identification of the likelihood of impacting a target,
- 3) an evaluation of the severity of the associated consequences of the failure.

This **rapid tree assessment** shall be made for the tree defect that is eligible for FEMA Public Assistance reimbursement per FEMA Public Assistance (PA) Program and Policy Guide (PAPPG dated April 2017), and has the appearance of “highest risk”.

FEMA eligible defects include:

- split trunk
- broken canopy
- lean >30°
- uprooted trees (windthrown trees) regardless of root exposure
- uprooted stumps ≥ 24” at 2’ (unattached) with roots exposed
- stumps ≥ 6” at 2’ (unattached) regardless of roots exposure
- stumps laying on top of the ground
- broken limbs ≥2” diameter at point of break

When a tree within this scope (lines 67-74) is not FEMA eligible the storm damage (i.e. defect) that has the “appearance of highest risk” shall be assessed.

In addition, the UFST Task Specialist shall also identify the existence of other “significant” tree defects (i.e. residual and pre-storm defects) that he/she believes may represent risk after any recommended disaster (storm) mitigation. See **Risk advisories** (line 152).

The timeframe for this post-disaster risk assessment is one (1) year⁴ or a length of time as agreed between the Team Leader and the municipality (i.e. the controlling authority) and specified here _____.

The UFST Task Specialist shall make mitigation recommendations based on these observations and timeframe. **[93.3.2]**

This timeframe and the risk assessment are no longer valid if/when the tree(s) is/are subjected to another significant storm event (e.g. ice or wind event), significant site changes (e.g. construction activity, adjacent land cover changes), or post-disaster tree mitigation/management activity.

Levels of tree risk assessment **[93.4]**

Only one level of risk assessment shall be used by the UFST Task Specialist.

Level 1: **[93.4.2.1]**

For trees on public or private property that have obvious storm damage and fall within the criteria in the Scope of Work, a Level 1 inspection shall include:

⁴ This timeframe captures four seasons of occupancy and tree biology.

- a partial or 360-degree ground-based visual inspection on that portion of the tree's roots, stem, and crown that is easily visible from safe and legal vantage points to identify broken or damaged limbs, split trunk, damaged crown, and/or disturbed root plate from storm damage and other obvious defects associated with risk
- identification of defects on:
 - publicly-owned trees that could potentially impact targets on public or private property (i.e. the target zone may extend onto private property)
 - privately-owned trees **ONLY IF** they could potentially impact targets on public property
- the **assessment protocol** as outlined above in the Scope of Work.

Because of the limited ability in viewing all portions of the damaged-tree using Level 1 assessments, risk ratings may not reflect the actual risk associated with the tree.

No additional tools shall be required for Level 1 inspections; however, optional tools may be used.

The arborist shall not be required to perform a higher level of assessment than what is specified in this section nor assess trees outside the Scope of Work, but may identify any need for additional inspections as necessary. **[93.3.3]**

Target identification

[93.5]

Because the Urban Forest Strike Team only assesses storm-damaged trees as outlined in the Scope of Work above, it is assumed that all trees assessed will have a target. Following Team Leader consultation with the controlling authority, the UFST Task Specialist shall be instructed in proper determination of target characteristics including human target occupancy (i.e. rare, occasional, frequent, or constant) within the likely striking distance of any specified tree or tree part(s) identified as likely to fail.

Risk analysis

[93.6]

The assessment data shall include the tree species or genus, DBH, latitude and longitude, recommendation regarding eligibility for mitigation reimbursement based on FEMA PAPPG (2018), the three (3) ISA BMP risk rating components for the defect identified, the calculated ISA BMP risk rating, other data collected during the assessment, risk mitigation recommendation, and existence of residual defects following mitigation. The sole purpose of the ISA BMP risk rating and other data is to help the Task Specialist determine appropriate mitigation recommendations, and help the controlling authority

identify and prioritize the most appropriate post-storm hazard mitigation plan for storm damaged trees that includes those eligible and not eligible for FEMA debris reimbursement.

Written report

[93.6.2]

A written report shall be provided by the UFST Team Leader to the controlling authority that will include a description of the methods used, identification and location of each tree inspected within the scope of work, a recommendation regarding eligibility for mitigation reimbursement based on FEMA PAPPG (2018), the tree risk assessment components which includes the tree part assessed for likely failure, the risk rating based on that component data, all other data collected for the assessment, risk mitigation recommendation(s), and indication of residual defect(s). In addition, a FEMA Public Assistance mitigation list (and corresponding map) will be generated that includes: genus/species, diameter, and location (i.e. latitude and longitude in decimal degrees) of each tree inspected within the scope of work with recommendation regarding eligibility for mitigation reimbursement based on FEMA PAPPG (2018).

