# Cass County, Texas Community Wildfire Protection Plan 2025



A collaborative approach to protecting lives, property, and natural resources in Cass County, Texas



## FOREWORD

The primary purpose of the Cass County Community Wildfire Protection Plan (CWPP) is to encourage the implementation of actions to mitigate the effects of future wildfires. Wildfire awareness in Cass County already exists in large part due to the Bear Creek Fire. This wildfire occurred on September 4<sup>th</sup> 2011 and grew to 41,050 acres because of months of unprecedented drought and the effects of winds from Tropical Storm Lee. In addition to destroying 66 homes, this wildfire also destroyed millions of dollars of commercial timber stands in both Cass and Marion Counties. Firefighting resources from across Texas and other states were required to suppress this fire which now claims the distinction of being the largest wildfire in East Texas history.

In 2014 the Cass County Wildfire Protection Plan was adopted to help prevent fires of this magnitude. Cass County has not experienced large wildfires since; however, we must be diligent. In revising our CWPP, Cass County will use:

- Collaboration by involving local emergency service districts, federal/state agencies, major corporate entities, and county workforces.
- Prioritized Fuel Reduction by coordinated and sustained maintenance of fire breaks and identification of areas with wildfire risks.
- Treatment of Structural Ignitability by working with our partners to adopt and use modern building codes and elimination of fuels near adjacent structures.



Bear Creek Fire, September, 2011 Photo: Lee McNeely In accordance with Title I of the Healthy Forest Restoration Act of 2003

This document was prepared by Cass County and Texas A&M Forest Service and was completed on \_\_\_\_\_

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# Introduction

Eighty percent of wildfires in Texas occur within two miles of a community. That means 80 percent of Texas wildfires pose a threat to life and property. A Community Wildfire Protection Plan (CWPP) can help protect against the threats of wildfire and reduce losses. By developing a CWPP, Cass County is outlining a strategic plan to mitigate, prepare, respond and recover.

## **Statement of Intent**

The intent of the Cass County CWPP is to reduce the risk of wildfire and promote ecosystem health. The plan also is intended to reduce home losses and provide for the safety of residents and firefighters during wildfires.

# Goals

- Provide for the safety of residents and emergency personnel.
- Limit the number of homes destroyed by wildfire.
- Promote and maintain healthy ecosystems.
- Educate citizens about wildfire prevention.

# **Objectives**

- Complete wildfire risk assessments.
- Identify strategic fuels reduction methods.

## **Advisory Group**

- Vin Robinson, Cass County Emergency Management Coordinator
- ....., Cass County Fire Association
- \_\_\_\_\_, East Texas Timbers Growers Association
- \_\_\_\_\_, Wildfire Biologist, Texas Parks and Wildlife
- \_\_\_\_\_, Wildland Urban Interface Specialist, Texas A&M Forest Service
- \_\_\_\_\_, Wildland Urban Interface Specialist, Texas A&M Forest Service
- \_\_\_\_\_, District Forester, Texas A&M Forest Service
- \_\_\_\_\_, District Fire Coordinator, Texas A&M Forest Service

# **Community Background**

# Location

Cass County Northeast Texas

With a population of approximately 29,500 in 2012, Cass County is one the largest counties in Northeast Texas, encompassing nearly 960 square miles. Cass County borders Bowie, Marion, and Morris counties in Texas, Caddo County of Louisiana, and Miller County of Arkansas. Most of the county is rural with the largest populations centers in Atlanta, Queen City, Linden, and Hughes Springs. Public lands within Cass County are the U.S. Army Corps of Engineers Wright Patman Lake with 55,000 acres and Atlanta State Park with 1,475 acres



# **General Landscape**

Texas is one of the fastest-growing states in the nation, with much of this growth occurring adjacent to metropolitan areas. This increase in population across the state will impact counties and communities within the wildland urban interface (WUI). The topography within the county is rolling hills.

Predictive Service Areas (PSA) represent regions where the weather reporting stations tend to react similarly to daily weather regimes and exhibit similar fluctuations in fire danger and climate. Seven PSA are delineated in Texas. Fire weather thresholds, fuel moisture thresholds and National Fire Danger Rating System thresholds have been developed for each PSA and are unique to the designated PSA.

Critical fire weather thresholds for the PSA in which Cass County is located are:

Relative humidity: 30 percent or less

20-foot windspeed (meaning windspeeds that are calculated at 20 feet above the forest canopy): 15 mph or more Temperature: 10 percent above average

In the tables below, at the low end of the scale in the greens and blues we see normal to below-normal conditions.

Initial attack should be successful with few complexities. At the upper end of the scale in the oranges and reds we see unusual or rare conditions and we would expect to see complex fires where initial attack may often fail. So the difficult category to describe and thus maybe the most important category for initial attack is the middle or transition zone in the yellow. Somewhere in the yellow, fires transition from normal to problematic.

NFDRS - National Fire Danger Rating System ERC - Energy Release Component **BI** - Burning Index **KBDI** - Keetch-Byram Drought Index

Dead I del Moisture Thresholds								
		Percentiles						
	3	<b>3 4-10 11-25 26-50 51-100</b>						
1000-hr	13	14-15	16	17	18			
100-hr	10	11-12	13-14	15	16			
10-hr	5	6	7	8-9	10			

#### **Dead Fuel Moisture Thresholds**

#### NFDRS Thresholds (Fuel Model G)

		Percentiles						
	97	<b>97 90-96 75-89 50-74 0-49</b>						
ERC	50	39-49	32-38	26-31	0-25			
BI	50	42-49	34-41	26-33	0-25			
KBDI	728	676-727	587-675	451-586	0-450			

#### **Live Fuel Moisture**

		Percentiles					
	3	<b>3 4-10 11-25 26-50 51-100</b>					
Pine	105	106-120	121-130	131-150	151-300		
Oak	75	76-90	91-100	101-125	126-300		
Juniper	75	76-90	91-110	111-125	126-300		



# Climate

The warmest time of the year is July and August with temperatures approaching or exceeding 95° F. Precipitation is also the lowest during this time. Winters are typically mild with temperatures ranging from the mid 50's to mid 60's. Temperatures do go below freezing (32° F) on occasion and can help dry and cure dead vegetation with low relative humidities. Precipitation is typically highest during the winter and spring months.

#### **Peak Fire Seasons:**

#### Primary - June through September with summer drying

Dry vegetation due to little or no rain, combined with temperatures of 89° to 95° F on a daily basis. Hurricanes or tropical storms close to Southeast Texas bring in dry, strong or gusty winds from the north and northeast.

#### Secondary – December through April with cured grasses and wind events

Cold front moves in from the north ushering in drier air. Relative humidity drops below 20 percent during the afternoon hours with winds gusting anywhere from 25 mph to 50 mph.

## **Cass County Surface Fuels**

Surface fuels contain the parameters needed to compute surface fire behavior characteristics, such as rate of spread, flame length, fireline intensity and other fire behavior metrics. As the name might suggest, surface fuels only account for the surface fire potential.

Canopy fire potential is computed through a separate but linked process. The Texas Wildfire Risk Assessment accounts for both surface and canopy fire potential in the fire behavior outputs.

Surface fuels are typically categorized into one of four primary fuel types based on the primary carrier of the surface fire: 1) grass, 2) shrub/brush, 3) timber litter and 4) slash.

Surface Fuels	Description	FBPS Fuel Model Set	Acres	Percent
GR 1	Short, Sparse Dry Climate Grass (Dynamic)	2005	57,855	9.4%
GR 2	Low Load, Dry Climate Grass (Dynamic)	2005	119,877	19.5%
GR 3	Low Load, Very Coarse, Humid Climate Grass (Dynamic)	2005	120	0.0%
GR 4	Moderate Load, Dry Climate Grass (Dynamic)	2005	0	0.0%
GS 1	Low Load, Dry Climate Grass-Shrub (Dynamic)	2005	0	0.0%
GS 2	Moderate Load, Dry Climate Grass-Shrub (Dynamic)	2005	23,303	3.8%
GS 3	Moderate Load, Humid Climate Grass-Shrub (Dynamic)	2005	16,254	2.6%
SH 2	Moderate Load Dry Climate Shrub	2005	0	0.0%
SH 5	High Load, Dry Climate Shrub	2005	0	0.0%
SH 6	Low Load, Humid Climate Shrub	2005	0	0.0%
FM 8	Closed timber litter (compact)	1982	62,042	10.1%
FM 9 HWD	Hardwood litter (fluffy) - Low Load for Texas	Custom	46,256	7.5%
FM 9	Long-needle (pine litter) or hardwood litter	1982	155,244	25.3%
FM 9 PPL	Long-needle (pine litter, plantations) - High Load for Texas	Custom	66,848	10.9%
NB 91	Urban/Developed	2005	45,727	7.4%
NB 93	Agricultural	2005	32	0.0%
NB 98	Open Water	2005	19,617	3.2%
NB 99	Bare Ground	2005	1,397	0.2%
		Total	614,573	100.0%



#### Vegetation

The vegetation map describes the general vegetation and landcover types across the state of Texas. In the Texas Wildfire Risk Assessment (TWRA), the vegetation dataset is used to support the development of surface fuels, canopy cover, canopy stand height, canopy base height and canopy bulk density datasets. The vegetation classes with descriptions are shown in the following table.

Class	Description	Acres	Percent
Open Water	All areas of open water, generally with < 25% cover of vegetation or soil	19,388	3.2%
Developed Open Space	Impervious surfaces account for < 20% of total cover (i.e. golf courses, parks, etc)	20,611	3.4%
Developed Low Intensity	Impervious surfaces account for 20-49% of total cover	28,503	4.6%
Developed Medium Intensity	Impervious surfaces account for 50-79% of total cover	1,710	0.3%
Developed High Intensity	Impervious surfaces account for 80-100% of total cover	477	0.1%
Barren Land (Rock/Sand/Clay)	Vegetation generally accounts for <15% of total cover	1,368	0.2%
Cultivated Crops	Areas used for the production of annual crops, includes land being actively tilled	32	0.0%
Pasture/Hay	Areas of grasses and/or legumes planted for livestock grazing or hay production	69,156	11.3%
Grassland/Herbaceous	Areas dominated (> 80%) by grammanoid or herbaceous vegetation, can be grazed	64	0.0%
Marsh	Low wet areas dominated (>80%) by herbaceous vegetation	39	0.0%
Shrub/Scrub	Areas dominated by shrubs/trees < 5 meters tall, shrub canopy > than 20% of total vegetation	34,344	5.6%
Floodplain Forest	> 20% tree cover, the soil is periodically covered or saturated with water	62,033	10.1%
Deciduous Forest	> 20% tree cover, >75% of tree species shed leaves in response to seasonal change	64,594	10.5%
Live Oak Forest	> 20% tree cover, live oak species represent >75% of the total tree cover	0	0.0%
Live Oak/Deciduous Forest	> 20% tree cover, neither live oak or deciduous species represent >75% of the total tree cover	7	0.0%
Juniper or Juniper/Live Oak Forest	> 20% tree cover, juniper or juniper/live oak species represent > 75% of the total tree cover	0	0.0%
Juniper/Deciduous Forest	> 20% tree cover, neither juniper or deciduous species represent > 75% of the total tree cover	0	0.0%
Pinyon/Juniper Forest	> 20% tree cover, pinyon or juniper species represent > 75% of the total tree cover	0	0.0%
Eastern Redcedar Forest	> 20% tree cover, eastern redcedar represents > 75% of the total tree cover	2	0.0%
Eastern Redcedar/Deciduous Forest	> 20% tree cover, neither eastern redcedar or deciduous species represent > 75% of the total tree cover	2	0.0%
Pine Forest	> 20% tree cover, pine species represent > 75% of the total tree cover	103,077	16.8%
Pine Regeneration	Areas of pine forest in an early successional or transitional stage	41,739	6.8%
Pine/Deciduous Forest	> 20% tree cover, neither pine or deciduous species represent > 75% of the total tree cover	118,894	19.3%
Pine/Deciduous Regeneration	Areas of pine or pine/deciduous forest in an early successional or transitional stage	48,531	7.9%
Total		614,573	100.0%





Class	Acres	Percent
Pine/Deciduous Forest, 0-3 years	25,406	8.1%
Pine/Deciduous Forest, 4-6 years	14,688	4.7%
Pine/Deciduous Forest, 7-9 years	8,810	2.8%
Pine/Deciduous Forest, 10-12 years	8,618	2.7%
Pine/Deciduous Forest, 13-15 years	9,351	3.0%
Pine/Deciduous Forest, 16-18 years	9,506	3.0%
Pine/Deciduous Forest, 19-21 years	2,437	0.8%
Pine/Deciduous Forest, 22-30 years	7,341	2.3%
Pine/Deciduous Forest, 30 plus years	82,730	26.2%
Pine Forest, 0-3 years	25,830	8.2%
Pine Forest, 4-6 years	11,890	3.8%
Pine Forest, 7-9 years	12,096	3.8%
Pine Forest, 10-12 years	12,910	4.1%
Pine Forest, 13-15 years	10,739	3.4%
Pine Forest, 16-18 years	12,123	3.8%
Pine Forest, 19-21 years	3,656	1.2%
Pine Forest, 22-30 years	12,418	3.9%
Pine Forest, 30 plus years	44,629	14.2%
Total	315,177	100.0%

Pine age is one the key inputs used to assist with the development of several fuel datasets including, surface fuels, canopy ceiling height/stand height, canopy base height and canopy bulk density. The age classes are as follows: 0-3 years, 4-6 years, 7-9 years, 10-12 years, 13-15 years, 16-18 years, 19-21 years, 22-30 years, and 30 + years.

In the pine forests of East Texas, pine stands are an important consideration in the overall wildfire management of the area. Many stands are planted and managed as a financial investment by private landowners, timber companies, timber management investment organizations (TIMOs), or real estate investment trusts (REITs). Other stands may be used for recreation and/or represent prime wildlife habitat for critical or endangered species. Age is often a good indicator of the potential fire behavior and value associated with pine stands, as well as the susceptibility of the stand to be damaged from wildfire. For example, young stands mixed with grass and smaller-sized trees have the potential to exhibit extreme fire behavior and are very susceptible to damage.

However, these young stands typically have less value associated with them as compared to more mature pine stands. As a pine stand ages it typically becomes less susceptible to damage from wildfires. Pine Age was produced as part the East Texas Fuels Classification Project sponsored by Texas A&M Forest Service.





