District 7 Fire Rescue Community Wildfire Protection Plan



In accordance with Title I of the Healthy Forest Restoration Act of 2003

This document was prepared by Bexar County District 7 Fire Rescue

And Texas A&M Forest Service.

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Bexar County Judge	Interim Director
State of Texas	Texas A&M Forest Service
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Justin Rodriguez	Wes Moorehead
Bexar County Commissioner	Associate Director
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Esteban Marquez	
Division Chief	
District 7 Fire Rescue	

Introduction

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 affect counties and communities that are located within the Wildland Urban Interface (WUI). The WUI is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases the risk from wildfire. Seventy nine percent of wildfires in Texas occur within two miles of a community. That means 79 percent of Texas wildfires pose a threat to life and property. A Community Wildfire Protection Plan (CWPP) is a plan developed by a community in an area at risk from wildfire. The CWPP is a collaborative product involving interested parties, local government, local firefighting agencies, the state agency that oversees forest management, and federal land management agencies, if present. While plans do not need to be overly complicated, they should effectively address local forest and range conditions, values-at-risk, and priorities for action. By developing a CWPP, the Northwest Bexar County District 7 Fire Rescue is outlining a strategic plan to mitigate, prepare, respond, and recover.

Statement of Intent

The purpose of the Northwest Bexar County District 7 Fire Rescue CWPP is to protect human life and reduce property loss due to wildland fire in the Northwest Bexar County area. Although reducing the threat of wildland fire is a primary motivation, managing area wildlands for hazardous fuel reduction and fire resilience is only one part of the overall CWPP plan. Residents and visitors alike want healthy, fire resilient wildlands that provide habitat for wildlife, recreation, and scenic beauty. These wildland areas are a critical part of the community's value and economy. The CWPP outlines a strategy for long-term success by identifying priorities for action and suggests immediate steps that can be taken to protect the community from wildland fire while simultaneously protecting other important social and ecological values.

Goals and Objectives

Goals

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

Objectives

- Establish secondary ingress/egress routes in subdivisions with one way in, one way out roads.
- Continue to train firefighters to standards set forth in National Wildfire Coordinating Group PMS 310-1 and Texas A&M Forest Service TIFMAS Business Manual, have a minimum of 42 members trained to the Wildland FF1/1CT5 level by the spring of 2022, and have all shift officers trained as TIFMAS Engine Boss level by end of 2022.
- Implement identified fuels reduction projects on public land near communities at highest risk to wildfire at a rate of 2 per year.
- Address treatment of structural ignitability through establishment of Firewise Communities at a rate of 2 per year.
- Deliver wildfire prevention material and education programs through public outreach events.

Collaborative Planning Committee Members

District 7 Fire Rescue

Kevin Clarkson, Fire Chief Esteban Marquez, Division Chief Timothy Ivey, Division Chief

Texas A&M Forest Service

Gary Barney, Regional Fire Coordinator Guy Duncan, Assistant Chief Fire Coordinator Alex Bregenzer, Wildland Urban Interface Coordinator

City of San Antonio

Brian Stanush, Wildfire Program Coordinator

Bexar County

Christina Neely-Lopez, Deputy Fire Marshal

Texas Parks and Wildlife

Mike Lloyd, Regional Fire Coordinator Chris Holm, Superintendent Government Canyon Natural Area

Planning Process and Methodology

Date/Time	Names	Notes
February 4, 2021	Bill Davidson Cindy Colston	CWPP Proclamation signed
	Lonnie Stockton	
	Gary Schott	
	Kevin Clarkson	
May 4, 2021	Esteban Marquez	Discussed CWPP planning,
0930	Alex Bregenzer	distributed assignments:
0330	, wex bregenzer	Clarkson to write statement of
		intent, goals, objectives.
		Bregenzer to prepare
		communities to assess
June 24, 2021	Alex Bregenzer	CWPP TXWRAP Community
	Esteban Marquez	Assessor Meeting
	Edward Huron	_
	Brandon Reck	
	Juan Castro	
August 26, 2021	Alex Bregenzer	Completed District 7 Risk
	Esteban Marquez	Assessments
	Edward Huron	
	Brandon Reck	
	Juan Castro	
September 30, 2021	Alex Bregenzer	CWPP Meeting to review
	Esteban Marquez	document and update
		necessary information.
October 7, 2021	Esteban Marquez	CCPP Updated Draft submitted
0945		to Alex Bregenzer for review.
October 26, 2021	Alex Bregenzer	CWPP Document review
1507	Esteban Marquez	completed and updated.

Community Profile

Surrounded by the beauty of the Texas Hill County, Northwest Bexar County protected by District 7 Fire Rescue (ESD# 7) is a vibrant community that has a flourishing economy and a high quality of life.

In the last few decades, The Northwest Bexar County communities have experienced a large increase of residential and commercial growth. Citizens remain committed to economic prosperity while balancing environmental consciousness and historic preservation with modern revitalization.

Community Legal Structure

Northwest Bexar County operates under the Elected Commissioners Court and is the overall managing/governing body of Bexar County. It is comprised of the County Judge and four Commissioners. Each Commissioner represents a quarter of the population in Bexar County. The County Judge is the presiding officer of the Bexar County Commissioners Court as well as the spokesperson and ceremonial head of the County government. The Court is responsible for budgetary decisions, tax and revenue decisions, and all personnel decisions except for certain positions which are either elected or appointed by the judiciary or other committees. The Court also appoints and monitors the actions of all County department heads other than those offices headed by elected official.

Emergency Response Capabilities

District 7 Fire & Rescue (ESD7)	District 2 Fire & Rescue (ESD2)
Oty Apparatus 3 Type 1 Engine 1 Type 3 Engine 2 Type 6 Engine 2 Tender 4 Command Pick up 5 Ambulances 2 All-Terrain Vehicles 1 Ladder Truck	 Qty Apparatus 1 Platform 3 Type 1 Engine 1 Type 4 Engine 2 Type 6 Engine 1 Tender 5 Command Pick up
Gray Forest VFD (ESD8)	Helotes FD
Qty Apparatus2 Type 1 Engine1 Ladder Truck1 Type 6 Engine	 Qty Apparatus Type 1 Engine Type 3 Engine Type 6 Engine Tender Command Pick up
Mutual Aid	

- AACOG All Hazard Mutual Aid Agreement
- Alamo Area Emergency Services Mutual Aid Agreement

Fire Code

Northwest Bexar County has adopted the following codes which are codified in the Texas county of Bexar.

Code of Ordinances:

- International Residential Code, 2015 edition
- International Building Code, 2015 edition
- National Electric Code, 2014 edition
- International Plumbing Code, 2015 edition
- Various amendment to these codes and County Ordinances

Utilities

CPS Energy (Electric and Natural Gas)

CPS Energy of San Antonio, Texas (formerly "City Public Service"), has combined natural gas and electric service. Acquired by the City of San Antonio in 1942, CPS Energy serves over 741,000 electricity customers and more than 331,000 natural gas customers in its 1,566-square-mile (4,060 km2) service area, which includes Bexar County and portions of its 7 surrounding counties. CPS Energy's diverse fuel generation mix includes nuclear power (35%), coal (34%), natural gas (15%) and renewable energy (16 percent).

CPS Headquarters
700 San Pedro
San Antonio, Texas 78216
Service/Gas or Electric Emergencies
(210) 353-4357

Grey Forest Utilities (Natural Gas)

Grey Forest Utilities provides natural gas distribution services for customers located in a 600 square mile service area in northwest metropolitan San Antonio, Texas.

Grey Forest Utilities Headquarters 14570 Bandera Road Helotes, Texas 78023 (210) 695-8781

SAWS (Water / Sewer)

The San Antonio Water System (SAWS) is the largest drinking water and sewage utility in Bexar County, Texas. SAWS draws water from the Edwards Aquifer to service its customers in all 8 counties of greater San Antonio metropolitan area. SAWS is owned by the City of San Antonio.

SAWS Headquarters
2800 U.S. Highway 281 North
San Antonio, Texas 78212
Customer Service & Water/Sewer Emergencies
(210) 704-7297

Schools

The Area of Northwest Bexar County protected by District 7 Fire Rescue (ESD# 7) is located within Northside independent School District. There area has multiple campus located within response District.

Randall H. Fields Elementary

9570 Fm 1560 North, San Antonio TX, 78254 Phone: 210-398-2150

Fax: 210-688-0347
School Hours: 7:45 am - 3:10 pm
Principal: Jennifer Hammond
Associate Principal: Richard V. Martinez

Kay Franklin

9180 Silver Spot, San Antonio TX, 78254 Phone: 210-398-1700

Fax: 210-257-3013 School Hours: 7:45 am - 3:10 pm Principal: Brenda Gallardo Associate Principal: Juan D. Perez

Nathan Kallison ES

8610 Ranch View East, San Antonio TX, 78254 Phone: 210-398-2350

> Fax: 210-688-9034 School Hours: 7:45 am - 3:10 pm Principal: Billy Navin

Associate Principal: Guadalupe Veliz

Helotes Elementary School

13878 Riggs Rd, Helotes TX, 78023

Phone: 210-397-3800 Fax: 210-695-3827 School Hours: 7:15 AM - 3:10 PM Principal: Kasey Crick Associate Principal: Tonya Almaraz

Dean H. Krueger Elementary School

9900 Wildhorse Pkwy, San Antonio TX, 78254 Phone: 210-397-3850

> Fax: 210-257-1130 School Hours: 7:45 am - 3:10 pm Principal: Kirsten Velasquez Associate Principal: Kristina Diaz

Los Reyes Elementary School

10785 Triana Pkwy, Helotes TX, 78023 Phone: 210-398-1200

Fax: 210-695-5394
School Hours: 7:45 am - 3:10 pm
Principal: Erika Pruneda
Associate Principal: Matthew Scherwitz

Evelyn Scarborough Elementary School

12280 Silver Pointe, San Antonio TX, 78254

Phone: 210-397-8000 Fax: 210-257-1019 School Hours: 7:45 am - 3:10 pm Principal: Sandra Luna Associate Principal: Angela Deleon

Dr. Joe Ward Elementary School

8400 Cavern Hill, San Antonio TX, 78254

Phone: 210-397-6800 Fax: 210-257-1195 School Hours: 7:45 am - 3:10 pm Principal: Sunday Nelson Associate Principal: Paul Alvarez

Joey Tomlinson Elementary School

9748 Swayback Ranch, San Antonio, TX 78254

Phone: 210-398-2650 School Hours: 7:45 am - 3:10 pm Principal: Wendy Tiemann Associate Principal: James Dominguez

Dr. Pat Henderson Elementary School

14605 Kallison Bend San Antonio, TX 78254

Phone: 210-398-1050 Fax: 210-256-0985

School Hours: 7:45 am - 3:10 pm Principal: Thomas Mackey Associate Principal: Lillyana Hinojosa

Dr. John M. Folks

9855 Swayback Ranch, San Antonio TX, 78254

Phone: 210-398-1600 Fax: 210-257-3060

School Hours: 8:40 am - 4:05 pm Principal: Shawn McKenzie Associate Principal: Yvette Lopez

Wallace B. Jefferson

10900 Shaenfield, San Antonio TX, 78254

Phone: 210-397-3700 Fax: 210-257-4988

School Hours: 8:40 am - 4:05 pm Principal: Monica Cabico Associate Principal: Nicole Gomez

Joe Straus III

8092 Talley Road, San Antonio, TX 78253-7146

Phone: 210-398-2550 School Hours: 8:40 am - 4:05 pm Principal: Dana Gilbert-Perry Associate Principal: Wendi Autumn Peralta

Sandra Day O'Connor High School

12221 Leslie Rd, Helotes TX, 78023

Phone: 210-397-4800 Fax: 210-695-4804 School Hours: 9:00 am - 4:30 pm Principal: Robert Martinez Associate Principal: Jason Christian

William H. Taft High School

11600 Culebra Road, San Antonio TX, 78253

Phone: 210-397-6000 Fax: 210-688-6072

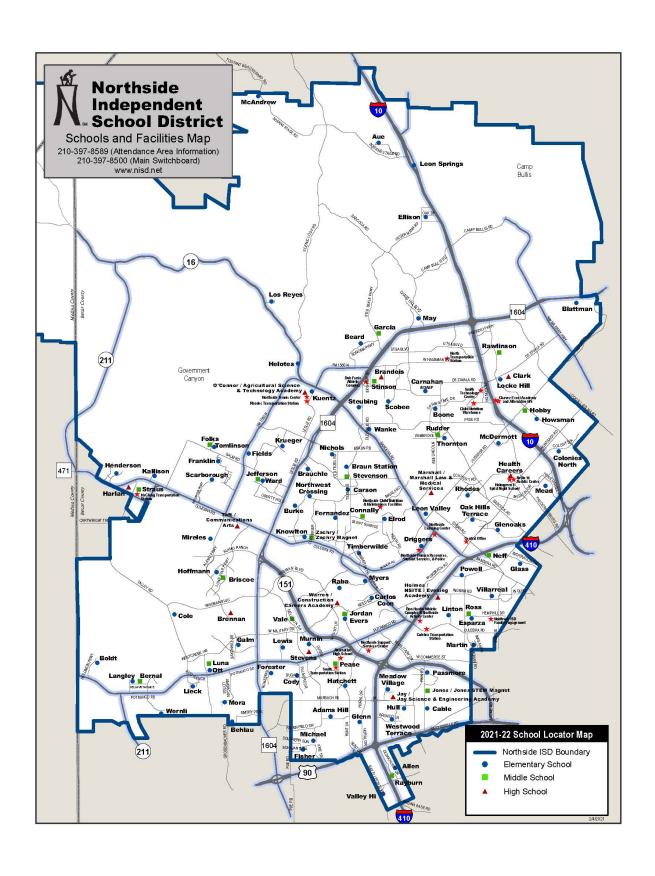
School Hours: 9:00 am - 4:30 pm Principal: Martha Cortinas-Fernandez Associate Principal: Richard Halle

John M. Harlan High School

14350 Culebra Road San Antonio, TX 78253

Phone: 210-398-2200 Fax: 210-688-0494

School Hours: 9:00 am - 4:30 pm
Principal: Robert Harris
Associate Principal: Richard Yzaguirre



Climate

Northwest Bexar County protected by District 7 Fire Rescue (ESD# 7) is located in the South-Central Texas National Weather Service Austin/San Antonio climate Region. The city is located in the south-central portion of Texas on the Balcones escarpment. With its location on the northwest edge of the Gulf Coastal Plain, it experiences a modified subtropical climate. The average monthly temperatures range from the 50s in winter to 80s in summer. Elevation varies from near 550 feet to near and above 1000 feet above sea level.