Risk advisories

[93.6.2.1.1]

Regardless of the storm damage mitigation recommended or taken (except removal), some residual tree risk will remain following mitigation. Only when the tree is removed will all potential structure and stability concerns associated with the tree be eliminated; however, remaining stumps may still pose some level of risk.

Because this deployment and subsequent tree risk assessments are related to a recent natural disaster and some storm-related damage may not be immediately apparent at the time of our deployment, the controlling authority should include follow-up inspections as part of the mitigation plan for all trees within the areas designated in this specification.

Owner determination

[93.6.4]

It shall be the responsibility of the controlling authority to schedule additional inspections as recommended by UFST, determine other actions needed, and implement mitigation recommendations.

[93.6.4.1]

Primary contacts

Controlling Authority: Steven Dubois Harris County Precinct 3
Title:
Mobile: 713-459-3981 Email: sdubois@pct3.com

Urban Forest Strike Team: Logistics Coordinator
Michael Merritt
Texas A&M Forest Service
Mobile: 832-260-5866, 713-562-6469
mmerritt@tfs.tamu.edu

Urban Forest Strike Team: Team Leader
Will Liner
Alabama Forestry Commission
Mobile: 334-451-1789
will.liner@forestry.alabama.gov

Urban Forest Strike Team: Assistant Team Leader
Hugh Whitehead
Fairfax County Urban Forest Management Division
Mobile: 571-221-6472
hugh.whitehead@fairfaxcounty.gov

State U&CF Coordinator: Paul Johnson
Texas A&M Forest Service
Mobile: 210- 289-0815
pjohnson@tfs.tamu.edu

Literature cited

ANSI A300 (Part 9)-2011 Tree Risk Assessment; a. Tree Structure Assessment, Tree Care Industry Association, Inc. As of July 6, 2011 <<http://www.tcia.org/index.aspx>>

Best Management Practices: Tree Risk Assessment (2011), Smiley, E.T., and N. Matheny, S. Lilly, International Society of Arboriculture, Champaign, IL

Tree Risk Assessment - Manual (2013), Dunster, J. and E.T. Smiley, N. Matheny, and S. Lilly, International Society of Arboriculture, Champaign, IL (i.e. TRAQ)

FEMA Public Assistance Program and Policy Guide FP 104-009-2 / April 2018

<https://www.fema.gov/media-library/assets/documents/111781>

[https://www.fema.gov/media-library-data/1525468328389-](https://www.fema.gov/media-library-data/1525468328389-4a038bbef9081cd7dfe7538e7751aa9c/PAPPG_3.1_508_FINAL_5-4-2018.pdf)

[4a038bbef9081cd7dfe7538e7751aa9c/PAPPG_3.1_508_FINAL_5-4-2018.pdf](https://www.fema.gov/media-library-data/1525468328389-4a038bbef9081cd7dfe7538e7751aa9c/PAPPG_3.1_508_FINAL_5-4-2018.pdf)