## **Community Facilities and Resources**

Cass County has many diverse and regionally located community facilities. The facility types include:

- School Districts and schools
- Emergency facilities
- Utilities and hazardous materials
- Pipelines and wellheads
- Historical properties and structures

These facilities require special protection from wildfire as the possible loss is costly and vastly impacts the community.

# **Schools Districts**

## Atlanta Independent School District

- Atlanta High School, 705 Rabbit Boulevard. Atlanta, TX
- Atlanta Middle School, 600 High School Lane Atlanta, TX
- Atlanta Elementary, 902 ABC Lane Atlanta, TX
- Atlanta Primary School, 505 Rabbit Boulevard. Atlanta,TX

## Avinger Independent School District

• Avinger High/Elementary School, 245 Conner Avenue Avinger, TX

## **Bloomburg Independent School District**

Bloomburg High/Elementary School, 307 West Cypress Street Bloomburg,TX

## Hughes Springs Independent School District

- Hughes Springs High School, 701 Russell Street Hughes Springs, TX
- Hughes Springs Junior High School, 609 Russell Street Hughes Springs, TX
- Hughes Springs Elementary, 808 Russell Street Hughes Springs, TX

## Linden-Kildare Consolidated Independent School District

- Linden-Kildare High School, 205 Kildare Road, Linden, TX
- Mae Luster Stephens Junior High, 205 Kildare Road, Linden, TX
- Linden-Kildare Elementary, 205 Kildare Road, Linden, TX

## **McLeod Consolidated Independent School District**

McLeod High/Elementary School, 19395 Farm to Market Road 125, McLeod, TX

## **Queen City Independent School District**

- Queen City High School, 905 Houston Street Queen City, TX
- Morris Upchurch Middle School, 500 5th Street Queen City, TX
- J.K. Hileman Elementary, 1013 Houston Street Queen City, TX

# **Emergency Facilities**

### Christus St. Michael Hospital (Formally Atlanta Memorial Hostial), 1007 South William

Street Atlanta, TX

•Acute care, 65 bed hospital

• Fully staffed emergency room

## Good Shepherd Medical Center, 404 N Kaufman Street Linden, TX

- Staffed emergency department
- Open from Monday-Friday 8am-5pm

### **Closest Burn Units:**

- Parkland Memorial Hospital Regional Burn Center in Dallas, TX
- Arkansas Children's Hospital in Little Rock, AR

## Utilities and Hazardous Materials Gas and Electric

**Bowie-Cass** Electric (903) 846-2311

**Marietta Gas and Water** (903) 835-5596

**Southwestern Electric Power Co.** (903) 562-1131

**CenterPoint Energy** (903)

Water Atlanta Water Department (903) 796-7153

**Avinger Water Department** (903)

**Bloomburg Water Department** (903) 728-5554

Domino Water Department (903)

**Eastern Cass Water Corporation** 903) 796-2393

**Linden Water Department** (903)

**Queen City Water Department** (903)

Western Cass Water Supply Co. (903) 756-8789

Some areas of Cass County contain Hydrogen Sulfide or "Sour Gas." Sour Gas is extremely poisonous and can cause permanent injuries or death in small amounts in a very short amount of time. Precautionary measures should be implemented when wildfire operations are being completed near Sour Gas wells.



### **Pipelines and Wellheads**

**Alaron Energy, Inc. (PS 014450)** 469-647-5033 E 325-340-1077

Ark-La-Tex Energy Company, LLC (PS 030584) 318-676-2018 E 318-347-1872

Barrow-Shaver Resources Co (PS 053321) 903-593-5221 E 903-593-5221

**Beacon Petroleum Corp (PS 059400)** 713-894-1070 E 713-894-1070

**Beehive Operating LLC (PS 061750)** 940-549-5356 E 940-456-4272

Black Bayou Operating LLC (PS 07263) 817-882-9063 E 817-495-9331

**Booher Engineering Inc (PS 082570)** 817-882-9063 E 903-530-8333

**Brooks Petroleum Company (PS 097323)** 903-504-5405 E 903-245-4495

**Buffco Production Inc. (PS 106406)** 903-988-8199 E 903-796-4697

Centerpoint Energy Gas LLC (PS) 318-227-2565

**Cass Energy LLC (PS 139618)** 318-861-9222 E 972-310-5422

**CEC Operations of Texas LLC (PS 140531)** 316-665-2651 E 316-665-2651

Chaparral Energy (USA) LLC (PS 144597) 405-478-8770 E 405-478-8770

**Chaparral Operating Inc (PS 144581)** 318-631-2216 E 318-631-2216 **Diversified Production LLC (PS 220903)** 318-751-3917 E 844-507-5540

**Eagle Oil and Gas Co (PS 238634)** 214-369-1545 E 940-781-0704

Gallery Petroleum LLC (PS 293172) 903-984-3443 E 318-588-0748

Katy Resources LLC (PS 451659) 214-526-9700 E 214-526-9700

**KLO Oil and Gas LLC (PS 470563)** 918-599-9327 E 918-630-5870

Lance Oil and Gas Production LLC (PS 484437) 903-924-6381 E 903-728-5484

Louisiana Energy Consultant Inc (PS 509391) 903-984-3443 E 318-227-7907

**Machin and Associates Inc. (PS 520328)** 903-753-2697 E 903-738-5181

**Magnolia Production Inc. (PS 521505)** 903-796-1855 E 903-796-1855

**Marion County Production Co (PS 526241)** 903-984-3443 E 903-799-0131

**McCormick Production Company Inc (PS 541901)** 318-995-6675 E 318-995-6675

**McDonald Resources LLC (PS 547940)** 903-672-5297 E 903-672-5297

**McKnight, C.L. (PS 551650)** 903-826-7479 E 903-826-7479

**Moransco Energy Corporation (PS 584122)** 903-984-3443 E 318-465-9918

**O'Benco, Inc (PS 617512)** 318-865-8568 E 318-865-8568

**Natural Gas P/L Company of America LLC** 713-369-9400

**Oil Patch Operators LLC (PS 620505)** 903-984-3443 E 318-422-2272 **Okie Operating Co LTD (PS 621080)** 918-582-2501 E 918-582-2555

**Pegasi Operating Inc (PS 650623)** 903-503-5956 E 903-503-2956

**Performance Operating Partners (PS 100367)** 318-841-2630 E 800-591-9070

**Ramtex Energy LLC (PS 690225)** 918-936-4600 E 479-287-7920

**Ridgeling Well Salvage (PS 711114)** 409-224-8446 E 409-224-8446

**Rose City Resources LLC (PS 727892)** 903-245-4495 E 903-245-4495

**RWJ Operating LLC (PS 739805)** 214-484-66927 E 214-517-4553

Skylar Exploration Co LLC (PS 785940)318-227-8668E 903-255-4844

**Smith Resources Inc (PS 796160)** 903-935-5232 E 903-935-5232

Southwest Operating Inc Tyler (PS 806415) 903-597-4279 E 903-530-1563

**Stetson Petroleum Corp (PS 819479)** 406-844-3600 E 903-271-3330

**Stroud Petroleum Inc (PS 828082)** 318-425-0101 E 318-425-0101

Sulphur River Exploration Inc. (PS 828880) 214-373-1091 E 800-734-4872

**Swanson Operating Inc (PS 831662)** 940-631-9363 E 940-631-6378

**Tanos Exploration II LLC (PS 835976)** 903-597-7667 E 903-597-7667 **United Petroleum and Gas Inc (PS 877497)** 903-984-3443 E 318-934-4010

**Vanco Oil and Gas Corp (PS 881484)** 325-677-1991 E 325-667-1991

\*Source: Railroad Commission of Texas Red highlighted companies are either delinquent or not active. If no answer, contact RRC.

#### **Pipeline Safety**

Most highly explosive pipelines will be buried approximately three feet deep, but there are exceptions.

Some of the larger firefighting equipment will be powerful enough to rupture these lines. Other lines may not be as explosive but can also be very dangerous. Most of the plastic "flow lines" that lie on top of the ground are usually carrying less of a dangerous liquid but can still burn if ignited. This hazard requires the use of lookouts, especially at night. Some situations may require that the ground person walk in front of the equipment if pipelines are suspected in the vicinity.

Underground pipelines are marked with aboveground markers.

## **Historical Structures and Properties**

#### **Texas Historical Commission**

The Texas Historical Commission (THC) maintains a GIS database (mapped) of historic properties and structures in Texas. A list of properties with locations can be found on the following link <u>https://atlas.thc.texas.gov/Map</u>.

There are approximately 29 sites in Cass County referenced on the THC website. These sites are as follows:

- Historical Markers 7 total
- Cemeteries 15 total
- Structures 8 total

The structures are listed as:

- Smyrna Baptist Church (on SH77 east of Atlanta)
- Hopewell Baptist Church (on CR2921 near Hughes Springs)
- Mt Zion Baptist Church of Christ (on CR1771 south of Linden)
- Masonic Lodge Hall and First Baptist Church (at FM125/FM248 in Kildare)
- Cass County Courthouse (downtown Linden)
- Laws Chapel Methodist Church (on FM2329 southwest of Atlanta)
- Smith Hoyt Youngs House (606 E Hiram, Atlanta)
- United Methodist Church of Atlanta (701 Lindsey Lane, Atlanta)

There could be additional structures that are not registered or not shown in the THC data base. These areas are an important part of Cass County history heritage and culture. These areas require protection from wildfire.

Locally, \_\_\_\_\_\_\_ is the chairperson of the \_\_\_\_\_\_. The \_\_\_\_\_\_ should be contacted on a periodic basis to see if additional structures or areas should be not in the CWPP.

## **Industrial Facilities**

Cass County has several major industrial facilities that require protection from wildfire. These facilities provide jobs or utilities and present a hardship to Cass County if lost or damaged.

These facilities are:

- Graphics Packaging paper mill located near Domino
- Ward Timber sawmill near Linden
- Oil/Gas Wellheads and Pipeline Facilities various locations in Cass County
- Water Production Wells various locations in Cass County
- Power Transmission Lines various locations in Cass County

These areas require protection from wildfire.

# **Transportation Facilities**

#### **Texas Department of Transportation (TxDOT)**

TxDOT operates a county wide highway system in Cass County. These roads include:

- Federal Aid Primary Highways major highways such as US59 and US259
- State Highways local highways such as SH77, SH43 and SH8
- Local System many Farm to Market (FM) roads

#### Cass County (County)

Cass County maintains a countywide road system through its four precints. These roads include:

- Tier I Roads typically paved arterial roads
- Tier II Roads typically unpaved collector roads

#### Airports

The City of Atlanta operates a municipal airport.

#### Railroads

Union Pacific Railroad operates a mainline railroad that generally parallels US59 and crosses Cass County from the southeast to the northwest.

## **County Legal Authority**

§ 352.081. REGULATION OF OUTDOOR BURNING. (a) In this section, "drought conditions" means the existence of a long-term deficit of moisture creating atypically severe conditions with increased wildfire occurrence as defined by the Texas Forest Service through the use of the Keetch-Byram Drought Index or, when that index is not available, through the use of a comparable measurement that takes into consideration the burning index, spread component, or ignition component for the particular area.

(b) On the request of the commissioner's court of a county, the Texas Forest Service shall determine whether drought conditions exist in all or part of the county. The Texas Forest Service shall make available the measurement index guidelines that determine whether a particular area is in drought condition. Following a determination that drought conditions exist, the Texas Forest Service shall notify the county when drought conditions no longer exist. The Texas Forest Service may accept donations of equipment or funds as necessary to aid the Texas Forest Service in carrying out this section.

(c) The commissioners court of a county by order may prohibit or restrict outdoor burning in general or outdoor burning of a particular substance in all or part of the unincorporated area of the county if:

(1) drought conditions have been determined to exist as provided by Subsection (b); or

(2) the commissioners court makes a finding that circumstances present in all or part of the unincorporated area create a public safety hazard that would be exacerbated by outdoor burning.

(d) An order adopted under this section must specify the period during which outdoor burning is prohibited or restricted. The period may not extend beyond the 90th day after the date the order is adopted. A commissioner's court may adopt an order under this section that takes effect on the expiration of a previous order adopted under this section.

(e) An order adopted under this section expires, as applicable, on the date:

(1) a determination is made under Subsection (b) that drought conditions no longer exist; or

(2) a determination is made by the commissioner's court that the circumstances identified under Subsection (c)(2) no longer exist.

(f) This section does not apply to outdoor burning activities:

(1) related to public health and safety that are authorized by the Texas Natural Resource Conservation Commission (or Texas Commission for Environmental Quality/) for:

(A) firefighter training;

(B) public utility, natural gas pipeline,

or mining operations; or

(C) planting or harvesting of agriculture crops;

or

(2) that are conducted by a prescribed burn manager certified under Section 153.048, Natural Resources Code, and meet the standards of Section 153.047, Natural Resources Code.

(g) Any person is entitled to injunctive relief to prevent the violation or threatened violation of a prohibition or restriction established by an order adopted under this section.

(h) A person commits an offense if the person knowingly or intentionally violates a prohibition or restriction established by an order adopted under this section. An offense under this subsection is a Class C misdemeanor.

Added by Acts 1999, 76th Leg., ch. 1435, § 1, eff. Aug. 30, 1999. Amended by Acts 2001, 77th Leg., ch. 1185, § 1, eff. Sept. 1, 2001. Renumbered from § 240.906 by Acts 2001, 77th Leg., ch. 1420, § 12.004, eff. Sept. 1, 2001. § 352.082. OUTDOOR BURNING OF HOUSEHOLD REFUSE IN

CERTAIN RESIDENTIAL AREAS. (a) This section applies only to the unincorporated area of a county:

(1) that is adjacent to a county with a population of

#### 3.3 million or more; and

(2) in which a planned community is located that has 20,000 or more acres of land, that was originally established under the Urban Growth and New Community Development Act of 1970 (42 U.S.C. Section 4501 et seq.), and that is subject to restrictive covenants containing ad valorem or annual

U.S.C. Section 4501 et seq.), and that is subject to restrictive covenants containing ad valorem or annual variable budget based assessments on real property.

(b) In this section, "neighborhood" and "refuse" have the meanings assigned by Section 343.002, Health and Safety Code.

(c) A person commits an offense if the person intentionally or knowingly burns household refuse outdoors on a lot that is:

(1) located in a neighborhood; or

(2) smaller than five acres.

(d) An offense under this section is a Class C misdemeanor. On conviction of an offense under this section, the court shall require the defendant, in addition to any fine, to perform community service as provided by Sec- tion 16(e), Article 42.12, Code of Criminal Procedure. Does this need to remain in?