Winter

During winter the area is alternately influenced by a continental climate, when winds blow from the north and west and by a modified maritime climate, when south and southeast winds blow from the Gulf of Mexico. Mild weather prevails during most of the winter. Below freezing temperatures occur on average about 20 days each year. When strong cold fronts do occur, they block any moderating effects from the Gulf of Mexico. The coldest winters overall have come from those winters of frequent cold fronts, accompanied by mostly cloudy weather regimes. The coldest low of record was 0 on January 31, 1949. Daily temperature variations can be as much as 40 to 50 degrees. Very warm days occur when dry west winds in a mild air mass allow winter temperatures to climb to spring or summerlike levels. Normally the first freezing temperatures occur around December 1st, while the average last freeze occurs in late February

Summer

During the summer, the climate becomes more tropical like with prevailing south and southeast winds. The moderating effects of the Gulf of Mexico prevent extremely high temperatures; however, summers are usually long and hot with daily maximum temperatures above 90 over 80 percent of the time. In many years summer conditions continue into September and sometimes even to October. The highest of record was 111 September 5, 2000. Occasionally, cool fronts may move through the area, dropping overnight lows into the 50s and 60s; however, the cooling is brief, and in a day or two the minimum temperatures are back to the 70s. If the drier air with these fronts has lost all of its cool properties, daytime highs have risen above normal, as the moderating effects of the Gulf of Mexico are blocked. Although July and August can have limiting rain, sometimes rather heavy rain events can come in July and August, especially with the remnants of tropical storms or stalled out cool fronts.

Rainfall

Northwest Bexar County protected by District 7 Fire Rescue (ESD# 7) is situated between a semi-arid area to the west and a much wetter and more humid area to the east. Such a location allows for large variations in monthly and annual precipitation amounts. The average long-term annual precipitation for the area is around 29 inches, although it may range from near 10 to near 50 inches from one year to another. The extremes vary from 10.11 inches in 1917 to 52.28 inches in 1973. Heavy rain may occur with or without thunder in any season. During some of these events, rain has exceeded 5 inches in several hours and caused flash flooding. A year of normal precipitation is sufficient for the production of most crops, although during the drier year's irrigation is essential. On average the heaviest rains fall in May, September, and October while the driest months, on average, are December through March, and July. Since rainfall is sporadic, the wettest and driest month in any one year may occur in any season and vary widely from year to year. Precipitation from April through September usually occurs as a result of thunderstorms; however, thunderstorms may occur in any month.

Source: National Weather Service; http://www.weather.gov/

Predictive Service Areas

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, fuel moisture, and National Fire Danger Rating System thresholds have been developed for each PSA and are unique to the designated PSA. The northwest Bexar County Area protected by District 7 Fire Rescue (ESD# 7 falls on the border of 4 different Predictive Service Areas; Central Texas, Coastal Plains, Hill Country, and Rio Grande Plains. For purposes of this Community Wildfire Protection Plan the Coastal Plains PSA and Rio Grande Plains PSA were used because they better represent the weather patterns and fuels of northwest Bexar County.

In the tables below, at the low end of the scale in the green and blue we see normal to below normal conditions. Initial attack should be successful with few complexities. At the upper end of the scale in the orange and red we see unusual or rare conditions and we would expect to see complex fires where initial attack may often fail. 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.

Coastal Plains PSA

Peak Fire Seasons:

Primary – July through September Secondary – February through April

Critical Fire Weather Thresholds:

Relative Humidity – 25% or less 20' Wind Speed – 15 MPH or more Temperature – 90° or more Energy Release Component – Over 44 Burning Index – Over 55

Fuel Moisture Thresholds:

10 HR – 7% 100 HR – 13% 1000 HR – 14%

Dead Fuel Moisture Thresholds

		Percentiles							
	3	3 4-10 11-25 26-50 51-100							
1000-hr	12	13	14-15	16-17	18				
100-hr	11	12	13-14	15	16				
10-hr	5	6	7	8	9				

NFDRS Thresholds (Fuel Model G)

		Percentiles						
	97	97 90-96 75-89 50-74 0-49						
ERC	48	43-47	36-42	29-35	0-28			
BI	59	51-58	42-50	33-41	0-32			
KBDI	718	680-717	592-679	416-591	0-415			

Live Euel Meistur

		Percentiles					
	3	3 4-10 11-25 26-50 51-100					
Mesquite Oak	95	96-100	101-110	111-125	126-300		
	75	76-90	89-100	101-125	126-300		

Rio Grande Plains PSA

Peak Fire Seasons:

Primary – June through August Secondary – February through April

Critical Fire Weather Thresholds:

Relative Humidity – 25% or less 20' Wind Speed – 15 MPH or more Temperature – 90° or more Energy Release Component – Over 50 Burning Index – Over 54

Fuel Moisture Thresholds:

10 HR – 6% 100 HR – 11% 1000 HR – 13%

Dead Fuel Moisture Thresholds

		Percentiles						
	3	3 4-10 11-25 26-50 51-100						
1000-hr	11	12	13-14	15-16	17			
100-hr	10	11	12-13	14-15	16			
10-hr	4	5	6	7-8	9			

NFDRS Thresholds (Fuel Model G)

		Percentiles						
	97	97 90-96 75-89 50-74 0-49						
ERC	56	51-55	41-50	32-40	0-31			
BI	63	53-62	43-52	34-42	0-33			
KBDI	745	713-744	604-712	420-603	0-419			

Live Fuel Moisture

		Percentiles							
	3	3 4-10 11-25 26-50 51-100							
Mesquite	95	96-100	101-110	111-125	126-300				
Oak	75	76-80	81-90	91-105	106-300				
Juniper	70	71-80	81-90	91-110	111-300				

Significant Fire Potential Matrices

In order to get a more accurate representation of local thresholds, we can look at the significant fire potential matrices for the Guadalupe River RAWS Station and Stinson Municipal Airport RAWS Station. The Significant Fire Potential Matrix represents the potential for a significant fire as it relates to Burning Index and Energy Release Component. The number 1 represents the 0-25th percentile, 2 represents the 26-89th percentile, 3 represents the 90-96th percentile and 4 represents the 97th percentile.

Guadalupe River		Fuel Dryness Level Energy Release Component G (ERC)					
RAWS 2018		1 0-41	2 42-56	3 57-63	4 64+		
	1 0-37	Low	Low To Moderate	Moderate To Low	Moderate		
her Level lex G (BI)	2 38-52	Low To Moderate	Moderate To Low	Moderate	Moderate To High		
Fire Weather Level Burning Index G (BI)	3 53-63	Moderate To Low	Moderate	High	High		
	4 64+	Moderate	Moderate To High	High	Very High		

Stinson Muni		Fuel Dryness Level Energy Release Component G (ERC)					
Airport 2018	0 17	1 0-45	2 46-57	3 58-64	4 65+		
	1 0-41	Low	Low To Moderate	Moderate To Low	Moderate		
her Level lex G (BI)	2 42-59	Low To Moderate	Moderate To Low	Moderate	Moderate To High		
Fire Weather Level Burning Index G (BI)	3 60-70	Moderate To Low	Moderate	High	High		
_	4 71+	Moderate	Moderate To High	High	Very High		

Remote Automatic Weather Stations (RAWS) are strategically located throughout the United States. These stations monitor the weather and provide weather data that assists land management agencies with a variety of projects such as monitoring air quality, rating fire danger, and providing information for research applications.

The Burning Index (BI) reflects the change in fine fuel moisture content and wind speed and is highly variable day to day. The BI is more appropriate for short-term fire danger and can be loosely associated with flame length by dividing the BI by 10. The BI is readily affected by wind speed and fine fuel moisture.

The Energy Release Component (ERC) serves as a good characterization of local seasonal fire danger trends resulting from the area's fuel moisture conditions. The ERC is a relative index and should be compared to historic trends and thresholds on the corresponding area's pocket card. The ERC relies heavily on large and live fuels, has low variability, and is not affected by wind speed.

Source: Texas Interagency Coordination Center (TICC); http://ticc.tamu.edu/

General Landscape

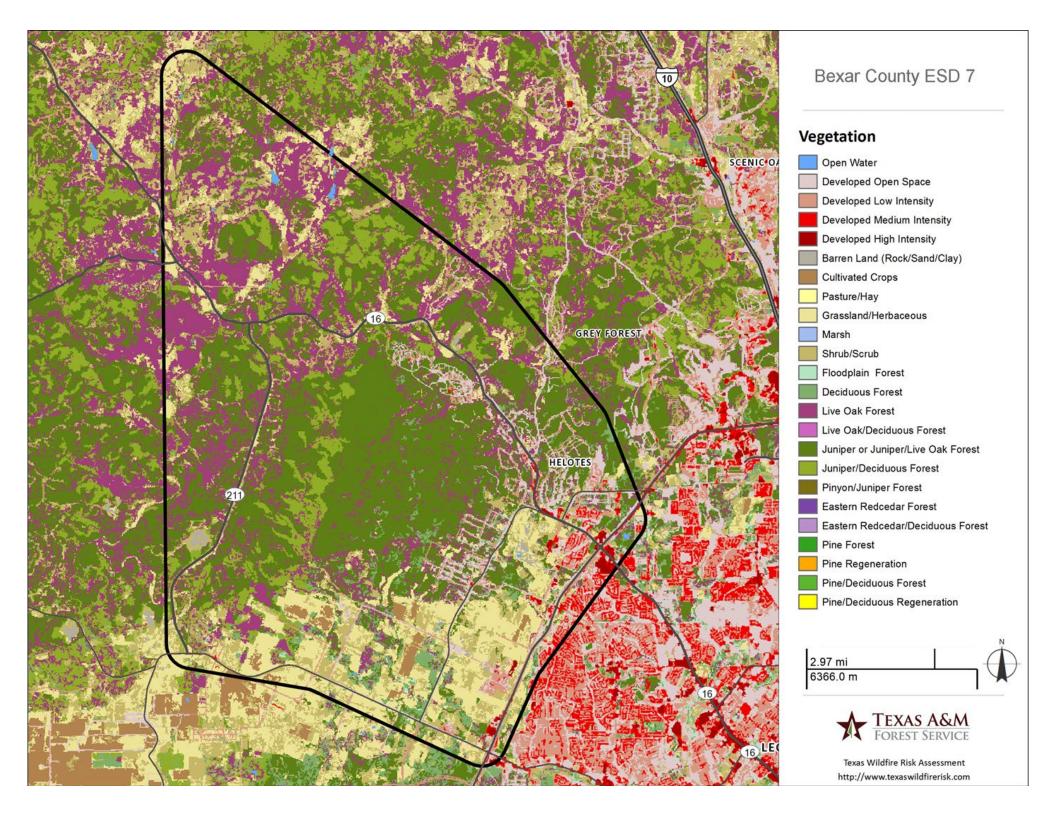
The Northwest Bexar County Area protected by District 7 Fire Rescue (ESD# 7) is located on the southern edge of the Edwards Plateau in the Balcones Canyonlands ecoregion. The topography is largely shaped by the erosion of the limestone bedrock forming steep canyons, sinkholes, and rock outcrops. Terrain has played a role in numerous fatality fires across the nation and is listed as one of the "Common Denominators of Fire Behavior on Tragedy Fires" in the Incident Response Pocket Guide. There are several terrain indicators to watch out for on wildfires, all of which are present in the Helotes project area.

Vegetation

The Edwards Plateau is characterized by a combination of tall, medium and short grasses, often intermixed into a woodland or forest setting with hardwood trees such as escarpment live oak, Texas oak, honey mesquite and with coniferous Ashe juniper. Protective canyons, especially on the eastern and southern portions of the plateau, provide for a great diversity of other hardwood species such as escarpment black cherry, Texas mountain-laurel, Mexican plum, and lacey oak. Springs and creeks found in these canyons are typically lined with bald cypress, sycamore, and black willow.

Prior to heavy settlement, fire played a major role in shaping the vegetation on the Edwards Plateau. Fire occurred on the majority of the land every 4-7 years. During this interval, Ashe juniper was kept out of most uplands by fire and dense grass competition. Other trees such as escarpment live oak and honey mesquite were kept more isolated among the grasses. In these cases, older trees or groups of trees could either withstand wildfires or inhibit their spread because they are generally more fire resistant than grasses. Concentrated livestock grazing which reduced the fire carrying grasses, allowed trees, especially Ashe juniper to expand into the open areas. Protected canyons and moist, north facing slopes reduced the number of damaging fires which allowed many trees to persist prior to human settlement.

Class	Description	Acres	Percent
Open Water	All areas of open water, generally with < 25% cover of vegetation or soil	62	0.1 %
Developed Open Space	Impervious surfaces account for < 20% of total cover (i.e. golf courses, parks, etc)	2,256	3.9 %
Developed Low Intensity	Impervious surfaces account for 20-49% of total cover	2,243	3.9 %
Developed Medium Intensity	Impervious surfaces account for 50-79% of total cover	550	1.0 %
Developed High Intensity	Impervious surfaces account for 80-100% of total cover	180	0.3 %
Barren Land (Rock/Sand/Clay)	Vegetation generally accounts for <15% of total cover	140	0.2 %
Cultivated Crops	Areas used for the production of annual crops, includes land being actively tilled	476	0.8 %
Grassland/Herbaceous	Areas dominated (> 80%) by grammanoid or herbaceous vegetation, can be grazed	6,591	11.5 %
Shrub/Scrub	Areas dominated by shrubs/trees < 5 meters tall, shrub canopy > than 20% of total vegetation	5,743	10.0 %
Floodplain Forest	> 20% tree cover, the soil is periodically covered or saturated with water	44	0.1 %
Deciduous Forest	> 20% tree cover, >75% of tree species shed leaves in response to seasonal change	2,099	3.7 %
Live Oak Forest	> 20% tree cover, live oak species represent >75% of the total tree cover	11,577	20.2 %
Juniper or Juniper/Live Oak Forest	> 20% tree cover, juniper or juniper/live oak species represent > 75% of the total tree cover	20,296	35.4 %
Juniper/Deciduous Forest	> 20% tree cover, neither juniper or deciduous species represent > 75% of the total tree cover	5,062	8.8 %
Total		57,319	100.0 %



Endangered Species

Current species identified by the U.S. Fish and Wildlife Service as either threatened or endangered and believed to occur in Bexar County are as follows: Bracted Twistflower, Cokendolpher Cave Harvestman, Government canyon Bat Cave Spider, Madla's Cave Meshweaver, Robber Barron Cave Meshweaver, Government Canyon Bat Cave Meshweaver, Braken Bat Cave Meshweaver, Popping Plover, Black-capped Vireo, Golden-cheeked warbler, Rhadine infernalis beetle, Helotes mold beetle, Rhadine exilis beetle, and Whopping Crane.

Bexar County is home to two endangered bird species, The Black-capped Vireo (*Vireo atricapilla*) and the Golden-cheeked Warbler (*Setophaga chrysoparia*). Both species nest march- late summer and require oak-juniper woodland habitats which must be considered in wildfire mitigation strategies. As mentioned in the vegetation section, the lack of frequent low intensity fires over the past century has drastically changed the makeup of the vegetation of the Edwards Plateau. The vegetation that these species need to survive and nest in is not as abundant as it once was. The habitat and nesting characteristics of endangered species in the area must be taken into consideration when planning wildfire mitigation techniques. The need for this habitat also justifies the need for wildfire mitigation projects because if an intense fire burns through the habitat, it may take several years for nature to recover and for regrowth to reach maturity.