UFST JOB HAZARD ANALYSIS

1. Work Project Activity	Urban Forest Strike Team Deployment	
2. Location (City, State)	Houston, TX	
3. Unit	Disaster Deployment	
4. Team Leader(s)	Michael Merritt	
5. Job Title	Team Leader	
6. Date Prepared	18June2018	
7. Tasks/Procedures	8. Hazards	9. Abatement Actions
General Field Work		
	Communications	Stay in contact with Team Leader and other crews; charge and carry a cell phone and have cell phone numbers of Team Leader, other Team members and key contacts; sign out at beginning of day with your work location and sign in at end of day so that others know your status
	Falling Trees/Limbs	Wear hardhat at all times when assessing trees outside of the vehicle; be aware of anticipated conditions; be especially cautious when the wind is blowing; limit the amount of time spent near or under hazardous trees
	Working In Brush	Wear long sleeve shirt and long pants; wear protective glasses to prevent eye injuries
	Heavy Vehicular Traffic	Wear proper safety vest at all times when assessing trees outside of the vehicle; be aware of vehicular traffic; limit the amount of time spent on the roadway; look both ways before stepping into roadway; always yield to vehicular traffic when assessing trees on foot
	Downed Utility Lines	Be aware of downed power lines, and assume any line is energized; electrical current can move through the ground and other structures; move away from the area and notify proper officials
	Debris In Walking Areas	Stump Holes, damaged walkways, debris, etc.; pay attention to your path of travel; if your attention is diverted, stop and complete task before proceeding
	Dehydration	Keep plenty of water or electrolyte drink in the vehicle; take frequent drinks throughout the day especially on hot days (2-3 quarts per day)
	Fatigue	Limit shifts to 12 hours or less
	Sun/Hyperthermia	Use sunscreen to protect exposed skin; use slower pace as ambient temperature increases; take water breaks often
	Insects	Use insect repellent as needed; check for ticks, especially in areas prone to lime disease
	Cold/Hypothermia	Dress appropriately for weather; carry extra clothes; dress in layers; use rain gear to prevent clothes from getting/staying wet; wear adequate gloves as needed; take frequent breaks in warm vehicle or structure
	Stump Holes	Pay attention to your path of travel; if your attention is diverted, stop and complete task before proceeding
	Free Roaming Animals	Carry pepper spray and only use on animals if you are being aggressively approached; do not provoke animals by making sudden, aggressive movements or making direct eye contact
	Un-Safe Areas Or Situations	Travel in pairs; leave an area where you do not feel safe; disengage from a situation where a person appears to be becoming angry or agitated

	General Public Activity	Always yield to public activity such as joggers, bicyclists, etc.; be courteous and helpful to public; carry UFST ID
	Injuries	Keep a first aid kit in your vehicle; Carry list of hospitals/urgent care facilities in the area where you will be working; Minor injuries - treat as soon as possible with first aid; Major Injuries/Illness - use emergency first aid as appropriate; call 911 or drive victim to nearest hospital/urgent care facility; notify Team Leader of incident as soon as possible
	Inclimate Weather	Check weather reports daily before leaving command post; dress appropriately for the weather conditions; be cautious when assessing trees in windy conditions; notify Team Leader of unsafe conditions related to weather; stop working if you do not feel safe due to wind, lightning, or other weather-related conditions
	Crew Health/Needs	Team Leader should determine crew needs related to allergic reactions or other potential health risks
Vehicle Operation		
	Windshield Surveys	Windshield surveys require at least two people in the vehicle (a driver and a dedicated observer); Be aware of vehicles behind you as you assess trees; frequently pull over and let others pass you; do not react to gestures from other vehicles
	Accidents	Stop vehicle, call police immediately, check the health of others in your vehicle and other vehicle (if it is safe); (see injuries above); call Team Leader as quickly as possible after the accident
	General Driving	Always wear safety belts; keep windows clear of ice, snow, condensation, dirt, etc.; drive defensively, giving yourself enough time and space to react to other drivers, pedestrians, or wildlife on the road; stop and take a break if you feel sleepy while driving, or let someone else drive; park vehicles in safe places away from heavy traffic; leave UFST ID on dashboard Traffic signs, lights and street signs may be down or non- functioning after a storm; approach intersections cautiously; determine travel directions ahead of time; have maps or GPS available; where debris is in or near roadway, slow speed and drive with caution
	Pedestrians	Be cognizant of state or local mandated pedestrian crossing zones; Team Leader should review local pedestrian crossing designation and markings; city contact should identify high pedestrian use street if possible
Command Post		
	Tight Quarters	Keep work space clean, organized and safe; take breaks as necessary; clean up spills or messes that may be a hazard
	Working Relationships	Keep voices down to prevent disturbing those working in or near the command post; always demonstrate mutual respect for others; guard against over reacting to others under stress; recognize that fatigue affects everybody differently; be respectful of the working environment of other non-UFST employees in or near command post
10. Team Leader Signature		
11. Date		

ORGANIZATION ASSIGNMENT LIST (ICS 203)