# **Collaboration Opportunities**

Cass County is a large rural community with a large land area and a small population. Population density is the area divided by the population. Cass County is just under 30 residents per square mile.

Texas lists population density for Metropolitan Statistical Areas (MSA) in five categories with the least ranging from 35 to 100 people per square mile. Cass County's population and ranking is rural.

With an extremely small population density, protection from wildfires requires a collaborative approach as no single entity has the resource to fight and contain wildfires. This Community Background section of the CWPP identified many organizations that suffer significant loss from wildfire, but have some resources that can be used to prevent or fight wildfires. These are:

- Texas Forestry Service
- Emergency Service Districts
- School Districts
- Emergency Facilities
- Utility Providers
- Industrial Entities
- Transportation Providers

Cass County has the legal authority to issue and rescind burn bans. By working in conjunction with the Texas Forestry Service and closely monitoring weather patterns, Cass County can limit ignition sources by issuing a burn ban.

In this report, information is supplied for entities that benefit from a collaborative approach to preventing and fighting wildfires.

# **Fire Environment**

## Wildland Urban Interface

The Wildland Urban Interface (WUI) is described as the area where structures meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases wildfire risks. In Texas, more than 80 percent of wildfires occur within two miles of a community.

Cass County's population is estimated to be 29,500 and is projected to decrease to 24,769 by 2040.

It is estimated that 26,330 people, or 90 percent of the population, live within the WUI.

Population is determined by the housing density of a certain area. This is measured in the number of houses per number of acres. The higher-density areas are calculated at three houses per acre and the less dense areas are calculated at one house per 40 acres. This information gives planners an idea of how many homes are at risk to wildfire and how many homes would need to be protected during a wildfire, which is useful when planning evacuations.

The scale below shows the lowest density (gray) to highest density (purple) and the WUI population and acreage reflected for each density level in Cass County.

Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
LT 1hs/40ac	1,664	6.3%	92,929	48.0%
1hs/40ac to 1hs/20ac	2,536	9.6%	39,357	20.3%
1hs/20ac to 1hs/10ac	4,345	16.5%	31,275	16.1%
1hs/10ac to 1hs/5ac	5,374	20.4%	18,043	9.3%
1hs/5ac to 1hs/2ac	5,803	22.0%	8,778	4.5%
1hs/2ac to 3hs/1ac	6,608	25.1%	3,400	1.8%
GT 3hs/1ac	0	0.0%	0	0.0%
Total	26,330	100.0%	193,781	100.0%

#### WUI Population and Acres



# **Fire Occurrence**

Update

During early September of 2011, Cass County experienced the largest fire in East Texas history when the Bear Creek Fire ignited. A total of 41,050 acres were consumed along with 66 homes.

Wildfire occurrence statistics provide insight into the number of fires, the cause of fires and acres burned. These statistics are useful for prevention and mitigation planning. They can be used to determine the time of year most fires typically occur and develop a fire prevention campaign aimed at reducing a specific fire cause. The fire occurrence statistics are grouped by primary response agency, which include:

• Federal – Fires reported by U.S. Forest Service, U.S. Fish and Wildlife Service and National Park Service.

• **Texas A&M Forest Service (TFS)** – Texas A&M Forest Service's fire occurrence database represents all state- reported fires.

• Local – The local category includes fires reported via Texas A&M Forest Service's online fire department reporting system. It is a voluntary reporting system that includes fires reported by both paid and volunteer fire departments since 2005.

Five years of historic fire report data was used to create the fire occurrence summary charts. Data was obtained from federal, state and local fire department report data sources for the years 2005-2009. The most common cause of wildfires in Cass County is debris burning.



#### Cass County, TX Wildfire Ignitions (2005-2009)

# **Fire Behavior**

Cass County has two primary fuel types of concern: grasses and pine. During the winter dormant season, grasses pose the most risk especially during passing weather fronts. Cured grasses and high winds can produce active fire behavior during the dormant season.

Depending on grazing practices, rates of spread and flame lengths can range from low to high. Since grasses are considered a onehour fuel, they dry out quickly and burn rapidly.

Pine forests are high risk fuels during late summer drying (June through September). Pine can produce single-tree and group torching depending on live fuel moisture levels and the presence of understory fuels. Sustained crown runs are possible when canopy fuels are dense. Pines pose the most risk for spotting potential. A high concentration of pine needles creates more surface area for ignition, and can easily be lofted far ahead of the main fire, producing spot fires.

Younger pine plantations, brush and tall grasses are the primary ladder fuels in the area. Ladder fuels act to transition a surface fire to the canopy of a tree. Young pine plantations and grass can produce high flame lengths and under the right conditions, cause mature pines to torch. Cass County has a live fuel mositure sampling site to mointor fuels and can be viewed at http://ticc.tamu.edu/PredictiveServices/ FuelsFireDanger.htm.

While most wildland incidents will end with a successful initial attack, Cass County does have the potential for extended attack, especially during dry, windy conditions and when Energy Release Components are above the 97th percentile.

#### **Peak Fire Seasons:**

Primary: June through September with summer drying. Secondary: December through April with cured grasses and wind events.





Ladder fuels can cause tree torching

Grass fuels in pine plantation during Bear Creek Fire.

#### **Fire Danger Tools:**

Probably the most effective tool for gauging the day-today fire behavior in Cass County is the Significant Fire Potential Matrix that can be found on the Texas Interagency Coordination Center website (http://ticc.tamu.edu). The matrix, pictured at right, takes into account Burning Index (BI) and Energy Release Component (ERC). The BI provides the potential for initial attack activity, while the ERC provides the potential for extended attack activity. Together, these two indices produce a simple and accurate outlook for fire behavior on any given day.

#### For Cass County, these values can be found for Linden at: BI/ERC Calculations: http://ticc.tamu.edu/PredictiveServices/

WeatherStation.htm \* Click on "NFDRS Indices"

#### Fire Potential Matrix: http://ticc.tamu.edu/PredictiveServices/ WeatherStation.htm

\* Click on the "Linden RAWS"

Linden		Preparedness Level Energy Release Component G (ERC)					
RAWS		<b>1</b> 0-28	<b>2</b> 29-39	<b>3</b> 40-50	<b>4</b> 51+		
	<b>1</b> 0-25	Low	Low	Moderate	Moderate		
h Level dex G (BI)	<b>2</b> 27-38	Low	Moderate	Moderate	Moderate		
Dispatch Level Burning Index G (BI)	<b>3</b> 39-45	Moderate	Moderate	High	High		
	4 46+	Moderate	Moderate	High	Very High		



#### **Characteristic Rate of Spread**

Characteristic Rate of Spread is the typical or representative rate of spread of a potential fire based on a weighted average of four percentile weather categories. Rate of spread is the speed with which a fire moves in a horizontal direction across the landscape, usually expressed in chains (66 feet) per hour (ch/hr) or feet per minute (ft/min). For purposes of the Texas Wildfire Risk Assessment, this measurement represents the maximum rate of spread of the fire front.

Rate of spread is a fire behavior output, which is influenced by three environmental factors – fuels, weather and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high and extreme weather days for each weather influence zone in Texas. A weather influence zone is an area where, for analysis purposes, the weather on any given day is considered uniform. There are 22 weather influence zones in Texas.



### **Characteristic Flame Length**

Characteristic Flame Length is the typical or representative flame length of a potential fire based on a weighted average of four percentile weather categories. Flame Length is defined as the distance between the flame tip and the midpoint of the flame depth at the base of the flame, which is generally the ground surface. It is an indicator of fire intensity and is often used to estimate how much heat the fire is generating. Flame length is typically measured in feet.

Flame length is a fire behavior output, which is influenced by three environmental factors – fuels, weather and topography.



# **Risk Assessments**

Risk assessments are conducted to gauge wildland fire hazards for the lands and neighborhoods in a particular area. Assessments are 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:

- Assesses risks, hazards, fire protection capability, structural vulnerability and values to be protected.
- Identifies the Wildland Urban Interface (WUI) within the planning area.
- Identifies and prioritizes areas in which to conduct fuels reduction treatments.

Risk assessment criteria includes:

- Means of access (ingress and egress, road width, all-season road condition, fire service access and street signs)
- Vegetation (characteristics of predominate vegetation within 300 feet of a home, defensible space)
- Roofing assembly (roof class)
- Building construction (materials)
- Available fire protection (water source availability, organized response resources)
- Placement of gas and electric utilities

Risk assessments were conducted in the response zones for each fire department district in Cass County. Texas A&M Forest Service staff met with fire department members at each station and discussed wildland fire issues and capacity building needs. TFS staff then assessed the response zone area based on fire department input to identify at-risk areas and communities.

Once at-risk areas were identified, specific mitigation strategies were outlined to reduce wildfire risks.

#### **Fire Department Locations**

#### **Atlanta Fire Department**

606 S. Louise Street Atlanta, TX Ricky Draper, Fire Chief 903.796.2303 rdraper@atlantatexas.org

#### **Avinger Volunteer Fire Department**

P.O. Box 117 Avinger, TX Kyle Downs 903.235.7376 <u>kydowns@tfts.tamu.edu</u>

**Bryans Mill Volunteer Fire Department** Jody Crocker 903.285.4803

#### **Cass County ESD #1**

P.O. Box 62 McLeod, TX Freddy Mosley, Chief 903.556.9288 ccedsone@gmail.com

#### **Cass County ESD #2**

704 4th Street Queen City, TX Eric White 903.824.1755 Th\_pa\_fd@hot mail.com

#### Cass County ESD #3

210 E. Main Street Bloomburg, TX Dakota Huddleston, Chief 903.824.6946 Ccesd3@yahoo.com

#### **Cass County ESD #4**

3760 FM 1841 Linden, TX Kieth Duncan, Chief 903.826.4595

#### **Cross Roads Volunteer Fire Department** 553 FM 2888 Naples, TX Robert Fritts, Chief 903.434.6422

**Douglassville Volunteer Fire Department** P.O. Box 39 Douglassville, TX Alfred E. Point, Chief 903.824.9966 Alf16poi@gmail.com

#### **Hughes Springs Volunteer Fire Department**

603 E. 1st Street Hughes Springs, TX Jay Cates 903.573.4914 Hsfd282@aol.com

Foxgrl545@gmail.com

#### Linden Volunteer Fire Department

P.O. Box 1032 Linden, TX Chris Hill, Chief 903.799.0725 Linden905@yahoo.com

#### **Marietta Volunteer Fire Department**

238 County Road 2353 Marietta, TX Chuck Ham, Chief 903.824.2046 <u>mariettafdc@aol.com</u>

#### Naples Volunteer Fire Department

Naples, TX Michael Dodson, Chief 903.380.0731 mldodson@yahoo.com

#### **Red Hill Volunteer Fire Department**

7331 Hwy 8 Douglassville, TX Leroy Wilbanks 903.331.7430 redhillvfd@yahoo.com





\*The Cass County Department Fire Department Response Zone Map is based off the Ark-Tex Council of Governments data. The response zone map has been updated, but data was not available at the time to reflect these changes. Backup for a wildland fire could include a fire plow from the Texas A&M Forest Service

office in Linden. Response time would depend on the availability of firefighters and equip- ment. The Linden office has four tractor plow units which cover Cass and Marion counties. During periods of high wildfire activity, four small fires or one large fire would quickly obligate TFS resources. Additional TFS re- sources would have to come from New Boston, Pittsburg or Marshall, based on availability.


# Atlanta Fire Department (Not Updated)

## Background

Atlanta Fire Department is located at 606 S. Louise St. Atlanta, TX in the eastern section of Cass County. The Atlanta FD serves approximately 5,800 residents and 91 square miles of coverage area. Atlanta FD is dispatched from the Atlanta Police Department.

Most of the assessment area is sparsely populated, with large expanses of rural land, primarily devoted to commercial timber production, and cattle production. The greatest population density in the assessment area is the city of Atlanta. The primary roads within the assessment area are US Hwy 59, TX Hwy 77, and TX Hwy 43. Other county and farm-to-market roads are mostly paved. There are also several private roads which go to individual homes. Some roads have one-way in and out access and should be marked with "No Outlet" or "Dead End" signs. **Areas of concern are County Road 2328 and Fin and Feather Club.** 

## **Response Capabilities**

Initial response to either a structure or wildland fire would come from Atlanta FD. There are approximately 24 active members within the department, 14 paid and 10 volunteers. Four fire firefighters and two administrative personnel are available for firefighting during working hours mid-week. Response times would depend on location of the fire within their response area, but the longest time would be 15 minutes. Atlanta FD has very good mutual aid with Linden VFD, ESDs #1, #2, #3 and #4 and Red Hill VFD.

The primary source of water available to the fire department for the purpose of fire suppression is the Eastern Cass Water Supply Corporation and Atlanta Water Department. Fire apparatus is capable of drafting directly from ponds, lakes, or a dry hydrant. Fire hydrants are present in the Atlanta city limits and dry hydrants throughout the response area.

### **Fire Reporting**

Atlanta FD does not participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires through TICC is encouraged as it is important for database management and for the application of future grants. The department uses the National Fire Incident Reporting System (NFIRS). Reporting though TICC could aid in receiving future grants for equipment through TFS. Equipment needs for Atlanta FD are wildland PPE (coveralls).

## **Equipment Needs**

Atlanta needs additional equipment as follows:

•

•

## **Unique District Properties**

Atlanta has the following unique properties presenting special firefighting difficulty:

•

•

## **Atlanta Fire Department Equipment**

Department	Equipment	Туре	Tank (Gal)



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachements coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

In order to achieve cooperation and participation of the residents in the Atlanta response area in reducing the risk of wildfire, it is recommended that the local newspaper be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Atlanta FD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Atlanta FD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing throughout the response area is good with no issues from the department responding to calls. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

#### **Burn Bans/Evacuation**

A burn permit is required within the city limits. Compliance is generally good throughout the response area when a burn ban is in effect. In order to increase awareness of high fire danger and burn bans, it is recommended that Atlanta VFD continue to place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Atlanta FD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wild-

land fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggest- ed that these tanks have all wildland fuel sources removed from around them for at least ten feet. Underground oil and gas lines are clearly marked, but caution should be taken when working around any lines. There is a large Kinder-Morgan gas pump within the response area.



Fin & Feather Club is an area of concern in Atlanta's response zone.