Black-capped Vireo

Black-capped vireos nest in Texas during April – July and spend the winter on the western coast of Mexico. They build a cup-shaped nest in the fork of a branch 2 – 4 feet above the ground, usually in shrubs such as shin oak or sumac. Their preferred habitat includes rangelands with scattered clumps of shrubs separated by open grassland. The clearing of low growing woody cover needed for nesting and overgrazing by deer and livestock are leading to the loss of habitat for the Black-capped vireo. Range fires, which used to keep the land open and the shrubs growing low to the ground, are not as frequent today as in the days prior to human settlement in Texas. In some portions of the vireos range, particularly the central and eastern segment, increases in juniper (cedar) and other woody species can cause the vegetation to grow out of the patchy, low shrub cover that provides suitable habitat. In these communities, good nesting habitat generally has between 30-60% shrub canopy. Selective brush removal with herbicides or mechanical means during the non-breeding season (September - February) can be used to keep the habitat favorable for vireo nesting. For example, the selective removal of juniper serves to maintain the proper shrub canopy and encourages growth of associated broad-leaved shrubs. (*Texas Parks and Wildlife*).

Golden-cheeked Warbler

Golden-cheeked warblers nest only in central Texas, mixed Ashe-juniper, and oak woodlands, in ravines and canyons. They use long strips of cedar bark and spider webs to build their nests. They come to Texas in March to nest and raise their young and leave in July to spend the winter in Mexico and Central America. Their habitat consists of woodlands with tall Ashe juniper, oaks, and other hardwood trees. Controlling juniper on these areas by prescribed burning, hand cutting, or well-planned mechanical methods is often desirable to improve range condition and plant diversity and is compatible with protection and conservation of adjacent Golden-cheeked Warbler habitat. However, when brush management and maintenance activities near habitat are necessary, they should not occur during the March – August nesting season to avoid adverse impacts such as disturbance of nesting and feeding birds. (*Texas Parks and Wildlife*)

Community Risk Assessment

Risk assessments are a systemic process for identifying and assessing the range of elements that could lead to undesirable outcomes for a specific situation. Quantitative risk assessments require calculations of the two primary components of risk: the magnitude of the potential loss and the probability that the loss will occur. For the wildland urban interface, a risk assessment is a step in the planning process that identifies the probability that any feature of the landscape or structure will create potential harm to a homeowner or community.

Fuels

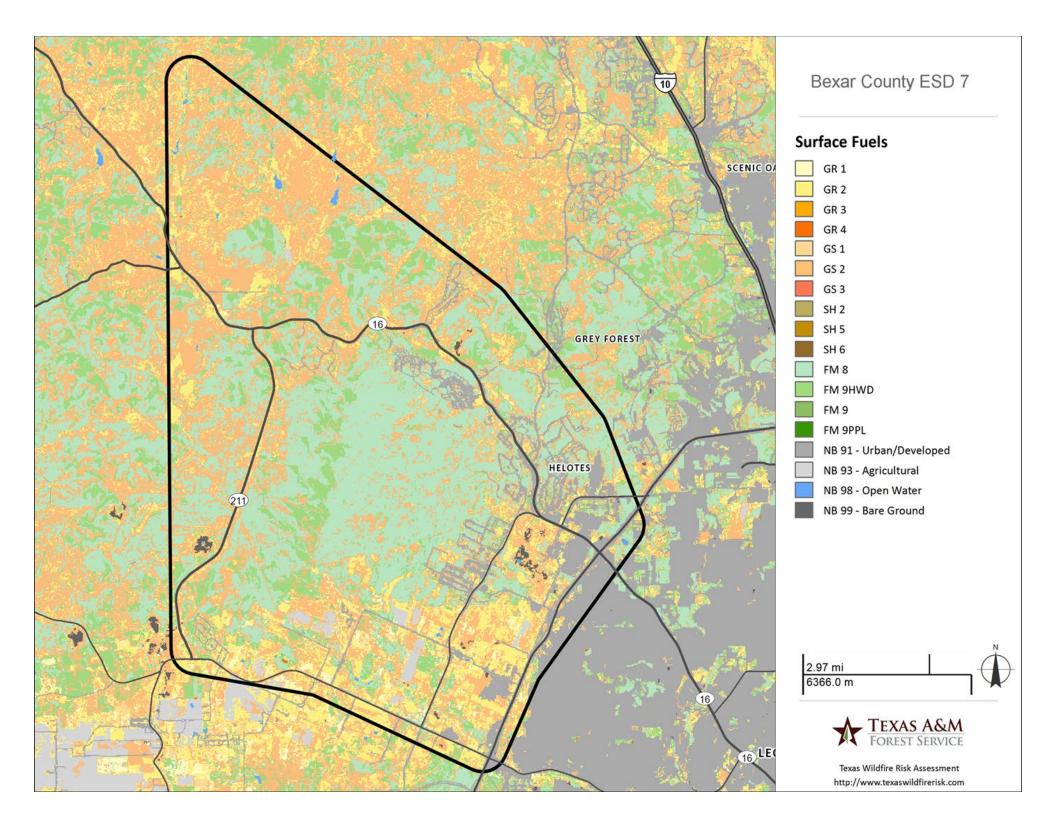
Surface fuels contain the parameters needed to compute surface fire behavior characteristics, such as rate of spread, flame length, fireline intensity, and other fire behavior metrics. As the name might

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 Portal 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 4.) Slash



Surface Fuels	Description	FBPS Fuel Model Set	Acres	Percent
GR 1	Short, Sparse Dry Climate Grass (Dynamic)	2005	904	1.6 %
GR 2	Low Load, Dry Climate Grass (Dynamic)	2005	6,883	12.0 %
GS 1	Low Load, Dry Climate Grass-Shrub (Dynamic)	2005	77	0.1 %
GS 2	Moderate Load, Dry Climate Grass-Shrub (Dynamic)	2005	19,255	33.6 %
FM 8	Closed timber litter (compact)	2005	18,584	32.4 %
FM 9 HWD	Hardwood litter (fluffy) - Low Load for Texas	2005	5,653	9.9 %
NB 91	Urban/Developed	2005	5,221	9.1 %
NB 93	Agricultural	2005	476	0.8 %
NB 98	Open Water	2005	96	0.2 %
NB 99	Bare Ground	2005	164	0.3 %
Total			57,320	100.0 %



Extreme Fire Behavior

Characteristic rate of spread and flame length are fire behavior outputs, which are 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.

This section factors in a worst-case scenario interpretation of how the fuel will burn during severe weather conditions. These conditions lead to extreme fire behavior with high rates of spread and large flame lengths. During times of intense fire behavior, firefighters must change their tactics because resources are unable to use direct attack methods of suppression. Fire resources may be forced to fall back to a pre-existing defensive line to burn out or begin evacuations of threatened communities.



Some Big-Change Makers

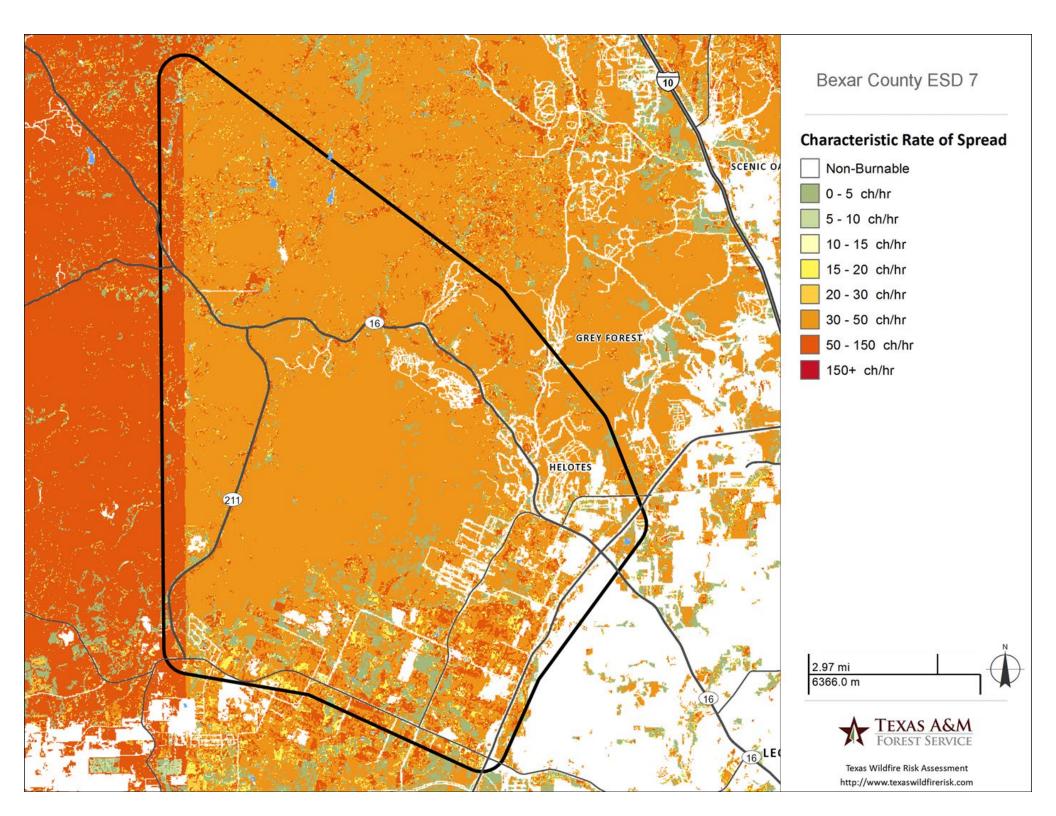
- Transition between surface fire (litter/grass) and crown fire
- Wind events: cold fronts; thunderstorm outflows, sea-breeze; surfacing of winds aloft by mixing or by mountain waves; reversal of slope/canyon winds; wind gusts; evening wind drop as mixing ceases.
- Slope reversals: over a ridgetop usually less dangerous; across a drainage often more dangerous.
- Increased wind speeds on upper slopes (combined with onset of crowning)

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 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 for the fire front.

Throughout ESD 7 and the surrounding vegetation, fire rate of spread can reach 30-50 chains/hour. That means in one hour a fire can move up to a half mile. This is an important factor to consider when requesting additional resources for fire suppression. The fire can spread significantly between the time resources are requested and the time they arrive.

Rate of Spread	Acres	Percent
Non-Burnable	5,958	10.4 %
0 - 5 (ch/hr)	3,148	5.5 %
5 - 10 (ch/hr)	95	0.2 %
10 – 15 (ch/hr)	211	0.4 %
15 - 20 (ch/hr)	1,531	2.7 %
20 - 30 (ch/hr)	355	0.6 %
30 - 50 (ch/hr)	39,498	68.9 %
50 - 150 (ch/hr)	6,523	11.4 %
150 + (ch/hr)	0	0.0 %
Total	57,319	100.0 %



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.

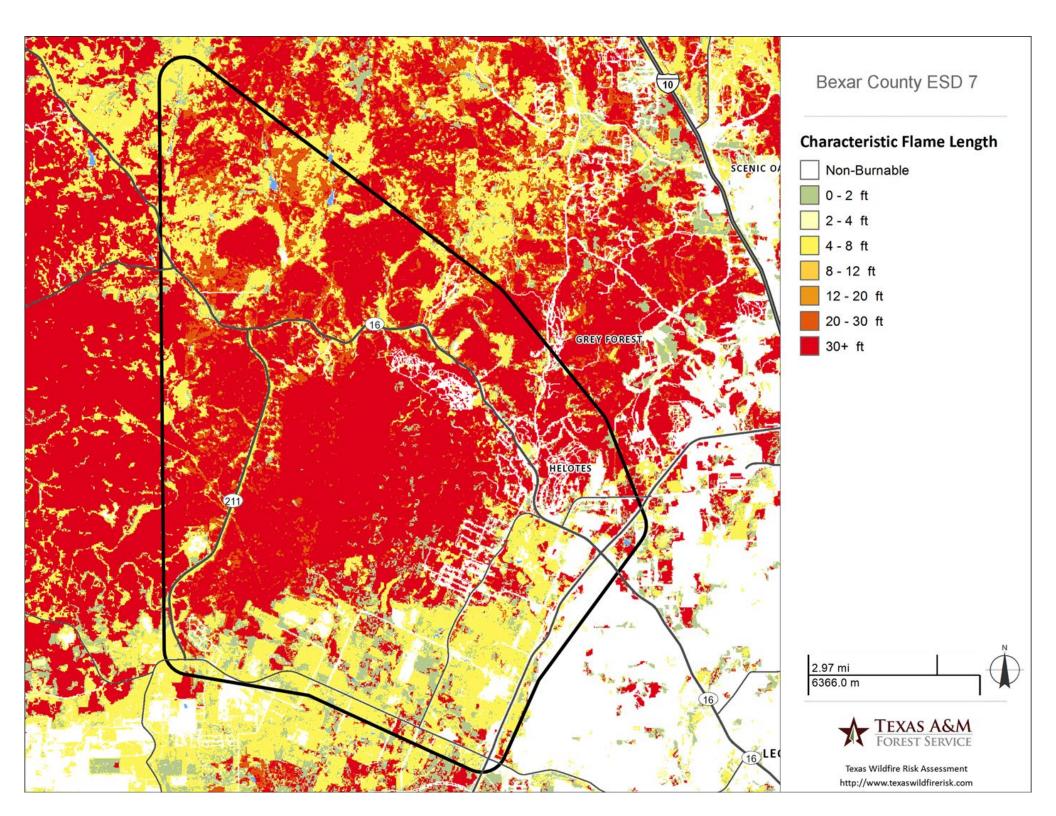
The majority of ESD 7 has the potential to produce flame lengths over 20 feet. Fire suppression tactics can be chosen based on the observed flame length and fireline intensity.

The table below is out of the National Wildfire Coordinating Group's Fireline Handbook Appendix B: Fire Behavior, it gives an interpretation of suppression strategies based on observed flame lengths. For portions of the ESD 7 project area, if a severe wildfire is burning, crowning, spotting, and major fire runs are probable. Control efforts at the head of the fire will likely be ineffective.