1. Incident Name: <i>UFST Training & Exercise</i>		2. Operational Period: Date From: 6/25/18 Time From: 1300		Date To: 6/29/18 Time To: 1100	
3. Incident Commander(s) and Command Staff:			7. Operations Section:		
IC/UCs	Mickey Merritt	Chief	Mickey Merritt		
	Dudley Hartel	Deputy			
Deputy					
Safety Officer		Division/Group	Urban Forest Strike Team		
Public Info. Officer	Paul Johnson	Team Leader	Will Liner		
Liaison Officer	Linda Moon	Assistant TL	Hugh Whitehead		
4. Agency/Organization Representatives:					
Agency/Organization	Name				
Houston Parks & Rec					
Houston EM					
Harris County					
5. Planning Section:					
Chief	Gretchen Riley				
Deputy					
Technical Specialists	Shruthi Srinivasan				
	Lara Johnson				
6. Logistics Section:					
Chief	Mickey Merritt				
Deputy		Air Operations Branch			
Support Branch		Air Ops Branch Dir.	n/a		
Director	Monica Singhanian				
Ground Support Unit					
Facilities Unit		8. Finance/Administration Section:			
		Chief	Gretchen Riley		
Service Branch		Deputy	Amy Geppert		
Director	Amy Geppert	Time Unit			
Food Unit		Procurement Unit			
Transportation Unit		Comp/Claims Unit			
Lodging Unit		Cost Unit			

1. Incident Name: <i>UFST Training & Exercise</i>		2. Operational Period: Date From: 6/25/18 Date To: 6/29/18 Time From: 1300 Time To: 1100	
9. Prepared by: Name: _____		Position/Title: _____ Signature: _____	
ICS 203	IAP Page _____	Date/Time: _____	

Communications List (ICS 205A)

1. Incident Name:		2. Operational Period: Date From: _____ Date To: _____ Time From: _____ Time To: _____	
3. Basic Local Communications Information:			
Incident Assigned Position	Name (Alphabetized)	Method(s) of Contact (phone, pager, cell, etc.)	
IC/Logistics/Instructor	Mickey Merritt	713-562-6469	mmerritt@tfs.tamu.edu
Dep. IC/Instructor	Dudley Hartel	706-988-3986	dhartel@fs.fed.us
Team Leader	Will Liner	334-451-1789	will.liner@forestry.alabama.gov
Asst. Team Leader	Hugh Whitehead	571-221-6472	hugh.whitehead@fairfaxcounty.gov
Planning/Finance Chief/Instruct	Gretchen Riley	979-587-8135	griley@tfs.tamu.edu
PIO/Instructor	Paul Johnson	210-289-0815	pjohnson@tfs.tamu.edu
Logistics Support	Monica Singhanian	832-638-3997	msinghanian@tfs.tamu.edu
Dep. Finance	Amy Geppert	512-339-6828	ageppert@tfs.tamu.edu
GIS Tech. Specialist/Instructor	Shruthi Srinivasan	858-774-6270	ssrinivasan@tfs.tamu.edu
GIS Tech Specialist/Instructor	Lara Johnson	804-239-0813	Lara.johnson@dof.virginia.gov
Instructor	Susan Granbery	478-283-0705	sgranbery@gfc.state.ga.us
Instructor	Stephen Lloyd	386-307-8347	Stephen.Lloyd@FreshFromFlorida.com
Instructor	Parry, John	603-397-2658	jparry@fs.fed.us
Team Leader Training	Blevins, Courtney	817-879-3974	cblevins@tfs.tamu.edu
Team Leader Training	Duncum, Daniel	936-546-3143	dduncum@tfs.tamu.edu
Team Leader Training	Hamel, Brad	512-954-4056	bhamel@tfs.tamu.edu
Team Leader Training	Hawkins, Seth	478-951-8286	shawkins@gfc.state.ga.us
Team Leader Training	Kroeze, Mark	210-859-9253	mkroeze@tfs.tamu.edu
Team Leader Training	Lancour, Katherine (Kay)	517-740-6248	Katherine.Lancour@cmsenergy.com
Team Leader Training	Sayers Kevin	517-230-7905	sayersk@michigan.gov
Team Leader Training	Weaver, Matt	281-630-6158	mweaver@tfs.tamu.edu
Task Specialists Training	Abernathy, Bridget	859-327-7257	bridget.abernathy@ky.gov
Task Specialists Training	Cooper, Christopher	9852949279	chris@batonrougegreen.com
Task Specialists Training	Green, William	956-373-8543	bgreen@tfs.tamu.edu
Task Specialists Training	Harlow, Meacham	7697984196	mharlow@mfc.state.ms.us
Task Specialists Training	Hines, Kari		khines@tfs.tamu.edu
Task Specialists Training	Matel, John	9365457747	jmatel@tfs.tamu.edu
Task Specialists Training	McGregor, Rachel		rmcgregor@tfs.tamu.edu
Task Specialists Training	Pope, Brian	936 546 3164	bpope@tfs.tamu.edu
Task Specialists Training	Quinn, Krista	479-228-7929	Krista.quinn@agriculture.arkansas.gov

