

2018

City of Amarillo

Community Wildfire Protection Plan



North Loop Fire - 2006

Recognizing the dangers and potential hazards that wildfires can impact upon communities while acknowledging that they are part of our natural history and help shape the native Texas ecosystems; the City of Amarillo, the Amarillo Fire Department and its Fire Marshal's Office, and the Office of Emergency Management along with regional departments, Federal and State resources and area wide stakeholders have developed this community wildfire protection plan to efficiently deal the threat of wildfire to our community.

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

This document was prepared by the Amarillo Fire Department
and the Texas A&M Forest Service
and was completed on August 22, 2018.

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Section 1.0 Introduction

1.1 Statement of Intent:

The purpose of the City of Amarillo Community Wildfire Protection Plan (CWPP) is to protect human life and reduce property loss due to wildland fire in the Amarillo area. Although reducing the threat of wildland fire is a primary motivation, managing area wild lands for hazardous fuel reduction and fire resilience is only one part of the overall CWPP plan. The CWPP is to prepare all stakeholders for the likelihood of Wildland Urban Interface (WUI) fires and to educate the public on the dangers, effects, and preparations needed for these wildfire events. 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.

1.2 Goals:

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

1.3 Objectives:

- Complete wildfire risk assessments
- Identify strategic fuels reduction projects
- Address treatment of structural ignitability
- Identify local capacity building and training needs
- Promote wildfire awareness programs

1.4 Core Working Group:

Jeff Greenlee – Fire Chief – Amarillo Fire Department (AFD)
 Sam Baucom – Deputy Fire Chief – AFD
 Joe Ward – District Chief – AFD
 Josh Whitney – Captain – AFD
 Mylea Lovell – WUI Specialist – Texas A&M Forest Service (TFS)
 Larry Davis – Public Information Officer – AFD
 Beau Hargrave – Firefighter – AFD
 Jacob Diaz – Fire Marshal – AFD
 Chip Orton – Emergency Mgmt Coordinator (EMC) – Office of Emergency Mgmt
 Danielle May – Deputy EMC – Office of Emergency Management
 Randy Schuster – Director of Building Safety – COA

1.5 Planning Process:

Planning Process and Methodology		
Date	Attendees	Action Items
18 Nov 2016	Sam Baucom Joe Ward Mikal Orr (AFD) Larry Davis Beau Hargrave	Met to discuss the creation of a Community Wildfire Protection Plan (CWPP) for the City of Amarillo and its 5-mile extra-territorial jurisdiction (ETJ). Handed out CWPP guidebooks, discussed the requirements of a CWPP, and identified priorities to starting the process.
8 Dec 2016	Sam Baucom Joe Ward Larry Davis Beau Hargrave	Identified the core working group, made preliminary assignments, discussed progress made and what to do next. Core Working Group must include: AFD Fire Chief, AFD Fire Marshal, Amarillo EMC, Director of Building Safety, TFS WUI Specialist, and a City Hall Management Representative.

Planning Process and Methodology (cont.)		
Date	Attendees	Action Items
15 Dec 2016	Jeff Greenlee Sam Baucom Joe Ward Jacob Diaz Beau Hargrave Larry Davis Mylea Lovell Chip Orton Brad Britten (OEM)	<p>Discussed the general outline of the document and finalized assignments. We also looked at other resources to add to the document as well as supplement the Firewise USA™ and Ready, Set, Go programs. We set a date to have a working draft to disseminate and a date for the next core group meeting. We identified possible stakeholders and how or when to bring them in.</p>
23 Mar 2017	Mikal Orr	<p>Rough draft ready to discuss for dissemination to working group and stakeholders.</p>
2 Aug 2017	Jeff Greenlee Sam Baucom Joe Ward Jacob Diaz Beau Hargrave Larry Davis Mylea Lovell Chip Orton Brad Britten	<p>The purpose of this meeting is to discuss the draft Community Wildfire Protection Plan (CWPP) product and any areas of concern in the plan or that may have been left out of the plan. Chief Ward is cleaning up the rough draft. A copy of the draft CWPP will be distributed to this group for your review a couple weeks in advance of this meeting. This is the first meeting that will also include representatives from the two adjacent Fire Departments (Potter & Randall Counties) for the collaboration element where CWPP mitigation includes the 5-mile ETJ.</p>
18-21 Sep 2017	Sam Baucom Joe Ward Beau Hargrave	<p>Wildland Urban Interface Symposium, San Antonio, Texas.</p>

Planning Process and Methodology (cont.)		
Date	Attendees	Action Items
2 Nov 2017	Sam Baucom Joe Ward Jacob Diaz Josh Whitney Beau Hargrave Mylea Lovell Chip Orton Richard Lake (PCFR) Dennis Gwyn (RCFD)	CWPP Planning meeting and Texas Wildfire Risk Assessment Portal (TxWRAP) Mobile App Training. This meeting was set up to discuss potential communities within the EJT to begin WUI assessments and learn to use TxWRAP site. We were also introduced to the TxWRAP mobile application and given training on how to use the product.
4 Jan 2018	Jeff Greenlee Sam Baucom Joe Ward Jacob Diaz Josh Whitney Beau Hargrave Larry Davis Chip Orton Brad Britten Randy Schuster	Planning Meeting to discuss the upcoming S-219 (Firing Ops) class and potential Rx fire projects to be determined. During this discussion, we will propose a couple different city-owned properties for your review since the ideal burn plot will be dependent upon weather conditions, including wind speed and wind direction.
10 Jan 2018	Sam Baucom Floyd Hartman (COA) Raymond Lee (COA) Damen Ratliff (COA)	Planning meeting to identify and discuss potential City of Amarillo (COA) owned properties within the COA proper and also outside the city limits, and identify which COA department is responsible for the property.
10 Jan 2018	Sam Baucom James Amerson (RCFD) Dennis Gwyn (RCFD) Troy Ducheneaux (RCFD)	Planning Meeting with Randall County Fire Department to discuss the upcoming S-219 (Firing Ops) class and potential Rx fire projects in Randall County, but that are contained within the COA ETJ.