## Avinger Volunteer Fire Department (updated 2025)

## Background

The main fire department is located at Church St near Main St/ Hwy 49 in Avinger, TX. There is also a substation located in the Eagle Landing community off Hwy 155. Avinger and Eagle Landing, a Firewise Community since 2004, are the primary communities within the department's coverage area. Avinger VFD serves approximately 1,200 residents and 64 miles of coverage area. There is disagreement with the actual response area and the Ark-Tex Council of Governments map. Avinger VFD is dispatched from Cass County Commissioners Channel.

Most of the assessment area is sparsely populated, with large expanses of rural land, primarily devoted to commercial timber or cattle production. The greatest population density is the small communities of Avinger and Eagle Landing. Eagle Landing is a Firewise Community and is a good model of defensible space around the home. The primary roads within the assessment area are TX Hwy 155 and 49, and FM 1399. Many residences in the response area have access consisting of at least one paved road. There are also several private roads which go to individual homes. Avinger VFD response area does extend south into Marion County which does cause potential confusion as the road name changes from County Road 1651 to Avinger-Cutoff Road with different 911 addressing. Another area of concern is where County Road 1601 becomes Liberty Road into Marion County

#### **Response Capabilities**

Initial response to either a structure or wildland fire comes from Avinger VFD. There are 20 active members within the department, with 5 members available for firefighting during working hours mid-week. Response times depend on the availability of the firemen, and location of the fire within their response area. Avinger VFD has very good mutual aid with Linden VFD, Hughes Springs VFD, as well as Mims VFD in Marion County and Jenkins and Lonestar VFD's in Morris County. These mutual aid departments often respond to the Avinger response area when assistance is requested.

The primary source of water available to the fire department for the purpose of fire suppression is the Western Cass Water Supply Corporation. The department has pumps capable of drafting directly from ponds, lakes, or a dryhydrant. Six (6) fire hydrants and two (2) dry hydrants are located in Eagle Landing.

## **Fire Reporting**

Avinger VFD does actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting of "false alarms" should be reported as "other call". Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Equipment Needs**

Avinger VFD needs additional equipment as follows:

- 26 hand held radios
- 10 Cairns 1040 helmets
- 12 sets of bunker gear (coat, pants and boots)
- New station building (120x75x16)

#### **Unique District Properties**

Avinger VFD has the following unique properties presenting special fire fighting difficulty:

- Rob Roy Industries
- Natural gas and oil wells
- KCS Railroad
- Rose City Resources

Department	Equipment	Туре	Tank (Gal)
	2 Person Cab Rescue Pumper	1	1,000
	5 Person Cab Pumper	1	1,500
	2 Person Cab Brush Truck	6	250
	2 Person Cab TFS Brush Truck	5	700
	2 Person Cab TFS Brush Truck	5	700
	4 Person Cab Engine	5	750
	Command Trailer		

Avinger VFD Equipment (updated 2025)

Avinger main volunteer fire station, downtown Avinger.





#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

Avinger VFD does present wildfire mitigation and prevention information in the Avinger ISD district and is encouraged to continue this method of public outreach, and in addition provide public awareness articles to the Upshur Rural Electric Cooperative through their customer newsletter. Avinger VFD is a member of 'Ready, Set, Go!" and should continue to utilize the program. It is recommended that the local newspaper be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Avinger VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues.

#### 911 Addressing

911 addressing problems are evident where County Road 1601 becomes Liberty Road into Marion County where addressing is not visible on many homes and does slow response times down without a clear address to go to.

County Road signs within the response area could be more visible from intersecting roads so that fire fighters do not pass by the road when responding to a fire. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Avinger VFD continue to place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Avinger VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wild-land fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggest- ed that these tanks have all wildland fuel sources removed from around them for at least ten feet. The Enbridge gas plant is also a concern where the flare has caused small wildfires in the past and could be dangerous working around in the event of a large fire. Hydrogen Sulfide ("Sour Gas"), an extremely dangerous gas, is also a concern within the response area. Underground oil and gas lines are clearly marked, but caution should be taken when working around any lines.

## **Proposed Avinger Community Wildfire Protection Plan**

The following suggested goals and objectives for the Greater Avinger Area CWPP have been approved by the Mayor of Avinger, Avinger VFD, and Eagle Landing Firewise Committee.

- 1. Hold meeting with community for support and volunteers
- 2. Conduct a demographics survey of the Avinger area community
- 3. Create a list of special needs residents (elderly, living alone, bedridden, medical needs, etc.)
- 4. Conduct an environmental study for fire breaks and emergency escape routes
- 5. Obtain permission from landowners to create fire breaks and clear underbrush
- 6. Create reciprocal emergency escape routes for property on roads with only one way out
- 7. Acquire a small bulldozer with backhoe for clearing fire lanes, underbrush and maintenance
- 8. Implement a local communications and warning system for the Greater Avinger Area
- 9. Create "defensible space" around residences, business, schools, parks and public buildings
- 10. Create a volunteer task force to assist with mitigation for special needs residents
- 11. Designate several local shelters for evacuees, pets and farm animals
- 12. Create an emergency packet with local maps, evacuation routes, shelters & bug-out kit info
- 13. Assess county roads for fire apparatus and emergency evacuation
- 14. Assess Avinger VFD's apparatus and equipment status
- 15. Assess the membership and training status of Avinger VFD
- 16. Schedule regular public and school safety programs through Avinger VFD
- 17. Agreement with Avinger ISD to use school buses for evacuations especially disabled & elderly
- 18. Other proactive actions as may be suggested

## City of Avinger, Texas Proclamation

## Supporting the Greater Avinger Area Community Wildfire Protection Plan

WHEREAS, the Avinger Volunteer Fire Department, the city of Avinger, Texas (Avinger) and the Texas A&M Forest Service are creating a Community Wildfire Protection Plan (CWPP) for the Greater Avinger Area served by the Avinger Volunteer Fire Department which will include risk assessments, environmental studies and mitigation proposals; and

WHEREAS, Avinger is a chartered entity under Rural A law of the state of Texas; and

WHEREAS, Avinger Volunteer Fire Department is a department of Avinger; and

WHEREAS, Avinger Volunteer Fire Department serves about 65 square miles outside the city limits of Avinger which has been designated as the Greater Avinger Area; and

WHEREAS, the Greater Avinger Area is located in the Wildland/Urban Interface of the dense pine and hardwood forests of Northeast Texas; and

WHEREAS, the Greater Avinger Area experienced a major wildfire in September of 2011; and

WHEREAS, Avinger and Avinger Volunteer Fire Department support the creation of a Greater Avinger Area Community Wildfire Protection Plan; and

WHEREAS, a Greater Avinger Area Community Protection Plan will require risk assessments, environmental studies and suggested mitigation programs; and

**WHEREAS**, Avinger and Avinger Volunteer Fire Department must approve the final Community Wildfire Protection Plan.

**NOW, THEREFORE**, I, Marvin Parvino, as Mayor of Avinger, do hereby proclaim that the city of Avinger, Texas, will support Avinger Volunteer Fire Department and the Texas A&M Forest Service in the creation of a Greater Avinger Area Community Wildfire Protection Plan including, but not limited to, risk assessments, environmental studies and mitigation programs.

Signed in duplicate originals on this the 22<sup>nd</sup> day of October, 2012

Marvin Parvino, Mayor, Avinger, Texas

## **Eagle Landing**

Eagle Landing is a 1,610 acre development of 129 homes located in southwestern Cass County near Avinger, Texas. This very rural area of northeast Texas is heavily wooded with relatively steep terrain in some areas.

Eagle Landing was first approached by the Texas Forest Service (TFS) about Firewise Communities/USA following a wild- fire within the subdivision in April 2004. At the request of the community's homeowners association, TFS provided information to everyone at their annual meeting on May 1, 2004. The homeowners voted unanimously to engage in the Firewise Communities/USA recognition process.

TFS and Avinger VFD conducted an assessment of the development. The primary concerns noted were:

- Cul-de-sacs not designated
- Inadequate water sources
- Hydrants difficult to find especially at night
- Open burning conducted by absentee owners unfamiliar with fire weather conditions
- Inadequate 911 addressing

A plan for Eagle Landing was developed to address these concerns. Suggestions to the board included:

- Posting "No Outlet" signs at all cul-de-sacs
- Locating a second dry hydrant at the common area in the center of the development at the dam
- Installing blue 'cat eye' reflectors at every hydrant
- Installing Smokey Bear fire danger signs at both entrances into the development
- Conducting individual home assessments to offer mitigation recommendations, including 911 addressing

The Eagle Landing Firewise Board embarked on these projects immediately. In addition, they planned their first Firewise Day for September 11th, 2004. By the end of February 2005, the following projects were completed:

**1.** A second dry hydrant was installed September 8<sup>th</sup> at Eagle Landing Dam. This task was a cooperative effort involving TFS, the National Resources Conservation Service, Resource Conservation and Development and Cass County

2. Blue 'cat eyes' were ordered from Texas Department of Transportation to be installed adjacent to all fire hydrants

**3.** Smokey Bear fire danger signs were ordered from the USDA-Forest Service National Symbols Cache on September 8th

4. Eagle Landing's first "Firewise Day" was held September 11<sup>th</sup>. Homeowners were made aware of the Board's progress. Requests for individual home assessments were taken. Seven new members were recruited for the Avinger Volunteer Fire Department. The homeowners raised over \$600 in contributions for the fire department
5. Contact was made with Cass County Commissioner Kenneth Pate on November 18<sup>th</sup>. He confirmed that 18 'no outlet' signs were installed at the cul-de-sacs that needed them

**6.** A Smokey Bear fire danger sign was posted at the main entrance to the development in January 2005 **7.** Home assessment training for 14 residents of Eagle Landing and members of Avinger VFD was held on February 5<sup>th</sup>, 2005



## Bryans Mill Volunteer Fire Department No Update Provided to Date

### Background

The Bryans Mill VFD' station is located at 309 FM 994 Naples, TX, in northwestern Cass County. Bryans Mill VFD serves approximately 300 people and 50 miles of coverage area.

The primary roads within the assessment area are Texas Highway 77, FM 994, and FM 1766. Most of the residents in the response area have access consisting of at least one paved county road. There are also several private roads which go to individual homes.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from the Bryan's Mill VFD. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is very low. Bryans Mill VFD has mutual aid with Marietta VFD and Douglassville VFD and Maud VFD in Bowie County.

The primary source of water available to the fire department for the purpose of fire suppression is the Western Cass water supply. The VFD does not have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Stand pipes with flush valves are located in various parts of the response area. Due to the lack of available water sources in northern Cass County, this VFD utilizes its' tanker for water.

## **Fire Reporting**

Bryans Mill VFD does participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires is encouraged as it is important for database management and for the application of future grants.

#### **Equipment Needs**

Bryans Mill VFD needs additional equipment as follows:

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- •

## **Unique District Properties**

Bryans Mill VFD has the following unique properties presenting special firefighting difficulty:

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## Brvans Mill VFD Equipment

bryans win vib Equipment				
Department	Engine Type	Tank Size (Gal.)	GPM	
Bryans Mill VFD	Brush Truck	200	250	
Bryans Mill VFD	Brush Truck	250	95	
Bryans Mill VFD	Tender	1200	1250	



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

The local newspapers, *Cass County Sun* and *Naples Monitor*, can provide news releases from the Texas A&M Forest Service during periods of heightened fire danger. Bryans Mill may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local busi- nesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Bryans Mill VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Bryans Mill VFD continue to place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Bryans Mill assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wild-land fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. The northwestern part of the response area has a very high density of oil and gas facilities which support the gas plant at Bryans Mill. These wells and pipelines increase the risk of fighting wildland fires in this area. The gas plant has internal fire response capabilities, including a sprinkler system, in the event of a wildland fire in the vicinity.

# Cass County ESD #1 No Update Provided to Date

## Background

The Cass County ESD #1's department is located at P.O Box 62 McLeod, TX, in southeastern Cass County. Cass County ESD #1 serves approximately 1,200 and 88 miles of coverage area. Cass County ESD #1 is dispatched from the Atlanta Police Department. **ESD#1 would like their fire station to be fire resistant and become a community safe room in the event of a tornado.** 

Most of the assessment area is sparsely populated, with large expanses of rural land, primarily devoted to commercial timber or cattle production. The greatest population density in the assessment area is the small community of McLeod. The primary roads within the assessment area are TX Hwy 43, FM 251, FM 125, and FM 1841. Most of the residences in the response area have access consisting of at least one paved road. There are also several private roads which go to individual homes.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from Cass County ESD #1. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 30 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is low. Cass County ESD #1 has mutual aid with Cass County ESD #2, as well as Atlanta Fire Department.

The primary source of water available to the fire department for the purpose of fire suppression is the water supply corporation. The VFD does have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Stand pipes with flush valves are in various parts of the response area.

## **Fire Reporting**

Cass County ESD#1 does not actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Equipment Needs**

Cass County ESD #1 needs additional equipment as follows:

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- •

## **Unique District Properties**

ESD #1 has the following unique properties presenting special firefighting difficulty:

- •
- •

## **Cass County ESD #1 Equipment**

Department	Engine Type	Tank Size (Gal.)	GPM
Cass County ESD 1	Engine-Type V	200	200
Cass County ESD 1	Engine- Type III	500	250
Cass County ESD 1	Engine-Type III	2000	500
Cass County ESD 1	Engine-Type I	1000	1250



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see reference)

#### **Public Awareness**

Cass County ESD #1 has a pro-active fire prevention program in the local schools. It is recommended that the local newspaper be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Cass County ESD #1 may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Cass County ESD #1, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Cass County ESD #1 continue to place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Cass County ESD #1 assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. The eastern part of the response area has a very high density of oil and gas facilities which support the gas plant between Kildare and McLeod on FM 125. These wells and pipelines increase the risk of fighting wildland fires in this area. Lightning strikes on oil collection tanks are a common cause of wildfires for ESD #1.

Large Gas Plant in Cass County ESD #1 response area



Cass County ESD #1 station



# Cass County ESD #2 (Updated 2025)

## Background

The Cass County ESD #2's department is located at 704 4th St Queen City, TX, which is in northeastern Cass County. Cass County ESD #2 serves approximately 5,600 residents over 150 miles of coverage area. Cass County ESD #2 is dispatched from the Atlanta Police Department.

Except for Queen City, most of the assessment area is sparsely populated, with large expanses of rural land, primarily devoted to commercial timber production, and cattle production. The primary roads within the assessment area are U.S. Highway 59, TX Hwy 77, FM 251, FM 74, FM 2328, FM 995, FM 96 and FM 3129. Most of the residences in the response area have access consisting of at least one paved road. There are also several private roads which go to individual homes. There are several hydrants and dry fire hydrants within the response area.