1. Incident Name:		2. Operational Period: Date From: _____ Date To: _____ Time From: _____ Time To: _____	
Task Specialists Training	Seemann, Robert	985.789.7675	robert@batonrougegreen.com
Task Specialists Training	Sentence, Joseph	7723606434	earthfirsthorticulture@gmail.com
Task Specialists Training	Sills, Mike	214-384-8673	msills@tfs.tamu.edu
Task Specialists Training			
Task Specialists Training			
4. Prepared by: Name: _____ Position/Title: _____ Signature: _____			
ICS 205A	IAP Page _____	Date/Time: _____	

MEDICAL PLAN - ICS FORM 206



MEDICAL PLAN (ICS 206)

1. Incident Name: UFST TL/TS Training - Houston, TX		2. Operational Period: Date From: June 25, 2018 Time From: 12:00		Date To: June 29, 2018 Time To: 12:00			
3. Medical Aid Stations:							
Name	Location	Contact Number(s)/Frequency	Paramedics on Site?				
First Choice Emergency Room	1510 S. Mason Road, Katy TX 77450	281-371-8300	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No			
Med Spring Urgent Care	6501 S Fry Road #1000, Katy TX 77494	832-260-0670	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
Katy Emergency Center	24433 Katy Freeway Suite 700, Katy TX 77494	281-394-9111	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			
			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
4. Transportation (indicate air or ground):							
Ambulance Service	Location	Contact Number(s)/Frequency	Level of Service				
Acadian Ambulance Service	221 Baker Rd., Houston TX 77094	1-800-259-3333	<input checked="" type="checkbox"/> ALS	<input checked="" type="checkbox"/> BLS			
Harris County EMS	2121 Brittnore Rd., Houston, TX 77043	911	<input checked="" type="checkbox"/> ALS	<input checked="" type="checkbox"/> BLS			
Bay Star Ambulance Service	11020 Katy Freeway #205, Houston TX 77043	877-777-7400	<input checked="" type="checkbox"/> ALS	<input checked="" type="checkbox"/> BLS			
			<input type="checkbox"/> ALS	<input type="checkbox"/> BLS			
5. Hospitals:							
Hospital Name	Address, Latitude & Longitude if Helipad	Contact Number(s)/Frequency	Travel Time		Trauma Center	Burn Center	Helipad
			Air	Ground			
Houston Methodist West Hospital	18500 Katy Frwy, Houston Tx 77094	832-522-5522		10 minutes	<input type="checkbox"/> Yes Level: _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Memorial Herman Katy	23900 Katy Frwy, Houston TX 77494 29.7866861 -95.7840750	281-644-7000	5 minutes	20 minutes	<input checked="" type="checkbox"/> Yes Level: <u>IV</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes Level: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes Level: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
					<input type="checkbox"/> Yes Level: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Special Medical Emergency Procedures:							
<input type="checkbox"/> Check box if aviation assets are utilized for rescue. If assets are used, coordinate with Air Operations.							
7. Prepared by (Medical Unit Leader): Name: Michael Merritt				Signature: Michael Merritt			
8. Approved by (Safety Officer): Name: _____				Signature: _____			
ICS 206		IAP Page _____		Date/Time: _____			

[Click here to get Word fillable copies of ICS Forms.](#)









WEATHER – Forecast and Updated Daily in Briefing

6/22/2018 Houston, TX 10-Day Weather Forecast - The Weather Channel | Weather.com



Scan for updated forecast

Houston, TX 10 Day Weather
8:05 am CDT

DAY	DESCRIPTION	HIGH / LOW	PRECIP	WIND	HUMIDITY
TODAY JUN 22	 AM Clouds/PM Sun	95°/77°	10%	SW 8 mph	64%
SAT JUN 23	 Partly Cloudy	93°/79°	10%	S 13 mph	69%
SUN JUN 24	 Partly Cloudy	91°/78°	20%	S 11 mph	70%
MON JUN 25	 Partly Cloudy	92°/77°	20%	SSE 9 mph	67%
TUE JUN 26	 Partly Cloudy	92°/76°	20%	SSE 6 mph	67%
WED JUN 27	 Mostly Sunny	92°/76°	20%	S 6 mph	68%
THU JUN 28	 Partly Cloudy	91°/76°	20%	SSE 7 mph	69%
FRI JUN 29	 Partly Cloudy	91°/75°	20%	SSE 9 mph	72%