Flame Length	Acres	Percent
Non-Burnable	5,958	10.4 %
0 - 2 ft	3,894	6.8 %
2 - 4 ft	1,121	2.0 %
4 - 8 ft	12,680	22.1 %
8 - 12 ft	10	0.0 %
12 - 20 ft	25	0.0 %
20 - 30 ft	5,470	9.5 %
30 + ft	28,162	49.1 %
Total	57,320	100.0 %

Flame Length (Feet)	Fireline Intensity (Btu/ft/s)	Interpretation
< 4	< 100	Fire can generally be attacked at the head or the flanks by persons using hand tools, Hand line should hold the fire.
4-8	100 – 500	Fires are too intense for direct attack on the head by persons using hand tools. Hand line cannot be relied on to hold fire. Equipment such as plows, dozers, pumpers, and retardant aircraft can be effective.
8 – 11	500 – 1000	Fire may present serious control problems – torching, crowning, and spotting. Control effects at the fire head will probably be ineffective.
> 11	> 1000	Crowning, spotting, and major fire runs are probable. Control efforts at the head of fire are ineffective.



Historic Wildfire Response

Historically low intensity fires have occurred in the ESD 7 area. In recent history, these fires typically have not resulted in large-scale catastrophic incidents. The increasingly aggressive fire suppression efforts have deterred the fuels and fire regime in our local wildlands. This has resulted in unnaturally dense vegetation with years of accumulated debris and has created conditions that are conducive to intense burning wildfires. During September 2011, several wildland fires occurred in northwest Bexar County resulting in over 2,000 acres burned in that one month alone. These fires represent the potential destruction that wildland fires present to the ESD 7 community.

Dietz-Elkhorn Fire

Flames erupted on Camp Bullis on September 7, 2011, about 4:15 p.m. The fire had burned about 150 acres, but no structures were damaged. Aircraft were dropping retardant on the eastern portion and fire crews were preparing to abate the rest of the blaze overnight. Residents were evacuated from about 100 homes in Fair Oaks Ranch within a quarter mile of the fire, along Ralph Fair Road, Pimlico Lane and Ruffian Drive



Pat Gross Fire

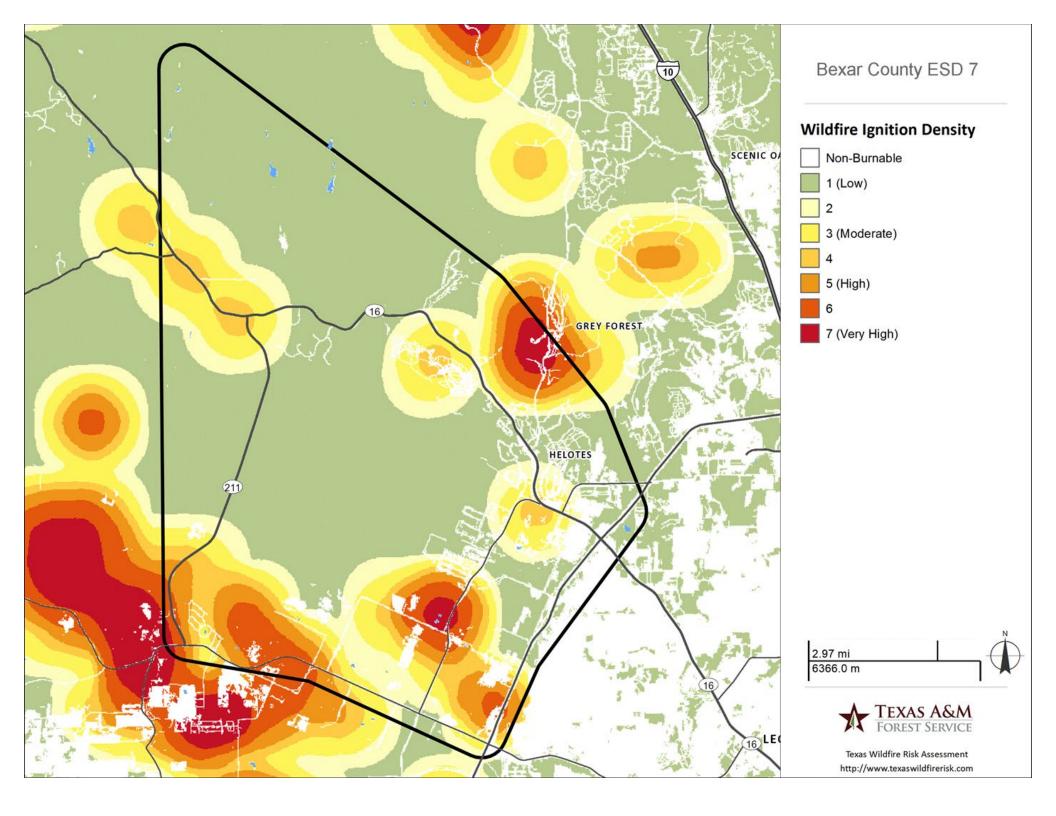
Firefighters from more than a dozen agencies worked to contain a 250-acre brush fire on September 9, 2011 in west Bexar County. There was no threat to structures during the wildfire event, but the event triggered a series of precautionary evacuations. The fire originated in rugged, hilly terrain near the

intersection of Zeta Drive and Potranco Rd at about 1:30 p.m. Texas 211 from U.S. 90 to Potranco Road was closed to traffic until 10 a.m. the following morning. As the fire moved west, about 100 residents in the Pioneer Estates neighborhood and along Mechler Road were evacuated to Medina Valley High School. CitiBank also closed its campus, evacuating 2,600 employees. The wildfire then turned to the north, and another 100 residents along Landa Road and in the Potranco Run subdivision were ordered to leave. No injuries were reported.



Wildfire Ignition Density is the likelihood of a wildfire starting based on historical ignition patterns.

Occurrence is derived by modeling historic wildfire ignition locations to create an average ignition rate map. The ignition rate is measured in the number of fires per year per 1000 acres. Five years of historic fire report data was used to create the ignition points for all Texas fires. Data was obtained from federal, state, and local fire department report data sources for the years 2005 to 2009. The compiled wildfire occurrence database was cleaned to remove duplicate records and to correct inaccurate locations. The database was then modeled to create a density map reflecting historical fire ignition rates.



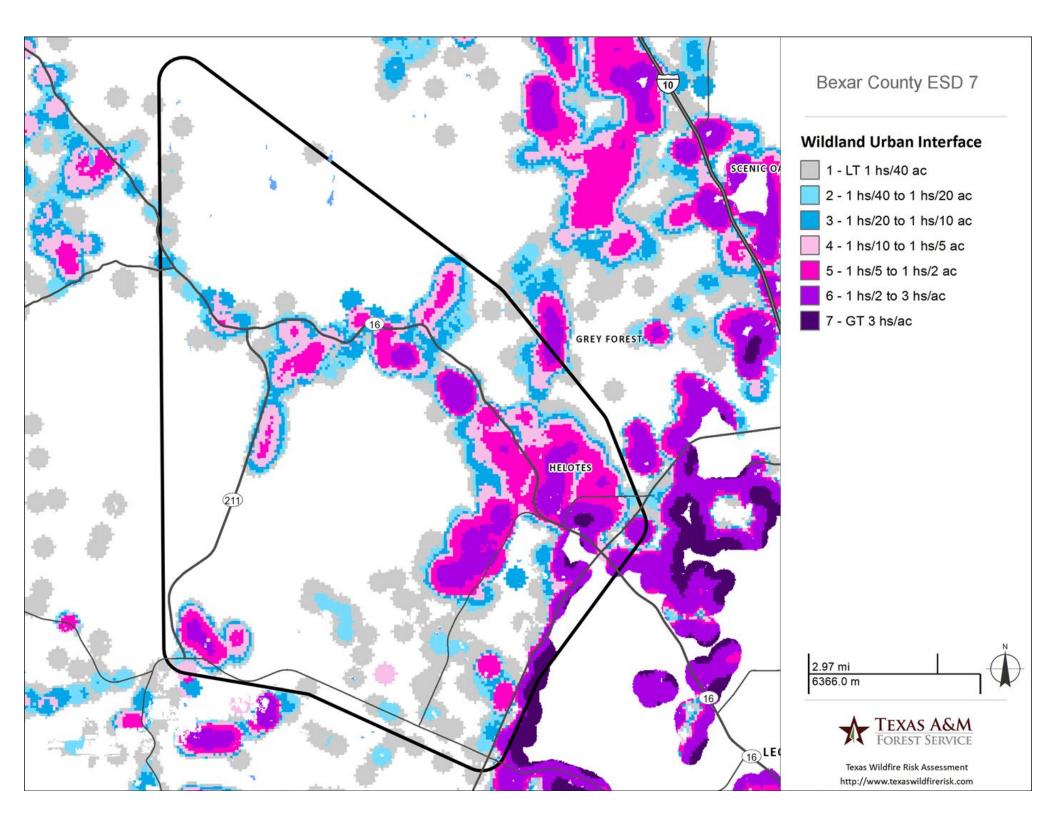
Where People Live

Wildland Urban Interface

It is estimated that 20,542 people or 59 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 chart to the right shows the lowest density (gray) to highest density (purple) and the WUI acreage reflected for each density level in the Northwest Bexar County area protected by District 7 Fire Rescue (ESD# 7District 7). The chart shows that even a small wildfire acreage wise can still threaten multiple homes and stretch available resources thin.

Housing Density	WUI Population	Acres	Percent
LT 1hs/40ac	115	6,650	29.4 %
1hs/40ac to 1hs/20ac	181	2,510	11.1 %
1hs/20ac to 1hs/10ac	401	2,998	13.3 %
1hs/10ac to 1hs/5ac	1,116	3,504	15.5 %
1hs/5ac to 1hs/2ac	2,967	3,945	17.4 %
1hs/2ac to 3hs/1ac	6,213	2,747	12.1 %
 GT 3hs/1ac	3,144	272	1.2 %
Total	14,137	22,626	100.0 %



Risk Assessments

In order to get an accurate idea of wildfire risk of the communities in ESD 7, there is a need to ground truth the assumptions of communities in the Wildland Urban Interface. Not all communities in the WUI are at the same risk to wildfire because the WUI is more than just a geographic location, but also a set of conditions that lead to structure ignition.

To standardize the process and compare all communities based on the same criteria the Texas A&M Forest Service Wildfire Risk Assessment Form was used to rate each community. This form is based off of criteria found in NFPA 1144 of characteristics that lead to structure ignition. The form looks at the surrounding environment and the home construction then adds the two scores together to get an idea of overall wildfire risk. By rating all communities using the same risk assessment process, they can be prioritized based on higher ratings.

To identify communities to be assessed the TxWRAP WUI layer was laid over the Bexar County Parcel Map from the Tax Assessors office. Communities were identified where several parcels fell in a similar geographic area. The goal was to get as close to the subdivision level as possible.

The communities were split between District 7 Fire Rescue and Texas A&M Forest Service to complete. Once completed the risk assessments were entered into ArcGIS and mapped based on their Wildfire Risk. By using ArcGIS, the communities were able to be broken down for further assessment in later sections of the CWPP. The estimated number of homes were calculated by counting the number of parcels within the identified community using the statistics tool in the attribute table on ArcGIS. The acres were calculated using the statistics tool in the attribute table on ArcGIS under the parcel data GIS Acres. The estimated values at risk were calculated using the statistics tool in the attribute table on ArcGIS using the tax assessors Improvement value of each parcel.

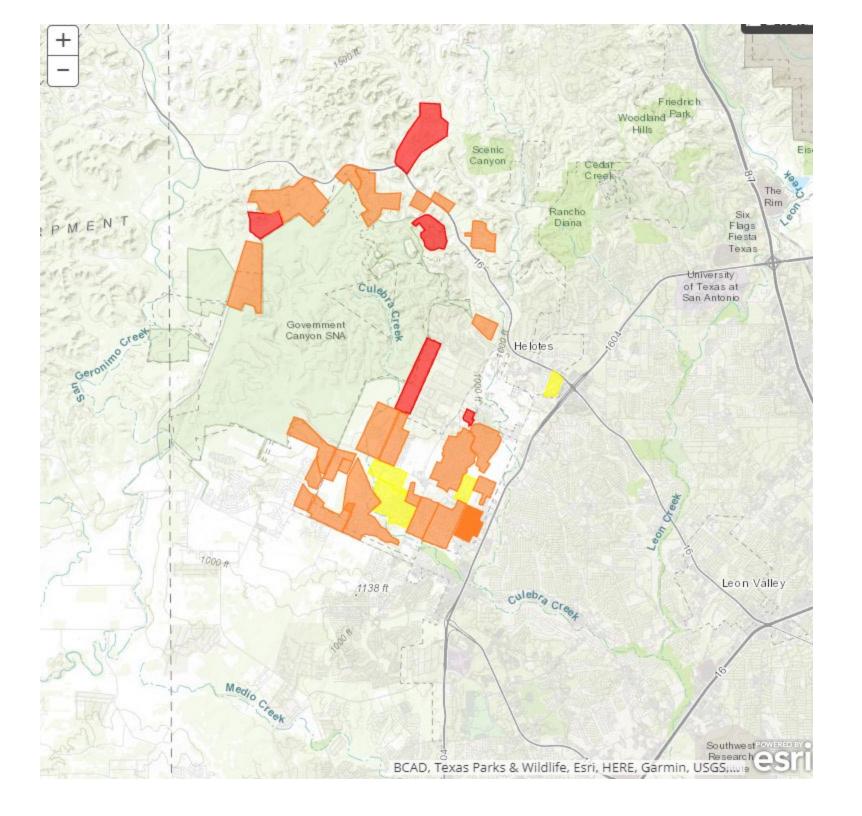
Based on the findings, 5 communities were identified as being at high risk to a wildfire. 23 communities were found to be at moderate risk and 4 communities were rated as being at low risk. Common factors found throughout the high-risk communities include heavy vegetation and insufficient defensible space for the fuel type present. What kept most communities in ESD 7 from reaching extreme risk was the home construction.

32 communities identified as being in the wildland urban interface were assessed for wildfire risk

5 communities including an estimated 686 homes valued at \$63,691,849 have a **HIGH** wildfire risk

23 communities including an estimated 9,941 homes valued at \$1,448,924,642 have a **MODERATE** wildfire risk.

4 communities including an estimated 2,226 homes valued at \$240,642,283 have a **LOW** wildfire risk.