## **Response Capabilities**

Initial response to either a structure or wildland fire would come from Cass County ESD #2. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 30 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is sufficient. Cass County ESD #2 has mutual aid with ESD #3, Douglassville VFD, Red Hill VFD, Atlanta Fire Department, and Miller County, Arkansas.

The primary source of water available to the fire department for the purpose of fire suppression is the Eastern Cass Water Supply Corporation. The department does have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Dry hydrants are in various parts of the response area.

## **Fire Reporting**

Cass County ESD #2 does actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants.

## **Equipment Needs**

ESD #2 needs additional equipment as follows:

- \_\_\_\_\_hand held radios
- \_\_\_\_ sets of Wildland Gear
- \_\_\_\_ Wildland Fire Shelters
- Wildland fire hose
- Fire shelter packs
- Replacement chassis for B-65 brush truck

## **Unique District Properties**

ESD #2 has the following unique properties presenting special firefighting difficulty:

- Graphics Packaging Paper Mill
- Quality Building
- Atlanta State Park
- Rocky Point Campground
- Piney Point Campground

Department	Equipment	Туре	Tank (Gal)	
	E-61 2024 Spartan, Engine	1	1,000	
	E-62 1999 International, Engine	1	1,500	
	E-63 1994 GMC, Engine	1	500	
	E-65 2026 International, Engine	1	800	
	B-61 2019 F550, Brush	6	300	
	B-62 1999 International, Brush	6	500	
	B-63 1982 Dodge, Brush	6	300	
	B-64 1997 GMC, Brush	6	300	
	B-65 1996 F350, Brush	6	300	
	T-61 2012 International, Tanker		2,000	
	T-62 2012 International, Tanker		2,000	
	R-61 2020 F350 Medical Rescue			
	R=62 1999 International Rescue			

# **Cass County ESD #2 Equipment** *(updated 2025)*



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

Cass County ESD #2 has a pro-active fire prevention program in the local schools, including a fire cadet training program at the high school. It is recommended that the local newspaper be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Cass County ESD #2 may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Cass County ESD #2, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area seem to be well-maintained.

#### **Burn Bans/Evacuation**

The department has requested that the county acquire and install TXDOT approved "Burn Ban" signs on feder- al, state, and FM roads within the county which would be deployed by the fire departments when burn bans are enacted by the county. Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Cass County ESD #2 place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Cass County ESD #2 assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet.

# Cass County ESD #3 Not Updated

## Background

The fire department is located at 210 E. Main Street Bloomburg, TX, in far eastern Cass County. ESD #3 serves approximately 1,400 residents and 34 miles of coverage area. ESD #3 is dispatched from the Atlanta Police Department.

Most of the assessment area is sparsely populated, with large expanses of rural land, primarily devoted to commercial timber or cattle production. The greatest population density in the assessment area is the small community of Bloomburg. The primary roads within the assessment area are TX Hwy 77, FM 249, FM 1635, and FM 3129. Most of the residences in the response area have access consisting of at least one paved road.

There are also several private roads that lead to individual homes.

## **Response Capabilities**

Initial response to either a structure or wildland fire would come from ESD #3. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average response time would be 30 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is relatively low. ESD #3 has mutual aid with Cass County ESD 2, Atlanta Fire Department, and Miller County, Arkansas. The primary source of water available to the fire department for the purpose of fire suppression is the Eastern Cass Water Supply corporation. ESD #3 does have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Dry hydrants are in various parts of the response area, but ESD #3 indicated the need for several more.

## **Fire Reporting**

ESD #3 does not actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Equipment Needs**

Cass County ESD #3 needs additional equipment as follows:

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### **Unique District Properties**

Cass County ESD #3 has the following unique properties presenting special firefighting difficulty:

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## Cass County ESD #3 Equipment

Department	Engine Type	Tank Size (Gal.)	GPM
Bloomburg VFD	Tender-Type II	200	200
Bloomburg VFD	Tender- Type III	1500	500
Bloomburg VFD	Engine-Type II	1250	1250
Bloomburg VFD	Engine-Type IV	250	



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachements coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

ESD #3 does present wildfire mitigation and prevention information in the Bloomburg ISD district and is encouraged to continue this method of public outreach. It is recommended that the local newspaper be pro- vided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Bloom- burg VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as ESD #3, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended ESD #3 continue to place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the ESD #3 assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet.

# Cass County ESD #4 (Updated 2025)

## Background

The ESD #4 stations are located at 3760 FM 1841 Linden, TX, and near Kildare, in eastern Cass County. ESD #4 serves approximately 450 people and 50 miles of coverage area.

The primary roads within the assessment area are US Hwy 59, FM 1841, and FM 248. Most of the residents in the response area have access consisting of at least one paved county road. There are also several private roads which go to individual homes.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from the ESD #4. Response times depend on the availability of the firemen, and location of the fire within their response area, but the average would be 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is very low.

The primary source of water available to the fire department for the purpose of fire suppression is the Eastern Cass water supply. The ESD does not have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. There are two fire hydrants and stand pipes with flush valves located in various parts of the response area.

## **Fire Reporting**

ESD #4 does actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Continuation of wildfire reporting is encouraged as it is important for database management and for the application of future grants.

#### **Equipment Needs**

ESD #4 needs additional equipment as follows:

- Communication Equipment
  - o 25 hand held radios
  - 10 mobile or vehicle units
- 10 sets of Wildland Gear
- 10 sets of Bunker Gear
- 10 sets of First Aid Kits
- Training materials
- 8 sets of large and secondary Jump Packs
- 10 sets of SCBA tank and mask
- 4 AED units
- 4 exhaust fans
- 4 extraction blankets
- 4 insulated wool blankets
- 15 high visibility vests
- 1 new Type 1 engine tanker
- 1 new brush truck
- 3 bay fire station (Kildare)
- Replacement driveways at 2 stations
- 2 station generators
- Signs, cones and ID tags
- Swift water rescue equipment including boat/trailer and rescue cans, throw rings, drag kits,

backpacks and helmets

#### **Unique District Properties**

ESD #4 has the following unique properties presenting special firefighting difficulty:

- Churches, 5 •
- Kildare Lodge Hall •
- LKHS, out buildings and stadium •
- Restaurants and retail, 4 •
- Oil and gas units •
- Petroleum pipelines SWEPCO substation •
- •
- Timber acreage •
- Transportation highways and rail •

# Cass County ESD #4 Equipment (updated 2025)

Department	Equipment	Туре	Tank (Gal)
	B90, 2003 Stewart Stevens, Brush	5	500
	B91, 2011 F550, Brush	5	500
	B92, Stewart Stevens M10, Brush	5	500
	E90, 1986 Ford FireCat, Engine	2	1,000
	T90, 2003 Stewart Stevens, Tanker	2	2,000
	T91, 1991 International, Tanker	2	2,000



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

It is recommended that the local newspaper be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Center Hill VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Center Hill VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area seem to be well maintained.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Center Hill VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Center Hill VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet.

# **Crossroads Volunteer Fire Department (Not Updated)**

## Background

The Crossroads VFD' station is located at 553 FM 2888 Naples, TX, in western Cass County. Crossroads VFD serves approximately 750 people and 75 miles of coverage area.

The primary roads within the assessment area are FM 130, FM 995, FM 1399, FM 250 and FM 161. Most of the residents in the response area have access consisting of at least one paved county road.

## **Response Capabilities**

Initial response to either a structure or wildland fire would come from the Crossroads VFD. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is very low. Crossroads is dispatched from Linden.

The primary source of water available to the fire department for the purpose of fire suppression is the Western Cass water supply. Most of the VFD's trucks have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Stand pipes with flush valves are located in various parts of the response area. Due to the lack of available water sources in northern Cass County, this VFD utilizes its' tender for water.

## **Fire Reporting**

Crossroads VFD has participated in in the past with fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Crossroads VFD Needs**

Crossroads VFD needs additional equipment as follows:

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## **Unique District Properties**

Crossroads VFD has the following unique properties presenting special firefighting difficulty:

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#### **Crossroads VFD Equipment**

Fire Department	Equipment-Type	Tank Size (Gal.)	Pump Size (GPM)
Crossroads VFD	Brush Truck	500	250
Crossroads VFD	Brush Truck	250	150
Crossroads VFD	Tender	1000	250
Crossroads VFD	Pumper	500	750



#### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

#### **Public Awareness**

It is recommended that the local newspapers, *Cass County Sun* and *Naples Monitor* be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Crossroads VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Crossroads VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

#### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area seem to be well-maintained.

#### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Crossroads VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

#### Utilities

Most of the electric lines and other utilities in the Crossroads VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. The northwestern part of the response area has a very high density of oil and gas facilities which support the gas plant at Bryans Mill. These wells and pipelines increase the risk of fighting wildland fires in this area.
## Douglassville Volunteer Fire Department (Updated 2025)

### Background

The Douglassville VFD station is located at P.O. Box 39 Douglasville, TX, in northcentral Cass County. Crossroads VFD serves approximately 900 people and 62 miles of coverage area. Douglassville is main the community in the response zone.

Primary roads within the assessment area are TX Hwy 8 and 77, FM 2791, and FM 2065. Most of the residents in the response area have access consisting of at least one paved county road.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from the Douglassville VFD. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is very low.

The primary source of water available to the fire department for the purpose of fire suppression is the Western Cass water supply. The VFD does have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Stand pipes with flush valves are in various parts of the response area. Due to the lack of available water sources in northern Cass County, it is suggested that one or more VFD's pursue a tanker for mutual aid.

### **Fire Reporting**

Douglassville VFD does not actively participate in fire reporting through the Texas Interagency Coordination Center (TICC) website. Reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Equipment Needs**

Douglassville VFD needs additional equipment as follows:

- 8 hand held radios
- Large tanker
- Brush truck
- New station
- Update all fire fighting equipment

### **Unique District Properties**

Douglassville VFD has the following unique properties presenting special firefighting difficulty:

- Bowie Cass Electrical Cooperative
- Service station and retail stores
- Gas supply plant
- Sawmill

Department	Equipment	Туре	Tank (Gal)
	Engine, small	2	
	Brush truck		
	Army truck	7	200
	Army truck	7	200

## Douglassville VFD Equipment (updated 2025)



### **Risks and Mitigation Strategies**

### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

### **Public Awareness**

It is recommended that the local newspapers be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Douglassville VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Douglassville VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

### 911 Addressing

911 addressing is currently sufficient in the response area. It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area seem to be well-maintained.

### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Douglassville VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

### Utilities

Most of the electric lines and other utilities in the Douglassville assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. The northwestern part of the response area has a very high density of oil and gas facilities which support the gas plant at Bryan's mill. These wells and pipelines increase the risk of fighting wildland fires in this area.

## Hughes Springs Volunteer Fire Department (Updated 2025)

### Background

The Hughes Springs VFD station is located at PO Box 356 Hughes Springs, TX 75, in the southwest section of Cass County. Hughes Springs VFD serves approximately 3,300 residents and 85 square miles of coverage area. Hughes Springs is main community in the response zone.

The primary roads within the assessment area are TX Hwy 49, Hwy 11, FM 161. Other county and farm-to-market roads are a mix of paved and unpaved. Many portions of the response area have wetnatured soils which hold and retain moisture for long periods. **Some roads have one-way in and out access and should be marked with "No Outlet" or "Dead End" signs. Roads of highest concern are CR 2921 and CR 2861.** Hughes Springs VFD coverage area does extend west into Morris County.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from Hughes Springs VFD. There are approximately 30 active members within the department, with 3-4 members available for firefighting during working hours mid-week. Response times would depend on the availability of the firemen, and location of the fire within their response area. Hughes Springs VFD has very good mutual aid with Linden VFD, Avinger VFD, and Lonestar VFD's in Morris County. There is poor mutual aid with Cross Roads VFD due to limited resources in that department. These mutual aid departments often respond to the Hughes Springs response area when assistance is requested.

Hughes Springs VFD is dispatched from Cass County Sherriff's Office. Communication in the field is a concern due to the topography of the response area. A repeater is needed for sufficient communication throughout the response area. The new digital radio system is also a concern where radio communication may be limited and less consistent. These issues have been addressed by the Cass County emergency management coordinator.

The primary source of water available to the fire department for the purpose of fire suppression is the Western Cass County water supply corporation. The department has pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Fire hydrants are present in the Hughes Springs city limits and dry hydrants throughout the response area.

### **Fire Reporting**

Hughes Springs VFD has actively participated in fire reporting through the Texas Interagency Coordination Center website. Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Equipment Needs**

Hughes Springs VFD needs additional equipment as follows:

- \_\_\_\_ hand held radios
- \_\_\_\_ sets of Wildland Gear
- Nozzle replacement
- Attack nozzles

### **Unique District Properties**

Hughes Springs VFD has the following unique properties presenting special firefighting difficulty:

- KCS Railway
- Oil and gas wells, pipelines and storage units

• Industries needing Class B foams

## Hughes Springs VFD Equipment

Department	Equipment	Туре	Tank (Gal)
	Grass Truck, 1 ton		
	Class A Pumper		
	Class A Pumper		
	Military Conversion, Tanker		
	Military Conversion, Brush		



### **Risks and Mitigation Strategies**

### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

### **Public Awareness**

Hughes Springs VFD does present wildfire mitigation and prevention information in the Hughes Springs ISD district and is encouraged to continue this method of public outreach. Educational material is also placed in stores and sent via mail to homeowners. It is recommended that the local newspapers be provided with news releases from the Texas A&M Forest Service during periods of heightened fire danger. Hughes Springs VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service pro- grams, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Hughes Springs VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

### 911 Addressing

It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. 911 addressing problems are evident as addressing is not visible on many homes and does slow response times down without a clear address to go to.

County road signs within the response area could be more visible from intersecting roads so that fire fighters do not pass by the road when responding to a fire.

### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Hughes Springs VFD place fire danger / burn ban signs at highly visible locations with- in the response area. Evacuation notification could come through "reverse 911".

### Utilities

Most of the electric lines and other utilities in the Hughes Springs VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from taken when working around any lines.

## Linden Volunteer Fire Department (Updated 2025)

### Background

The Linden VFD station is located at PO Box 1032 Linden, TX, in the southcentral part of Cass County. Hughes Springs VFD serves approximately 5,000 residents and 180 square miles of coverage area. Linden, Pruitt, and Carterville are the main communities in the response zone.

