



WALKER COUNTY

Community Wildfire Protection Plan

A collaborative, community-based planning process to help protect life, property and natural resources in Walker County

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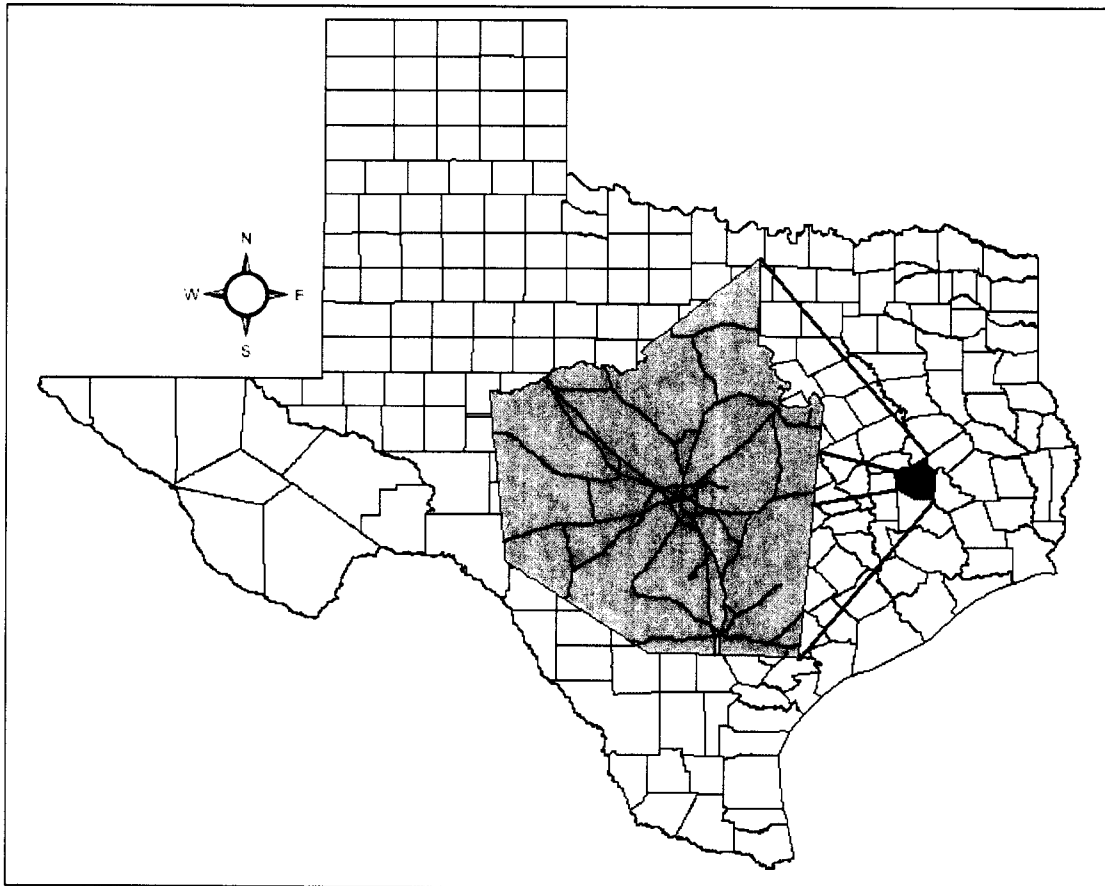
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Walker County Community Wildfire Protection Plan

1.0 Introduction

Wildland fire is an integral component of the ecosystems of Walker County. For millennia low intensity fires have maintained the health of our native forests and grasslands. Changes in land use and fire suppression have significantly altered the composition and structure of native vegetation in these fire prone ecosystems. One result of these changes is that when a wildland fire does occur it may burn more intensely and longer than historical low intensity fires did in the past. These fires have the potential to pose a significant threat to human life and ecological integrity. The hazard is further complicated by the increased development and human activity in these fire-prone ecosystems, in particular through increased development in the Urban Wildland Interface. The Urban Wildland Interface occurs where human improvements and structures intermingle with wildland vegetation. This can take the form of a subdivision or group of homes nestled in a forest setting or individual properties scatted across the landscape. In many situations this risk associated with a wildfire can be dramatically reduced through actions such as public outreach, fuels reduction around structures, and improving communities' infrastructure.

Walker County, Texas



1.1 Collaboration/Planning Committee Members

In an effort to address these issues a multi-jurisdictional group of agencies, organizations, and individuals have collaborated to develop the Walker County Community Wildfire Protection Plan (CWPP). The core group consists of representatives from the local fire departments, local governing bodies, the Texas Forest Service, and federal partners. Representatives that are listed below constitute the Core Group Selected by the Walker County Commissioners Court:

Tom Grisham- Huntsville Fire Department- Fire Chief
 Butch Davis - Walker County Sheriff's Department- County Emergency Management Coordinator
 John Hobbs - Huntsville Fire Department - Assistant Fire Chief
 Tim Paulsel - Walker County - County Commissioner
 Aaron Kulhavy - City of Huntsville - City Planner
 Andrew Isabel - Walker County - County Planner
 Randall Prewitt- USFS - Fire Management Officer
 Jordan Beakley - USFS - Prevention & Fuels Technician
 John Waldo - City of Huntsville - Emergency Management Coordinator
 Justice Jones - Texas Forest Service – State WUI & Prevention Coordinator
 Jared Karns - Texas Forest Service – Wildland Urban Interface Specialist

Additional support was provided by the following individuals and agencies:

Walker County Firefighters Association of Fire Chiefs
 David Anderson - Walker County - Deputy County Emergency Management Coordinator
 Walker County
 City of Huntsville
 Walker County Commissioners Court
 Danny Pierce - Walker County Judge
 Reginald Lepley- Extension Agent - Agricultural extension
 Sam Houston RC&D Council
 Walker County Soil and Water Conservation District
 NRCS - Walker County
 Jake Donellan - Texas Forest Service - District Forester
 Joel Hambright - Texas Forest Service - Regional Forester
 Wendy Gandy - Texas Forest Service - Resource Specialist I
 Matt Morris - Texas Forest Service - Resource Specialist
 Warren Oja - USFS - Sam Houston District Ranger
 Jason Kowalski – USFS - Assistant Fire Management Officer

Community Wildfire Committee Meeting Summary

Meeting Dates	Topics Covered	Attendees
11/13/2009	Meeting- Review of CWPP to date and update of information	Working Group
02/12/2010	Meeting – Discussion of grant funded projects	David Clark, Leon Scaife, Justice Jones
04/15/2010	Meeting – Review and discussion of new Fuels Reduction Grant available to Walker County	Judge Pierce, David Clark, Butch Davis, Leon Scaife
05/17/2010	Meeting- Review of CWPP to date and started planning for plan revision	Working Group

	with new group members	
12/07/2011	Meeting – Reviewed projects – Discussed recent wildfire – Reviewed current CWPP and assessments with updated document	Working Group

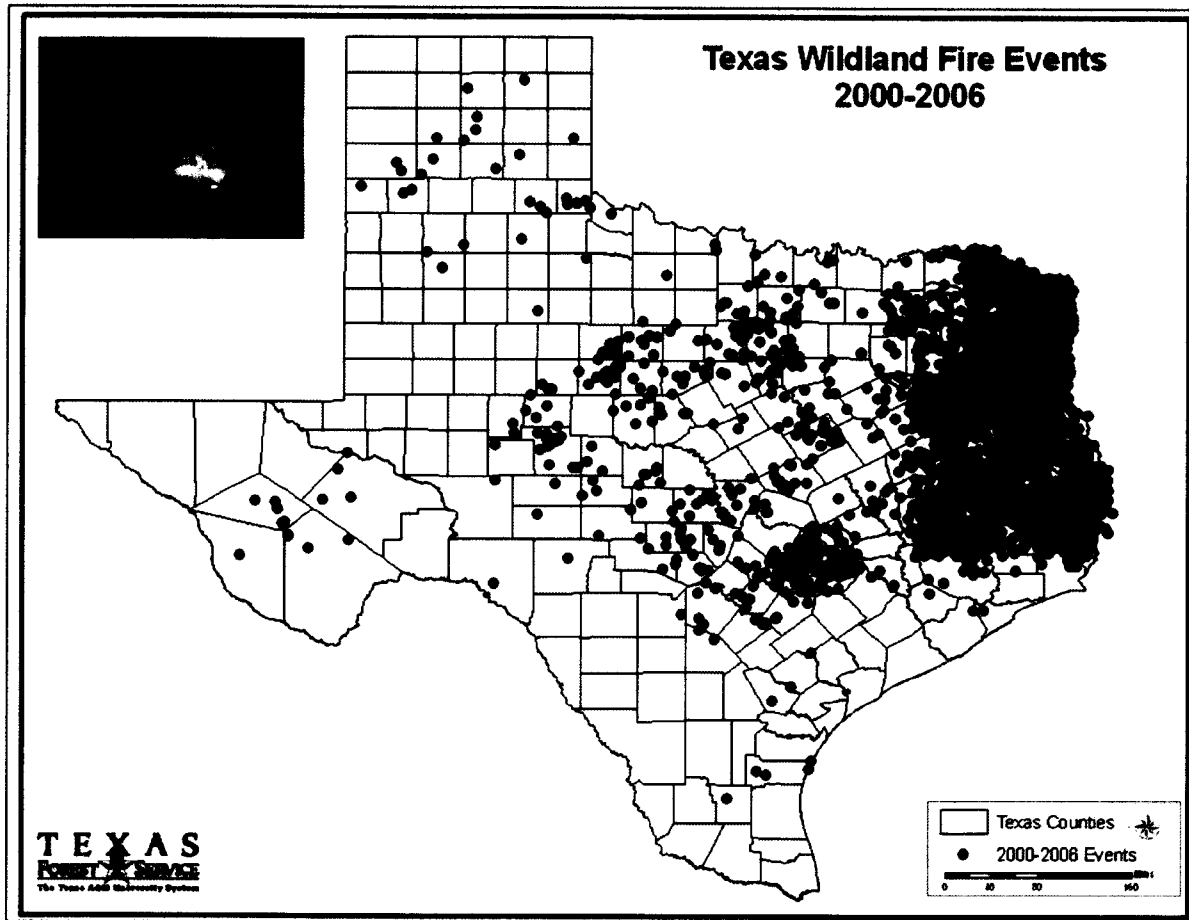
1.2 Statement of Intent

The purpose of the Walker County CWPP is to protect human life and reduce property loss due to wildland fire in communities throughout Walker County. Although reducing the threat of wildland fire is the primary motivation behind this plan, managing the forests and rangelands for hazardous fuel reduction and fire resilience is only one part of the larger picture. Residents and visitors alike want healthy, fire resilient forests that provide habitat for wildlife, recreation opportunities, and scenic beauty. The Forests in Walker County are a critical part of the community's values and economy. The plan outlines a strategy for long term success, identifies priorities for action, and suggests immediate steps that can be taken to protect the communities from wildland fire while simultaneously protecting other important social and ecological values.

1.3 Historical Fire Occurrence

Historically low intensity fires have occurred across the East Texas Region at three to ten year intervals. These fires typically did not result in large scale catastrophic fires or stand replacing fire. Instead, they created a mosaic landscape that resulted in diverse, and fire resistant, plant communities. During the last century humans have become increasingly aggressive in fire suppression efforts effectively altering the conditional class and fire regime of many forest and rangelands. This has resulted in unnaturally dense forests with years of accumulated debris and created forest conditions that are conducive to intense burning wild fires. Walker County is no exception to this rule with a long history of fire occurrence. Presently fire departments in Walker County respond to over 46% more wildland fires than structure fires. During 2011 Walker County experienced wildland fires which burned 6,178.1 acres.

Engineers refer to these areas with common fire occurrence with regular cycles, as a fire plain. This term has been chosen since there are many similarities in behavior with that of a flood plain.



1.4 Existing Situation/Current Risks

Wildland Urban Interface

The wildland urban interface occurs anywhere structures are built in or near wildland vegetation. It is in this (WUI) zone that wildfires pose the greatest threat to life, property, and community resources. This volatile mix of people, homes and fuel also creates one of the most dangerous situations that firefighters face, urban interface fire. During interface conflagrations firefighters are often confronted with numerous hazards such as utilities, hazardous materials, panicked residents evacuating, and many other hazards not present in a strictly wildland fire scenario. In a WUI wildfire event it is often difficult to defend all structures if multiple homes or communities are threatened at the same time. If access is limited, firefighters may also have difficulty reaching homes during a fast moving fire.

In certain situations, specific actions such as fuels reduction around communities and structures, infrastructure improvements, and public education and outreach may reduce the risk of catastrophic fire in the wildland-urban interface.

Title I of the Healthy Forests Restoration Act (HRFA) defines the wildland urban interface (WUI) as:

- A. An area within or adjacent to an at-risk community that is identified in a community wildfire protection plan; or
- B. In the case of any area for which a community wildfire protection plan is not in effect—

- a. An area extending ½ mile from the boundary of an at-risk community;
- b. An area with 1½ miles of the boundary of an at-risk community, including any land that—
 - i. Has sustained steep slopes that creates that potential for wildfire behavior endangering the at-risk community
 - ii. Has a geographic feature that aids in creating an effective fire break, such as a road or a ridge top; or
 - iii. Is in condition class 3, as documented by the Secretary in the project-specific environmental analysis.
- c. An area that is adjacent to an evacuation route for an at-risk community that the Secretary determines, in cooperation with the at-risk community, requires hazardous fuel reduction to provide safer evacuation from the at-risk community.

HFRA states that community wildfire protection plans can identify the wildland urban interface for the at-risk communities in the plan.

Many communities in Walker County have the potential of being impacted by an interface fire. The problems in communities in proximity to wildland vegetation (be it forests or grasslands) is exacerbated by insect out breaks, drought or storm damage.

1.5 Goals and Objectives of the Walker County CWPP:

Goals

- Increase public understanding of living in a fire-adapted ecosystem
- Instill a sense of personal responsibility for taking preventative actions to mitigate the risk associated with wildland fire
- Restore fire-adapted ecosystems
- Improve the landscape's fire resilience while protecting other social and ecological values
- Identify resource and capability needs for local fire departments
- Provide emergency management personnel with data consistent with the FEMA requirements for PDM plans and HMGP.

To achieve these goals, the plan contains several objectives, including, but limited to:

Objectives

- Assess the risk and hazard of wildland fire on all lands within the plan boundary
- Identify priorities for fuel reduction projects
- Examine emergency operations and capabilities within the plan area
- Identify areas to improve community response and preparedness for wildland fire
- Create an plan that prioritizes actions to reduce hazardous fuels, enhance emergency response, and strengthen public education and prevention activities

1.6 Planning Process/Methodology

The Walker County CWPP integrates information from a variety of sources to present a comprehensive picture of risk and possible treatments on the landscape and enable Community organizations and their partners to act in a coordinated fashion. An approved plan also allows the nearby federal land management agencies to utilize the recent expedited authorities provided by the Healthy Forest Initiative (HFI) and the Healthy Forest Restoration Act (HRFA).

For communities pursuing federal grant funding from the National Fire Plan, a completed community wildfire protection plan has become crucial to gaining access to these funds. In addition, the development of a community wildfire protection plan is a potent means of getting County residents to take ownership of reducing their susceptibility to wildfire.

In spite of increased funding for hazardous fuels reduction projects in and around communities designated as being at risk, the need for funding far exceeds available resources. Therefore, it is imperative that implementation projects focus on the areas of highest concern and need.