Bexar County ESD 7 Community Wildfire Risk Assessment							
Community Name	Number of Homes	Acres	Residential Type	One Way In/Out	Road Width	Estimated \$ Value	Wildfire Risk
Helotes Canyon	80	96.89	Fixed	Yes	24 ft < 20 ft	48,165,230.00	40
Ridge at Bandera	120	58.97	Fixed	No	24 ft < 20 ft	25,065,780.00	44
San Antonio Ranch	348	196.1	Fixed	Yes	> 24 ft	39,690,519.00	65
Shadow Canyon	374	322.35	Fixed	No	24 ft < 20 ft	30,864,710.00	55
Triana	445	155.91	Fixed	No	24 ft < 20 ft	69,212,346.00	47
Stanton Run	247	73.08	Fixed	Yes	> 24 ft	29,655,320.00	21
Sanctuary	145	66	Fixed	No	24 ft < 20 ft	24,034,620.00	39
Wildhorse Overlook	123	171.05	Fixed	Yes	24 ft < 20 ft	5,691,950.00	61
Retablo Ranch	88	456.86	Fixed	Yes	24 ft < 20 ft	21,369,169.00	56
Chimney Creek	75	490.06	Fixed	Yes	24 ft < 20 ft	12,679,390.00	70
Wildhorse	950	243.89	Fixed	No	> 24 ft	134,551,345.00	46
Taosch Farm	205	88.74	Fixed	No	> 24 ft	24,505,970.00	44
Talise De Culebra	300	202.01	Fixed	No	> 24 ft	21,304,710.00	32
Stillwater Ranch	950	557.19	Fixed	No	> 24 ft	105,690,910.00	33
Silver Oaks 2	611	169.66	Fixed	No	> 24 ft	62,139,190.00	21
Silver Oaks 1	1012	320.79	Fixed	No	> 24 ft	117,634,733.00	30
Shaenfield Place	356	92.77	Fixed	No	> 24 ft	31,213,040.00	30
Tribute Oaks	142	52.8	Fixed	Yes	> 24 ft	35,565,023.00	44
Lantana Oaks	65	31.22	Fixed	Yes	> 24 ft	2,087,260.00	61
Hills of Shaenfield	2018	441.91	Fixed	No	> 24 ft	258,633,709.00	44
Remuda Ranch	70	73.26	Fixed	No	> 24 ft	5,010,860.00	35
Laura Heights	445	200.55	Fixed	No	> 24 ft	54,299,360.00	49
Prescott Oaks	300	145.79	Fixed	No	24 ft < 20 ft	133,176,000.00	35
Davis Ranch	450	336.75	Fixed	No	> 24 ft	145,795,500.00	42
Highlands	65	76.46	Fixed	Yes	< 20 ft	2,093,460.00	33
Cross Creek	350	185.87	Fixed	Yes	> 24 ft	793,910.00	58
Beverly Hills	75	329.96	Fixed	Yes	24 ft < 20 ft	3,542,730.00	63
Adobe Ranch Acres	62	91.29	Fixed	Yes	> 24 ft	13,192,460.00	54
Canyon Parke	109	243.51	Fixed	Yes	24 ft < 20 ft	23,399,480.00	46
Bridgewood Ranch	1520	300.37	Fixed	No	> 24 ft	163,261,330.00	44
Bridgewood Estates	728	170.9	Fixed	No	> 24 ft	84,191,690.00	44
Helotes Springs	25	567.74	Fixed	Yes	> 24 ft	24,747,070.00	35

Summary Facts

32 communities identified as being in the wildland urban interface were assessed for wildfire risk 5 communities including an estimated 578 homes valued at \$64,213,799 have a HIGH wildfire risk 23 communities including an estimated 8,321 homes valued at \$1,073,890,446 have a MODERATE wildfire risk. 4 communities including an estimated 2,223 homes valued at \$240,642,283 have a LOW wildfire risk.

0-30 Low Risk 31-60 Moderate Risk 61-90 High Risk 91+ Extreme Risk

Community Prescription

Undertaking wildfire mitigation in the wildland urban interface can reduce the risk of wildfire to the human environment. These actions offer several benefits including: Creating safer communities by reducing loss of life and property damage, allowing individuals and communities to minimize post disaster disruptions and recover more rapidly, Lessening the financial impact on individuals, communities, and society as a whole, and contributing to firefighter and public safety by reducing fuels or lessening the risk of structures igniting.

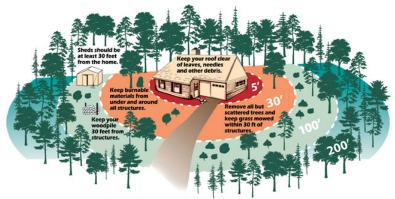
Treatment of Structural Ignitability

The Home Ignition Zone (HIZ) includes the house and its immediate surroundings (within 200 feet) or to the property boundary. The vegetation surrounding the home determines the home's susceptibility to ignition during a wildfire. To minimize the chance of a home ignition, homeowners should eliminate a wildfire's potential relationship with their house. This can be accomplished by interrupting the natural path a fire takes.

The Home Ignition Zone

The HIZ is broken down into 3 zones:

- 1. The Foundation 30 Feet: This area should have plants that are low to the ground, green and healthy. Homeowners should avoid large clumps of plants that can generate high heat. Noncombustible material such as rock or stone should be used instead of mulch around the homes foundation to create a buffer between the grass and foundation. The best choice for trees is deciduous species with wide, broad leaves. Shrubbery and bushes should be placed away from trees and planted in islands or groupings; this prevents fire from climbing through the lower vegetation into the canopy.
- 2. 30 100 Feet: More plants can be present in this area however, Firewise principles still apply. Firewood, small brush piles, or stacks of building materials should be moved to this zone or further away. 30 feet spacing between clusters of 2-3 trees should be maintained along with fuel breaks such as, driveways, gravel walkways, and lawns. Trees in this zone need to be pruned to height of 6-10 feet from the ground.
- **3. 100 200 Feet**: Trees in this zone should be thinned to eliminate overlapping canopies, although less space is required than in zone 3. Smaller conifers growing between taller trees should be removed along with heavy accumulations of woody debris.



The Home Ignition Zone

Firewise Communities

Because many homes are located within the HIZ of their neighbor's home, a community approach at reducing combustible material should be taken. The Firewise Communities/USA program draws on a community's spirit, its resolve, and its willingness to take responsibility for reducing wildfire risks by providing the resources needed to achieve both a high level of protection against wildland urban interface fire and ecosystem balance. Neighborhoods, subdivisions, and small towns in fire-prone areas can earn Firewise Communities/USA Recognition status by implementing Firewise principles tailored to their specific community needs. This nationwide initiative recognizes communities for taking action to protect people and properties from the risk of fires in the wildland urban interface. Communities create their programs themselves with cooperative assistance from local fire staff and state forestry agencies. By encouraging local communities to work with the District 7 Fire Rescue and Texas A&M Forest Service through the Firewise Communities/USA program, efforts to reduce home ignitions during a wildfire event can be maximized. Firewise communities can work with a combination of other mitigation strategies to allow firefighters to fight wildfires safely, resulting in less loss to lives and property.

Fire-prone communities earn Firewise Communities/USA recognition status by meeting the following criteria:

- 1. Enlisting a Wildland Urban Interface Specialist to complete an assessment and create a plan that identifies locally agreed-upon solutions that the community can implement.
- 2. Sponsoring a local Firewise task force, committee, commission, or department which maintains the Firewise Community program and tracks its progress or status.
- 3. Each participating site is required to have a minimum of one wildfire risk reduction educational outreach event, or related activity annually.
- 4. Invest the equivalent of \$28.54 per dwelling unit in wildfire risk reduction actions annually. (The rate is based on the 2021 annual National Hourly Volunteer Rate, which is updated every year in April when the new amount is published). Work done by municipal employees or volunteers using municipal and other equipment can be included, as can state/federal grants dedicate towards this purpose.
- 5. Submitting an annual report to Firewise Communities/USA, documenting continuing compliance with the program.

Target Firewise Communities

The subdivisions identified as being at highest risk are the ones that Firewise efforts should focus on. Of the 32 communities assessed, 5 were identified as being high risk. Each of these subdivisions fall under its own homeowner's association. This gives us the opportunity to contact a larger population and inform them about there and there neighboring Firewise Community. Firewise Communities do not have to be ran through the HOA board, but it can make the recognition renewal process easier.

Community Name	Risk Assessment Rating	Estimated Assets at Risk	HOA Contact	Contact Information
Helotes Canyon	40	48,165,230.00	NA	NA
Ridge at Bandera	44	25,065,780.00	NA	NA
San Antonio Ranch	65	39,690,519.00	NA	NA
Shadow Canyon	55	30,864,710.00	NA	NA
Triana	47	69,212,346.00	NA	NA
Stanton Run	21	29,655,320.00	NA	NA
Sanctuary	39	24,034,620.00	NA	NA
Wildhorse Overlook	61	5,691,950.00	NA	NA
Retablo Ranch	56	21,369,169.00	NA	NA
Chimney Creek	70	12,679,390.00	NA	NA
Wildhorse	46	134,551,345.00	NA	NA
Taosch Farm	44	24,505,970.00	NA	NA
Talise De Culebra	32	21,304,710.00	NA	NA
Stillwater Ranch	33	105,690,910.00	NA	NA
Silver Oaks 2	21	62,139,190.00	NA	NA
Silver Oaks 1	30	117,634,733.00	NA	NA
Shaenfield Place	30	31,213,040.00	NA	NA
Tribute Oaks	44	35,565,023.00	NA	NA
Lantana Oaks	61	2,087,260.00	NA	NA
Hills of Shaenfield	44	258,633,709.00	NA	NA
Remuda Ranch	35	5,010,860.00	NA	NA
Laura Heights	49	54,299,360.00	NA	NA
Prescott Oaks	35	133,176,000.00	NA	NA
Davis Ranch	42	145,795,500.00	NA	NA
Highlands	33	2,093,460.00	NA	NA
Cross Creek	58	793,910.00	NA	NA
Beverly Hills	63	3,542,730.00	NA	NA
Adobe Ranch Acres	54	13,192,460.00	NA	NA
Canyon Parke	46	23,399,480.00	NA	NA
Bridgewood Ranch	44	163,261,330.00	NA	NA
Bridgewood Estates	44	84,191,690.00	NA	NA
Helotes Springs	35	24,747,070.00	NA	NA



Community Wildfire Risk Assessment

Total Assessed Rating

63 - High

Surrounding Environment Rating

Significant Hazard

Home Construction Rating

Significant Hazard

Fire Protection District

District 7 Fire Rescue

Community Information

Latitude 29° 33' 24" Longitude -98° 43' 13"

Number of Homes 75

 Size
 329.96 acres

 Road Width Class
 24 ft < 20 ft</td>

 One Way In/Out
 Yes

 Residential Type
 Fixed

Surrounding Environment

- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Prune trees 6–10 feet from the ground.
- Mow your lawn regularly.
- Prune trees 6–10 feet from the ground.
- Create a spacing of 30 feet between tree crowns.
- Create a 'fire-free' area within 5 feet of your home, using non-flammable landscaping materials.
- Remove dead vegetation from under the deck and within 10 feet of the house.
- Water plants, trees, and mulch regularly.
- Consider xeriscaping if you are affected by water restrictions.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Plant a mixture of deciduous trees, such as oaks and maples, and coniferous trees, like pines.
- Create fuel breaks like driveways and gravel walkways



- Remove debris from roofs
- Prune trees with branches overhanging roofs
- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation.
- Clean debris out of gutters regularly.
- Select heat and fire-resistant siding such as metal, brick, block, stone, cement board or fire-retardant treated lumber.
- Make sure there are no crevices or holes in the siding that could catch embers.
- Spread gravel or other non-combustible material under the deck.
- Screen in the bottom of the deck with metal 1/8-inch screening.
- Separate wooden fences from the house with a stone or metal barrier.
- Use a non-combustible material for skirting around the foundation
- Use metal framing or aluminum coverings for wood or vinyl.
- Use a fiberglass or metal screen.
- Use drapes and shutters that are fire resistant to help reduce the likelihood of fire spread.
- Keep propane tanks away from your home

Chimney Creek

Helotes, Bexar County, Texas



Community Wildfire Risk Assessment

Total Assessed Rating

70 - High

Surrounding Environment Rating

Significant Hazard

Home Construction Rating

Moderate Hazard

Fire Protection District

District 7 Fire Rescue

Community Information

Latitude 29° 37' 43" Longitude -98° 43' 8" Number of Homes 75

Size 490.06 acres Road Width Class 24 ft < 20 ft

One Way In/Out Yes Residential Type Fixed



- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Prune trees 6–10 feet from the ground.
- Mow your lawn regularly.
- Prune trees 6–10 feet from the ground.
- Create a spacing of 30 feet between tree crowns.
- Create a 'fire-free' area within 5 feet of your home, using non-flammable landscaping materials.
- Remove dead vegetation from under the deck and within 10 feet of the house.
- Water plants, trees, and mulch regularly.
- Consider xeriscaping if you are affected by water restrictions.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Plant a mixture of deciduous trees, such as oaks and maples, and coniferous trees, like pines.
- Create fuel breaks like driveways and gravel walkways.
- Remove smaller conifers that are growing between taller trees.
- Remove heavy accumulations of woody debris.
- Reduce the density of tall trees so canopies do not touch.



- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation.
- Clean debris out of gutters regularly.
- Select heat and fire-resistant siding such as metal, brick, block, stone, cement board or fireretardant treated lumber.
- Make sure there are no crevices or holes in the siding that could catch embers.
- Spread gravel or other non-combustible material under the deck.
- Screen in the bottom of the deck with metal 1/8-inch screening.
- Separate wooden fences from the house with a stone or metal barrier.
- Use a non-combustible material for skirting around the foundation
- Use metal framing or aluminum coverings for wood or vinyl.
- Use a fiberglass or metal screen.
- Use drapes and shutters that are fire resistant to help reduce the likelihood of fire spread.
- Keep propane tanks away from your home and other structures
- Keep vegetation pruned around overhead powerlines

Lantana Oaks

Helotes, Bexar County, Texas



Community Wildfire Risk Assessment

Total Assessed Rating

61 - High

Surrounding Environment Rating

Significant Hazard

Home Construction Rating

Moderate Hazard

Fire Protection District

District 7 Fire Rescue

Community Information

Longitude -98° 42' 9"
Number of Homes 65
Size 31.22 acres
Road Width Class > 24 ft
One Way In/Out Yes
Residential Type Fixed

29° 32' 41"



Surrounding Environment

Latitude

- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Prune trees 6–10 feet from the ground.
- Mow your lawn regularly.
- Prune trees 6–10 feet from the ground.
- Create a spacing of 30 feet between tree crowns.
- Create a 'fire-free' area within 5 feet of your home, using non-flammable landscaping materials.
- Remove dead vegetation from under the deck and within 10 feet of the house.
- Water plants, trees, and mulch regularly.
- Consider xeriscaping if you are affected by water restrictions.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Plant a mixture of deciduous trees, such as oaks and maples, and coniferous trees, like pines.
- Create fuel breaks like driveways and gravel walkways.
- Work with neighbors to reduce fuels and create defensible space.

- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation
- Clean debris out of gutters regularly.
- Select heat and fire-resistant siding such as metal, brick, block, stone, cement board or fire-retardant treated lumber.
- Make sure there are no crevices or holes in the siding that could catch embers.
- Spread gravel or other non-combustible material under the deck.
- Screen in the bottom of the deck with metal 1/8-inch screening.
- Separate wooden fences from the house with a stone or metal barrier.
- Use a non-combustible material for skirting around the foundation
- Use metal framing or aluminum coverings for wood or vinyl.
- Use a fiberglass or metal screen.
- Use drapes and shutters that are fire resistant to help reduce the likelihood of fire spread.