[Click here to current & forecasted conditions in AOI.](#)

ORGANIZATION ASSIGNMENT LIST, LOCAL RESOURCES AND CONTACT INFORMATION

Logistics: Mickey Merritt

Number: 713-562-6469

E-mail: mmerritt@tfs.tamu.edu

Crew One:

Crew Two:

Crew Three:

GIS: Shruthi Srinivasan

Number: 979-458-6653

E-mail: ssrinivasan@tfs.tamu.edu

Local Contact: Steve Dubois

Number: 713-459-3981

E-mail: sdubois@pct3.com

State U&CF Contact: Paul Johnson

Number: 210- 289-0815

E-mail: pjohnsons@tfs.tamu.edu

TFS HQ Contact: Gretchen Riley

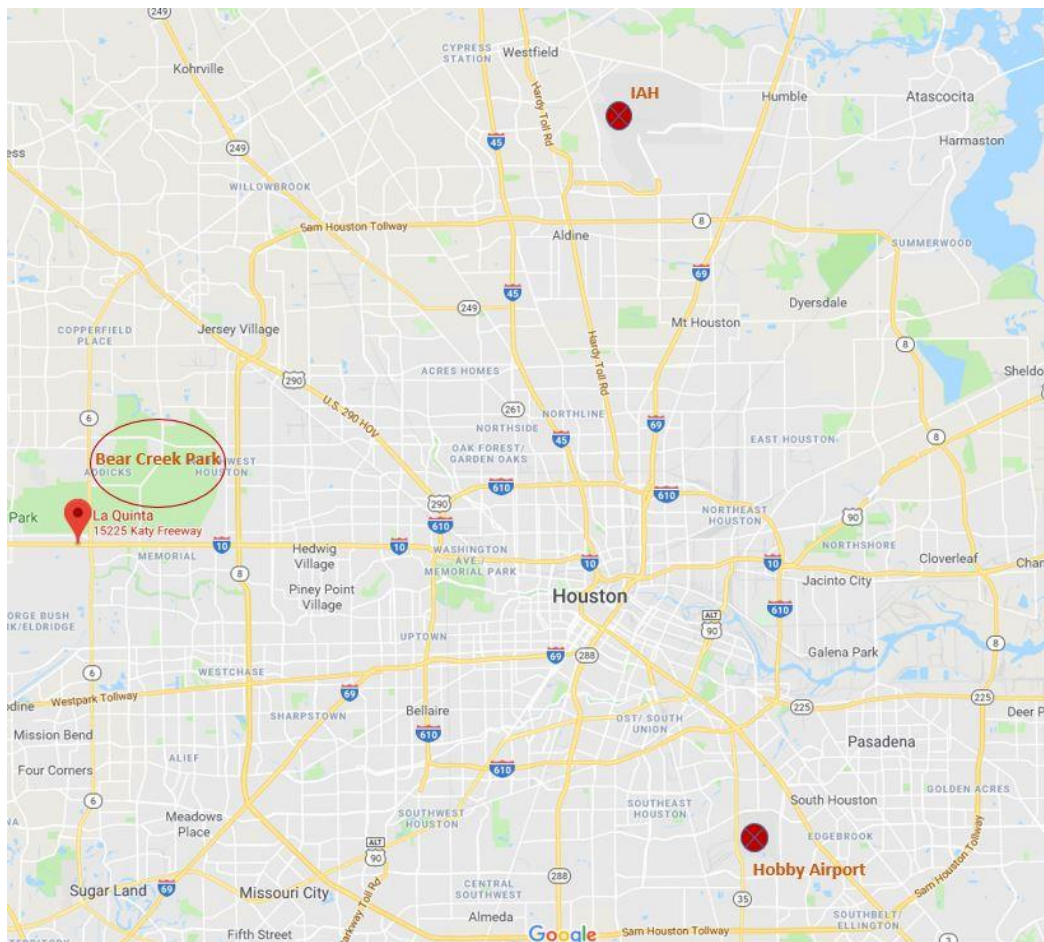
Number: 979-587-8135

E-mail: griley@tfs.tamu.edu

Hotel and Classroom Destination: 15225 Katy Freeway, Houston, TX 77094

Field Destination Address: Bear Creek Park, Houston, TX 77084

MAP PAGE – 1



MAP PAGE – 2

Bear Creek Park Assessment Locations