1.7 Plan Updates and Revisions

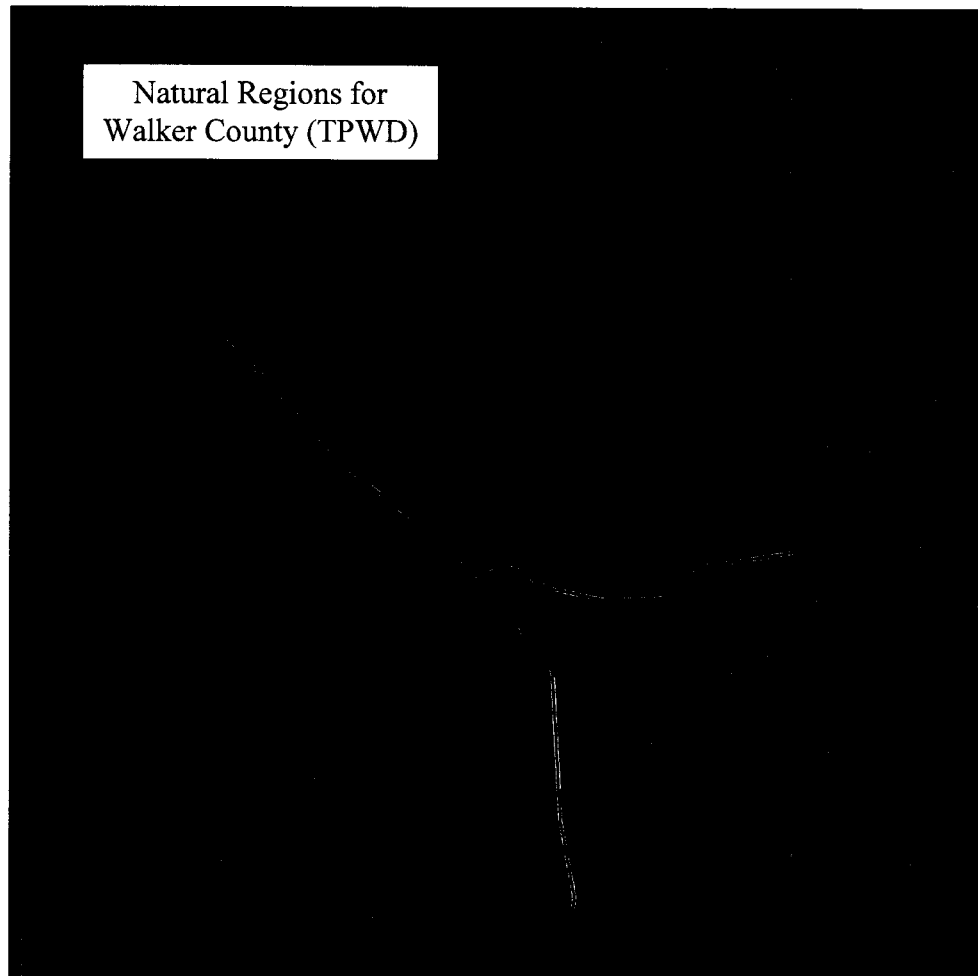
This plan may be updated and revised as necessary by the Walker County Emergency Management Coordinator. These changes must be approved by an appropriate representative of the Texas Forest Service in order to remain compliant with HFRA as a Community Wildfire Protection Plan.

This plan should also be reviewed and updated on a periodic basis as directed by laws, ordinance and other guidance to maintain its status in the County's emergency management plans.

2.0 Community Profile

Walker County is the 50th largest of the 254 counties in Texas, with an estimated population of 67,861 in 2010. The cities of Huntsville, New Waverly, and Riverside represent the major populated areas within the county. Walker County is an East Texas county that straddles two main ecological zones. The north western part of the county is black land prairie while the majority of remaining lands in the county consists of what we would call Piney Woods as this area is covered in pine tree forests. This diversity results in fire fighters being faced with the potential for fast moving grass fires and intense burning crown fires.

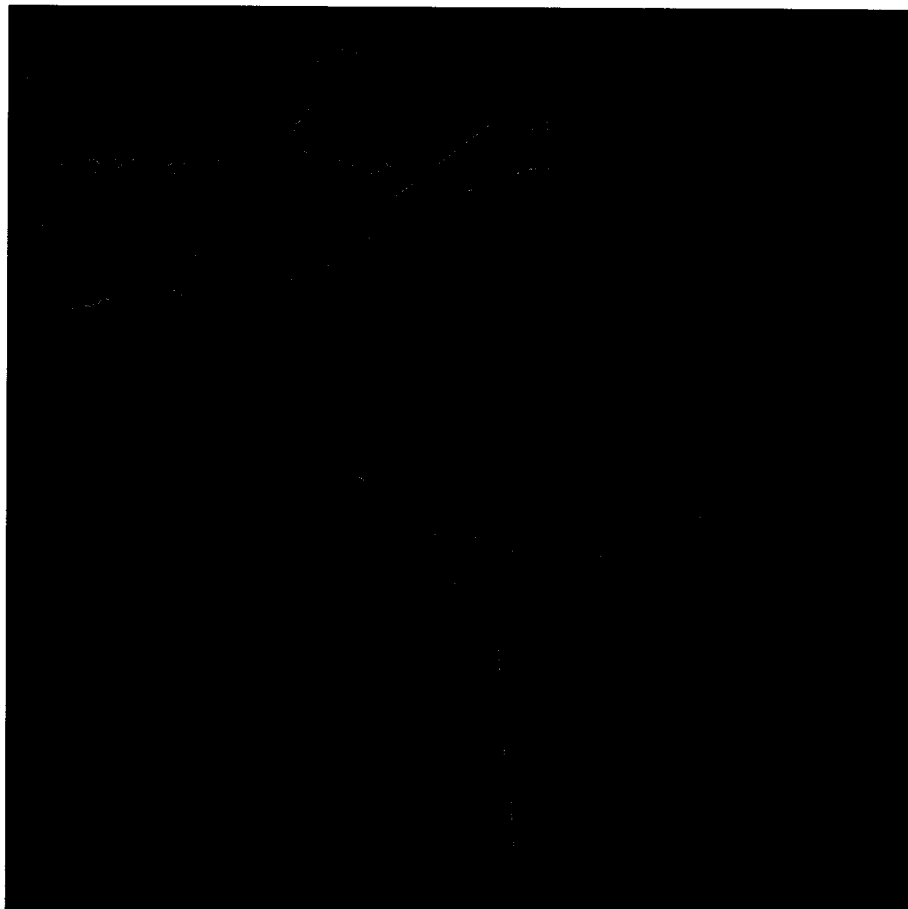
The county's economy relies on the Texas Department of Criminal Justice (prison system), Sam



Houston State University, forestry, and agribusiness. Principal sources of agricultural income include cattle, horses, cotton, grain, and timber. Minerals produced in the county include gas, oil, sand, stone, and gravel. The 2010 census for the county, at 61,758, was an increase of 9.9% since the 2000 census. The Sam Houston National Forest (U.S. Dept. of Agriculture) covers 53,461 acres of Walker County. Huntsville State Park (Texas Parks and Wildlife) including Lake Raven is adjacent to the national forest and on the outskirts of Huntsville. Nearby Lake Livingston and Lake Conroe also provide additional recreational facilities for

residents and visitors.

The main campus of Sam Houston State University (SHSU) is located in downtown Huntsville and currently has an enrollment of over 17,000 students. Huntsville serves as the Administrative Headquarters of TDCJ. TDCJ consists of four primary components: Institutional Division, State Jail Division, Parole Division, and the Manufacturing and Logistics Division. Seven of the state's 118 prison units are located in Walker County, with five of them within the city limits. Beyond TDCJ and SHSU, other governmental presence in Huntsville includes Region VI Educational Service Center, Gulf Coast Trades Center, Sam Houston State Park, Sam Houston National Forest, and the various units of local government and state field offices.



Vegetation Cover for Walker County

2.1 Community Location

The City of Huntsville is the county seat and principal commercial center of Walker County, located on Interstate 45, approximately 70 miles north of Houston, 180 miles southeast of Dallas, and approximately 130 miles west of the Louisiana state line.

2.2 Community Size

Population figures given in the following table are from the 2010 census.

Name	Population	Area (Square Miles)	Population Density (Persons per sq. mi.)
Walker County	67,801	801	86.5
Land		787.4	
Water		14	
City of Huntsville	38,548	35.86	1,075.0
City of New Waverly	919	2.21	415.8
City of Riverside	445	2.05	217.1
Incorporated	36,413	40.91	890.1

2.3 Structures /Population

Walker County Housing				
Name	Total Units	Occupied	Rented	Owner Occupied
Walker County	24,068	20,670	8,742	11,928
Huntsville	12,598	10,231*	5,783*	3,421*
New Waverly	421*	379*	139*	165*
Riverside	289*	176*	36*	75*
*There is no current data available for individual cities – this data shown is a carryover from the previous CWPP.				

Due to population and housing densities the City of Huntsville has the highest number of residents at risk from wildland fire.

2.4 Community Legal Structure

County

Walker County is organized as a County Government under the Texas Local Government Code with numerous municipalities within the county.

Municipalities

City of Huntsville – Home Rule (Council-City Manager)

City of New Waverly – General Law

City of Riverside – General Law

2.5 Utilities

Provider

Emergency Contact

Entergy

(800) 368-3749

Centerpoint

(800) 259-5544

Mid-South Synergy

(888) 525-6677 or

(936) 825-0635

Sam Houston Electric Coop

(800) 458-0381 or

(936) 328-1263 or

(936) 329-4355

2.6 Emergency Response Capabilities

The capacity of local responders including equipment and initial attack response times are listed in the appendix. In addition a map that reflects the response times of state, federal, and local fire departments is included in the appendix as well.

Walker County is extremely proactive in its efforts to provide for public safety in continuation of those efforts an emergency response digital network has been established to notify residents of existing and

potential threats to public safety including wildfires. In addition to this tool it is also recommended that local notification systems are established.

Evacuation, Telephone trees, emergency contacts, community information database

Currently, some of the communities in the planning areas do not have a shelter in place or local evacuation plan, telephone trees with emergency contacts, or a community information database.

Resident Emergency Notification

Walker County currently uses **Code Red** for emergency information dissemination. This is a geographically referenced high volume phone emergency alert system. It can contact land-line phones, cell phones, and pagers in specific areas at up to 60,000 calls per hour with a pre-recorded message. It can be used in any incident where immediate information is critical. In regards to wildfires, it can be used for emergency evacuation notifications, shelter precautions, and road closures

Recommended Actions

The following recommendations were identified as actions which can enhance the level of wildland fire protection for Walker County and the communities within it. The action items below are recommendations for the community to implement as funding and resources allow:

- Assemble a community telephone tree with a list of emergency contacts for each subdivision at risk
- Establish and practice a community evacuation plan
- Create a community information database to organize and disseminate information pertaining to wildfire, defensible space, education opportunities, etc.
- Establish and maintain adequate 911 addressing in all Communities at risk (should be discernable at night or in smoky conditions)

In addition to the above recommendations, the need for the additional action items as means of addressing the issues and challenges faced by the Walker Counties communities in terms of protection from wildfire:

- Increased firefighting staff
- Enhanced wildland training for structural firefighters
- Adding suppression water storage tanks, and dry hydrants
- Replacing and/or upgrading fire district equipment.

County Fire Department Capacity

Crabbs Prairie Volunteer Fire Department				
County: Walker		Contact	Robert Gray	
28 FM 1696 West		Phone	936-661-3721	
Huntsville, TX 77320		Email	Robert49@sbcglobal.net	
936-291-3333				
Number of Members:		19		
Station 1	Lat	N 30 45' 10"		
	Lon	W 95 39' 98"		
Officers:				
Chief	Robert Gray		Asst. Chief	Cecil Trantham
	1779 SH 75 N			83 Spring Circle
	Huntsville, TX 77320			Huntsville, TX 77320
	936-661-3721			936-295-3269
Captain	Billy Don Averitt			
	27A Red Bird			
	Huntsville, TX 77320			
	936-661-5946			
Equipment:				
Year/Make	Type	Pumping Capacity (GPM)	Water Capacity (Gallons)	Drafting Ability
2003 Ford	Brush	125	300	Yes
2005 E-ONE	Engine	1250	1000	
1982 Mack	Tanker	125	3500	
2011 Pierce	Tanker	500	2100	
Radio:				
Department	TX:		Mutual Aid:	Yes
Paging	TX:		Inter-City Car to Car:	Yes

Dodge Volunteer Fire Department				
County: Walker		Contact	Steve Hill	
28 Dodge Oakhurst Rd – FM405		Phone	936-291-6925	
P. O. Box 218		Email	shill@co.walker.tx.us	
Dodge, TX 77334				
Number of Members:		11		
Station 1	Lat	N 30 44' 42.7"		
	Lon	W 95 23' 50.7"		
Officers:				
Chief	Steve Hill		Asst. Chief	Larry Miller
	936-661-925 shill@co.walker.tx.us			936-661.1883 lmillersr@gmail.com
Equipment:				
Year/Make	Type	Pumping Capacity (GPM)	Water Capacity (Gallons)	Drafting Ability
2005	Tanker/Tanker	1500	2500	
2008	Booster	250	300	
2005	Booster	300	300	
1977	Booster	250	240	
Radio:				
Department	TX:		Mutual Aid:	
Paging	TX:		Inter-City Car to Car:	

New Waverly Volunteer Fire Department - Station #1									
County: Walker				Contact		Jacob Slott			
411 FM 1374 East				Phone		936-344-6716			
P.O. Box 975				Email		NWVFD700@yahoo.com			
New Waverly, TX 77358									
936-344-6911									
Number of Members:				20					
Station 1		Lat	N 30 32' 20.3"						
		Lon	W 95 28' 51.7"						
Officers:									
Chief		Jacob Slott			Asst. Chief		Kevin Tomczak		
		936-344-6911					936-537-8742		
		jslottconstruction@yahoo.com							
Equipment:									
Year/Make		Type	Pumping Capacity (GPM)		Water Capacity (Gallons)		Drafting Ability		
2006 Pierce		Engine	1250		1000				
1999 Westex		Pumper/Tanker	1000		3000				
1998 Ford		Booster	200		275				
2005 Ford		Booster	350		400				
2001 Ford		Utility							
2002 Ford		Crown Vic							
Radio:									
Department	TX:	154.145	Rx:	154.145	Tone:	100.00	Mutual Aid:	Yes	
County	TX:	158.835	Rx:	154.205	Tone:	100.00	Inter-City Car to Car:	Yes	
Paging	TX:	158.835	Rx:	154.205	Tone:	100.00			

New Waverly Volunteer Fire Department - F.S. 73 - 82									
County: Walker				Contact		Jacob Slott			
41 Dorrell Road (Phelps)				Phone		936-344-6911			
P.O. Box 975				Email		NWVFD700@yahoo.com			
New Waverly, TX 77358									
936-344-6911									
Number of Members: 20									
Station 1									
Lat		N 30 41' 33"							
Lon		W 95 26' 43"							
Officers:									
Chief		Jacob Slott			Asst. Chief		Kevin Tomczak		
		936-344-6911					936-537-8742		
		jslottconstruction@yahoo.com							
Equipment:									
Year/Make		Type	Pumping Capacity (GPM)		Water Capacity (Gallons)		Drafting Ability		
1983 Spartan		Tanker	1000		2000				
2009 Ford		Booster	175		325				
Radio:									
Department		TX:	Rx:	Tone:	Mutual Aid:		Yes		
County		TX:	Rx:	Tone:	Inter-City Car to Car:		Yes		
Paging		TX:	Rx:	Tone:					

Pine Prairie Volunteer Fire Department									
County: Walker				Contact		Mark Robinson			
3 Phil Wood Road				Phone		936-662-0841			
Huntsville, TX 77320				Email		Mark6469@hotmail.com			
Number of Members:				10					
Station 1		Lat	N 30 48' 12.5"						
		Lon	W 95 34' 1.5"						
Officers:									
Chief					Asst. Chief		Tim Buhler 936-662-4615 tbuhler@huntsvilletx.gov		
Captain					Captain				
Equipment:									
Year/Make	Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability		
2007 Dodge	Booster	300			300				
80s GMC	Booster	150			300		Yes		
80s Ford	Booster	150			300				
90s International	Tanker	150			3200				
70s Ford	Tanker	150			1200				
2000 Ford	Utility								
1993 E-ONE	Engine	1500			800				
Radio:									
Department	TX:						Mutual Aid:		
County	TX:						Inter-City Car to Car:		

Riverside Volunteer Fire Department - Station #1									
County: Walker				Contact		Gabe Johnson, Chief			
6 Walker P. O. Box 355 Riverside, TX 77367 936-594-2817 936-594-4884 fax				Phone		936-594-2817 Station 936-668-0261 Cell			
				Email		Riversidevfd@msn.com			
Number of Members: 13									
Station 1		Lat	N 30 51' 7.8"						
		Lon	W 95 24' 4.7"						
Officers:									
Chief					Asst. Chief				
Equipment:									
Year/Make	Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability		
1996 Dodge	Brush Truck	150			300		Yes		
1987 Young	Engine	1250			750		Yes		
1992 Dodge	Rescue	0			0				
1998 Dodge	Booster	150			300				
2006 Freightliner	Tanker	500			2000				
1996 Chev	Utility								
Radio:									
Department	TX:						Mutual Aid:		
County	TX:						Inter-City Car to Car:		

Riverside Volunteer Fire Department - Jim Scarborough Station #2									
County: Walker				Contact		Gabe Johnson, Chief			
87 Sterling Chapel Road P. O. Box 355 Riverside, TX 77367 936-594-2817 936-594-4884 fax				Phone		936-594-2817 Station 936-668-0261 Cell			
				Email		Riversidevfd@msn.com			
Number of Members: 13									
Station 1		Lat	N 30 42' 21"						
		Lon	W 95 27' 35"						
Officers:									
Chief					Asst. Chief				
Equipment:									
Year/Make	Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability		
1996 Dodge	Booster	150			300				
2004 GMC	Tanker	450			1900				
Radio:									
Department	TX:						Mutual Aid:		
County	TX:						Inter-City Car to Car:		