San Antonio Ranch

Helotes, Bexar County, Texas



Community Wildfire Risk Assessment

Total Assessed Rating

65 - High

Surrounding Environment Rating

Severe Hazard

Home Construction Rating

Slight Hazard

Fire Protection District

District 7 Fire Rescue

Community Information

Latitude 29° 35' 59" Longitude -98° 42' 55" Number of Homes 348 Size 196.10 acres

Road Width Class > 24 ft
One Way In/Out Yes
Residential Type Fixed

Surrounding Environment

- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Prune trees 6–10 feet from the ground.
- Mow your lawn regularly.
- Prune trees 6–10 feet from the ground.
- Create a spacing of 30 feet between tree crowns.
- Create a 'fire-free' area within 5 feet of your home, using non-flammable landscaping
- Remove dead vegetation from under the deck and within 10 feet of the house.
- Water plants, trees, and mulch regularly.
- Consider xeriscaping if you are affected by water restrictions.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Plant a mixture of deciduous trees, such as oaks and maples, and coniferous trees, like pines.
- Create fuel breaks like driveways and gravel walkways.
- Remove smaller conifers that are growing between taller trees.
- Remove heavy accumulations of woody debris.
- Reduce the density of tall trees so canopies do not touch.



- Expand defensible space out to 200 feet or greater
- Expand defensible space out to 200 feet or greater

- Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation.
- Clean debris out of gutters regularly.
- Make sure there are no crevices or holes in the siding that could catch embers.
- Spread gravel or other non-combustible material under the deck.
- Screen in the bottom of the deck with metal 1/8-inch screening.
- Separate wooden fences from the house with a stone or metal barrier.
- Use a non-combustible material for skirting around the foundation
- Use metal framing or aluminum coverings for wood or vinyl.
- Use a fiberglass or metal screen.
- Use drapes and shutters that are fire resistant to help reduce the likelihood of fire spread.
- Keep propane tanks away from your home and other structures
- Keep vegetation pruned around overhead powerlines

Wildhorse Duebrook

Helotes, Bexar County, Texas



Community Wildfire Risk Assessment

Total Assessed Rating

61 - High

Surrounding Environment Rating

Severe Hazard

Home Construction Rating

Slight Hazard

Fire Protection District

District 7 Fire Rescue

Community Information

Latitude 29° 36' 9" Longitude -98° 46' 22"

Number of Homes 123

Size 171.05 acres Road Width Class 24 ft < 20 ft

One Way In/Out Yes Residential Type Fixed

Surrounding Environment

- Trim tree canopies regularly to keep their branches a minimum of 10' from structures and other trees.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Prune trees 6–10 feet from the ground.
- Mow your lawn regularly.
- Prune trees 6–10 feet from the ground.
- Create a spacing of 30 feet between tree crowns.
- Create a 'fire-free' area within 5 feet of your home, using non-flammable landscaping materials.
- Remove dead vegetation from under the deck and within 10 feet of the house.
- Water plants, trees, and mulch regularly.
- Consider xeriscaping if you are affected by water restrictions.
- Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- Plant a mixture of deciduous trees, such as oaks and maples, and coniferous trees, like pines.
- Create fuel breaks like driveways and gravel walkways.
- Remove smaller conifers that are growing between taller trees.



- Remove heavy accumulations of woody debris
- Reduce the density of tall trees so canopies do not touch.

• Home Construction

Clean vents to keep them free of debris, allowing them to keep embers out while allowing air flow for ventilation.

- Clean debris out of gutters regularly.
- Make sure there are no crevices or holes in the siding that could catch embers.
- Spread gravel or other non-combustible material under the deck.
- Screen in the bottom of the deck with metal 1/8-inch screening.
- Separate wooden fences from the house with a stone or metal barrier.
- Use a non-combustible material for skirting around the foundation
- Use metal framing or aluminum coverings for wood or vinyl.
- Use a fiberglass or metal screen.
- Use drapes and shutters that are fire resistant to help reduce the likelihood of fire spread.
- Keep propane tanks away from your home and other structures
- Keep vegetation pruned around overhead powerlines

4.2 Hazardous Fuels Reductions Project(s)

Fuel reduction projects such as, creating shaded fuel breaks or fire breaks can dramatically reduce the spread and intensity of wildfire. Reducing the density of fuel by thinning and trimming trees and removing ladder fuels helps keep the fire on the ground, increasing the chances for firefighters to control the fire. Determining where to administer such a specific treatment is critical. Practices implemented incorrectly and/or ignored will likely increase the fire risk. Locations of necessary treatments should be used only after all prevention measures, including Firewise modifications to the home and landscaping, have been completed.

Best Management Practices

Closed Canopy Woodland (Shaded Fuel Break):

A closed canopy woodland is a woodland where canopy closure is sufficient to limit growth of tall grass to less than 50% of the ground cover. The intent of creating closed-canopy woodland is to reduce the chance of a surface fire transitioning into a crown fire by the reduction of vertically connected ladder fuels. The heavy shade provided by a closed forest canopy suppresses the growth of grasses and other fine volatile fuels.

- a. Do not prune or remove deciduous hardwood trees. Thin conifers and live oaks less than 4-inches in diameter but maintain dominant tree canopy cover. Thinning should involve removing the entire specimen, with a focus on smaller, overtopped trees.
- b. Remove ladder fuels that increase the chance a surface fire will transition into a crown fire.
 Fallen trees, branches, or other flammable debris occurring within 4-6 feet of the ground are considered ladder fuels.
- c. Raise the canopy base height of taller trees by removing lower limbs to a height of 6-8 feet.
- d. In order to prevent the transmission of Oak wilt (Ceratocystis fagacearum), avoid wounding oak trees from February through June. Paint all wounds and fresh cut stumps, regardless of season, with an approved aerosol wound dressing or latex paint.

Open Canopy Woodland:

The goal of creating an Open Canopy Woodland is to reduce the chance of a crown fire traveling through a closely connected canopy. Open woodland is defined as woodland where the lack of canopy closure allows grass to cover more than 50% of the ground. If the vegetation on the property is characteristic of open woodland or if there are open woodlands leading into closed woodlands, the following treatments apply:

- a. Thin the woodlands to preserve deciduous hardwood trees and remove less fire-resistant species such as conifers, junipers, and Live Oaks that compete for the same canopy space.
- b. In areas consisting of mostly conifers, remove smaller-immature conifers. Removing conifers in the understory will reduce canopy bulk density and increase canopy base height that would otherwise contribute to a sustained crown fire.
- c. In areas consisting of mostly conifers, only remove conifers in the over-story where trees or branches overlap, again, percent canopy cover should remain the same. Promoting fewer, but larger and taller trees, will reduce canopy bulk density near the ground reducing the likelihood of a sustained crown fire.

Debris Removal:

The debris or slash created from fuel reduction activities will create an increased fire risk and must be eliminated throughout the duration of the treatment. Debris reduction methods include:

- a. Physical removal of all debris or slash from the treatment site.
- b. Chip all slash on site and leave the remaining chips in piles not to exceed 6 feet in diameter and 3 feet in height.
- c. Chip all slash on site and leave the remaining chips in contour rows not exceeding 1 foot wide and 1 foot in height.

Precautionary Considerations

Oak Wilt:

Caused by the fungus Ceratocystis fagacearum, it is the most destructive disease affecting Live oaks and red oaks in Central Texas. Use care to prevent the spread of oak wilt during implementation of the hazardous fuels treatments (i.e. painting all wounds on oaks). For more information, visit http://www.texasoakwilt.org/2011/pruning-guidelines-for-prevention-of-oak-wilt-in-te

Habitat Damage:

It is the intent of this document to minimize potential impacts to threatened and endangered wildlife species and their critical habitats. Before removing or pruning a tree, based on the specifications within this document, consider the tree's current and future contribution to the suitability of creating and/or maintaining a critical habitat for various threatened or endangered species.

Noxious and Invasive Plant Species:

The Texas Department of Agriculture defines a noxious and invasive plant as: "Any plant species that has a serious potential to cause economical or ecological harm to the agriculture, horticulture, native plants, ecology and waterways of Texas" Many of these noxious and invasive plant species may also serve as undesirable ladder fuels and should be removed. More information on the identification, management and control of these noxious and invasive plants can be found at:

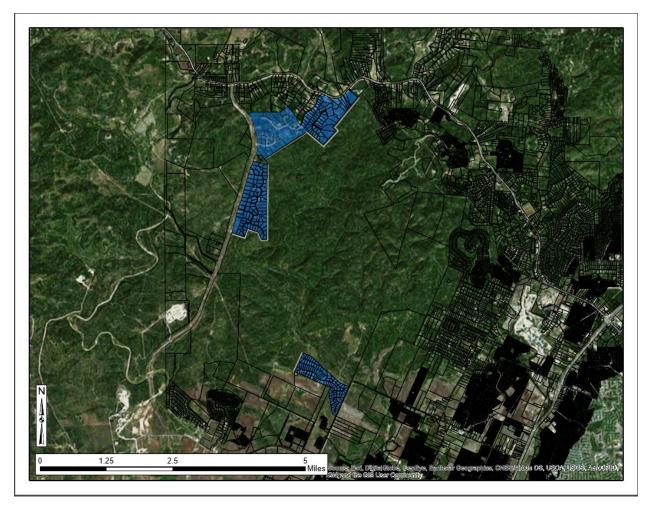
http://www.texasagriculture.gov/regulatoryprograms/plantquality/noxiousandinvasiveplants.aspx

Projects

In the event of a wildland fire, fuel mitigation is needed in several areas at Government Canyon State Natural Area (GCSNA). Constructing shaded fuel breaks along several sections of the natural area perimeter will reduce fuel density, thus improving fire control opportunities. Vegetation occupies the area near several subdivisions along the perimeter of the natural area. By removing ladder fuels and maintaining a canopy the intensity of a wildfire will be altered. The project objective is to reduce fuel to manageable levels in and around identified project areas. Major vegetation components are Ashe juniper, Texas persimmon, Plateau Live Oak, and Mountain Laurel. Adequate levels of removal of these fuels is needed to provide a shaded fuel break in the vegetation, thus slowing a fire if one were to start. Along each identified project area utilize the guidelines set forth as best management practices. The two main objectives are to first reduce the chance of a surface fire transitioning into a crown fire and second to reduce the chance of a crown fire being sustained within the canopy. Several areas of GCSNA have been identified as fuel reduction priority areas by Texas Parks and Wildlife's Wildland Fire Management Program.

The majority of fuel reduction priority areas identified follow the border of ESD 7 and Government Canyon State Natural Area. This line follows the border of 4 moderate to high wildfire risk communities: Retablo Ranch, Wildhorse Overlook, Helotes Springs and Canyon Parke. The proposed project entails the creation of a shaded fuel break 75-100 feet wide along the adjacent subdivisions by a trained wildland saw crew. A saw crew was chosen because this area falls within the Edwards Aquifer Recharge Zone. A saw crew will be able to work in and around the identified project areas without causing subsurface soil disturbance.

The proposed sites also fall in Golden Cheeked Warbler habitat. To cause the least amount of disturbance to this species the target dates for the fuel reduction projects have been scheduled around the warbler breeding season. A shaded fuel break design was chosen in order to leave some Ashe juniper, which the Golden Cheeked Warbler uses for nesting. All of the adjacent subdivisions could benefit from the proposed fuel break with limited disturbance to wildlife.

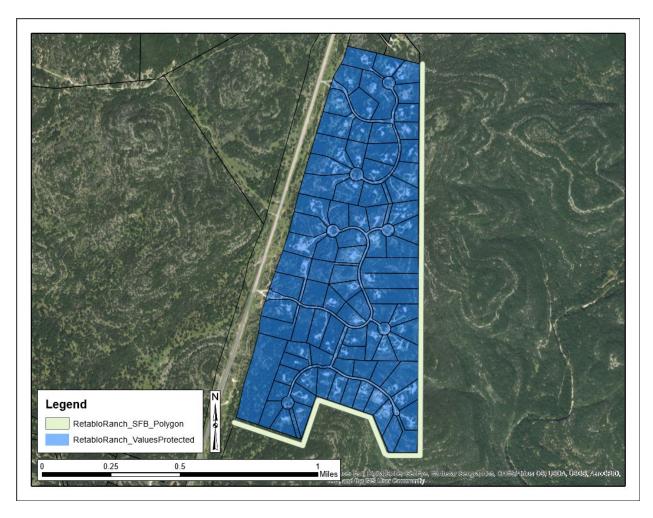


Owneship	Restrictions	Treatment Types	Method	Target Dates	Total Acres Treated	Total Acres Protected	Total Values Protected
TPWD	GCWH	Mechanical	Handcrew	August –	65	1,328	\$73,211,529
Government	EARZ		Chainsaws	March			
Canyon SNA							

^{*}GCWH – Golden-cheeked Warbler Habitat

1. The Retablo/ESD7 and Texas parks and Wildlife

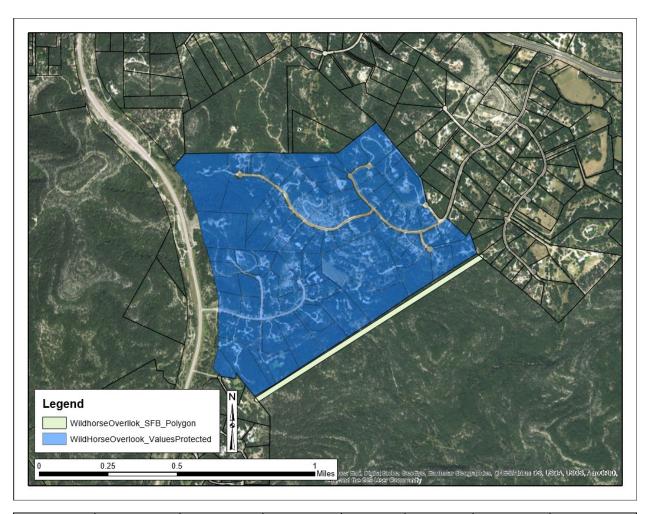
The Retablo/ESD7 and Texas parks and Wildlife shaded fuel break follows the boundary between property owned by the Texas Parks and wildlife the Retablo Ranch subdivision. This location was prioritized because of heavy fuel loading on the District 7 protected properties continuing onto Texas Park property within area.