The primary roads within the assessment area are US Hwy 59; TX 8, 11, and 155; and FM 125, FM 1841, FM 1399, FM 995, FM 2683 and FM 248. Most of the residents in the response area have access consisting of at least one paved county road. There are also several private roads which go to individual homes.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from the Linden VFD. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average would be 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is occasionally limited. Linden VFD has mutual aid with Center Hill VFD, Atlanta FD, Red Hill VFD, Crossroads VFD, Hughes Springs VFD, and Avinger VFD. Linden VFD is dispatched from out of Linden.

The primary source of water available to the fire department for the purpose of fire suppression is water hauled on the tender. Most of the VFD's trucks have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. Stand pipes with flush valves are in various parts of the response area.

### **Fire Reporting**

Linden VFD actively participates in fire reporting through the Texas Interagency Coordination Center website. Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants.

### **Linden VFD Equipment**

Department	Equipment	Туре	Tank (Gal)
	1991 Beck Ottawa, Engine		
	1995 Ford, Tanker		
	2004 F450, Brush Truck		
	2003 Chevrolet Suburban, Command		
	2021 Spartan Metro Star, Engine		
	2023 International, Squad		

### **Equipment Needs**

Linden VFD needs additional equipment as follows:

- \_\_\_\_hand held radios
- Brush truck
- Tanker truck
- Command vehicle
- Expanded fire station
- Bunker gear
- SCBAs
- Cascade system
- Flashlights
- Cardio and gym equipment for station

### **Unique District Properties**

Linden VFD has the following unique properties presenting special firefighting difficulty:

- City of Linden
  - Historic courthouse
  - Historic post office
  - Many multi story buildings
  - o Churches, 13
  - $\circ$  Timber yard
  - Skilled nursing facility
  - Restaurants, 6
  - Retail stores
  - Government offices
- Oil and gas wells, pipelines and storage units



### **Risks and Mitigation Strategies**

### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

### **Public Awareness**

The local newspapers *Cass County Sun* and *Citizen's Journal* can provide news releases from the Texas A&M Forest Service during periods of heightened fire danger. Linden VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Linden VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

### 911 Addressing

It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel.

### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Linden VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

### Utilities

Most of the electric lines and other utilities in the Linden VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. Underground oil and gas lines are clearly marked, but caution should be taken when working around any lines. Some parts of the response area have a very high density of oil and gas facilities. These wells and pipelines increase the risk of fighting wildland fires in this area.

## Marietta Volunteer Fire Department (Not Updated)

### Background

The Marietta VFD station is located at 283 CR 2353 Marietta, TX in the northwestern region of Cass County. Marietta, Nickleberry, and Bethlehem are the primary communities within the department's coverage area. Marietta VFD serves approximately 1,500 residents over 50 square miles of coverage area.

The primary roads within the assessment area are TX Hwy 77, FM 250, FM 1399, and FM 2888. Most of the residences in the response area have access consisting of at least one paved road. There are also several private roads which go to individual homes. Access concerns have been indicated on county roads 2585, 2582, and FM 1766. These roads have one-way in and out access. They are located in the Bryans Mill response area but Marietta VFD does take calls from this part of Cass County.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from Marietta VFD. There are 12 active members within the department. Response times would depend on the availability of the firemen, and location of the fire within their response area, but the average is 10-15 minutes. Due to the membership of this VFD, the availability of firemen during working hours on weekdays is sufficient with two trucks and 2-3 first-responders. Marietta VFD has mutual aid with Bryans Mill VFD, Douglassville VFD, Red Hill VFD, and Cross Roads Department. Marietta VFD often responds to Bryans Mill and Cross Roads response areas due to limited personal in those departments.

The primary source of water available to the fire department for the purpose of fire suppression is the water supply corporation. The department does have pumps capable of drafting directly from ponds, lakes, or a dry hydrant. It is recommended that "blue cat eye" reflectors are placed on fire hydrants for increased visibility at night. With the addition of a 2000 gallon tanker and mutual aid capabilities, Marietta VFD's water turn-around time is only about 20 minutes.

### **Fire Reporting**

Marietta VFD actively participates in fire reporting through the Texas Interagency Coordination Center website. Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants. Marietta VFD does have a pending grant through TFS for another brush truck.

### **Equipment Needs**

Marietta VFD needs additional equipment as follows:

•

### **Unique District Properties**

Marietta has the following unique properties presenting special firefighting difficulty:

•

### Marietta VFD Equipment

Fire Department	Equipment-Type	Tank Size (Gal.)	Pump Size (GPM)
Marietta VFD	Engine-Type VI	250	
Marietta VFD	Engine-Type V	500	
Marietta VFD	Engine-Type IV	750	
Marietta VFD	Engine-Type VI	200	



### **Risks and Mitigation Strategies**

### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

### **Public Awareness**

The local newspapers can provide news releases from the Texas A&M Forest Service during periods of heightened fire danger. Marietta VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Marietta VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

### 911 Addressing

It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area could be more visible from intersecting roads so that fire fighters do not pass by the road when responding to a fire.

### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Marietta VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911". Marietta VFD has completed a small evacuation on C.R. 2465 in the Douglasville response area.

### Utilities

Most of the electric lines and other utilities in the Marietta VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wild- land fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. Underground oil and gas lines are clearly marked, but caution should be taken when working around any lines. The Enbridge gas plant could become a Haz-Mat situation if a large fire does burn adjacent to the plant.

## **Naples Volunteer Fire Department**

### Background

The Naples VFD station is located at ??????

Naples is in Morris County. Are they needed because of mutual aid agreements?

## Red Hill Volunteer Fire Department (Not Updated)

### Background

The Red Hill VFD station is located at 7331 TX Hwy 8 Douglasville, TX 75560 in the central region of Cass County. Red Hill VFD serves approximately 500 residents over 46 square miles of coverage area. The greatest population density in the assessment area are the small communities of Red Hill, Gum Springs, and Hickory Grove.

The primary roads within the assessment area are TX Hwy 8, FM 995, and FM 1399. Many residences in the response area have access consisting of at least one paved road, but there are roads such as County Road 2345 that are not paved and could be difficult to evacuate from in a wildfire situation. There are also several private roads which go to individual homes.

### **Response Capabilities**

Initial response to either a structure or wildland fire would come from Red Hill VFD. There are 16 active members within the department, with 7-8 being with firefighting capabilities. Response times would depend on the availability of the firemen, and location of the fire within their response area. Due to the membership of this VFD, the availability of firemen and firewomen during working hours on weekdays is limited with no response capabilities. Red Hill VFD has very good mutual aid with Linden VFD, Douglassville VFD, Atlanta VFD, Crossroads VFD, Cass County Emergency Service District (ESD) 2, and Marietta VFD. These mutual aid departments often respond to the Red Hill response area when assistance is needed. Red Hill VFD is dispatched out of Linden.

The primary source of water available to the fire department for the purpose of fire suppression is the water supply corporation. The department has pumps capable of drafting directly from ponds, lakes, or a dry hydrant. It is recommended that "blue cat eye" reflectors are placed on fire hydrants for increased visibility at night.

### **Fire Reporting**

Red Hill VFD has actively participated in fire reporting through the Texas Interagency Coordination Center website. Reporting has been limited in the past year due to no department computer. It is recommended that the department apply for the 2604 grant through TFS to acquire a computer. Continuation of reporting wildfires is encouraged as it is important for database management and for the application of future grants. Red Hill VFD has indicated that training is needed for both structure and wildland fires for younger members.

### **Equipment Needs**

Red Hill VFD needs additional equipment as follows:

•

### **Unique District Properties**

Red Hill VFD has the following unique properties presenting special firefighting difficulty:

•

Red	Hill	VFD	Equipment
ncu			Equipment

Fire Department	Equipment-Type	Tank Size (Gal.)	Pump Size (GPM)
Red Hill VFD	Engine-Type VI	250	125
Red Hill VFD	Engine-Type VI	350	125
Red Hill VFD	Tender-Type II	1000	250



### **Risks and Mitigation Strategies**

### **Fuels Modification**

Most of the response area has a very high density of pine plantations. It is recommended that each individual homeowner maintain at least 30 feet of "Defensible Space" (200 feet preferable) immediately around each home and outbuilding to mitigate fuels on their own property (see references). Using non-combustible housing material/roofing and mitigating wooden attachments coupled with fuels modification give a home the best chance of surviving a wildfire (see references).

### **Public Awareness**

The local newspapers can provide news releases from the Texas A&M Forest Service during periods of heightened fire danger. Red Hill VFD may be interested in utilizing Texas A&M Forest Service displays and pamphlets during their public service programs, fundraising events and at local businesses to increase public awareness on wildfire issues. "Ready Set Go!" is a nationwide program which offers fire departments located in rural areas with the potential of wildland fire, such as Red Hill VFD, the opportunity to educate residents in their response area on ways to identify and implement their own solutions to mitigate the risk of wildfire (see reference material).

### 911 Addressing

It is recommended that each home in the rural areas have the "911 address" clearly marked with reflective numbers and/or letters which are visible at night, preferably with three inch letters. It is suggested that the residents adopt a uniform placement plan, and they face both directions of travel. County road signs within the response area could be more visible from intersecting roads so that fire fighters do not pass by the road when responding to a fire.

### **Burn Bans/Evacuation**

Cass County Fire Dispatch should be notified of a homeowner's intent to burn, to ensure compliance with burn bans. It is recommended Red Hill VFD place fire danger / burn ban signs at highly visible locations within the response area. Evacuation notification could come through "reverse 911".

### Utilities

Most of the electric lines and other utilities in the Red Hill VFD assessment area are located above ground. This is a disadvantage since power poles may burn in the event of a wildfire; windstorms could down power lines; or burned trees may fall across power lines. In addition, there are propane tanks at some homes which have wildland fuels around them which could burn and possibly cause the tanks to explode during a wildfire. It is suggested that these tanks have all wildland fuel sources removed from around them for at least ten feet. Underground oil and gas lines are clearly marked, but caution should be taken when working around any lines.

# **County Mitigation Strategies**

### **Public Education**

Public education campaigns are designed to heighten community awareness for wildfire risks. They may be general and cover the entire city or they may be specific and targeted for a certain area or issue (i.e. an awareness campaign on combustible attachments for a high risk-area). Texas A&M Forest Service has a large selection of public education materials on Ready, Set, Go!, Firewise Communities, home hardening, fuels management, basic fire behavior and Firewise landscaping that can be customized for the Cass County.

Additional opportunities for public education include:

- Wildfire Awareness Week (second week of April)
- Fire Prevention Week
- Fire station tours
- Smoke alarm program
- Ready, Set, Go! (or other) town hall meetings with Texas A&M Forest Service
- Access to CWPP and other mitigation and prevention material on Cass County web page
- Targeted outreach with fire department to at-risk areas
- Partnerships with local media outlets
- Public outreach with oil and gas companies on firebreaks
- Promotion of the biomass industry

## **Hazardous Fuels Reduction**

Fuels reduction projects are intended to clear overgrown vegetation, which can reduce the rate of spread and intensity of a wildfire and keep it out of the crowns of trees. In addition, these projects usually provide a safer environment for firefighters to work and extinguish a fire. Fuels reduction projects along evacuation routes may also give evacuees and incoming resources a safer ingress/egress. With the large amount of pine plantations in Cass County, fuels reduction should be considered by timber companies and land owners to reduce the potential of home and timber loss.

Methods of treatment can vary. Treatment options include:

- Mechanical (mulcher, chipper).
- Hand clearing (chainsaws, handsaws).
- Herbicide application.
- Prescribed fire.
- Planting of shortleaf pine and hardwood species to encourage diversity and reduce continuous pine fuel component.

Some methods may be more effective than others, depending on the fuel types. Some methods may also be preferred when working around neighborhoods. The scope of each project will vary, but generally fuels reduction projects are completed along the border of neighborhoods and/or breaks in fuels (i.e. roads).

Generally, fuels reduction projects are 100 to 200 feet wide depending on the fuel type.

## **Fuels Management**

Fuels reduction projects can slow the spread of wildfire, protect homes, and create a safer atmosphere for firefighters to protect structures.

Wright Patman Lake and Atlanta State Park are active in prescribed burning for healthy forest and land management purposes. Both areas are a good model of fuels management and reduction as well. Prescribed burning along with other best management purposes (BMP's) such as thinning, mulching, and shaded fuel breaks reduce fuels and can lower the intensity of a wildfire



## **East Texas Prescribed Fire Initiative**

The East Texas Prescribed Fire Initiative is a cost-sharing program provided through the National Wild Turkey Federation (NWTF) for private landowners with an interest in conducting prescribed burns to reduce fuel loads and improve wildlife habitat in east Texas. Limited funding is available, so properties will be ranked and scored based upon criteria established by the East Texas Prescribed Fire Initiative Steering Committee. Landowners will be enrolled until all funds are exhausted.

### **REQUIREMENTS FOR ELIGIBILITY:**

• Participants must enroll a minimum burn unit of 25 acres.

• An on-site inspection of the property will be conducted by NWTF or a NWTF authorized representative before the project is approved for funding. Therefore, it will be required that NWTF or one of NWTF's authorized representatives be allowed access to the participating property.

- A burn plan for the property must be completed and submitted before funds are obligated to a project.
- Prescribed burn managers must be approved by NWTF or by an NWTF authorized representative.

• Prior to final reimbursement, all prescribed burns must be inspected and approved by NWTF or a NWTF authorized representative. Therefore, it will be required that NWTF or one of NWTF's

authorized representatives be allowed access to the participating property throughout the contract period. • NWTF will pay up to \$5,000 per landowner at a maximum rate of \$20/acre for prescribed burn implementation by an approved prescribed burn contractor or landowner. Landowner contribution may be in-kind services or cash. No more than \$5,000 will be made available to one Cooperator during a single calendar year. Claims for payment will not be accepted more than one year from the date of the signed Cooperator Agreement. The cooperator will provide invoices for work completed to the project representative. No funds shall be disbursed to the cooperator until the prescribed burns have been completed and work has been physically inspected and certified by the project representative or authorized representative as being complete.

• Landowners with large burn units that agree to lower the cost will be ranked higher.

• East Texas Prescribed Fire Initiative Steering Committee hall have authority to approve special projects outside the normal cost share guidelines.

• Projects must be completed within 1-year of enrollment or cooperators must submit a written request for an extension.

• NWTF and its Authorized Representatives accepts no liability for any prescribed burn activities associated with the cost share, application, application approval, prescribed burn plan, prescribed burn approval or the prescribed burn itself.