Thomas Lake Road Volunteer Fire Department									
County: Walker			Contact		Rick Gibson				
P.O. Box 809 Riverside, TX 77367			Phone		936-594-6459				
			Cell		936-661-8222				
			Email		rlgibson@windstream.net				
Number of Members:			12						
Station 1		Lat	N 30 51' 19.5"						
		Lon	W 95 20' 45.9"						
Officers:									
Chief		Rick Gibson			President		John Kennedy		
		936-594-2892					936-661-2311		
Equipment:									
Year/Make		Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability	
2004 Freightliner		Engine	1250			1000			
2007 GMC		Booster	250			500			
2004 Freightliner		Tanker	500			3000			
2001 Ford		Rescue							
Radio:									
Department		Tone:	A-569.1		B-832.5		Mutual Aid:		Yes
County		TX:	158.835	Rx:	154.205		Inter-City Car to Car:		Yes
Paging		TX:							

Huntsville Fire Department - Station #1									
County: Walker			Contact		John Waldo				
1987 Veterans Memorial Blvd			Phone		936-291-5945				
Huntsville, TX 77340			Email		jwaldo@huntsvilletx.gov				
Number of Members:									
Station 1									
Lat		N 30.68.21							
Lon		W 95.55.31							
Officers:									
Chief		Tom Grisham							
Equipment:									
Year/Make	Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability		
Mack	Ladder	1500			500				
Ford	Utility								
International	Engine	1500			1000				
	Hazmat Trailer								
Radio:									
Department							Mutual Aid:		
County							Inter-City Car to Car:		
Paging									

Huntsville Fire Department - Station #2									
County: Walker				Contact		John Hobbs			
2109 Sam Houston Ave. Huntsville, TX 77340				Phone		936-291-5943			
				Email		jhobbs@huntsvilletx.gov			
Number of Members:									
Station 1									
Lat		N 30.70.91							
Lon		W 95.55.04							
Officers:									
Chief		Tom Grisham							
Equipment:									
Year/Make		Type		Pumping Capacity (GPM)		Water Capacity (Gallons)		Drafting Ability	
Ferrara		Ladder		2000		300			
Mack		Engine		1500		750			
International		Engine		500		500			
Freightliner		Rescue							
International		Tanker		1500		2000			
Ford		Booster		250		300			
Radio:									
Department								Mutual Aid:	
County								Inter-City Car to Car:	
Paging									

Huntsville Fire Department – Station #4									
County: Walker				Contact		Tom Grisham			
1619 Hwy. 30 East				Phone		936-291-5941			
Huntsville, TX 77320				Email		tgrisham@huntsvilletx.gov			
Number of Members:									
Station 1		Lat	N 30.73.55						
		Lon	W 95.52.71						
Officers:									
Chief		Tom Grisham							
Equipment:									
Year/Make	Type	Pumping Capacity (GPM)			Water Capacity (Gallons)		Drafting Ability		
International	Engine	1500			1000				
Mack	Engine	1500			500				
AM General	Tanker	350			1200				
Radio:									
Department							Mutual Aid:		
County							Inter-City Car to Car:		
Paging									

2.7 Schools

Walker County School Campuses

Discovery Kids 1700 7th Street Huntsville, TX 77320	Contact: Phone: Fax:	Mrs. Margaret Reece 936-439-0900 936-439-9347	Enrollment: 70 Latitude: 30.43.40 Longitude: 95.33.36
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Week Day Ministries for Children 1016 Sam Houston Avenue Huntsville, TX 77320	Contact: Phone: Fax:	Director Deborah Wright 936-291-6155 936-295-9500	Enrollment: 49 Latitude: 30.43.27 Longitude: 95.33.05
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Tomorrow's Promise 2817 Old Houston Road Huntsville, TX 77340	Contact: Phone: Fax:	Director KayBoehning 936-439-0303 936-730-8278	Enrollment: 190 Latitude: 30.41.59 Longitude: 95.32.24
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Alpha Omega Academy PO Box 8419 Huntsville, TX 77340	Contact: Phone: Fax:	Principal – Paul Davidhizer 936-438-8833 936-438-8844	Enrollment: 305 Latitude: 30.42.02 Longitude: 95.36.46
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Faith Lutheran School 111 Sumac Huntsville, TX 77340	Contact: Phone: Fax:	Director Kristie Pacher 936-291-1706 936-295-8266	Enrollment: 150 Latitude: 30.42.37 Longitude: 95.35.50
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Vista Academy & Premier High School 2407 Sam Houston Avenue Huntsville, TX 77340	Contact: Phone: Fax:	Principal Ray Moore 936-291-0203 936-294-9203	Enrollment: 256 Latitude: 30.42.26 Longitude: 95.32.54
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Summit Christian Academy 3122 Montgomery Road Huntsville, TX 77340	Contact: Phone: Fax:	Director Kathy Ignatovich 936-295-9601 936-295-9236	Enrollment: 120 Latitude: 30.41.46 Longitude: 95.33.09
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Little Red Schoolhouse 1900 Normal Park Huntsville, TX 77340	Contact: Phone:	Director Marla Shelly 936-295-0831	Enrollment: 100 Latitude: 30.42.49 Longitude: 95.33.51
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New Waverly I.S.D (Main Off) 355 Front Street New Waverly, TX 77358	Contact: Phone: Fax:	Superintendent 936-344-6751 936-344-2438	Darol Hail. PHD Latitude: 30.32.16 Longitude: 95.28.53
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New Waverly High School 9464 SH 75 South New Waverly, TX 77358	Contact: Phone: Fax:	Principal Kris Drane 936-344-6451 936-344-6113	Enrollment: 297 Latitude: 30.31.25 Longitude: 95.29.08
New Waverly Junior High 1111 Front Street New Waverly, TX 77358	Contact: Phone: Fax:	Principal Dudley Hawkes 936-344-2246 936-344-8313	Enrollment: 185 Latitude: 30.32.45 Longitude: 95.28.45
New Waverly Elementary 355 FM 1375 West New Waverly, TX 77358	Contact: Phone: Fax:	Principal Justin Gray 936-344-2900 936-344-2901	Enrollment: 276 Latitude: 30.32.09 Longitude: 95.29.12

Huntsville High School 515 FM 2821 East Huntsville, TX 77320	Contact: Phone: Fax:	Principal Beth Burt 936-293-2626 936-293-2603	Enrollment: 1,732 Latitude: 30.44.31 Longitude: 95.32.12
Mance Park Middle School 1010 8 th Street Huntsville, TX 77320	Contact: Phone: Fax:	Principal Debbie Holmann 936-293-2755 936-293-2759	Enrollment: 862 Latitude: 30.43.38 Longitude: 95.33.01
Huntsville Intermediate School 431 US 190 East Huntsville, TX 77320	Contact: Phone: Fax:	Principal Angee Andrus 936-293-2717 936-293-2712	Enrollment: 898 Latitude: 30.43.15 Longitude: 95.31.56
Estella Stewart Elementary School 3400 Boettcher Drive Huntsville, TX 77320	Contact: Phone: Fax:	Principal Amber Rodriguez 936-293-2811 936-293-2809	Enrollment: 628 Latitude: 30.41.31 Longitude: 95.32.12
Mary McAshan Gibbs Elementary School 1800 19 th Street Huntsville, TX 77340	Contact: Phone: Fax:	Principal Rosa Balles 936-293-2837 936-293-2826	Enrollment: 394 Latitude: 30.42.50 Longitude: 95.33.37
Huntsville Elementary School 87 Martin Luther King Drive Huntsville, TX 77320	Contact: Phone: Fax:	Principal Koren Nicks 936-293-2888 936-293-2896	Enrollment: 549 Latitude: 30.44.18 Longitude: 95.32.31
Samuel W. Houston Elementary School 1641 7 th Street Huntsville, TX 77320	Contact: Phone: Fax:	Principal Stacy Bennett 936-439-1200 936-439-1223	Enrollment: 599 Latitude: 30.43.40 Longitude: 95.33.32
Scott Johnson Elementary School 603 US 190 East Huntsville, TX 77320	Contact: Phone: Fax:	Principal Delanise Taylor 936-293-2866 936-293-2876	Enrollment: 595 Latitude: 30.43.70 Longitude: 95.31.50

2.8 Emergency Services/Facilities

Emergency Medical Service Providers

Huntsville-Walker County EMS
PO Box 1602
Huntsville, TX 77340

Phone: 936-435-2480

Hospitals

Huntsville Memorial Hospital
110 Memorial Hospital Drive
Huntsville, TX 77340

Phone: 936-291-3411

2.9 Regulatory Issues

Many of the issues involved in preventing or mitigating the effects of wildfires can be addressed through local planning processes and development regulations. As development and re-development of at-risk areas occur both planners and building officials must understand their parts in helping to create healthy ecosystems and communities.

One of the most important things planners can do is include wildfire protection as a necessity in their comprehensive planning efforts. This assures the components of the wildland-urban interface are addressed at the policy, regulatory and budgetary levels. In addition, it is typically at this level that we start to deal with multi-jurisdictional planning.

Traditionally, most regulation dealing with fire protection comes from building and fire codes. They deal primarily with structure survival during an event. Land-use and development regulations, such as zoning and subdivision regulations, deal more with bulk, density and site facility design. They also provide an approval process linked directly to plans for the entire community, not just the specific site. In Texas, communities have some ability to plan and regulate in an area, immediately outside their limits and extending from one-half mile to five miles out, called the extra-territorial jurisdiction.

As communities develop and expand their borders plans and regulations need to be constantly updated and applied. Attentive and comprehensive planning process must also be applied to assure policies and resources are available when needed. As with any significant issue wildfire planning and protection must touch all aspects of community management.

3.0 Community Risk Assessment

Identifying Communities-at-Risk

To determine communities-at-risk, the Community Wildfire Committee first had to define “community.” The following criteria were used to identify neighborhoods and subdivisions within the plan area.

- Recognized development (e.g. platted subdivisions); Any large grouping of structures

The following criterion was then used to determine if in fact the community was at risk from losses due to wildfire.

A community at risk is one that:

- Is an interface community as defined in the Federal Register notice of January 4 2001, or a group of homes and other structures with basic infrastructure and services, (such as utilities and collectively maintained transportation routes), in or adjacent to federal land?
- Has present conditions that are conducive to large-scale wildland fire
- Faces a significant threat to human life or property as a result of a wildland fire.¹

The purpose of the risk assessment is to gauge the relative risk and hazard due to wildland fire for the lands and communities within the planning area. It is a tool to direct implementation to the highest priority areas and promotes cross-boundary coordination. The risk assessment is crucial to developing an understanding of the risk of potential losses to life, property, and natural resources during a wildland fire. Specifically, the risk assessment:

All individuals that participated in risk assessment received formal training in risk assessment methodology.

- 1) Assesses risk, hazard, fire protection capability, structural vulnerability, and values to be protected.
- 2) Identifies the wildland urban interface (WUI) across the plan area.
- 3) Identifies and prioritizes areas in which to conduct fuels reduction treatments.

The Walker County CWPP integrates information from a variety of sources to present a comprehensive picture of risk and possible treatments on the landscape and enable Community organizations and their partners to act in a coordinated fashion. A completed plan also allows the adjacent federal land management agencies to make use of the recent expedited authorities provided by the Healthy Forest Initiative (HFI) and the Healthy Forest Restoration Act (HRFA).

In addition, for communities seeking federal grant funding from the National Fire Plan, a completed community wildfire protection plan has become critical to accessing these funds. Lastly, developing a community wildfire protection plan is a powerful tool to help get local residents and visitors involved in fire protection efforts.

¹ The Healthy Forests Initiative and the Healthy Forests Restoration Act: Interim Field Guide

All of the communities/neighborhoods identified in the Walker County assessment area are considered to be at-risk communities. Due to the large number of communities located throughout the county it was not practical to conduct assessments in every community. Through the collaborative process of integrating feedback from all of the fire service entities located in the county the above listed communities were given priority for assessment. Assessments will continue to take place as new developments arise and additional areas at risk are identified. Assessments can also be conducted at the request of community members and leaders.

- **Risk:** is the likelihood of a fire occurring this information is based on data collected by the Texas Forest Service utilizing the National Fire Reporting System, Texas Fire Reporting System, the Southern Fire risk assessment and USFS data.
- **Hazard:** the conditions that hinder control of a wildland fire once it starts. This information is derived through the southern fire risk assessment and is reflected by the Wildfire susceptibility index located in the appendix.
- **Values:** are the people, property, natural resources and other resources that could suffer losses in a wildland fire event. This information was derived from community risk assessment, county and city planners and the county tax assessor.
- **Structural Vulnerability:** the elements of a property or community that influence the ignitability of structures (construction materials, landscaping, access, and surrounding fuels)
- **Protection Capability:** the ability to mitigate losses, prepares for, respond to and suppress wildland and structural fires.

Walker County CWPP Risk Assessment Factors

Assessment Categories	Elements	Data Source
Risk	Ignition Density (human and lightning caused from 1985-2006).	Southern Fire Risk Assessment
Hazard	Landscape approach to evaluate Slope, Aspect, Elevation, Weather, Structure Density, Ingress/Egress based on local fire professional experience	ICC Subdivision Assessment Form,
	Fuels survey based on interpretation of ortho-photos by local fire professionals for vegetation density, fuel type and topography	Vegetation Hazard Map Layer USFS
	Structural Vulnerability (Home Risk Assessments) based on the professional judgment and experience of local fire professionals	Risk Assessment Form,
Values	Structural Density based on visual interpretation.	Derived from 2000 census data
Protection Capability	Survey of Suppression resources	Texas Forest Service Community Fire Profile

3.1 Access

Numerous communities throughout Walker County have limited access. From an emergency response standpoint this dramatically complicates fire services ability to provide for safe evacuation of residents while attempting to suppress wildfires and other hazards. Some of the communities assessed have response time in excess of 20 minutes not including time it takes to notify volunteer fire departments.

3.2 Topography

The topography in Walker County is variable ranging from flat to steep slopes. Ridge lines can exhibit slopes as steep as 30% however most of the county consists of rolling hills intermixed with pasture lands. There are also numerous arroyos that bisect the county complicating fire services ability to reach certain areas of the county.

3.3 Fuels

One of the challenges that face Fire Fighters in Walker County is the diversity of fuels that may confront a firefighter in any given situation. Firefighters may be combating a grass fire one moment and have to change tactics and fight a forest fire the next.

Fuels Data Collected

The fuels information collected through the Home Risk Assessment process can be summarized as follows

- Slope
- Vegetation Type
- Fuel Type
- Fuel Density
- Fuel Bed Depth
- Fire Condition Class

3.4 Construction

Building Construction was broken down into the following categories and the predominant characteristics were used to determine structural ignitability for a given subdivision. The assessment task force is aware that this type of assessment may provide for concern of individual risk levels as some residents risk level can vary significantly. To counteract this individual home assessments are available upon request.

- Roofing Material
- Siding
- Outbuilding
- Combustible fences, decks or other attachments

3.5 Water Sources for Structure Protection

In addition to long response times, limited or no water supply in many areas make it difficult for fire engines to provide adequate amounts of water for fire suppression and structure protection. This causes long turn around for water shuttling in excess of 45 minutes in some instances.

Response times were broken down into the following categories

- 500 GPM within 1000'
- Draft source on site but farther than 1000'

- 20 minute turn around
- 20-45 minute round trip
- 45 minutes or greater round trip

3.6 Expected Fire Behavior

Due to the variability of fuel types in Walker County, fire suppression forces have to be prepared for combating a broad range of fire behavior. During winter months freeze cured grass fires driven by dry northern fronts and high winds can produce rapid rates of spread with extreme fire behavior. These fires can pose a significant threat to life and property as they provide almost no time for homeowners to prepare or evacuate. Suppression forces can be quickly faced with the decision to protect individual homes or attempt to suppress fires that may threaten entire communities.

During warm dry summer months Forests can become tinderboxes where only one careless spark can ignite a fire that can destroy forests and threaten the communities that are near them. During these extreme seasons, crown fires can exceed the capacity of even the best equipped fire service forces. In the event of crown fires, departments can only withdrawal and take a defensive mode. In an effort to protect structures while maintaining fire fighter safety.



East Texas Crown
Fire

3.7 Community Hazard Ratings

The factors that were considered in the risk assessment were access, fuels, water sources, building materials, and the Home Ignition Zone. All fire resources located in Walker County were consulted in an effort to develop a comprehensive County wide risk assessment. Feedback from each entity was compiled and a risk assessment task force was identified. The risk assessment task force comprised representatives of the Local Fire Departments, Texas Forest Service and United States Forest Service and Grasslands. The Risk Assessment Task Force, using the data compiled by the various fire service entities, the Risk Assessment Task Force conducted over 80 community risk assessment throughout Walker County.