Ownership	Restrictions	Treatment Type	Method	Target Dates	Acres Treated	Acres Protected	Values Protected
ESD 7 and TPW	GCWH EARZ	Mechanical	Handcrew Chainsaws	August – March	28	393	\$21,369,169

2. The Wild Horse Overlook/ESD7 and Texas parks and Wildlife

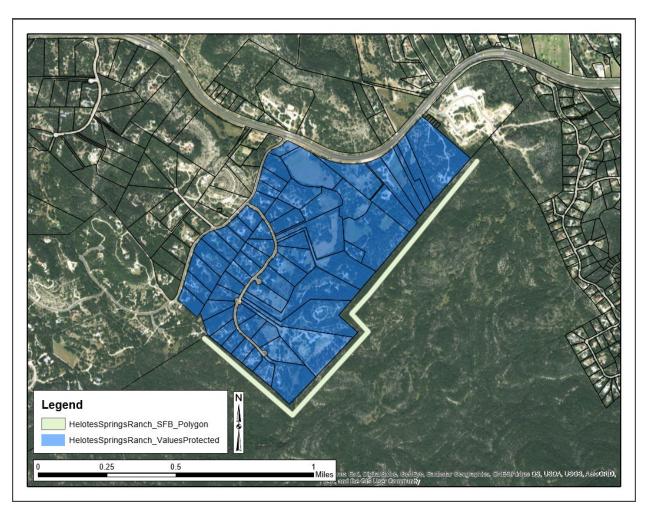
The Wild Horse Overlook/ESD7 and Texas parks and Wildlife shaded fuel break follows the boundary between property owned by the Texas Parks and wildlife the Wild Horse Overlook subdivision. This location was prioritized because of heavy fuel loading on the District 7 protected properties continuing onto Texas Park property within area.



Ownership	Restrictions	Treatment	Method	Target	Acres	Acres	Values
		Туре		Dates	Treated	Protected	Protected
ESD 7 and	GCWH	Mechanical	Handcrew	August –	12	380	\$16,139,050
TPW	EARZ		Chainsaws	March			

3. The Helotes Spring Ranch/ESD7 and Texas parks and Wildlife

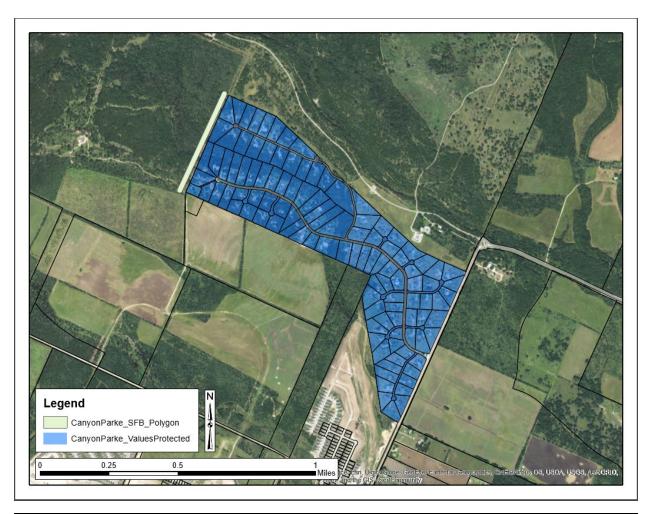
The Helotes Spring Ranch/ESD7 and Texas parks and Wildlife shaded fuel break follows the boundary between property owned by the Texas Parks and wildlife the Helotes Spring Ranch subdivision. This location was prioritized because of heavy fuel loading on the District 7 protected properties continuing onto Texas Park property within area.



Ownership	Restrictions	Treatment	Method	Target	Acres	Acres	Values
		Туре		Dates	Treated	Protected	Protected
ESD 7 and	GCWH	Mechanical	Handcrew	August –	20	326	\$12,127,440
TPW	EARZ		Chainsaws	March			

4. The Canyon Parke Estates /ESD7 and Texas parks and Wildlife

The Canyon Parke Estates/ESD7 and Texas parks and Wildlife shaded fuel break follows the boundary between property owned by the Texas Parks and wildlife the Canyon Parke Estates subdivision. This location was prioritized because of heavy fuel loading on the District 7 protected properties continuing onto Texas Park property within area.



Ownership	Restrictions	Treatment	Method	Target	Acres	Acres	Values
		Type		Dates	Treated	Protected	Protected
ESD 7 and	GCWH	Mechanical	Handcrew	August –	5	229	\$23,575,870
TPW	EARZ		Chainsaws	March			

4.3 Public Outreach and 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 target areas or issues. 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 city of Helotes.

Public Outreach

National Wildfire Community Preparedness Day/Cornyval Parade

The District 7 Fire Rescue provides recognition of Wildfire Preparedness during the Helotes Cornyval Parade. Utilizing our Type 3 Wildand Engine, In addition to banners were placed on the apparatus announcing National Wildfire Community Preparedness Day. It is estimated that 3,000 people attended the parade.

Fire Prevention Week

Each year Fire Prevention Week is very active time for District 7 Fire Rescue. Fire Safety messages are taken to two elementary schools were the annual fire safety message is delivered through video and Fire Fighter interaction with each of the students. It is estimated that approximately 2,000 plus students participate each year.

Fire Station Tours

Numerous station tours are given throughout the year. Wildland Urban Interface handout information is available for those who visit the fire station.

Fire Department Website

http://www.D7FR.org

Local Newspapers

The local newspaper has been used on numerous occasions to provide various fire safety messages, including Wildfire Preparedness and Prevention.

Public Information

Radio

KTSA 550 AM 4050 Eisenhauer Road San Antonio, Texas 78218 (210) 654-5255 phone (210) 885-5076 fax ktsanews@bmpradio.com WOAI 1200 AM 6222 NW IH-10 San Antonio, Texas 78201 (210) 736-9731 phone (210) 735-8811 fax jimforsyth@clearchannel.com Texas Public Radio 89.1 FM 8401 Datapoint Drive, Suite 800 San Antonio, Texas 78229 (210) 614-8977 phone

news@tpr.org

Clear Channel Radio San Antonio 6222 NW IH-10 San Antonio, Texas 78201 (210) 547-0270

Television

KENS 5
5400 Fredericksburg Road
San Antonio, Texas 78229
(210) 366-2002 phone
(210) 366-2716 fax
news@kens5.com
newstips@kens5.com

KSAT-TV 1408 N. St. Mary's Street San Antonio, Texas 78215 (210) 351-1269 phone (210) 351-1310 fax news@ksat.com KVDA-TV Telemundo 6234 San Pedro San Antonio, Texas 78216 (210) 568-0199 phone (210) 510-0177 fax kvdanews@nbcuni.com

KWEX TV Univision 411 East Durango San Antonio, Texas 78204 (210) 242-7451 phone (210) 226-0131 fax WOAI-TV 1031 Navarro San Antonio, Texas 78205 (210) 476-1022 phone (210) 224-9898 fax newsdesk@woaitv.com

Newspapers

San Antonio Express News Avenue E and 3rd Street San Antonio, Texas 78205 (210) 250-3171 phone (210) 250-3150 fax citydesk@express-news.net news@mysa.com La Presna (bilingual)
230 N. Medina
San Antonio, Texas 78207
(210) 242-7900 phone
(210) 242-7901 fax
editor@lapresna.com
tinoduran@lapresna.com

Helotes Highlights 20079 Stone Oak Parkway Suite 1105-195 San Antonio, Texas 78258 (210) 548-6448 – phone (210) 595-1654 – fax info@highlightspub.com

Helotes Weekly News 14743 Old Bandera Road Helotes, Texas 78023 (210) 240-8137 - phone ken@helotesweekly.com

Prevention Signs and Posters

Fire prevention signs and posters are used to meet a seasonal or non-permanent need. They are normally constructed of cardstock, cardboard, or plastic. Posters range in size from small notices for use on recreation area bulletin boards to large highway posters. There are three types of messages:

- General Awareness or Informational: Provide reminders or information such as "Crush Smokes."
- **2. Regulatory:** Provide information on regulations established by law to prevent wildfires such as "Spark Arrestor Required."
- **3. Prohibitive:** Provide the most current information prohibiting the use of fire or acts creating fire risk such as "No Campfires." In order to adequately post a unit during periods of fire restrictions it is desirable to have a poster mount at each road entering the unit. Visitors can't be expected to comply with special restrictions unless they are informed.

When used correctly posters are an economical and effective method of reaching targeted audiences with timely messages. Posters relay information to the public in our absence. They may be your only public contact with visitors in certain locations. It is likely that most bulletin boards, interpretive sites, and roadside rest area signs are in place for purposes other than fire. Remember to coordinate your messages with the people who maintain these signs. This is an opportunity to share duties with others such as recognized Firewise Communities.

Sign Ordering

The UNICOR Sign Factory in Lompoc, California is the source of posters and signs for the USDA Forest Service. UNICOR will sell their posters to wildland fire organizations and fire departments. Access the UNICOR website for their most current price list.





Federal Prison Industries UNICOR Sign Factory 3901 Kline Boulevard Lompoc, California 93436 805-735-6211, fax 805-735-4507





To order posters fax your order to UNICOR and follow up your fax with a phone call to provide payment information. Do not put credit card information on your order form. Standard shelf stock orders are shipped within twenty working days.

www.unicor.gov

In the case of a fire emergency UNICOR offers fast delivery. In the event of a fire emergency request quick shipment and UNICOR will pull your order within 24-48 hours and ship via Federal Express on your Fed-Ex number.

Special Orders

Shelf stock posters have the USDA Forest Service logo. You can special order posters of your own design or order these designs with your organization's logo. A special order form, "Request for Custom Sign Quote", is found at the end of this appendix. Allow additional time on special orders for design, printing, and shipping.

4.4 Resource and Training Needs

The National Incident Management System Wildland Fire Qualification System Guide, PMS 310-1, developed under the sponsorship of the National Wildfire Coordinating Group (NWCG), is designed to:

- Establish minimum requirements for training, experience, physical fitness level, and currency standards for wildland fire positions, which all participating agencies have agreed to meet for national mobilization. Standards may be augmented to meet specific needs within an agency, but the augmentation cannot be imposed by an agency on its cooperators who meet the minimums outlined in this guide.
- 2. Allow cooperating agencies to jointly agree upon training, experience, physical fitness level, and currency standards to meet fire management needs for wildland fire (wildland fire includes wildfire and prescribed fire).
- 3. Establish minimum qualifications for personnel involved in prescribed fires on which resources of more than one agency are utilized—unless local agreements specify otherwise.

NWCG recognizes the ability of cooperating agencies at the local level to jointly define and accept each other's qualifications for initial attack, extended attack, large fire operations, and prescribed fire.

Position Qualifications

Required Training: Required training provides a direct link between training and job performance to provide for responder health and safe operations on wildland fires. Required training cannot be challenged.

Note: The only exception to the PMS 310-1 required training is for structural firefighters using
the Crosswalk for qualification in FFT2, FFT1, ENGB and/or STEN. Those using the Crosswalk
must use the identified gap course material (G-130, G-131, G-231, G-330) and obtain
appropriate course certificates. Refer to the Crosswalk for Structural and Wildland Firefighters
section of the PMS 310-1 for further guidance.

Physical Fitness Levels: Personnel must meet established physical fitness levels for wildland fire assignments. Agencies may determine the method of evaluating the physical fitness level of their personnel. However, the testing method should be a measurable evaluation process. Four levels of physical fitness have been established.

- Arduous Duties involve fieldwork requiring physical performance calling for above-average
 endurance and superior conditioning. These duties may include an occasional demand for
 extraordinarily strenuous activities in emergencies under adverse environmental conditions and
 over extended periods of time. Requirements include running, walking, climbing, jumping,
 twisting, bending, and lifting more than 50 pounds; the pace of work typically is set by the
 emergency situation.
- Moderate Duties involve fieldwork requiring complete control of all physical faculties and may
 include considerable walking over irregular ground, standing for long periods of time, lifting 25
 to 50 pounds, climbing, bending, stooping, squatting, twisting, and reaching. Occasional
 demands may be required for moderately strenuous activities in emergencies over long periods
 of time. Individuals usually set their own work pace.
- Light Duties mainly involve office-type work with occasional field activity characterized by light physical exertion requiring basic good health. Activities may include climbing stairs, standing,

- operating a vehicle, and long hours of work, as well as some bending, stooping, or light lifting. Individuals can usually govern the extent and pace of their physical activity.
- None required Positions that do not require a physical fitness level.

Other Training Which Supports Development of Knowledge and Skills: Personnel are not required to complete NWCG courses referenced under "Other Training Which Supports Development of Knowledge and Skills" in order to qualify for an NWCG position—unless specific agency policy dictates otherwise. Although training referenced here is not "required," the training provided in the identified courses is a primary means by which personnel can prepare for position performance evaluation by obtaining specific knowledge and skills required to perform tasks identified in the PTB.

Qualification	Required Training	Other Training
FFT2 Firefighter Type II	ICS 100 Introduction to ICS L180 Human Factors in the Wildland Fire Service S130 Firefighter Training S-190 Introduction to Wildland Fire Behavior IS700 NIMS: An Introduction	N/A
FFT1 Firefighter Type I	S131 Firefighter Type 1 S133 Look Up. Look Down, Look Around	S219 Firing Operations S211 Portable Pumps and Water Use S212 Wildland Fire Chainsaws
ENGB Engine Boss	ICS200 ICS for Single Resources S230 Crew Boss (Single Resource) S290 Intermediate Wildland Fire Behavior	S270 Basic Air Operations S231 Engine Boss (Single Resource) L280 Followership to Leadership S219 Firing Operations S-260 Interagency Incident Business Management
STEN Strike Team Leader Engines	ICS300 Intermediate ICS for Expanding Incidents IS800b NRF: An Introduction S215 Fire Operation in the Wildland Urban Interface S330 Task Force/Strike Team Leader	L380 Fireline Leadership S336 Tactical Decision Making in Wildland Fire

Source: PMS 310-1, Wildland Fire Qualification System Guide

Texas Intrastate Fire Mutual Aid System (TIFMAS) Skills Crosswalk:

The Skills Crosswalk identifies critical wildland firefighting skills that structural firefighters need to be safe and effective in either of two situations: when making an initial attack on a wildland fire in their jurisdiction, or when working with state and federal wildland firefighter agencies. The Crosswalk was developed by analyzing and comparing National Fire Protection Association (NFPA) structural firefighting standards with National Wildland Coordinating Group (NWCG) wildland firefighting Position Task Books. The resulting Crosswalk identifies wildland skills and knowledge not incorporated within standard structural firefighting training. By incorporating a structural firefighter's existing fire suppression knowledge and skills, use of this Crosswalk reduces required classroom hours, minimizes curriculum redundancies, and makes efficient use of limited training hours. Coursework, practical demonstration of skills using NWCG Task Books, and the use of materials in resource kits assembled for each position have

been incorporated into the Crosswalk. Four specific NWCG positions are incorporated in Crosswalk, each paired with a counterpart structural position, as shown below:

Structural Fire Counterpart Position	Entering Qualifications	NWCG Position
Non-Supervisory Structural Firefighter, Basic	Meets NFPA 1001 for Firefighter 1, or equivalency	Firefighter 2 (FF2)*
Non-Supervisory Structural Firefighter, Advanced	Meets NFPA 1001 for Firefighter 2, or equivalency	Firefighter 1 (FF1)*
Driver/Operator/Engineer or Company Officer Experienced lieutenants, captains, chief officers	Meets NFPA 1021 for Fire Officer 1, or equivalency Meets NFPA 1021 s for Fire Officer, or equivalency	Single-Engine Resource Boss (ENGB) Strike Team Leader (STEN)

Crosswalk can be used as an NWCG equivalency and certification tool by structural firefighters and fire officers who meet the qualifications of firefighters as specified by NFPA 1001 and NFPA 1021, respectively, or the training standard determined as equivalent by the AHJ. The following table portrays training hours savings with use of the Crosswalk.