## **East Texas Prescribed Fire Initiative**

Prescribed burn trailers are jointly funded by Texas Parks and Wildlife Department (TPWD) and the NWTF. Several are staged throughout the state and they are available for rent to landowners who show they have (at least) liability vehicle insurance. Rental rates are \$100 for 2 days (allows time to pick up and return the trailer and burn one day) and \$50 for every additional day, or portion thereof. Users must show proof of insurance before towing the trailer (check your auto insurance policy) and are responsible for any loss or damage sustained by the trailer or the equipment while in their possession.

Burn trailers contain the following items:

- (1) 60 Gallon 2.5HP skid mount 6 gpm 0 -120 psi 25' of hose and trailer
- (1) 25 Gallon ATV Spray Rig
- (2) Backpack sprayers
- (4) Drip Torches
- (2) 5 Gallon Drip Torch Fuel Cans
- (4) Motorola Two Way Radios
- (1) Kestrel Weather Meter
- (2) Road Hazard Signs, (2) Sign Stands
- (6) Flappers
- (4) Shovels
- (4) Council Rakes
- (1) Bottle Jack and Spare Tire
- 1) Action Packer Storage Box

For more information about renting the prescribed burn trailer, please contact:

#### Penny Wilkerson

Wildlife Biologist Texas Parks and Wildlife Department 104 Leslie Lane Atlanta, TX 75551 Home/Office: 903-796-7526 Mobile: 903-799-8026 Email: penny.wilkerson@tpwd.texas.gov

## Communications

### Two issues relating to radio communications occurred during several of the fire department assessments:

1) poor radio coverage in the western parts of Cass County

2) interference between fire department transmissions on the Cass County Commissioner's frequency.

### Both of these issues have been addressed by the Cass County EMC:

1) A repeater location was identified on the DPS antenna on Cusseta Mountain, and installed.

2) In phase two of the county communications plan, a duplex repeater is planned for installation in Linden to separate fire communications from the Commissioner's frequency.



## **Defensible Space**

The area immediately surrounding a home is critical to its survival in a wildfire. Thirty feet is the absolute minimum recommended defensible space zone.

The Home Ignition Zone (HIZ) extends to 200 feet from the home. The fuel loading and continuity in the HIZ is a critical part of the risk assessment process and the results should direct defensible space mitigation projects. Vegetation placement, lawn care and use of fire-resistant materials (such as rock) will play an important role during a wildfire. While home hardening – the practice of making your home fire-resistant – is important for everyone, it is especially important for those homeowners who cannot mitigate the entire HIZ.

The primary type of mitigation project regarding defensible space is public education.



# READY, SET, GO!

Create Your Own Wildfire Action Plan

# Ranchers and Rural Residents

### PREPARE YOUR ANIMALS

- Create a livestock evacuation plan.
- Ensure proper registering and branding of livestock.
- Establish contingency plan for feeding livestock if graze land is destroyed by fire.

# **GET READY** |

### PREPARE YOUR FAMILY

- Create a *Family Disaster Plan* that includes meeting locations and communication plans and rehearse it regularly. Include in your plan the evacuation of large animals such as horses.
- Know your evacuation routes (have more than one exit from your headquarters and primary residence).
- Pre-program your GPS device with multiple escape routes, as visibility may be low.
- Assemble an emergency supply kit as recommended by the American Red Cross.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Keep an emergency supply kit in all ranch and personal vehicles.

### PREPARE YOUR PROPERTY

- Establish and maintain firebreaks around pastures and structures.
- Create defensible space around all structures.
- Reinforce fences with metal posts if applicable.
- Create a safe zone clear of all vegetation for equipment.
- Clear vegetation around fuel tanks and other highly combustible equipment.





# **READY, SET, GO!**

**Create Your Own Wildfire Action Plan** 

ow that you've done everything you can to protect your house, it's time to prepare your family. Your Wildfire Action Plan must be prepared with all members of your household well in advance of a fire.

Use these checklists to help you prepare your Wildfire Action Plan. Each family's plan will be different, depending on their situation. Once you finish your plan, rehearse it regularly with your family and keep it in a safe and accessible place for quick implementation.

# **GET READY** Prepare Your Family





- Create a Family Disaster Plan that includes  $\square$ meeting locations and communication plans and rehearse it regularly. Include in your plan the evacuation of large animals such as horses.
- Have fire extinguishers on hand and train your family how to use them.
- Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- Plan several different evacuation routes.
- Pre-program your GPS device with multiple escape routes, as visibility may be low.
- Designate an emergency meeting location outside the fire hazard area
- Assemble an emergency supply kit as recommended by the American Red Cross.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- Have a portable radio or scanner so you can stay updated on the fire.

# **GET SET** As the Fire Approaches

- Evacuate as soon as you are set!
- Alert family and neighbors.
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.
- Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

### **INSIDE CHECKLIST**

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains and close metal shutters.
- Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.



### **OUTSIDE CHECKLIST**

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- Turn off propane tanks.
- Don't leave sprinklers on or water running they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

### **IF YOU ARE TRAPPED: SURVIVAL TIPS**

- Shelter away from outside walls.
- Bring garden hoses inside house so embers don't destroy them.
- Patrol inside your home for spot fires and extinguish them.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out.
- After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- Check inside the attic for hidden embers.
- Patrol your property and extinguish small fires.
- If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.

# GO! | Early!

By leaving early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.

### WHEN TO LEAVE

Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

### WHERE TO GO

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.)

### HOW TO GET THERE

Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an escape route away from the fire.



### WHAT TO TAKE

Take your emergency supply kit containing your family and pet's necessary items.

### **EMERGENCY SUPPLIES**

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildfire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross at www.redcross.org.

- Three-day supply of water (one gallon per person per day).
- Non-perishable food for all family members and pets (three-day supply) and a can opener.
- First aid kit and a dust mask or bandana.
- Flashlight, battery-powered radio, and extra batteries.
- An extra set of car keys, credit cards, cash or traveler's checks.
- Sanitation supplies.
- Extra eyeglasses or contact lenses.
- Important family documents and contact numbers.
- Map marked with evacuation routes.
- Prescriptions or special medications.
- Family photos and other irreplaceable items.
- Easily carried valuables.
- Personal computers (information on hard drives and disks).
- Chargers for cell phones, laptops, etc.

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

## **Evacuation Planning**

Evacuation plans can be created for high-risk neighborhoods, especially those with minimal egress routes, large populations, or special populations. Plans should incorporate routes of ingress for emergency responders.

Emergency management, law enforcement, fire department, public works and the mayor's office may all be involved in the evacuation process.

### General Evacuation Checklist Planning:

- Determine area(s) at risk:
  - Determine population of risk area(s).
  - Identify any special needs facilities and populations in risk area(s).
- Determine evacuation routes for risk area(s) and check the status of these routes.
- Determine traffic control requirements for evacuation routes.
- Estimate public transportation requirements and determine pickup points.
- Determine temporary shelter requirements and select preferred shelter locations.



The Ready, Set, Go! program, which can be accessed at texasfirewise.org, provides information on how to prepare for wildfire, stay aware of current conditions and evacuate early when necessary.

### **Advance Warning:**

- Provide advance warning to special needs facilities and advise them to activate evacuation, transportation and reception arrangements. Determine if requirements exist for additional support from local government.
- Provide advance warning of possible need for evacuation to the public, clearly identifying areas at risk.
- Develop traffic control plans and stage traffic control devices at required locations.
- Coordinate with special needs facilities regarding precautionary evacuation. Identify and alert special needs populations.
- Ready temporary shelters selected for use.
- Coordinate with transportation providers to ensure vehicles and drivers will be available when and where needed.
- Coordinate with school districts regarding closure of schools.

### **Evacuation:**

- Advise neighboring jurisdictions and the local Disaster District that evacuation recommendation or order will be issued.
- Disseminate evacuation recommendation or order to special needs facilities and populations. Provide assistance in evacuating, if needed.
- Disseminate evacuation recommendation or order to the public through available warning systems, clearly identifying areas to be evacuated.
- Provide amplifying information to the public through the media. Emergency public information should address:
  - What should be done to secure buildings being evacuated
  - What evacuees should take with them

- Where evacuees should go and how should they get there
- Provisions for special needs population and those without transportation
- Staff and open temporary shelters.
- Provide traffic control along evacuation routes and establish procedures for dealing with vehicle breakdowns on such routes.
- Provide transportation assistance to those who require it.
- Provide security in or control access to evacuated areas.
- Provide Situation Reports on evacuation to the local Disaster District.

Depending on the situation and availability of facilities, one or more of the following approaches will be used to handle evacuees arriving with pets:

- Provide pet owners information on nearby kennels, animal shelters and veterinary clinics that have agreed to temporarily shelter pets.
- Direct pet owners to a public shelter with covered exterior corridors or adjacent support buildings where pets on leashes and in carriers may be temporarily housed.
- Set up temporary pet shelters at fairgrounds, rodeo or stock show barns, livestock auctions and other similar facilities.

### **Return of Evacuees:**

- If evacuated areas have been damaged, reopen roads, eliminate significant health and safety hazards and conduct damage assessments.
- Determine requirements for traffic control for return of evacuees.
- Determine requirements for and coordinate provision of transportation for return of evacuees.
- Advise neighboring jurisdictions and local Disaster District that return of evacuees will begin.

### SPECIAL CONSIDERATIONS FOR LIVESTOCK:

- Livestock are sensitive and responsive to wildfire anywhere within their sensory range.
- Normal reactions vary from nervousness to panic to aggressive and resistive escape attempts.
- Livestock often are injured or killed by fleeing from a wildfire into fences, barriers and other fire risks.
- Once the flight syndrome kicks in, it is retained long after the smoke, heat and noise stimuli are removed.
- Some animal species such as alpacas, llamas and especially horses become virtually unmanageable in the face of oncoming wildfire.
- In situations like this, experienced handlers (as many as possible), proper equipment and a firm and prompt evacuation approach is needed.
- If time is limited because of fire ground speed, open possible escape routes and recapture animals later.
- In the case of a fast-moving fire, some landowners spray paint their phone numbers on the sides of livestock before setting them free. Others attach identification tags to animals.
- If you choose to leave a halter on your animal, consider attaching identification, such as a luggage tag.
- Firefighters may cut fences and open gates if time and safety concerns allow.
- Advise evacuees through the media that they can return to their homes and businesses; indicate preferred travel routes.
- Provide traffic control for return of evacuees.
- Coordinate temporary housing for evacuees who are unable to return to their residences.
- Coordinate with special needs facilities regarding return of evacuees to those facilities.
- If evacuated areas have sustained damage, provide the public information that addresses:
  - Documenting damage and making expedient repairs
  - Caution in reactivating utilities and damaged appliances
  - Cleanup and removal/disposal of debris
  - Recovery programs
- Terminate temporary shelter and mass care operations.
- Maintain access controls for areas that cannot be safely reoccupied.

## **Structure Protection Planning**

Structure protection planning can involve home assessments or structure triage planning. It can be generalized for a neighborhood or target a specific block of homes that are at a greater risk to wildland fire. The goal is to have a general plan in place of how homes will be protected (including number of resources needed, access issues, tactical considerations and defendable/non-defendable list).

The Firescope publication *Wildland Urban Interface Structure Protection* suggests the following tactics may be implemented after a fire behavior forecast is made and assigned structures are triaged.

### Check and Go

"Check and Go" is a rapid evaluation to check for occupants requiring removal or rescue. Structure Triage Category – Threatened Non-Defensible

- This tactic is most appropriate when there is no Safety Zone or Temporary Refuge Area present and the forecasted fire spread, intensity and projected impact time of the fire front prohibit resources from taking preparation action to protect the structure.
- Complete a rapid evaluation to check for occupants and evaluate life threat.
- Used when fire spread, intensity, lack of time or inadequate defensible space prohibit firefighting resources from safely taking action to protect the home when the fire front arrives.
- Evaluate the structure for follow-up action when additional resources become available, the fire front passes or fire behavior intensity is reduced.

### Prep and Go

"Prep and Go" implies that some preparation of the structure may be safely completed prior to resources leaving the area.

Structure Triage Category – Threatened Non-Defensible

- A tactic used when a Safety Zone and Temporary Refuge Area are not present and/or when fire spread and intensity are too dangerous to stay in the area when the fire front arrives but there is adequate time to prepare a structure for defense ahead of the fire front.
- Utilized for structures where potential fire intensity makes it too dangerous for fire resources to stay when the fire front arrives.
- There is some time to prepare a structure ahead of the fire; resources should engage in rapid, prioritized fire protection preparations and foam the structure prior to leaving.
- Resources should leave with adequate time to avoid the loss of Escape Routes.
- Advise residents to leave and notify supervisors of any residents who choose to stay so that you can follow-up on their welfare after the fire front passes.
- As with Check and Go, Prep and Go is well suited for engine strike teams and task forces.

### **Prep and Defend**

"Prep and Defend" is a tactic used when a Safety Zone and Temporary Refuge Area are present and adequate time exists to safely prepare a structure for defense prior to the arrival of the fire front. Structure Triage Category – Threatened Defensible

- An ideal multiple resource tactic especially in common neighborhoods where efforts may be coordinated over a wide area. A tactic used when it is possible for fire resources to stay when the fire front arrives. Fire behavior MUST be such that it is safe for firefighters to remain and engage the fire.
- Adequate escape routes to a safety zone must be identified. A safety zone or Temporary Refuge Area must exist on site.
- Adequate time must exist to safely prepare the structure for defense prior to the arrival of the fire frexist on site.

### **Fire Front Following**

"Fire Front Following" is a follow-up tactic employed when Check and Go, Prep and Go or Bump and Run tactics are initially used.

- A tactic used to come in behind the fire front.
- This action is taken when there is insufficient time to safely set up ahead of the fire or the intensity of the fire would likely cause injury to personnel located in front of the fire.
- The goal of "Fire Front Following" is to search for victims, control the perimeter, extinguish spot fires around structures, control hot spots and reduce ember production.



### Bump and Run

"Bump and Run" is a tactic where resources typically move ahead of the fire front in the spotting zone to extinguish spot fires and hot spots, and to defend as many structures as possible.

- Bump and Run may be effective in the early stages of an incident when the resource commitment is light and structure protection is the priority.
- Bump and Run may be used on fast-moving incidents when there are adequate resources available but where an effort must be made to control or steer the head and shoulders of the fire to a desired end point.
- Perimeter control and structure protection preparation are secondary considerations with the Bump and Run tactic.
- Resources must remain mobile during Bump and Run and must constantly identify escape routes to Safety Zones and Temporary Refuge Areas as they move with the fire front.
- Control lines in front of the fire should be identified and prepared with dozers and fire crews enabling the bump and run resources to direct the fire to a logical end point. This is a frontal attack strategy and a watch out situation.