The task force utilized the International Code Commission's Subdivision Risk assessment form as a guide for conducting the assessments. A copy of the Assessment Guide from the 2006 edition of ICC standards and is located in the appendix. Upon completion, the assessments were presented to the working group for review, and projects that would have the biggest impact were then prioritized. These projects are outline and listed in section 4.0 Community Prescription.

YALOKER COUNTY WILDFIRE RISK ASSESSMENT RESULTS

LEGEND: **New Risk**



RESIDENTIAL AREAS

<u>ROAD OR COMPLEX</u>	<u>RATING</u>	<u>LAT & LON</u>	<u>SERVICING FD</u>
Acorn Hills (High 68) (Note: flush valves located at: N30.45.31 W95.28.28 and N30.45.52 W95.28.50 @ 17.5 rated bridge)		N30.45.31 W 95.28.28	Riverside VFD
Ashworth Road Complex (Moderate 44) (Note: Petroleum Explorer Pumping Station N30.50.39 W95.29.41)		N30.51.39 W95.30.16	Riverside VFD
Bethy Creek Community	Moderate 52	N30.49.26 W95.23.31	Riverside VFD
Brookview	Low 35	N30.44.27 W95.36.07	Huntsville FD
Buckhorn Acres (High 61) (Note: dry hydrant @ Forest Glen)	High 92	N30.39.48 W95.16.39	New Waverly VFD
Bybee Circle (Moderate 34)		N30.46.46 W95.40.36	Crabbs Prairie VFD

Camp Coyote (Rhodes Road) (Note: swimming pool at main lodge))	Moderate 40	N30.46.19 W95.41.50	Crabbs Prairie VFD
Canyon Lake	Moderate 40	N30.47.16 W95.32.17	Pine Prairie VFD
Chandler Road (Moderate 49) (Note: very low hanging Power lines)	Moderate 64	N30.45.23 W95.39.14	Crabbs Prairie VFD
Coyote Run (High 58)	High 99	N30.30.57 W95.24.22	New Waverly VFD
Cogans Grove	Moderate 60	N30.45.50 W95.43.41	(Crabbs Prairie VFD)
Deep River Plantation (High 58) (Note: Trinity River ramp access)	High 85	N30.57.42 W95.30.18	Riverside VFD
Dogwood Lake Estates (Moderate 45) (Note: dry hydrant @ lake)	Moderate 43	N30.44.50 W95.24.60	Dodge VFD
East Fork Estates (New subdivision – no homes)	Low 36	N30.43.50 W95.23.10	Dodge VFD
Elkins Lake (Note: Veterans Memorial Parkway entrance is N30.40.33 W95.32.20)	Moderate 44	N30.40.20 W95.30.58 (@ I45)	Huntsville FD
Falba Community (High 53) (Note: located at FM247 & Kennedy Lane)	High 104	N30.52.21 W95.39.56	Pine Prairie VFD
Fish Hatchery (High 54)		N30.44.32 W95.31.21	Huntsville FD
Forest Glen (High 59)	High 80	N30.40.23 W95.23.15	New Waverly VFD
Forgotten Forest (Extreme 69) (Note: need turbo draft at large pond N30.43.14 W95.24.18)		N30.43.39 W95.24.40	Dodge VFD
Grant Colony Road (Extreme 67)		N30.42.29 W95.29.33	Huntsville FD
Horseshoe Lake Estates (High 53) (Note: flush valves located at N30.48.33 W95.28.10 & N30.48.38 W95.27.44)	High 91	N30.48.29 W95.24.40	Riverside VFD
Hostetter Road (High 52)		N30.31.39 W95.29.34	New Waverly VFD
Joe Smith Road (High 54)	High 101	N30.47.11 W95.36.20	Pine Prairie VFD
Lake Falls Estates (Extreme) (Note: flush valves located at N30.49.60 W95.29.29 & N30.49.21 W95.29.40)		N30.47.42 W95.30.20	Pine Prairie VFD
Lake Jackson Estates (High 51)		N30.43.13 W95.25.12	Dodge VFD
Lake Land (Moderate 42) (Note; dry hydrant at N30.50.40 W95.22.32 & flush valve at N30.50.41 W95.22.32)	Moderate 57	N30.49.19 W95.23.27	Riverside VFD
Landis Lake (High 54) (Note; dry hydrant N30.48.50 W95.25.55 & flush valves @ N30.47.58 W95.25.39 & N30.48.10 W95.25.41)		N30.48.38 W95.26.33	Riverside VFD
Little Loop Road (High 61)	High 110	N30.32.13 W95.39.11	New Waverly VFD

Lost Meadows (Extreme 69) (Note: need to develop fire plan with New Waverly VFD, USFS, and Montgomery County TFS)	Extreme 119	N30.33.35 W95.30.70	New Waverly VFD
Majestic Forest (Moderate 37)	Moderate 57	N30.40.41 W95.33.50	Huntsville FD
Mathis Dairy Road (Moderate 49)		N30.42.49 W95.26.37	Riverside VFD
McFadden Road (High 55)	High 90	N30.43.21 W95.2436	Pine Prairie VFD
O'Bannon Ranch Road (Moderate 43) (Note: flush valves at N30.46.16 W95.31.10 & N30.48.36 W95.30.40)	Moderate 67	N30.48.16 W95.31.10	Pine Prairie VFD
Old Waverly (High 55)		N30.27.70 W95.21.32	New Waverly VFD
Pinedale Subdivision Road	Moderate 47	N30.48.11 W95.38.00	Pine Prairie VFD
Pine Shadow Estates/Club Lake (Ext 65)		N30.40.41 W95.33.48	Huntsville FD
Possum Walk Road (High 55)	High 86	N30.36.10 W95.37.39	New Waverly VFD
RWA Ranch – Armadillo (Moderate 46)	Moderate 66	N30.47.15 W95.32.15	Pine Prairie VFD
Ranchview Estates	Moderate 57	N30.41.46 W95.38.45	Crabbs Prairie VFD
Redskin Ridge/McMilian Lane (High 58) (Note: flush valve located at N30.52.12 W95.26.80)		N30.54.17 W95.23.27	Dodge VFD
Riverside Harbor (High 61)		N30.52.40 W95.25.33	Riverside VFD
Sam Houston Forest Estates (Mod. 47) (Note: dry hydrant N30.33.12 W95.37.80)		N30.33.17 W95.37.11	New Waverly VFD
Spriggs Road (Moderate 38)	Moderate 52	N30.45.39 W95.39.60	Crabbs Prairie VFD
Spring Circle (Note: low power lines in area)	Moderate 56	N30.46.52 W95.40.11	Huntsville FD
Spring Lake (High 53) (Note: one entrance)		N30.42.31 W95.33.80	Huntsville FD
Stewart Road (Moderate 49)		N30.34.13 W95.34.20	Huntsville FD
Summer Place (High 51)	High 95	N30.41.52 W95.36.41	Huntsville FD
Sunset Lake (High 54) (Note: dry hydrant N30.38.53 W95.34.34)	High 93	N30.40.16 W95.33.28	Huntsville FD
Tafalski Road (High)		N30.33.70 W95.29.23	New Waverly VFD
Tanglewood Mobile Home (High 53)		N30.42.70 W95.32.13	Huntsville FD
Thomas Lake Road (High 50)	High 83	N30.51.10 W95.20.45	Thomas Lake Rd VFD
Timberwilde (Moderate 33) (Note: lake for drafting @ N30.41.44 W95.36.30)	Moderate 45	N30.42.10 W95.36.47	Huntsville FD

Wallace Road Community	High 104	N30.49.10 W95.32.55	Pine Prairie VFD
Watson Lake Subdivision (High 53)	High 92	N30.42.59 W95.31.33	Dodge VFD
Westridge Subdivision (Moderate 48)		N30.42.47 W95.35.40	Huntsville FD
Whispering Pines (High 59)	High 85	N30.33.20 W95.28.25	New Waverly VFD
Wildwood Shores (Moderate 48)	Moderate 60	N30.39.80 W95.33.59	New Waverly VFD
Winters Ranch Road (Note: flush valve @ N30.27.70 W95.21.32)	Moderate 50	N30.27.70 W95.21.32	New Waverly VFD
Woodland Hills (note: extremely low power lines – large lake access)	Moderate 65	N30.49.10 W95.32.32	Pine Prairie VFD
Woodview Drive (Moderate 30)	Moderate 55	N30.46.12 W95.39.60	Crabbs Prairie VFD

INDUSTRIAL AREAS COMPANIES

<u>COMPANY</u>	<u>RATING</u>	<u>LAT & LON</u>	<u>SERVICING FD</u>
Americom	Low Hazard	N30.30.14 W95.29.27	New Waverly VFD
Cam Equipment Sales	Moderate Hazard	N30.75.09 W95.60.90	Huntsville FD
City Transfer Station	Low Hazard	N30.72.42 W95.59.68	Huntsville FD
Color Spot Nursery	Low Hazard	N30.74.85 W95.63.37	Crabbs Prairie VFD
Downhole Drilling Dynamics	Low Hazard	N30.30.14 W95.29.27	New Waverly VFD
Empire Truss Limited	Extreme Hazard	N30.35.53 W95.30.34	Huntsville FD
Gardner Glass Products	Low Hazard	N30.41.17 W95.32.19	Huntsville FD
Landscapers Pride	Moderate Hazard	N30.33.57 W95.29.13	New Waverly VFD
Liquid Minerals	Low Hazard	N30.57.72 W95.47.49	New Waverly VFD
Loop Tech	Low Hazard	N30.33.57 W95.53.13	New Waverly VFD
Materia Inc.	High Hazard	N30.35.50 W95.29.28	Huntsville FD

Mitcham Industries	High Hazard	N30.37.53 W95.30.34	Huntsville FD
New Waverly Metals	Low Hazard	N30.35.27 W95.28.49	New Waverly VFD
Oliver Brothers Lumber Yard	High Hazard	N30.70.56 W95.46.60	Huntsville FD
Pavers Supply	Low Hazard	N30.71.02 W95.50.84	Huntsville FD
The Scotts Company	Moderate Hazard	N30.74.94 W95.62.25	Crabbs Prairie VFD
Steely Lumber Company	Moderate Hazard	N30.67.93 W95.49.64	Huntsville FD
Trinity River Authority	Moderate Hazard	N30.83.32 W95.54.88	Pine Prairie VFD
Texas Best Concrete	Low Hazard	N30.57.72 W95.47.49	New Waverly VFD
Transit Mix Concrete	Low Hazard	N30.70.64 W95.51.05	Huntsville FD
United Machine Works	Low Hazard	N30.30.14 W95.29.27	New Waverly VFD
Universal Forest Products	Moderate Hazard	N30.33.57 W95.29.13	New Waverly VFD
Weatherford Liner Systems	Low Hazard	N30.37.53 W95.30.34	Huntsville FD

3.8 Assets at Risk

This portion of the plan addresses the resources, both natural and related to human infrastructure that could be threatened by wildland fire.

3.8.1 Natural Resources

Walker County lies within the crossroads of several ecosystems. From extensive pines forest, hardwood bottoms to black land prairies. In addition to the diversity of ecosystems found in the county, forest lands contain the endangered red cockaded woodpecker (*Picoides borealis*) and bald eagle (*Haliaeetus leucocephalus*). The red cockaded woodpecker is an indicator species that prefers and open pine forest with grass understory and provides insight into historical forest condition within the county. Forest and grasslands within the county serve as buffers for numerous watersheds and bodies of water including major water sources for Houston, Conroe, and many other large communities. The Trinity River feeds directly into Lake Livingston. The San Jacinto River feeds into Lake Conroe, a major source of water for Houston. The Protection of these critical watersheds is an integral component of the Walker County Community Wildfire Protection Plan.

Agriculture in Walker County

In addition to forest resources, Walker County supports a broad base of other agricultural resources. Forage for both wildlife and domesticated animals can be significantly impacted by wildfire, as well as the loss of actual live stock. Many of the farms throughout the county are small family owned farms averaging less than 200 acres. Wildfires can occur on a regular basis in Walker County and have major implications for these small acreage landowners.

Average size of farms: 198 acres

Average value of agricultural products sold per farm: \$24,326

Average value of crops sold per acre for harvested cropland: \$732.53

The value of nursery, greenhouse, floriculture, and sod as a percentage of the total market value of agricultural products sold: 49.17%

The value of livestock, poultry, and their products as a percentage of the total market value of agricultural products sold: 45.48%

Average total farm production expenses per farm: \$23,875

Harvested cropland as a percentage of land in farms: 9.15%

Irrigated harvested cropland as a percentage of land in farms: 2.10%

Average market value of all machinery and equipment per farm: \$30,512

The percentage of farms operated by a family or individual: 94.25%

Average number of cattle and calves per 100 acres of all land in farms: 17.07

Milk cows as a percentage of all cattle and calves: 0.38%

Land in orchards: 82 acres.

3.8.2 Commercial and Industrial Resources

Groundwater District			
Bluebonnet Groundwater Conservation District (Walker, Grimes and Navasota Cos.)			
Physical:	303 E. Washington Ave Suite D	Mail:	P.O. Box 269
	Navasota, TX 77868		Navasota, TX 77868
Phone:	936-825-7303	E-Mail:	BGCD@bluebonnetgroundwater.org
Water Supply Corporations			
Dodge-Oakhurst Water Supply		Contact:	Charles Whitten
6 Farris St.		Phone:	936-291-0802
Dodge, TX 77334		Fax:	936-291-0802
Glendale Water Supply Corp.		Contact:	Nora Mathis
10668 South State Hwy 94		Phone:	936-594-9417
Trinity, TX 75862		Fax:	936-594-0668
Phelps Water Supply Corp.		Contact:	Roark Rohe
455 FM 2296		Phone:	936-295-4051
Huntsville, TX 77340		Fax:	936-295-9179
Riverside Water Supply Corp.		Contact:	Don Hayman
P.O. Box 194		Phone:	936-594-5793
Riverside, TX 75862		Fax:	936-594-3537
Trinity Rural Water Supply		Contact:	Charlie Toms
P.O. Box 709		Phone:	936-594-2192
Trinity, TX 75862		Fax:	936-594-8491
Walker County Rural Water		Contact:	James Morrison
P. O. Box 704		Phone:	936-295-4452
Huntsville, TX 77342		Fax:	936-295-8550

3.8.3 Community Values & Cultural Assets

Walker County has a long and proud cultural history. Home to General Sam Houston and the monument dedicated to him (The tallest statue of an American Hero). There are many other cultural resources worth protecting.

3.8.4 Estimated Values at Risk

The preliminary total taxable value which might be at risk within Walker County for the year 2011 is listed at \$ 2,632,328,939. This value is prior to any exemptions being deducted. The market value during this same time period is \$ 3,467,582,017.

It should be noted that along with the wildland fires we experienced, there was considerable loss due to the record drought we experienced in 2011. Farm losses during this time appear to have exceeded \$ 5,200,000,000.

4.0 Community Prescription

The community prescription is an action plan for reducing or minimizing the likelihood and or impact of wildfire in the planning area. The Community Prescription outlines strategies for prioritizing hazardous fuels reduction projects on private and public lands, addressing structural ignitability and insure planning and implementation are collaborative and consistent with the HFRA.

4.1 Hazardous Fuels Reduction Projects

Throughout Walker County and the communities and landscape within it the acres that need to be treated for hazardous fuels reduction significantly outweigh the availability of grant funding. Therefore the Walker County Wildfire Working Group is faced with the ominous task of deciding where to utilize limited fuels reduction funds as they become available. Therefore as a group, priority has been established for fuels reduction projects on both private and public lands that would have the greatest impact in protecting values at risk. The Highest priority in delineating projects is to protect life followed by property and natural resources. The following table reflects priorities established utilizing a matrix that includes risk level identified through the risk assessment process, population density and values protected. Many of the communities that were assessed are in proximity to federal lands. It is a recommendation of the Walker County Wildfire Working Group that forest health and wildfire fuels management take place on federal lands adjacent to communities at risk. This could be some combination of prescribed burning, mechanical fuels reduction, and selective thinning that reduce the fuels and increase forest health.

Project Priorities for Hazardous Fuels Reduction: Threats and Actions		
Community	Primary Threat/Risk	Recommended Action/Mitigation
Elkins Lake	Proximity of over 1200 homes adjacent to large amounts of wildland vegetation, numerous undeveloped lots are intermingled with developed lot, minimum access due to subdivision design increase the need for fuels reduction within the community and on adjacent lands.	Hazardous fuel reduction on USFS lands adjacent to community.