NWCG Positions	NWCG Curriculum Hours	Structural Equivalent Positions	Skills Crosswalk Hours
Firefighter 1 (FF1)	54	Non-Supervisory Structural Firefighter, Advanced	17.5
Single-Engine Resource Boss (ENGB)	88	Driver/Operator/Engineer or Company Officer	44
Strike Team Leader (STEN)	24	Experienced lieutenants, captains, chief officers	12.25

RT-130, Annual Fireline Safety Refresher Training:

Annual Fireline Safety Refresher Training is required for all positions as identified in the Wildland Fire Qualifications System Guide (NWCG 310-1). Annual Fireline Safety Refresher Training must include the following core topics:

- a. Entrapment Avoidance Use training and reference materials to study the risk management process (as identified in the Incident Response Pocket Guide) and rules of engagement (as appropriate to the participants, e.g. LCES, Standard Firefighting Orders, Eighteen Watch Out Situations, WFSA direction, Fire Management Plan priorities, etc.).
- b. Current Issues Review and discuss identified hot topics and national emphasis topics as found on the current WFSTAR web site. Review forecasts and assessments for the upcoming fire season and discuss implications for firefighter safety.
- c. Fire Shelter Review and discuss last resort survival. Conduct hands on fire shelter inspections. Practice shelter deployments in applicable crew/module configurations and while wearing typical fireline personal protective equipment. When possible, practice shelter deployments should be conducted in rough terrain and windy conditions. No live fire exercises for the purpose of fire shelter deployment training will be conducted.

- d. Other Hazards and Safety Issues Choose additional hazard and safety subjects, which could include SAFENET, current safety alerts, site/unit specific safety issues and hazards.
- e. CE hours CE Hours are per calendar year (January through December). Four hours are required each year following the year you receive your training for Basic Wildland (130/190/L180).
- f. The Authority Having Jurisdiction is responsible for insuring and documenting the 4 hours of CE annually.
- g. Fire Shelter review and discussion are a mandatory part of CE each year.

NWCG Chainsaw Certification Standards:

A Faller 3 is an individual being trained or evaluated in introductory level, non-complex chain saw operations. Work of a Faller 3 trainee should be under the supervision of a qualified Faller 3, 2 or 1. The TIFMAS Certification Committee has established the following minimum qualification and certification process for Chainsaw Operators (Red Card certified as Class 3 Faller).

- a. Successful completion of S-212, including the field exercise.
- b. Successful completion of NWCG Faller Class 3 position taskbook.
- c. Successful completion of biennial refresher training, including chainsaw maintenance, safety review, successful evaluation in introductory level, noncomplex chain saw operations, including demonstrating proficiency in limbing, bucking, and brush removal under various conditions.

Source: Texas Intrastate Fire Mutual Aid System (TIFMAS) Buisness and Mobilization Procedures. P. 47-50

To maximize the efficiency of training, chainsaw classes and refreshers should utilize the fuel reduction projects identified in this CWPP. Saw classes and refreshers have a required field day that can be spent working on tree and brush removal at the proposed fuel reduction sites. The classes should also be timed so that they fall in the window allowed by endangered species in the area (March - August).

4.5 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.

Community Name	Risk Assessment Rating	Rating	One Way In/Out
Helotes Canyon	40	Moderate	Yes
Ridge at Bandera	44	Moderate	No
San Antonio Ranch	65	High	Yes
Shadow Canyon	55	Moderate	No
Triana	47	Moderate	No
Stanton Run	21	Low	Yes
Sanctuary	39	Moderate	No
Wildhorse Overlook	61	High	Yes
Retablo Ranch	56	Moderate	Yes
Chimney Creek	70	High	Yes
Wildhorse	46	Moderate	No
Taosch Farm	44	Moderate	No
Talise De Culebra	32	Moderate	No
Stillwater Ranch	33	Moderate	No
Silver Oaks 2	21	Low	No
Silver Oaks 1	30	Low	No
Shaenfield Place	30	Low	No
Tribute Oaks	44	Moderate	Yes
Lantana Oaks	61	High	Yes
Hills of Shaenfield	44	Moderate	No
Remuda Ranch	35	Moderate	No
Laura Heights	49	Moderate	No
Prescott Oaks	35	Moderate	No
Davis Ranch	42	Moderate	No
Highlands	33	Moderate	Yes
Cross Creek	58	Moderate	Yes
Beverly Hills	63	High	Yes
Adobe Ranch Acres	54	Moderate	Yes
Canyon Parke	46	Moderate	Yes
Bridgewood Ranch	44	Moderate	No
Helotes Springs	35	Moderate	No

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 and 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. Aid 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.

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.

Pets

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.

Special Consideration 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.

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. 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.

4.6 Wildland Urban Interface Code

International Wildland Urban Interface Code

The International Wildland Urban Interface Code (IWUIC) is a model code that is intended to be adopted and used supplemental to the adopted building and fire codes of a jurisdiction. The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire and resulting erosion. The IWUIC has as its objective the establishment of minimum special regulations for the safeguarding of life and property from the intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to prevent structure fires from spreading to wildland fuels, even in the absence of fire department intervention.

NFPA 1141

Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural and Suburban Areas

NFPA 1141, Standard for Fire Protection Infrastructure for Land Development in Wildland, Rural, and Suburban Areas, was prepared by the technical committee on Forest and Rural Fire Protection. The technical committee responded to the rapid development of structures into areas that present unusual characteristics to responding fire agencies and worked extensively on making NFPA 1141 current with other documents and more usable by adopting jurisdictions. The committee was particularly interested in keeping the flexibility in the application of the standard by jurisdiction so that it works with existing codes and standards that may or may not adequately cover planned building groups.

The scope of the document was revised to focus on providing guidance on the development of the community infrastructure necessary to eliminate fire protection problems that result from rapid growth and change. Additional guidance was taken from the USDA Forest Service and the National Wildland/Urban Interface Fire Program (Firewise Communities), as well as input from several committee members and outside experts.

NFPA 1144

Standard for Reducing Structure Ignition Hazards from Wildland Fire

NFPA 1144, Standard for Reducing Structure Ignition Hazards from Wildland Fire, was prepared by the Technical Committee on Forest and Rural Fire Protection. It was officially adopted by state and local governments and adapted for use by numerous jurisdictions involved in planning Firewise Communities. The committee tested various assessment system versions in several Firewise Communities workshops, sponsored by the National Wildland/Urban Interface Fire Program, before arriving at the relative values and hazard levels given in the document. The committee increased the severity values for non-rated roofing, inadequate separation of vegetation from structures, and separation of structures from one another.

4.7 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 Assistance 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

5.0 Implementation Timetable

5.1 Tracking of Progress/Fire Planning Checklist

Tracki	Tracking of Progress						
Year	Public Education Events Hosted	Firewise Communities Registered	Fuel Reduction Projects Completed	Ingress/Egress Issues Addressed	Fire Department Wildland Training Classes		
2021							
2022							
2023							
2024							
2025							

5.2 Completed and In Progress Projects in ESD#7

Firewise Communities

	High Risk / High Priority Communities						
Community Name	Firewise Recognition	Recognition Date	Point of Contact				

Hazardous Fuel Reduction Projects

	Priority Hazardous Fuel Reduction Projects						
Project Name	Ownership	Completed Date	Point of Contact				
Beverly Hills	TPWD						
Wild Horse Overlook	TPWD						
Retablo Ranch	TPWD						
Helotes Springs Ranch	TPWD						
Shadow Canyon	TPWD						

Ingress/Egress

One Way In, One Way Out Communities with No Emergency Access		
Community Name	Solution	Completed Date
Helotes Canyon		
San Antonio Ranch		
Stanton Run		
Wildhorse Overlook		
Retablo Ranch		
Chimney Creek		
Tribute Oaks		
Lantana Oaks		
Highlands		
Cross Creek		
Beverly Hills		
Adobe Ranch Acres		
Canyon Parke		
Helotes Springs		

Training

Department Wildland Qualifications			
Position	Open Task Books	Qualified	Goal
FFT2		43	43
FFT1	12	8	20
FAL3	2		2
ENGB	2	4	8
STEN	1		2

Department Wildland Training Needs		
Class	Need	Complete
ICS-100 Introduction to ICS		41
L-180 Human Factors in the Wildland Fire Service	2	41
S-130 Firefighter Training		
S-190 Introduction to Wildland Fire Behavior		
IS700 NIMS: An Introduction		
S-131 Firefighter Type 1		
S-133 Look Up, Look Down, Look Around		
S-219 Firing Operations		
S-211 Portable Pumps and Water Use		
S-212 Wildland Fire Chainsaws		
ICS-200 ICS for Single Resources and Initial Attack Incidents		
S-230 Crew Boss (Single Resource)	12	
S-290 Intermediate Wildland Fire Behavior	12	6
S-270 Basic Air Operations		
S-231 Engine Boss (Single Resource)	12	6
L-280 Followership to Leadership		
S-260 Interagency Business Management		
ICS-300 Intermediate ICS for Expanding Incidents		
IS800B NRF: An Introduction		
S-215 Fire Operations in the Wildland Urban Interface	2	1
S-330 Task Force/Strike Team Leader	2	1
L-380 Fireline Leadership	2	1
S-336 Tactical Decision Making in Wildland Fire	3	0

7.0 Appendices

PROTECTION PLAN PHASE 3: FINALIZE	using information gathered from risk assessments and fire department CWPPs. Research and identify potential funding sources. Reconvene core group for second meeting. Present findings from assessments. • Fuel reduction • Fuel reduction • Structural ignitability Finalize county CWPP with edits from core group. Present for public opinion. Deliver draft to core group participants. Present final copy to commissioner's court. Present final copy to commissioner's court.
O DEVELOPING A COMMUNITY WILDFIRE PROTECTION PLAN PHASE 2: ASSESS PHASE 3: FINALIZE	Identify priority areas with fire service and federal agencies. This can be accomplished one-on-one meeting or with a group meeting. Develop a base map of Communities At Risk (CARs). Assemble fire department response area maps. Assemble checklist of topics to cover during assessments. Interview fire department to identify needs, concerns and update contact information. Conduct assessments in cooperation with fire department. Identify safety issues. Identify safety issues. Identify recommendations/projects. Finalize CAR map. Prioritize recommendations/projects. Develop local CWPP draft. Develop local CWPP to fire department for edits.
	Form core working group. Possible partners: County Officials County Judge County Sheriff Emergency Management Coordinator (EMC) County Planner Local Texas A&M Forest Service Fire services Volunteer Fire Departments Municipal Fire Departments Fire Association Fire Association Fire Marshal Law Enforcement Local and Municipal State Police Valental partners US Forest Service (USFS) National Park Service (UNFS) US Army Corps of Engineers (USACE) Conservation Service (NRCS) Resource Conservation & Development (RC&D) Identify other stakeholders to invite in the CWPP process. Private stakeholders Municipal stakeholders Municipal stakeholders
A LEADER'S GUIDE T	Engage local Texas A&M Forest Service. Contact local Wildland Urban Interface Specialist at www.texasfirewise.org Contact fire association/local law enforcement and fire services. Contact state and federal partners. If the above are supportive, then continue with: Discuss adopting CWPP into Annex of county's emergency management plan and mitigation action plan. Declare proclamation. Present proclamation to county judge and county commissioners during commissioners court for approval and signatures.

A.3 Wildfire Risk Assessment Score Sheet

Wildfire Risk Assessment Score Sheet Community Name:_ LAT:___ N LONG:_ W County:_ City: Fire Protection District: Homes: Acres: Primary Residential Type: Fixed / Mobile / RV One Way In/Out: Yes / No Road Width: > 24ft / 24ft < 20ft / < 20ft Overview of Surrounding Environment A. Characteristics of Predominant Vegetation Landscaped Lawn 10 Light (eg., short grasses, forbs) 15 Medium (e.g., taller grasses, light brush and small trees) Heavy (e.g., dense brush, timber, and hardwoods) Slash (e.g., timber harvesting residue) B. Defensible Space > 100 ft. of vegetation treatment from the structure(s) 71 to 100 ft. of vegetation treatment from the structure(s) 10 30 to 70 ft. of vegetation treatment from the structure(s) < 30 ft. of vegetation treatment from the structure(s) C. Possible Structure to Structure Ignition 0 No +5 D. Slope Slope < 8% 1 4 Slope 8-19% Slope 20-30% Slope > 30% E. Saddles, Box Canyons, Chimneys Present 0 No Yes F. Area with History of High Fire Occurrence G. Area Exposed to Southern Plains Wildfire Outbreak

Surrounding Environment

Total:

Hom	e Construction
A. Root	Fing Materials
1	Rated/Noncombustible
15	Nonrated
B. Deb	ris on Roof
0	No
+5	Yes
C. Vent	tilation and Soffits
1	With mesh or screening
5	Without metal mesh or screening
D. Gut	ters
1	Noncombustible
5	Combustible, leaf litter present
E. Build	ding Construction
1	Noncombustible siding
15	Combustible siding
F. Woo	oden Attachments
0	No
+5	Yes

ı	H. Utilitie	es	
	1	Both underground	
	3	One underground, one aboveground	
	5	Both aboveground	

Hazard Totals and Rating

Multi-paned Single-paned

A.	Hazard	Tot	als	
5	urround	ling	Env	iron

G. Windows

Surrounding Environment Total:		
Home Construction	Total:	
(0-15) Slight Structure Ignition Hazard		Moderate Structure nition Hazard
(31-45) Significant Structure Ignition Hazard	(46+) Seve	ere Structure Ignition Hazard

B. Hazard Rating

Total Hazar	d Rating:		
(0-30)	(31-60)	(61-90)	(91+)
Low	Moderate	High	Extreme

Assessed By:	Date:
Comments:	

Custom Sign Quotation Form

Fax your request for quote to (859) 254-9692.	Copy this form as needed, with one sign per form.
(Please use this are	ea to sketch your requirement)
Quantity:	Size:x
Substrate:	Reflectivity of Sheeting: Non-reflective
□Plywood	Phosphorescent
☐Magnetic ☐Fiberglass	☐Retro-Reflective - Engineer grade (meets LS 300☐Retro-Reflective - Engineer grade (meets LS 300☐
Plastic	Radius Corners
Size of letters:	□Yes □No or Not Applicable
If unsure, can factory determine best size? \textstyle Yes \textstyle No	Holes for Sign:
Colors	Yes, please specify location on drawing above. Size of holes:
	□No
Name	Was sign previously ordered?
Street Address	⊡Yes P.O.# Date ⊡No
	Special Instructions
Phone	Special Instructions

8.0 Record of Revisions