### Anchor and Hold

"Anchor and Hold" is a tactic utilizing control lines and large water streams from fixed water supplies in an attempt to stop fire spread. The goal is to extinguish structure fires, protect exposures and reduce ember production.

- Anchor and hold can be referred to as taking a stand to stop the progression of the fire.
- Anchor and hold tactics are more effective in urban neighborhoods where the fire is spreading from house to house.
- Establishing an anchor and hold line requires considerable planning and effort and utilizes both fixed and mobile resources.

### **Tactical Patrol**

"Tactical Patrol" is a tactic where the key element is mobility and continuous monitoring of an assigned area. Tactical Patrol can be initiated either:

- After the main fire front has passed and flames have subsided but when the threat to structures still remains
- In neighborhoods away from the interface where there is predicted to be significant ember wash and accumulated ornamental vegetation.
- Vigilance, situational awareness and active suppression actions are a must.

### Wildland Capacity Building

Capacity building should address training, personal protective equipment and apparatus or equipment needs within the department. This can include National Wildfire Coordinating Group (NWCG) classes, wildland engines, dozers, prescribed burning opportunities, etc.

### Mitigation Funding Sources

### FEMA Hazard Mitigation Grant Program



The Hazard Mitigation Grant Program (HMGP) provides grants to states and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. http://www.fema.gov/hazard-mitigation-grant-program

### **Texas A&M Forest Service Capacity Building**

Texas A&M Forest Service provides eligible fire departments with programs designed to enhance their ability to protect the public and fire service personnel from fire and related hazards. Ten highly successful programs are currently administered to help fire departments discover and achieve their potential. Citizens are better served by well-trained and equipped fire department personnel. http://texasfd.com

### **Rural Volunteer Fire Department Assisstance Program (HB 2604)**

The Texas Rural Volunteer Fire Department Assistance Program is a cost-share program funded by the Texas State Legislature. It provides funding to rural volunteer fire departments for the acquisition of firefighting vehicles, fire and rescue equipment, protective clothing, dry-hydrants, computer systems and firefighter training. Chartered, non-profit volunteer fire department operated by its members is eligible. Any part-paid/part- volunteer fire department is also eligible provided the number of paid members is 20 or less. http://texasforestservice.tamu.edu/main/popup.aspx?id=9436

### NWCG Engine Types

Using the Fire Equipment Working Team (FEWT) and the National Fire Protection Association (NFPA), the National Wildfire Coordinating Group (NWCG) categorizes information on fire engines into logical groups and provides common options often requested by fire managers. The Incident Command System (ICS) uses this engine type system based on the equipment. The NWFEC Wildland Fire Engine Classes used throughout this guide (LP, A, B, C, and D) are based on its mission and engine capability in relation to fire behavior. Table 2 shows NWCG minimum requirements for engine and water tender resource types.

	STRUCTURE ENGINES		WILDLAND ENGINES				
Components	1	2	3	4	5	6	7
Pump Rating							
minimum flow (gpm)	1000+	250+	150	50	50	30	10
at rated pressure (psi)	150	150	250	100	100	100	100
Tank Capacity Range (gal)	400+	400+	500+	750+	400-750	150-400	50-200
Hose (feet)							
2-1/2 inch	1200	1000	~	~	~	~	~
1-1/2 inch	400	500	500	300	300	300	~
1 inch	~	~	500	300	300	300	200
Ladders (ft)	48	48	~	~	~	~	~
Master Stream (GPM)	500	~		~	~	~	~
Personnel (minimum)	4	3	2	2	2	2	2

Table 2—NWCG Engine Types—Minimum Requirements.

Wildland engine types are described below.

**Type 3** — An engine that features a high-volume and highpressure pump. The Gross Vehicle Weight Rating (GVWR) is generally greater than 20,000 pounds.

**Type 4** — A heavy engine with large water capacity. Chassis GVWR is in excess of 26,000 pounds.

**Type 5** — Normally an initial attack engine on a medium duty chassis. GVWR of the chassis is in the 16,000 to 26,000 pound range.

**Type 6** — Normally an initial attack engine on a medium duty chassis. GVWR of the chassis is in the 9,000 to 16,000 pound range.

**Type 7** — A light duty vehicle usually on a 6,500 to 10,000 pound GVWR chassis. The vehicle has a small pump and is a multipurpose unit used for patrol, mop up or initial attack.

Source: U.S. Forest Service Wildland Fire Engine Guide



Type 3 engine



Type 6 engine

### Engines

Smaller than a typical municipal fire engine, wildland fire engines are specially-designed to handle remote, off- road areas and difficult terrain. The trucks carry 50 to 800 gallons of water, as well as a complement of hand tools and hoses. Generally, they're staffed by a crew of two to five wildland firefighters.

### **Heavy Equipment**

Bulldozers fitted with safety cages are critical tools for containing wildfires. Large, commercial bulldozers often are used on the open plains in South and West Texas, while smaller tractor-plow units are more common in forested areas in Central and East Texas. Both

dozers and tractor plows are used to put a control line — often called a fire line or fire break — around the flames. Doing so removes all the vegetation, or fuel, that would spread the fire.

### Water Tenders

Because wildland firefighters don't have access to fire hydrants, they must bring the water they need with them.

Tenders are capable of ferrying large quantities of water — up to 5,000 gallons to fire engines working on the fireline, allowing crews to fight the fire without stopping. When empty, these



water-shuttling trucks can return to a nearby city or town where hydrants are available or they can draft from a lake, pond or stream in the area.

### Hand Crews

A hand crew consists of highly-skilled wildland firefighters who use hand tools and chainsaws to clear the vegetation in front of an advancing fire. These crews are used in areas where heavy equipment can't go, such as remote areas with rugged terrain. Generally, there are about 20 people on the crew, though that number can vary slightly.

### Aircraft

Firefighting aircraft are a valuable tool for wildland firefighters. The speciallyequipped helicopters and airplanes can be used to drop water or fire retardant, but they don't always extinguish the fire. Helicopters often drop water, which can help put out a blaze. Air tankers, however, often drop retardant, a move that slows down the spread of flames and cools off the surrounding area, allowing ground crews to get closer and make more progress in containing the fire.



## Appendix

This section can be used for supplemental materials and resources that will be useful to emergency responders and members of the working group.

* CWPP Leader's Guide	3
* Glossary	
* Contact List	
* Cass County Proclamation	
* References	



## **Community Wildfire Protection Plan Leader's Guide**



#### Source: Texas A&M Forest Service

A Leader's Guide to Developing Community Wildfire Protection Plans

### Download A Leader's Guide to Developing Community Wildfire Protection Plans at

### texasfirewise.com



### Glossary

**Defensible space** — The area immediately encircling a home and its attachments.

**Extended attack** — Suppression activity for a wildfire that has not been contained or controlled by initial attack or contingency forces and for which more firefighting resources are arriving, en route or being ordered by the initial attack incident commander. (*National Wildfire Coordinating Group definition*)

**Fuel loading** — The amount of fuel present expressed quantitatively in terms of weight of fuel per unit area. This may be available fuel (consumable fuel) or total fuel and is usually dry weight. (*National Wildfire Coordinating Group definition*)

**Healthy Forests Restoration Act** — Signed into law in 2003, this act authorizes Community Wildfire Protection Plans as a tool to reduce hazardous fuels and maintain healthy forests.

**Home hardening** — Retrofitting process that reduces a home's risk to wildfire. This involves using non-combustible building materials and keeping the area around your home free of debris.

**Home Ignition Zone (HIZ)** — An area of up to 200 feet immediately surrounding a home.

**Incident Action Plan (IAP)** — Contains objectives reflecting the overall incident strategy, specific tactical actions and supporting information for the next operational period. When written, the plan may have a number of attachments, including incident objectives, organization assignment list, division assignment, incident radio communication plan, medical plan, traffic plan, safety plan and incident map. (*National Wildfire Coordinating Group definition*)

**Incident Command System (ICS)** - A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. (*National Wildfire Coordinating Group definition*)

**Initial attack** — Fire that is generally contained by the attack units first dispatched, without a significant augmentation of reinforcements, and full control is expected within the first burning period. (*National Wildfire Coordinating Group definition*)

Mitigation Action Plan — A document that outlines a procedure for mitigating adverse environmental impacts.

**Structural ignitability** — A home's design, construction materials and immediate surroundings are factors that contribute to how easily a home will ignite when wildfire threatens.

**Wildland Urban Interface (WUI)** — Areas where human habitation and development meet or are intermixed with wildland fuels (vegetation).

## **Contact List**

### **Texas Department of Public Safety:**

District Coordinator (Mt. Pleasant,) Division of Emergency Management (903) 241-0555

### **Texas A&M Forest Service contacts:**

Regional Fire Coordinator 400 W. Broad Street Talco, TX 75487 903-856-7181

Assistant Chief Regional Fire Coordinator 155 Texas Forest Service Loop Lufkin, TX 75904 936-875-4400



Linden Dispatch 903-756-7933

In the event of wildland arson, law enforcement support is available from the Cass County Sheriff's Department, and the Texas A&M Forest Service office in Linden. In addition, Texas A&M Forest Service law enforcement will support Cass County's efforts to enforce burn bans. When available, Texas A&M Forest Service law enforcement will investigate wildland fires which may result in a law violation. A bloodhound is located in the Liden office for arson and other criminal investigations.



# Cass County, Texas Proclamation

**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 development meets vegetation or the wildland urban 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 the Cass County.

**WHEREAS**, a Community Wildfire Protection Plan is authorized under the provisions outlined in Title I of the Healthy Forests Restoration Act of 2003.

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

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

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

**NOW, THEREFORE IT IS RESOLVED**, that the Cass County Comission urges all residents of this city and this community to participate in the implementation of a Community Wildfire Protection Plan in accordance with the Healthy Forest Restoration Act.

*Cass County Life*, April 29,2009 Volume 4, Issue 17



WEDNESDAY, APRIL 29, 2009

## **Usual business**

Cass County Commissioners contemplate starting wildfire plan, accept grant money

#### By MICHELLE WILLIAMS Cass County Life

Cass County commissioners were in session Monday to take care of business.

After perusing then approving the treasurer's monthly report for March and a quarterly report including January, February and March, commissioners declared May as Elder Abuse Prevention Awareness Month.

Lee McNeely, urban wildland interface coordinator for the Texas Forest Service, gave a presentation on and asked commissioners to consider adopting a community wildfire protection plan.

The plan, he said, would be a collaboration of the forest service, state and local authorities, fire departments and emergency services districts, which would foster public education about wildfire safety. McNeely said the cooperation could help volunteer fire departments acquire grants.

McNeely pointed out that for its size, Cass County suffers a greater number of wildfires each year than any county statewide. Such fires, he said, have cost residents homes and property and destroyed tree plantations, a significant contributor to the county's economy.

McNeely told the court he would work with county agencies to develop a wildfire plan if his request was approved. Commissioners voted unanimously to allow McNeely to begin work on the project.

Atlanta police chief and interim city manager Mike Dupree was on hand to apprise the court the City of Atlanta had received a \$30,097 grant for "law enforcement activitics" from the Bureau of Justice Assistance. Dupree said the grant will be shared with Cass County because Atlanta and the county have an interlocal assistance agreement. He said the grantor suggested Atlanta receive \$19,034 and the county \$11,063.

The court followed the The nex bureau's recommendation and meeting is a will accept \$11,063. the first-floc Precinct 1 Commissioner Brett courthouse.

Fitts asked the court to declare "old" chain link fence, posts and gates previously located on the construction site of the new justice center surplus property. Fitts said the materials could

not be turned in to a local metal processor because they had "concrete on them," so the materials have no monetary value. Fitts said he would dispose of them.

The court approved the request.

A motion to accept a Department of Justice COPS grant died for lack of a second.

Cass County Emergency Management Director Lee Trevino told commissioners the grant would provide salaries and compensation for three new sheriff's officers for three years. The fourth year, he said, the county would be responsible for retaining the officers and for "paying wages and compensation."

Precinct 3 Commissioner Paul Cothren voiced concern for the county's general fund surplus, which would pay the officers in the fourth year.

He stated he supported the protection the additional officers would provide county residents, but said, "I don't think we'll have the money in three years."

Precinct 4 Commissioner Max Bain made a motion to accept the grant funds. When no second was forthcoming, Trevino asked to interject, pointing out to the court one officer is slated to be hired at the county's expense to man the courthouse.

"We're going to have to pay for that (new officer) anyway. So, basically, this is a wash for the county."

After canvassing the court once and receiving no second, hearing discussion, then asking if anyone had "changed their mind," Cass County Judge Charles McMichael declared the motion dead.

The next commissioners' meeting is at 1:30 p.m. May 11 in the first-floor courtroom of the courthouse.

### erstand times are tough, and we just want to help.'

## **Writers**

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## Contributors

Brad Smith, Fire Behavior Analyst, Texas A&M Forest Serivce Jerry Voss, East Texas Timber Growers Association Georgia Keller, Cass County Fire Association Penny Wilkerson, Wildlife Biologist, Texas Parks and Wildlife Don Blackwell, Cass County Emergency Managment Coordinator Russell Lykins, District Forester, Texas A&M Forest Service **Chad Wiley**, District Fire Coordinator, Texas A&M Forest Service **Michael Catron**, GIS Coordinator, Ark-Tex Council of Governments **Robin Betts**, Fire Chief, Atlanta Fire Department

## References

**Firescope: Wildland Urban Interface Structure Protection** http://www.firescope.org/ics-guides-andterms/WUI-SP. pdf

### National Wildfire Coordinating Group

http://www.nwcg.gov/

### Texas A&M AgriLife Extension Service

http://agrilifeextension.tamu.edu/

### **Texas A&M Forest Service Capacity Building**

http://texasfd.com

**Texas A&M Forest Service Predictive Services** http://ticc.tamu.edu/PredictiveServices/ predictiveservices.htm

### **Texas A&M University**

http://www.tamu.edu

## Texas Intrastate Fire Mutual Aid System business manual

http://ticc.tamu.edu/Documents/IncidentResponse/ TIFMAS/TIFMAS\_Business\_Deployment\_Manual.pdf

**Texas Fire Response Handbook** http://ticc.tamu.edu **Texas Wildfire Risk Assessment Portal** http://www.texaswildfirerisk.com/

U.S. Forest Service Wildland Fire Engine Guide http://www.fs.fed.us/eng/pubs/pdf/00511203.pdf

The Weather Channel http://www.weather.com/