Lost Meadows	The community is on an isolated block of land situated within the Sam Houston National Forest. Response times are in excess of 45 minutes with no water sources located within the community. Most homes lack any defensible space and are constructed of non Firewise materials.	Fuels reduction on private within the community and on federal lands surrounding the subdivision. The subdivision would benefit from fuel reduction along escape routes to facilitate ingress and egress.
Smith Hill/ Gospel Hill Community	The community is located next to city of Huntsville park lands that are comprised of pine forests that transition to Blackland Prairie with numerous Eastern Red Cedars.	Fuels reduction around perimeter of community in the form of a shaded fuel break, exploration of the reintroduction of prescribed burning on the remaining park lands
Forgotten Forest	Heavy Fuels Little or no Defensible space	Fuels reduction around perimeter
Sunset Lake	Heavy fuels adjacent to USFS	Fuels reduction around perimeter
Club Lake	This community is located within the city limits of Huntsville and has limited access with no turn around for fire departments.	Fuels reduction around homes within subdivision and along egress route. Installing a turn around for fire department apparatus.
Watson Lake Subdivision	Heavy Fuels adjacent to and within community	Fuels reduction

4.2 Treatment of Structural Ignitability

Each of the community assessed was designated as having some level of risk and will receive a mail out with information on defensible space, structural ignitability and safe debris burning.

Project Prioritization/Structural Vulnerability Threats and Actions		
Community (<i>priority</i>)	Primary Threat/Risk	Recommended Action/Mitigation
Elkins Lake	Density of structures/ignitability, proximity to large amounts of wildland vegetation, numerous undeveloped lots, minimum access due to subdivision design	Education and Outreach, mail out, Promote Firewise Program
Lost Meadows	Ignition History of fire starts, vegetation in and around the community, no water source	Education and Outreach, community water source
Smith Hill/ Gospel Hill Community	Vegetation: structure & composition	Fire Wise compliance/education
Club Lake	Vegetation: structure & composition (vacant lots in subdivision)	Fire Wise compliance and education

4.3 Public Outreach and Education

One of the most important components of reducing the risk of losses due to wildland fire is elevating the level of public awareness regarding wildfire related issues. The activities outlined in this section are focused on increasing resident's awareness to wildfire occurrence, prevention and mitigation. Many residents of Walker County have recently relocated to the county to escape the hustle and bustle of Houston. These residents bring with the same level of expectation for emergency response times and levels as they have grown accustomed to in urban areas. Some areas of Walker County have limited access

and long response times. It is critical to inform homeowners of the responsibilities of living in a County with a rural history.

Outreach and Educational Events				
Outreach	Participants	Date	Progress	Future Plans
Wildfire Awareness Week	TFS, HFD		Planning in progress	Annual
Safety Town	HFD, CoH, TFS		Planning in progress	Annual
National Night Out	Law Enforcement, TFS, HFD		Planning in progress	Annual
Keep Huntsville Beautiful			Planning in progress	Annual
Walker County Proud – Annual Trash Bash	Walker County Proud, TFS, HFD	3/17/07	Complete, Inserts and personnel on site	Annual
Walker County Timber Growers Assoc.	WCFLA, TFS		Planning in progress	

Public Awareness Programs				
Activity	Participants	Date	Progress	Future Plans
Home Fire Inspections – Fire Safety and Defensible Space	HFD, Walker County Firefighters Assoc.		Training on “D” Space Planned	Continual
Fire Department Website update with UWI info	HFD, City of Huntsville, TFS		Ongoing	Continue to update
School Programs (Fire Prevention Week)	HFD, TFS, SO	Around 2 nd week in October	Ongoing	
WC Website	Walker County	Summer 2011	On line	Continue to update
WC Facebook	Walker County	Fall 2011	On Line	Continue To update

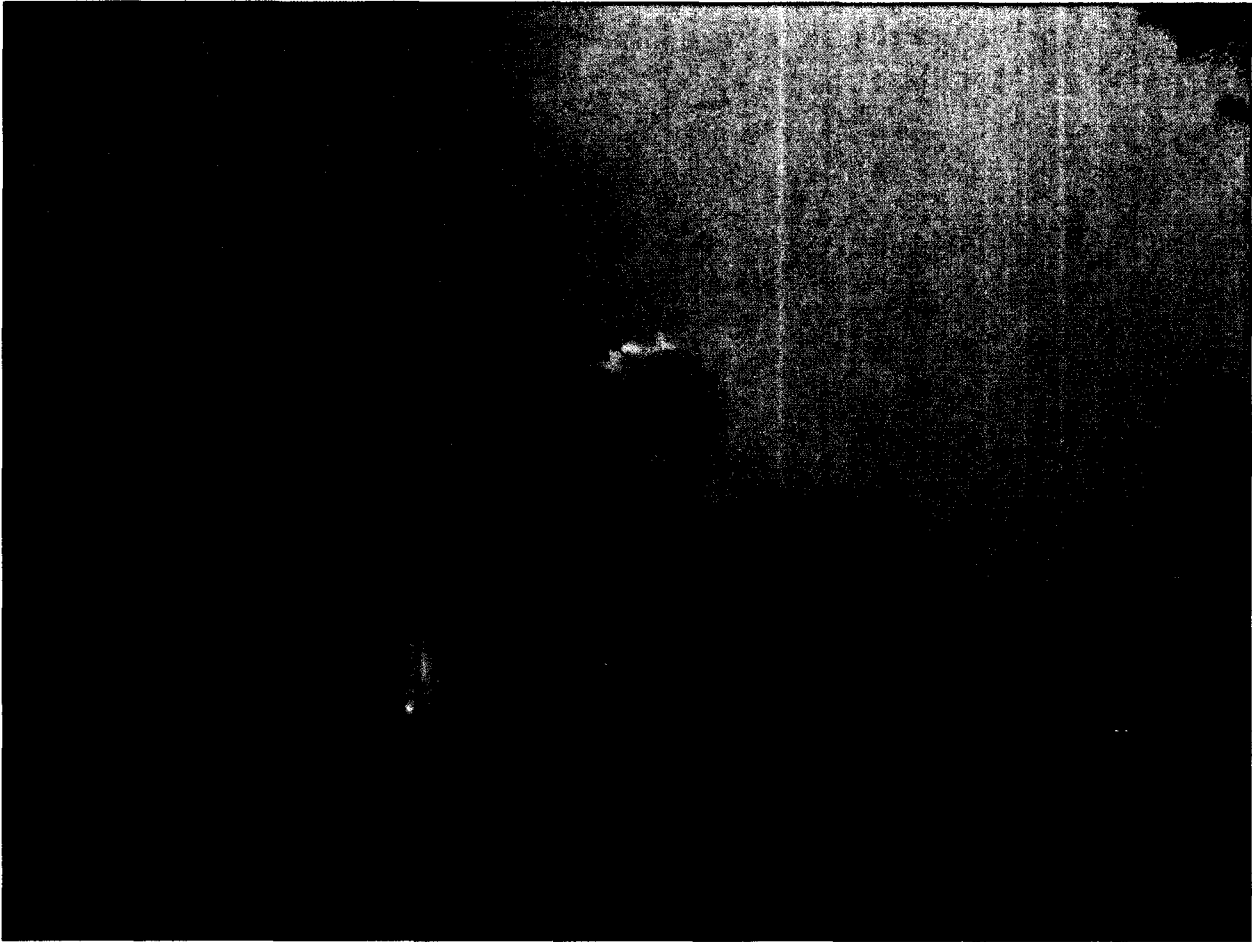
Partnership Development				
Group	Contact	Task	Contact Info	Date
Lions Club	Charles McDowell	Outreach, Newsletter, Meetings	(936) 294-1768	
Rotary Club	Greg Gathright	Outreach, Newsletter, Meetings	(936) 295-4438	
Boy Scout	Bill Matchett	Projects	(936) 295-4414	
CERT Teams	Joe Connell	Assessments	(936) 581-5565	
TDCJ	Kirk Moss	Projects	(936) 437-6038	
NRCS	John Muncrief	Technical Support		
SHSU	Keith Jenkins	Technical Support, Projects	(936) 294-1871	
Gulf Coast Trade Center	Mike York	Projects	(936) 344-7850	
Sam Houston RC&D	Wendell Daniels	Technical Support		
HGAC	Chuck Wemple	Technical Support	(713) 993-4514	
LEPC	Tom Grisham POC	Project Outreach, Inserts		
Walker Co. Fire Fighters Assoc.	Tom Grisham	Outreach/Assessments		
SWCD	RD Hopper	Technical Support		
DEM	David Larimer	PDM Funding		
Master Gardener	WC Master Gardeners, Reggie Lepley	Assessments, Outreach, Training	(936) 435-2426	3/15/2007
Walker County Timber Growers Assoc.	Don Gibbs		(936) 295-8069	

4.4 Emergency Facilities/Equipment Enhancement

Ongoing county wide efforts are taking place to enhance the capability of local fire departments. Many have participated in cost sharing programs administer by Texas Forest Service. The local fire departments have also undertaken loan/lease programs within the county in an effort to have serviceable equipment staged throughout the county to provide better protection coverage.

4.5 Emergency Response Plan/Evacuation Plan/Wildfire Response Plan

Walker County is no stranger to evacuations. Due to the unique nature of wildfire, such as limited visibility due to smoke, the possibility of ingress and egress can be impeded. The recommendation of the working group is that each community identifies safety zones within the community and evacuation routes in the event that a fire did occur.



Visibility could impact evacuation

4.6 Evaluation of Planning and Zoning

The area is experiencing continued steady growth both in the City of Huntsville as well as throughout the County and surrounding areas. This trend of increased growth is expected to continue over the next five years. There are numerous unincorporated communities that do not have a formal government entity to represent and/or address the issues faced by the community. This increases the need for a cohesive plan to reduce the wildfire threat faced by its residents. It is the recommendation of the committee that the following design concepts be integrated into the subdivision review process.

Housing and development considerations

- Subdivision Design - Ingress/egress, road widths, road grade, average lot size, and street signs
- Vegetation - Fuel type, defensible spaces present
- Topography - Slope
- Fire Protection - Response time, water source/proximity
- Structure Hazard - Construction materials
- Utilities - Placement

4.7 Enhancement of Utilities and Infrastructure

It was determined by through the risk assessment process that there was a need to increase the number of dry hydrant available for structure protection during a wildfire situation in several communities that were assessed. In addition the counties utility companies will be contacted in an effort to encourage them to maintain right utility right a ways. Many of the existing right of ways can serve as firebreaks if maintained.

City and county planning departments will also encourage Best Development Practices that provide for adequate water supply such as fire or dry hydrants, more than one point of ingress and egress and appropriate setbacks to prevent structure to structure ignitions.

4.8 Evaluate, Update and Maintain Planning Commitments

The Walker County Wildfire Protection Plan is intended to be a living document with updates and changes' being made as the plan evolves. In an effort to maintain the most current information in the plan the Walker County Wildfire Working Group will meet quarterly at minimum and intermittently as needs dictate. Participation in the working group requires and understanding of each members roles and responsibilities as a team member. Task forces have been formed to develop various aspects of the plan and may need to meet independent of the entire working group.

4.9 Develop/Review/Revise Memorandum of Understanding (MOU)

MOU's in place between local state and federal fire service.

4.10 Biomass/Utilization

Whenever possible the Community Wildfire Protection Planning Committee will promote the utilization of woody biomass resulting from fuels reduction and forest restoration projects. Opportunities are actively being explored to encourage these efforts.

5.0 Implementation Timetable

Section 5.0 illustrates a process for developing a community fire plan. The process provides steps for community organizing, gathering information and identifying priorities for action. This process can result in increased capacity within a community to reduce risk from wildfire. These tasks may vary depending on the resources within a community and build off of information being developed through other county, state or federal fire plans and projects.

Activity	Tasks	Timeline	Resources Needed
Establish a Community Wildfire Committee	Identify diverse community and agency Representatives for the project steering committee. Include three primary decision makers – local government, fire chiefs, and Texas Forest Service. Engage public agency partners in the process. – HFRA	2006	Local Fire Service, Texas Forest Service, Local Governing Bodies
	Establish roles and responsibilities via task force's	2006	Working Group
	Review/modify existing community fire plans	2006	Working Group
	Identify communities and neighborhoods within Emergency Service Districts and planning area boundaries	2006	Organizations with fire responsibilities
	Identify volunteers in each of the communities/neighborhoods to help with CWPP development and implementation	2006	Working Group
	Develop a timeline for steering committee meetings and public outreach process	2006	Working Group
	Develop system to monitor project timeline, tasks, products, and budget	2006	Working Group
Identify Goals and Objectives	Facilitate a session with the steering committee to identify community fire plan goals and objectives	2006	Texas Forest Service Representative
	Develop community organizational charts to illustrate organizations and local, state, and federal agencies that participate in various elements of fire protection.	2006	Texas Forest Service, Working Group
	Organize public meetings to present goals and objectives to community stakeholders and provide project information.	2006	Working Group
Gather Information on Wildfire Programs	Coordinate with the County and project subcommittees to present information on fuels reduction and fire protection projects to steering committee	2006	Risk Assessment Task Force
	Identify other fire-related projects within the community that have not been identified elsewhere	2006	Risk Assessment Task Force
Review Fire District Capabilities and Household Needs	Develop an inventory of resources (e.g., staff and volunteers), equipment, service boundaries, revenue and other resources	2006	Local, State and Federal Fire Service
	Distribute household resource surveys to gather data on household accessibility, notification, evacuation routes, special needs, household preparedness, as well as homeowners insurance.	2007	Emergency Management Coordinators, Local Fire Service
Conduct community meetings	Organize community/neighborhood meetings	2007	Working Group
	Schedule location and identify logistical tasks	2007	Working Group
	Work with volunteers to conduct community outreach and notify public about the meetings	2007	Working Group
	Coordinate with County to use wildfire risk assessment maps and other background materials for meetings	2007	Working Group
	Coordinate with County to assist w/ meeting facilitation	2007	Working group
County Fire Risk Assessment	Drive through county and assess current identified properties and all new as deemed necessary	2012	County OEM, HFD

5.1 Media Contacts and Release

Media Source	Date	Content	Target Audience
Huntsville Item	9/16/06	CWPP	County Wide
Huntsville Item	12/19/06	New engine for Crabbs Prairie	County Wide
Huntsville Item	3/12/07	Trash Bash D Space	County Wide
Huntsville Item	3/04/07	Defensible space clean up day	County wide

Newspapers

The Huntsville Item, 1409 10th Street, Huntsville, TX 77320
(936) 295-5407

Radio Stations

KSAM (101.7 FM) & KHVL (1490 AM), 622 IH45 South, Huntsville, TX 77340
(936) 295-2651

5.2 Tracking of Progress/Fire Planning Checklist

Risk Assessment	Continue to use reliable and usable data that is compatible among the various partner agencies.	Annual
	Update risk assessment with new data or changing conditions.	Annual
	Continue to reflect community input from meetings in risk assessment.	Annual
Fuels Reduction Fuels Reduction (continued)	Track the number of acres changed from Fire Regime/Condition Class (FR/CC) from 2 or 3 to 1.	Annual
	Track the total acres treated through fuel reduction measures.	Annual
	Track grants and utilize risk assessment data in new applications.	Annual
	Monitor number of evacuation routes and roads treated for fire protection on county, private, state and federal roads.	Annual
	Track education programs and document how well they integrate fuels objectives.	Annual
	Evaluate opportunities for biomass marketing and utilization.	Annual
	Track education efforts around emergency management	Annual
Emergency Management	Track progress on water source improvements	Annual
	Track progress on evacuation route improvements	Annual
	Track progress on access/egress improvements	Annual

5.3 Completed and In Progress Projects in Walker County

Project	Task	Timeline
Smith Hill Gospel	Fuels reduction project completed on the East border of the community. There was hand and mechanized clearing done to break the continuity of the heavy fuels. There is now a thirty foot wide fire break between the forested area and the subdivision. The fire break is approximately 30 feet wide and 3015 feet long. This is a minority community with historic ties to slavery in Walker County.	2008

Elkins Lake	There have been several Firewise meetings held in the community along with fire department booths set up at community events for literature distribution. Elkins Lake is being targeted as the first Ready Set Go community within the State and is only one of eight communities within the United States chosen to participate in the program. The south side of Elkins Lake Subdivision is having a 100 – 200ft wide shaded fuel break installed on the adjoining properties. The U.S. Forest Service has agreed to maintain the shaded fuel break along the entire southern perimeter. The Texas Forest Service will be working on the private land starting at the intersection of I-45 and Augusta dr. and heading southwest for approximately 2,238 ft. The mulched line will be 100ft wide. Where this line stops the U.S. Forest service will continue a mulch line along the south edge of the subdivision for approximately 12,590 ft and will be 200ft wide.	2009 2010
Club Lake	A mechanically mulched fuel break is being installed along the entire distance of the single access and egress roadway for Club Lake community. The total length of the mulched fuel break is approximately 8950 ft long and 30 ft wide.	2010
U.S. Forest Service Land	The U.S. Forest Service used a patch work approach to burning tracks of forest service land throughout Walker County. The U.S. Forest Service burned several thousand acres in 2009.	2009
U.S. Forest Service Land	The U.S. Forest Service used a patch work approach to burning tracks of forest service land throughout Walker County. The U.S. Forest Service burned several thousand acres in 2010.	2010
Educational Classes and Workshops	The Texas Forest Service held two separate “Wildfire Risk Assessment Trainings” for homeowners and community leaders in Walker County. The Texas Agrilife Walker County Extension agents and the Texas Forest Service put on two workshops for Master Gardeners covering the topic of “Firewise Landscaping and Defensible Space”.	2008 2009
Forest Glen Camp	The management staff from Forest Glen met with representatives from the Texas Forest Service to discuss making the camp a Firewise Community. There are few permanent residents at Forest Glen, however the daily population may be as high 550 children and staff members. The Forest Service is proposing a mechanical mulching along the north and east boundaries and hand thinning around the camp structures.	2010
Elkins Lake	A 100’ wide fuel reduction path has been cleared on the South side of Augusta Drive extending approximately 2,200’ from its intersection with IH45.	2011

6.0 Declaration of Agreement and Concurrence
 6.1 County Resolution

Proclamation 2006-17

WHEREAS, Texas is experiencing unprecedented growth and development in areas that were once rural coupled with an increase in the occurrence of wildfires.

WHEREAS, it is in these areas where developments meet vegetation or the Urban Wildland Interface that the greatest risk to public safety and property from wildfire exists.

WHEREAS, the best defense is preparedness and public education concerning the dangers that wildfire poses to the residents and natural resources of Walker County.

WHEREAS a Community Wildfire Protection Plan (CWPP) is authorized under the provisions outlined in Title I of the Healthy Forest Restoration Act of 2003.

WHEREAS, a CWPP is a written document, mutually agreed upon by local, state and federal representatives and stakeholders that identifies how a community will reduce its risks from wildland fire.

WHEREAS a CWPP addresses structural ignitability, prioritizes hazardous fuel reduction efforts on public and private lands and is developed collaboratively.

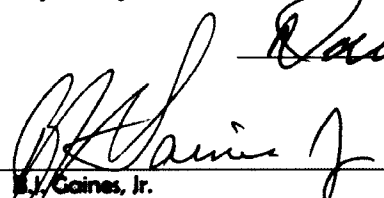
WHEREAS, the development of a CWPP gives a community an opportunity to influence the manner in which hazardous fuels are reduced on Federal lands in proximity to communities.

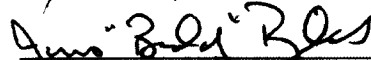
WHEREAS, communities with a CWPP receive priority when state and federal funding is allocated for mitigation.

WHEREAS, a CWPP offers the best solution for communities at risk from wildfire to mitigate said risks.

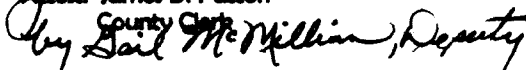
NOW, THEREFORE BE IT RESOLVED, that the Walker County Commissioners' Court urges all citizens of this county and this community to participate in the development of a county wide Community Wildfire Protection Plan in accordance with the Health Forest Restoration Act.

IN OFFICIAL RECOGNITION WHEREOF, we the undersigned hereby affix our signatures this 8th day of May, 2006.

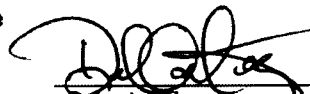

 B.J. Gaines, Jr.
 Commissioner, Pct. 1

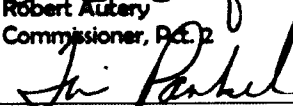

 James "Buddy" Reynolds
 Commissioner, Pct. 3


 Attest: James D. Patton
 County Clerk


 David McMillian, Deputy


 Danny Pierce
 County Judge


 Robert Autery
 Commissioner, Pct. 2


 Tim Paulsel
 Commissioner, Pct. 4

7.0 Glossary

A

Aerial Fuels: All live and dead vegetation in the forest canopy or above the surface fuels, including tree branches, twigs and cones, snags, moss, and high brush.

Air Tanker: A fixed-wing aircraft equipped to drop fire retardants or suppressants.

Agency: Any federal, state, county or city organization participating with jurisdictional responsibilities.

Aspect: Direction toward which a slope faces.

B

Blow-up: A sudden increase in fire intensity or rate of spread strong enough to prevent direct control or to upset control plans. Blow-ups are often accompanied by violent convection and may have other characteristics of a fire storm.

Brush: A collective term that refers to stands of vegetation dominated by shrubby, woody plants, or low growing trees, usually of a type undesirable for livestock or timber management.

Brush Fire: A fire burning in vegetation that is predominantly shrubs, brush and scrub growth.

Buffer Zones: An area of reduced vegetation that separates wildland fuels from vulnerable residential or business developments. This barrier is similar to a greenbelt in that it is usually used for another purpose such as agriculture, recreation areas, parks, or golf courses.

Burning Ban: A declared ban on open air burning within a specified area, usually due to sustained high fire danger.

Burning Conditions: The state of the combined factors of the environment that affect fire behavior in a specified fuel type.

Burning Index: An estimate of the potential difficulty of fire containment as it relates to the flame length at the most rapidly spreading portion of a fire's perimeter.

Burning Period: That part of each 24-hour period when fires spread most rapidly, typically from 10:00 a.m. to sundown.

C

Chipping: Reducing wood related material by mechanical means into small pieces to be used as mulch or fuel. Chipping and mulching are often used interchangeably.

Chain: A unit of linear measurement equal to 66 feet.

Closure: Legal restriction, but not necessarily elimination of specified activities such as smoking, camping or entry that might cause fires in a given area.

Command Staff: The command staff consists of the information officer, safety officer and liaison officer. They report directly to the incident commander and may have assistants.

Complex: Two or more individual incidents located in the same general area which are assigned to a single incident commander or unified command.

Condition Class: The classification system used by the Forest Service to determine the extent of departure from the natural fire regime.

Condition Class I: A forest system within its natural fire range and at low risk for catastrophic fire.

Condition Class II: A forest that has moderately departed from its historic fire occurrence and is at moderate risk of experiencing losses to a wildfire.

Condition Class III: A forest that has departed from its historic fire regime and the risk of losing key habitat is high.

Cooperating Agency: An agency supplying assistance other than direct suppression, rescue, support, or service functions to the incident control effort; e.g., Red Cross, law enforcement agency, Telephone Company, etc.

Creeping Fire: Fire burning with a low flame and spreading slowly.

Crown Fire (Crowning): The movement of fire through the crowns of trees or shrubs more or less independently of the surface fire.

Curing: Drying and browning of herbaceous vegetation or slash.

D

Dead Fuels: Fuels with no living tissue in which moisture content is governed almost entirely by atmospheric moisture (relative humidity and precipitation), dry-bulb temperature, and solar radiation.

Debris Burning: A fire spreading from any fire originally set for the purpose of clearing land or for rubbish, garbage, range, stubble, or meadow burning.

Defensible Space: An area either natural or manmade where material capable of causing a fire to spread has been treated, cleared, reduced, or changed to act as a barrier between an advancing wildland fire and the loss to life, property, or resources. In practice, "defensible space" is defined as an area a minimum of 30 feet around a structure that is cleared of flammable brush or vegetation.

Detection: The act or system of discovering and locating fires.

Dozer: Any tracked vehicle with a front-mounted blade used for exposing mineral soil.

Dozer Line: Fire line constructed by the front blade of a dozer.

Drop Zone: Target area for air tankers, helitankers and cargo dropping.

Drought Index: A number representing net effect of evaporation, transpiration, and precipitation in producing cumulative moisture depletion in deep duff or upper soil.

Dry Lightning Storm: Thunderstorm in which negligible precipitation reaches the ground. Also called a dry storm.

Duff: The layer of decomposing organic materials lying below the litter layer of freshly fallen twigs, needles, and leaves immediately above the mineral soil.

E

Energy Release Component (ERC): The computed total heat released per unit area (British Thermal Units per square foot) within the fire front at the head of a moving fire.

Engine: Any ground vehicle providing specified levels of pumping, water and hose capacity.

Engine Crew: Firefighters assigned to an engine. The Fireline Handbook defines the minimum crew makeup by engine type.

Entrapment: A situation where personnel are unexpectedly caught in a fire behavior-related, life threatening position where planned escape routes or safety zones are absent, inadequate or compromised. An entrapment may or may not include deployment of a fire shelter for its intended purpose. These situations may or may not result in injury. They include "near misses".

Environmental Assessment (EA): EAs were authorized by the National Environmental Policy Act (NEPA) of 1969. They are concise, analytical documents prepared with public participation that determine if an Environmental Impact Statement (EIS) is needed for a particular project or action. If an EA determines an EIS is not needed, the EA becomes the document allowing agency compliance with NEPA requirements.

Environmental Impact Statement (EIS): EISs were authorized by the National Environmental Policy Act (NEPA) of 1969. Prepared with public participation, they assist decision makers by providing information, analysis and an array of action alternatives, allowing managers to see the probable effects of decisions on the environment. Generally, EISs are written for large-scale actions or geographical areas.

Escape Route: A preplanned and understood route firefighters take to move to a safety zone or other low-risk area, such as an already burned area, previously constructed safety area, a meadow that won't burn, natural rocky area that is large enough to take refuge without being burned. When escaped routes deviate from a defined physical path, they should be clearly marked (flagged).

Escaped Fire: A fire which has exceeded or is expected to exceed initial attack capabilities or prescription.

Extended Attack Incident: A wildland fire that has not been contained or controlled by initial attack forces and for which more firefighting resources are arriving, en route, or being ordered by the initial attack incident commander.

Extreme Fire Behavior: "Extreme" implies a level of fire behavior characteristics that ordinarily precludes methods of direct control action. One or more of the following is usually involved: high rate of spread, prolific crowning and/or spotting, presence of fire whirls, strong convection column. Predictability is difficult because such fires often exercise some degree of influence on their environment and behave erratically, sometimes dangerously.

F

Fingers of a Fire: The long narrow extensions of a fire projecting from the main body.

Fire Behavior: The manner in which a fire reacts to the influences of fuel, weather and topography.

Fire Behavior Forecast: Prediction of probable fire behavior usually prepared by a Fire Behavior Officer, in support of fire suppression or prescribed burning operations.

Fire Break: A natural or constructed barrier used to stop or check fires that may occur, or to provide a control line from which to work.

Fire Cache: A supply of fire tools and equipment assembled in planned quantities or standard units at a strategic point for exclusive use in fire suppression.

Fire Crew: An organized group of firefighters under the leadership of a crew leader or other designated official.

Fire Front: The part of a fire within which continuous flaming combustion is taking place. Unless otherwise specified the fire front is assumed to be the leading edge of the fire perimeter. In ground fires, the fire front may be mainly smoldering combustion.

Fire Intensity: A general term relating to the heat energy released by a fire.

Fire Line: A linear fire barrier that is scraped or dug to mineral soil.

Fire Load: The number and size of fires historically experienced on a specified unit over a specified period (usually one day) at a specified index of fire danger.

Fire Management Plan (FMP): A strategic plan that defines a program to manage wildland and prescribed fires and documents the Fire Management Program in the approved land use plan. The plan is supplemented by operational plans such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

Fire Perimeter: The entire outer edge or boundary of a fire

Fire Regime: A natural fire regime is a classification of the role that fire would play across a landscape in the absence of human intervention.

Fire Season: 1) Period(s) of the year during which wildland fires are likely to occur, spread, and affects resource values sufficient to warrant organized fire management activities. 2) A legally enacted time during which burning activities are regulated by state or local authority.

Fire Storm: Violent convection caused by a large continuous area of intense fire. Often characterized by destructively violent surface winds in drafts, near and beyond the perimeter, and sometimes by tornado-like whirls.

Fire Triangle: Instructional aid in which the sides of a triangle are used to represent the three factors (oxygen, heat, fuel) necessary for combustion and flame production; removal of any of the three factors causes flame production to cease.

Fire Weather: Weather conditions that influence fire ignition, behavior and suppression.

Fire Weather Watch: A term used by fire weather forecasters to notify using agencies, usually 24 to 72 hours ahead of the event, that current and developing meteorological conditions may evolve into dangerous fire weather.

Fire Whirl: Spinning vortex column of ascending hot air and gases rising from a fire and carrying aloft smoke, debris and flame. Fire whirls range in size from less than one foot to more than 500 feet in diameter. Large fire whirls have the intensity of a small tornado.

Firefighting Resources: All people and major items of equipment that can or potentially could be assigned to fires.

Flame Height: The average maximum vertical extension of flames at the leading edge of the fire front. Occasional flashes that rise about the general level of flames are not considered. This distance is less than the flame length if flames are tilted due to wind or slope.

Flame Length: The distance between the flame tip and the midpoint of the flame depth at the base of the flame (generally the ground surface); an indicator of fire intensity.

Flaming Front: The zone of a moving fire where the combustion is primarily flaming. Behind this flaming zone combustion is primarily glowing. Light fuels typically have a shallow flaming front, whereas heavy fuels have a deeper front – also called fire front.

Flanks of a Fire: The parts of a fire's perimeter that are roughly parallel to the main direction of spread.

Flare-up: Any sudden acceleration of fire spread or intensification of a fire. Unlike a blow-up, a flare-up lasts a relatively short time and does not radically change control plans.

Forest Health: The ability of forest ecosystems to remain productive, resilient, and stable over time and to withstand the effects of periodic natural or human-caused stresses such as drought, insect attack, disease, climatic changes, fire, flood, resource management practices and resource demands.

Future Desired Conditions: The future desired conditions on federal land is a return to Condition Class I. (see Condition Class 1)

Flash Fuels: Fuels such as grass, leaves, draped pine needles, fern, tree moss and some kinds of slash, that ignite readily and are consumed rapidly when dry – also called fine fuels.

Forbs: Plants with a soft, rather than permanent woody stem, that is not a grass or grass-like plant.

Fuel: Combustible material. This includes, vegetation, such as grass, leaves, ground litter, plants shrubs and trees, which feed a fire.

Fuel Bed: An array of fuels usually constructed with specific loading, depth, and particle size to meet experimental requirements; also, commonly used to describe the fuel composition in natural settings.

Fuel Loading: The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area.

Fuel Model: Simulated fuel complex (or combination of vegetation types) for which all fuel descriptors required for the solution of a mathematical rate of spread model has been specified

Fuel Moisture (Fuel Moisture Content): The quantity of moisture in fuel expressed as a percentage of the weight when thoroughly dried at 212 degrees Fahrenheit

Fuel Reduction: Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.

Fuel Type: An identifiable association of fuel elements of a distinctive plant species, form, size, arrangement, or other characteristics that will cause a predictable rate of fire spread or difficulty of control under specified weather conditions.

G

Geographic Area: A political boundary designated by the wildland fire protection agencies where these agencies work together in the coordination and effective utilization.

Ground Fuel: All combustible materials below the surface litter, including duff, tree or shrub roots, punch wood, peat, and sawdust that normally support a glowing combustion without flame.

H

Haines Index: An atmospheric index used to indicate the potential for wildfire growth by measuring the stability and dryness of the air over a fire.

Hand Line: A fireline built with hand tools.

Hazard Reduction: Any treatment of a hazard that reduces the threat of ignition and fire intensity or rate of spread.

Head of a Fire: The side of the fire having the fastest rate of spread.

Heavy Fuels: Fuels of large diameter such as snags, logs, large limb wood, that ignite and are consumed more slowly than flash fuels.

Helibase: The main location within the general incident area for parking, fueling, maintaining, and loading helicopters. The helibase is usually located at or near the incident base.

Helispot: A temporary landing spot for helicopters.

Hotspot: A particular active part of a fire.

Hot spotting: Reducing or stopping the spread of fire at points of particularly rapid rate of spread or special threat, generally the first step in prompt control, with emphasis on first priorities.

I

Incident: A human-caused or natural occurrence, such as wildland fire, that requires emergency service action to prevent or reduce the loss of life or damage to property or natural resources.

Incident Action Plan (IAP): Contains objectives reflecting the overall incident strategy and specific tactical actions and supporting information for the next operational period. The plan may be oral or written. When written, the plan may have a number of attachments, including but not limited to: incident objectives, organization assignment list, division assignment, incident radio communication plan, medical plan, traffic plan, safety plan, and incident map.

Incident Command Post (ICP): Location at which primary command functions are executed. The ICP may be co-located with the incident base or other incident facilities.

Incident Command System (ICS): The combination of facilities, equipment, personnel, procedure and communications operating within a common organizational structure, with responsibility for the management of assigned resources to effectively accomplish stated objectives pertaining to an incident.

Incident Commander: Individual responsible for the management of all incident operations at the incident site.

Initial Attack: The actions taken by the first resources to arrive at a wildfire to protect lives and property, and prevent further extension of the fire.

J

Job Hazard Analysis: This analysis of a project is completed by staff to identify hazards to employees and the public. It identifies hazards, corrective actions and the required safety equipment to ensure public and employee safety.

K

Keech Byram Drought Index (KBDI): Commonly-used drought index adapted for fire management applications, with a numerical range from 0 (no moisture deficiency) to 800 (maximum drought).

L

Ladder Fuels: Fuels which provide vertical continuity between strata, thereby allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. They help initiate and assure the continuation of crowning.

Light (Fine) Fuels: Fast-drying fuels, generally with comparatively high surface area-to-volume ratios, which are less than ¼-inch in diameter and have a time lag of one hour or less. These fuels readily ignite and are rapidly consumed by fire when dry.

Lightning Activity Level (LAL): A number, on a scale of 1 to 6 that reflects frequency and character of cloud-to-ground lightning. The scale is exponential based on powers of 2 (i.e., LAL 3 indicates twice the lightning of LAL 2).

Litter: Top layer of the forest, scrubland, or grassland floor, directly above the fermentation layer, composed of loose debris of dead sticks, branches, twigs, and recently fallen leaves or needles, little altered in structure by decomposition.

Live Fuels: Living plants, such as trees, grasses, and shrubs, in which the seasonal moisture content cycle is controlled largely by internal physiological mechanisms rather than by external weather influences.

M

Mineral Soil: Soil layers below the predominantly organic horizons; soil with little combustible material.

Mobilization: The process and procedures used by all organizations, federal, state and local for activating, assembling, and transporting all resources that have been requested to respond to or support an incident.

Mop-up: To make a fire safe or reduce residual smoke after the fire has been controlled by extinguishing or removing burning material along or near the control line, felling snags, or moving logs so they won't roll downhill.

Multi-Agency Coordination (MAC): A generalized term which describes the functions and activities of representatives of involved agencies and/or jurisdictions who come together to make decisions regarding the prioritizing of incidents, and the sharing and use of critical resources. The MAC organization is not a part of the on-scene ICS and is not involved in developing incident strategy or tactics.

Mutual Aid Agreement: Written agreement between agencies and/or jurisdictions in which they agree to assist one another upon request, by furnishing personnel and equipment.

N

National Environmental Policy Act (NEPA): NEPA is the basic national law for protection of the environment, passed by Congress in 1969. It sets policy and procedures for environmental protection, and authorizes Environmental Impact Statements and Environmental Assessments to be used as analytical tools to help federal managers make decisions.

National Fire Danger Rating System (NFDRS): A uniform fire danger rating system that focuses on the environmental factors that control the moisture content of fuels.

National Wildfire Coordinating Group: A group formed under the direction of the Secretaries of Agriculture and the Interior and comprised of representatives of the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, U.S. Fish and Wildlife Service and Association of State Foresters. The group's purpose is to facilitate coordination and effectiveness of wildland fire activities and provide a forum to discuss, recommend action, or resolve issues and problems of substantive nature. NWCG is the certifying body for all courses in the National Fire Curriculum.

Normal Fire Season: 1) A season when weather, fire danger, and number and distribution of fires are about average. 2) Period of the year that normally comprises the fire season.

O

Operational Period: The period of time scheduled for execution of a given set of tactical actions as specified in the Incident Action Plan. Operational periods can be of various lengths, although usually not more than 24 hours.

Overhead: People assigned to supervisory positions, including incident commanders, command staff, general staff, directors, supervisors, and unit leaders.

P

Peak Fire Season: That period of the fire season during which fires are expected to ignite most readily, to burn with greater than average intensity, and to create damages at an unacceptable level.

Preparedness: Condition or degree of being ready to cope with a potential fire situation.

Prescribed Fire: Any fire ignited by management actions under certain, predetermined conditions to meet specific objectives related to hazardous fuels or habitat improvement. A written, approved prescribed fire plan must exist, and NEPA requirements must be met, prior to ignition.

Prescribed Fire Plan (Burn Plan): This document provides the prescribed fire burn boss information needed to implement an individual prescribed fire project.

Prescription: Measurable criteria that define conditions under which a prescribed fire may be ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social, or legal considerations.

Prevention: Activities directed at reducing the incidence of fires, including public education, law enforcement, personal contact, and reduction of fuel hazards.

R

Radiant Burn: A burn received from a radiant heat source.

Rate of Spread: The relative activity of a fire in extending its horizontal dimensions. It is expressed as a rate of increase of the total perimeter of the fire, as rate of forward spread of the fire front, or as rate of increase in area, depending on the intended use of the information. Usually it is expressed in chains or acres per hour for a specific period in the fire's history.

Reburn: The burning of an area that has been previously burned but that contains flammable fuel that ignites when burning conditions are more favorable; an area that has reburned.

Red Flag Warning: Term used by fire weather forecasters to alert forecast users to an ongoing or imminent critical fire weather pattern.

Rehabilitation: The activities necessary to repair damage or disturbance caused by wildland fires or the fire suppression activity.

Relative Humidity (Rh): The ratio of the amount of moisture in the air, to the maximum amount of moisture that air would contain if it were saturated. The ratio of the actual vapor pressure to the saturated vapor pressure.

Remote Automatic Weather Station (RAWS): An apparatus that automatically acquires, processes, and stores local weather data for later transmission to the GOES Satellite, from which the data is re-transmitted to an earth-receiving station for use in the National Fire Danger Rating System.

Resources: 1) Personnel, equipment, services and supplies available, or potentially available, for assignment to incidents. 2) The natural resources of an area, such as timber, crass, watershed values, recreation values, and wildlife habitat.

Resource Management Plan (RMP): A document prepared by field office staff with public participation and approved by field office managers that provides general guidance and

direction for land management activities at a field office. The RMP identifies the need for fire in a particular area and for a specific benefit.

Retardant: A substance or chemical agent which reduced the flammability of combustibles.

Run (of a fire): The rapid advance of the head of a fire with a marked change in fire line intensity and rate of spread from that noted before and after the advance.

S

Safety Zone: An area cleared of flammable materials used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. In firing operations, crews progress so as to maintain a safety zone close at hand allowing the fuels inside the control line to be consumed before going ahead. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of a blowup in the vicinity.

Severity Funding: Funds provided to increase wildland fire suppression response capability necessitated by abnormal weather patterns, extended drought, or other events causing abnormal increase in the fire potential and/or danger.

Single Resource: An individual, a piece of equipment and its personnel complement, or a crew or team of individuals with an identified work supervisor that can be used on an incident.

Size-up: To evaluate a fire to determine a course of action for fire suppression.

Slash: Debris left after logging, pruning, thinning or brush cutting; includes logs, chips, bark, branches, stumps and broken understory trees or brush.

Slop-over: A fire edge that crosses a control line or natural barrier intended to contain the fire.

Smoke Management: Application of fire intensities and meteorological processes to minimize degradation of air quality during prescribed fires.

Snag: A standing dead tree or part of a dead tree from which at least the smaller branches have fallen.

Spark Arrester: A device installed in a chimney, flue, or exhaust pipe to stop the emission of sparks and burning fragments.

Spot Fire: A fire ignited outside the perimeter of the main fire by flying sparks or embers.

Spot Weather Forecast: A special forecast issued to fit the time, topography, and weather of each specific fire. These forecasts are issued upon request of the user agency and are more detailed, timely, and specific than zone forecasts.

Spotting: Behavior of a fire producing sparks or embers that are carried by the wind and start new fires beyond the zone of direct ignition by the main fire.

Staging Area: Locations set up at an incident where resources can be placed while awaiting a tactical assignment on a three-minute available basis. Staging areas are managed by the operations section.

Strategy: The science and art of command as applied to the overall planning and conduct of an incident.

Structure Fire: Fire originating in and burning any part or all of any building, shelter, or other structure.

Suppressant: An agent, such as water or foam, used to extinguish the flaming and glowing phases of combustion when direction applied to burning fuels.

Suppression: All the work of extinguishing or containing a fire, beginning with its discovery.

Surface Fuels: Loose surface litter on the soil surface, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches that have not yet decayed enough to lose their identity; also grasses, forbs, low and medium shrubs, tree seedlings, heavier branchwood, downed logs, and stumps interspersed with or partially replacing the litter.

T

Tactics: Deploying and directing resources on an incident to accomplish the objectives designated by strategy.

Temporary Flight Restrictions (TFR): A restriction requested by an agency and put into effect by the Federal Aviation Administration in the vicinity of an incident which restricts the operation of nonessential aircraft in the airspace around that incident.

Torching: The ignition and flare-up of a tree or small group of trees, usually from bottom to top.

Type: The capability of a firefighting resource in comparison to another type. Type 1 usually means a greater capability due to power, size, or capacity.

U

Uncontrolled Fire: Any fire which threatens to destroy life, property, or natural resources.

Under burn: A fire that consumes surface fuels but not trees or shrubs. (See Surface Fuels.)

UWI: see Wildland Urban Interface

V

Volunteer Fire Department (VFD): A fire department of which some or all members are unpaid.

W

Water Tender: A ground vehicle capable of transporting specified quantities of water – also called a Tanker.

Wildland Fire: Any nonstructural fire, other than prescribed fire, that occurs in the wildland.

Wildland Fire Implementation Plan (WFIP): A progressively developed assessment and operational management plan that documents the analysis and selection of strategies and describes the appropriate management response for a wildland fire being managed for resource benefits.

Wildland Fire Use: The management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in Fire Management Plans.

Wildland Urban Interface: The line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

Acronyms and Abbreviations

BMP	Best Management Practices
CR	County Road
CWPP	Community Wildfire Protection Plan
DEM	Department of Emergency Management
DOI	Department of the Interior
DOT	Department of Transportation
DPS	Department of Public Safety
DPW	Department of Public Works
EAS	Emergency Alert System
ESA	Endangered Species Act

EOC	Emergency Operations Center
DBH	diameter at breast height
EIS	Environmental Impact Statement (NEPA)
FD	Fire Department
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
GPS	Global Positioning System
HFRA	Healthy Forests Restoration Act of 2003
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
ISO	Insurance Service Office
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MAA	Mutual Aid Agreement
NEPA	National Environmental Policy Act
NFP	National Fire Plan
NPS	National Park Service
NRCS	Natural Resource Conservation Service
NWCG	National Wildfire Coordinating Group PIO Public Information Officer
PIO	Public Information Officer
RCW	Red Cockaded Woodpecker
RFA	Rural Fire Assistance
SFFMA	State Firefighters and Fire Marshals Association
SHPO	State Historic Preservation Office
SMZ	Streamside Management Zone
TCEQ	Texas Commission on Environmental Quality
TFS	Texas Forest Service
TICC	Texas Interagency Coordination Center
TNC	The Nature Conservancy
TPWD	Texas Parks & Wildlife Department
TXDOT	Texas Department of Transportation
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
UWI	Urban Wildland Interface
VFD	Volunteer Fire Department
WUI	Wildland Urban Interface (alternative to UWI)

8.0 Appendices

Wildfire Hazard Rating Form Subdivision

Name of Subdivision: _____		Date: _____
County: _____	Size (acres): _____	# of Lots: _____
Rating: _____		Comments: _____

A. Subdivision Design

Points

1. Primary Roads

Two or more primary roads

1 _____

One road

3 _____

One way, one way out

5 _____

2. Width of Primary Road

20 Feet or more

1 _____

20 Feet or less

3 _____

3. Accessibility

Road Grade 5% or less

1 _____

Road Grade 5% or more

3 _____

4. Secondary RoadsLoop roads, cul-de-sacs with
outside turning radius of 45' or
greater

1 _____

Cul-de-sac turnaround radius is
less than 45 feet

2 _____

Dead-end roads 200 feet or less
in length

3 _____

Dead end roads greater than
200 feet in length

5 _____

5. Average lot size

10 acres or larger

1 _____

Larger than 1 acre, but less
than 10 acres

3 _____

1 acre or less

5 _____

6. Street signs

Present

1 _____

Partially

3 _____

Not present

5 _____

B. Vegetation**1. Fuel types**

Light

1 _____

Medium

5 _____

Heavy

10 _____

2. Defensible Space

70% or more of site

1 _____

30% or more, but less than 70%

3 _____

Less than 30% of site

5 _____

D. Roofing Material

Class A Rated

1 _____

Class B Rated

3 _____

Class C Rated

5 _____

Non-Rated

10 _____

E. Fire Protection-Water Source

500 GPM Hydrant within 1000'

1 _____

Hydrant farther than 1000' or
draft site

2 _____

Water source within 20 min. or
less round trip.

5 _____

Water source farther than 20
min. and less than 45 min.
round trip.

7 _____

Water source farther than 45 min.

10 _____

**F. Existing Building Construction
Materials**

Noncombustible siding/deck

1 _____

Noncombustible siding &
combustible deck

5 _____

Combustible siding & deck

10 _____

G. Utilities

All underground

1 _____

1 underground, 1 above ground

3 _____

All above ground

5 _____

TOTAL RATING FOR SUBDIVISION**Rating Scale:**

Moderate Hazard

30-49

High Hazard

50-64

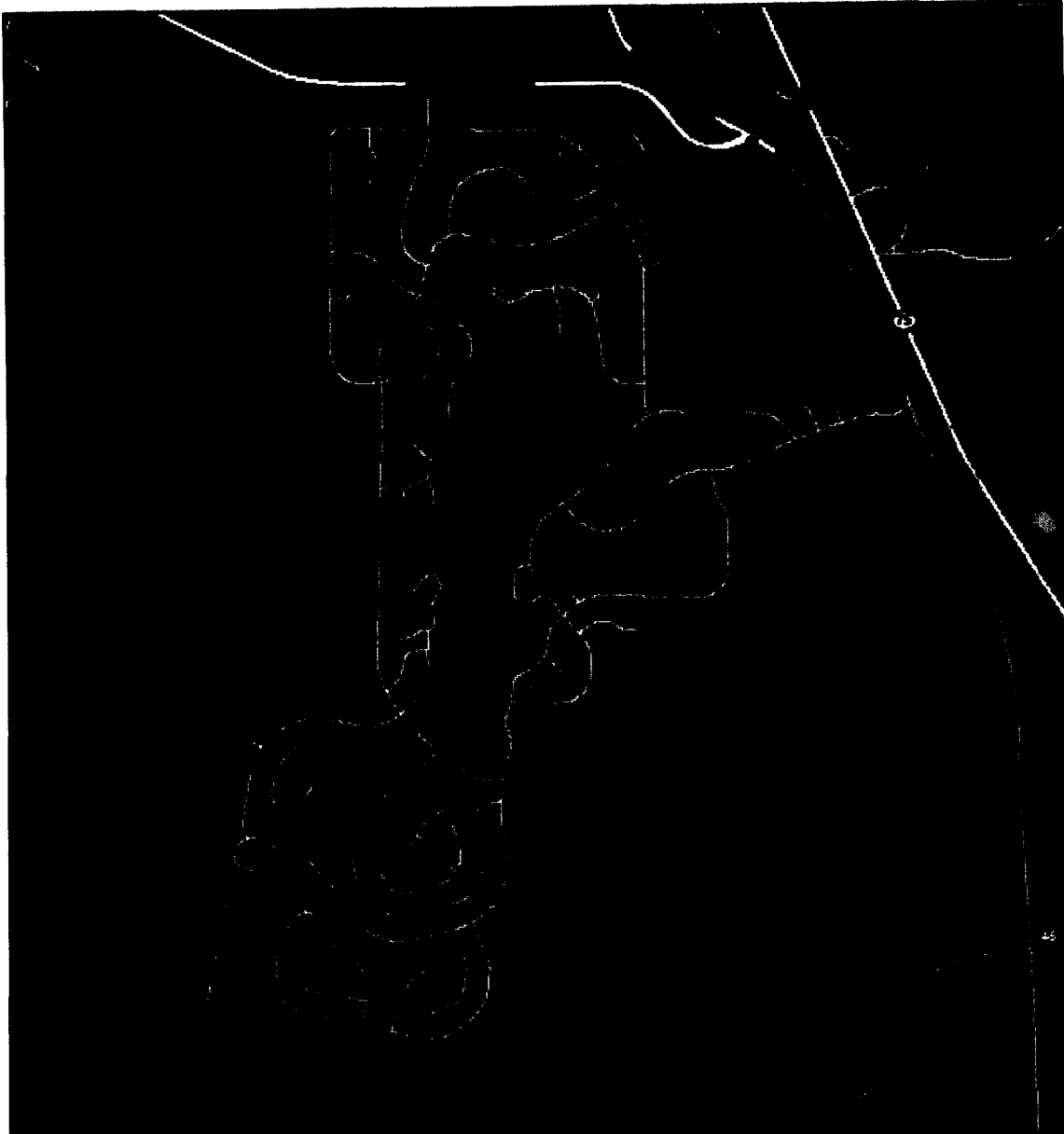
Extreme Hazard

65+

Rated by: _____

Date: _____

Elkins Lake Hazard Map



Size (acres): 1125

of Lots:

Rating: Moderate Hazard

Rated by:

Date:

County: Walker



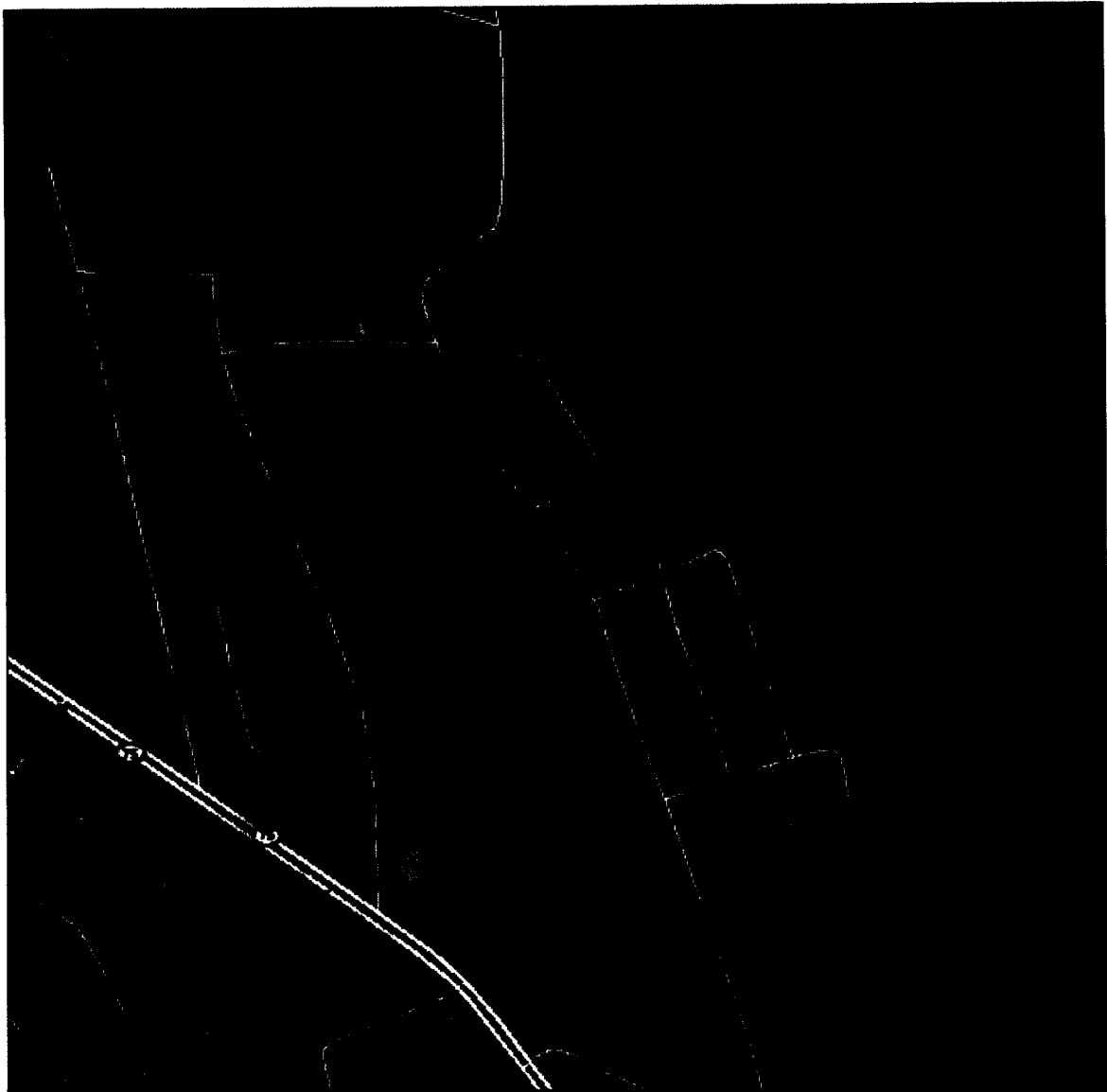
USFS Boundary



Hazard Area

TEXAS
 FOREST SERVICE
 WALKER COUNTY

Smith Hill Gospel Hazard Map



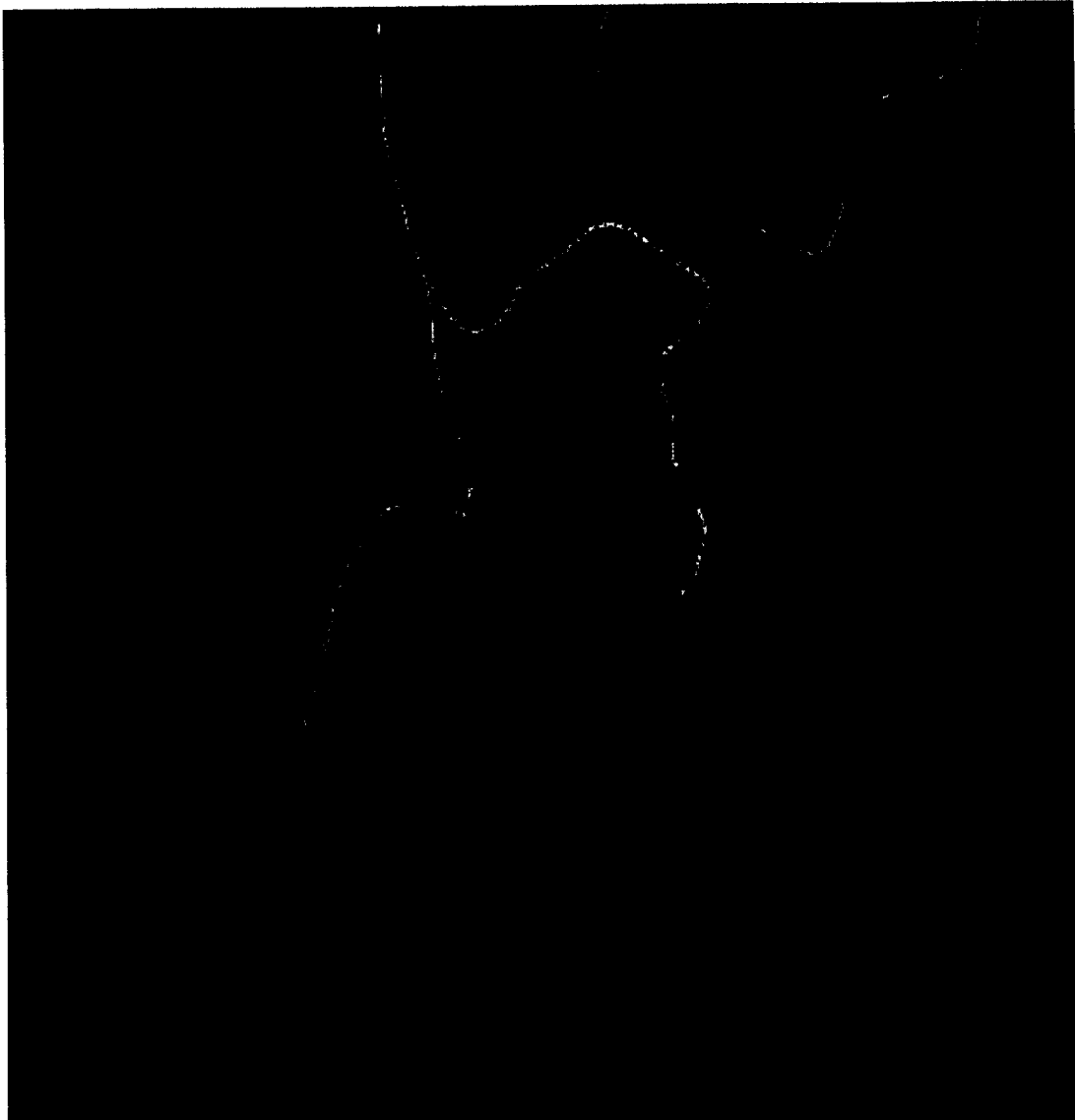
Size (acres): 126
of Lots:
Rating: High Hazard
Rated by:
Date:
County: Walker



Hazard Area

T E X A S
F U R I E S & S E R V I S
C O U N T Y C L E R K

Club Lake Hazard Map



Size (acres): 100

of Lots:

Rating: Extreme Hazard

Rated by: J. Jones

Date: 9/09

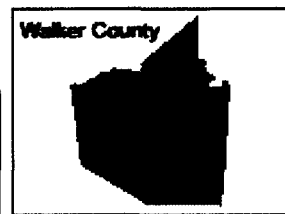
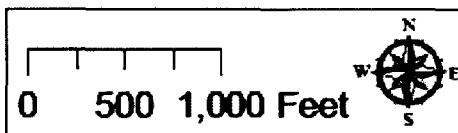
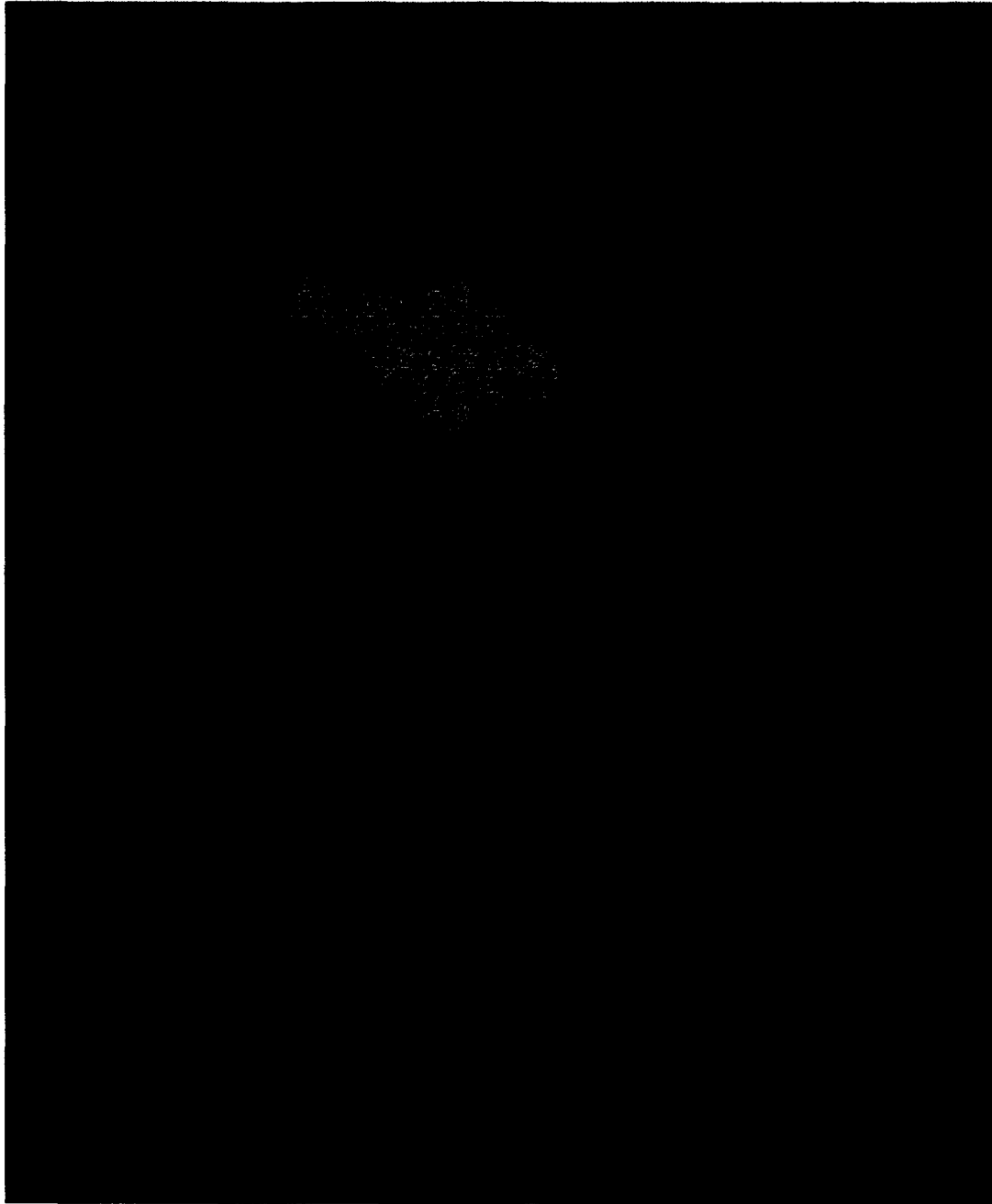
County: Walker

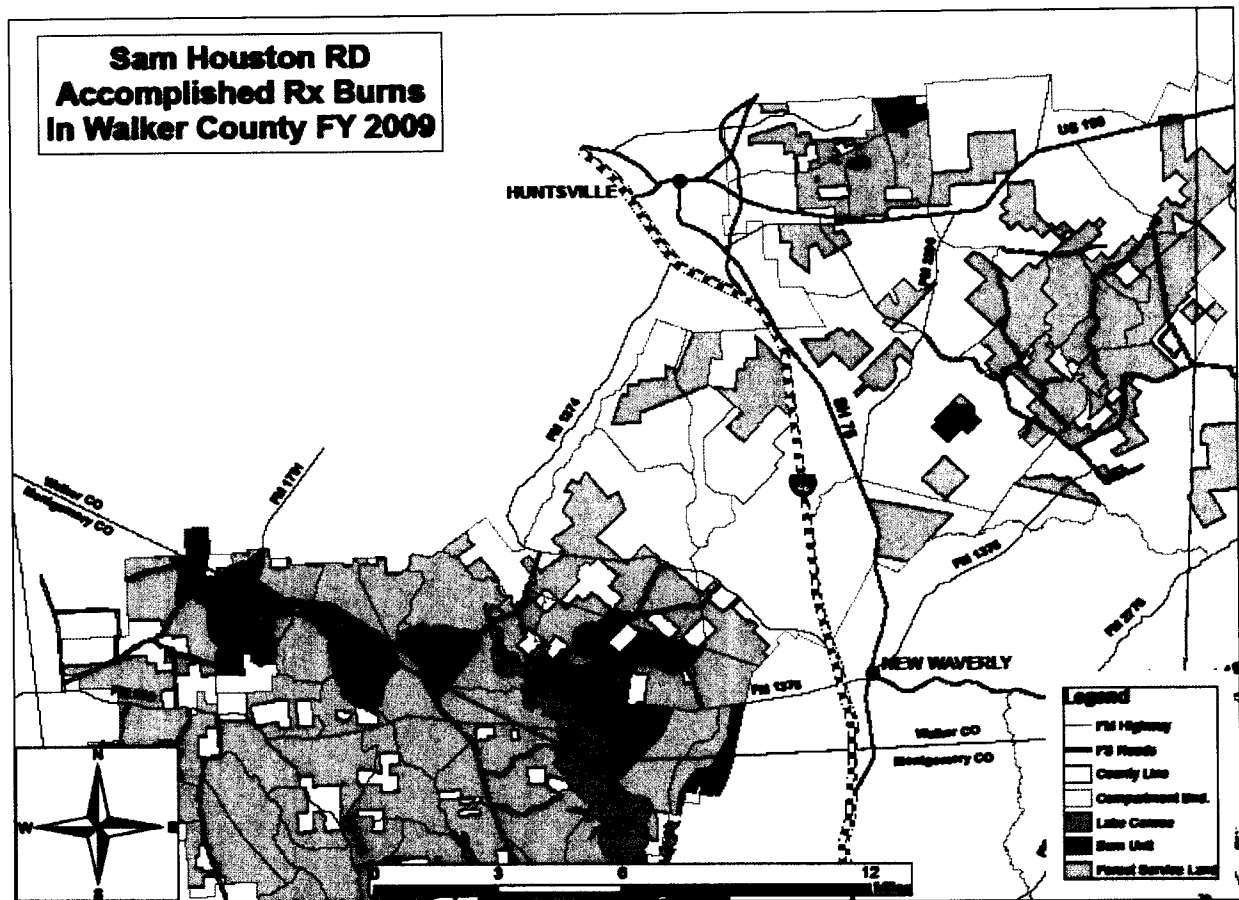


Hazard Area

T E X A S
FOREST & SERVICE
1111 N. ST. 101, SUITE 101

Forest Glen





RECORD OF REVISIONS

[illegible]