Planning Process and Methodology (cont.)		
Date	Attendees	Action Items
12 Jan 2018	Sam Baucom Rich Gray (TFS) Cody Holloway (TFS) Billy Gage (TFS)	Walk-through and planning meeting for 200 acre prescribed fire located east of Rick Klein Sports Complex.
16 Jan 2018	Sam Baucom Beau Hargrave Joe Ward	Planning meeting to discuss developing Klein Rx Project Burn Plan and
22 Jan 2018	Sam Baucom Beau Hargrave Justin Davis (AFD) John Russell (PRIMT) Jeff Harbin (PRIMT) Cody Jones (RCSO)	Wrap up meeting for final Incident Action Plan (IAP) and coordination planning of interagency participation in the Klein Rx Project. Attendees included members representing the Panhandle Regional Incident Management Team (PRIMT) and the Randall County Sheriff's Office (RCSO)
24 Jan 2018	Michelle Bonner (ACM) Jeff Greenlee Sam Baucom Beau Hargrave Joe Ward Larry Davis Jacob Diaz Rich Gray Cody Holloway (TFS)	Klein Rx Fire Project: Amarillo Fire Department conducted their first prescribed fire in over 60 years, with the assistance of the Texas A&M Forest Service, several surrounding fire departments, numerous city departments and county public safety agencies. This Rx project was held on the southeast side of town, but inside the city limits on City of Amarillo property. A total of 116 participants from 22 agencies or departments assisted with this project.
26 Jan 2018	Sam Baucom Clay Shelton (Tx DPS)	DPS helicopter flight to map out perimeter and size of prescribed fire. Total of 208 acres burned.
20 Feb 2018	Sam Baucom City Council Jared Miller	PowerPoint presentation to City Council and City Management of the before, during and after results of the Klein Rx Project

Planning Process and Methodology (cont.)		
Date	Attendees	Action Items
4 Apr 2018	Sam Baucom Mylea Lovell Javier Vara (TFS) Jacob Oehlert Josh Whitney Steve Anderson (AFD) Richard Lancaster (AFD)	Neighborhood Assessment Form Training: Web-based meeting with TFS GIS Specialist Javier Vara and Mylea Lovell to learn how to use the mobile application product to conduct neighborhood assessments.
15 May 2018	Josh Whitney Steve Anderson Ship Albracht (AFD) Beau Hargrave Dory Mogelinski (AFD) Richard Lancaster	Neighborhood Assessments: For one week (May 15-22), 2-3 person teams conducted neighborhood assessments for the 200+ communities identified during the CWPP process that met the WUI criteria and we within the City of Amarillo limits or the 5-mile ETJ. Attendees were lead assessors, other AFD members assisted them.
25 June 2018	Sam Baucom Jacob Oehlert Larry Davis Josh Whitney Dory Mogelinski Jacob Diaz Kevin Starbuck (DCM) Chip Orton Randy Shuster Mylea Lovell Rich Gray Jason Calvet (TFS) Adrian Escobar (BLM) Richard Lake Dennis Gwyn	CWPP Fuels Reduction Prioritization Planning Meeting. The purpose of this meeting was to discuss the prioritization of fuels reduction projects identified in Amarillo and its 5-mile Extra-Territorial Jurisdiction (ETJ) during the recent neighborhood assessments that were conducted during the development of the COA Community Wildfire Protection Plan (CWPP). The plan was to prioritize an equal amount of the identified projects for each jurisdiction: Potter, Randall and Amarillo. Additional critical neighborhoods were identified during this interagency, cooperative stakeholders meeting. A list of mitigation and education strategies was developed as well as a list those additional neighborhoods that need to be immediately included in this CWPP process.

Planning Process and Methodology (cont.)		
Date	Attendees	Action Items
11-13 Jun 2018	Sam Baucom Jacob Oehlert Josh Whitney Richard Lake Dennis Gwyn Jacob Mitchell	Dissemination of <i>Fuel and Education Prioritization Form</i> and the CWPP Fuels Reduction Prioritization Planning Meeting notes, including the additional critical communities that were added to the plan, to Amarillo Potter and Randall fire departments.
25 June 2018	Sam Baucom Mylea Lovell	CWPP Community Mapping meeting: Added additional communities to TxWRAP based on requests from CWPP Fuels Reduction Prioritization Meeting.
26 June 2018	Mylea Lovell Tyler Brown (TFS) Robyn Griffith (TFS)	Conducted TxWRAP mobile app risk assessments for several of the newly added critical wildfire risk neighborhoods that were identified on June 25 th .
2 July 2018	Josh Whitney Chip Albracht	Completed remaining neighborhood assessments that were added to the TxWRAP.
12 July 2018	Sam Baucom Joe Ward Richard Lake Josh Whitney Brandon Kinard (AFD) Bryan Van Meter (AFD) Richard Wellman (AFD)	Prioritized Neighborhood Planning Meeting to assist Potter County with the development of prioritizing the communities within the EJT and Potter Co. for Mitigation and community involvement. Discussed the timing and avenues of reaching said communities as well as strategies to improve or fire harden these landscapes.
13 July 2018	Sam Baucom Mylea Lovell	Submitted <i>Fuel and Education Prioritization Forms</i> for all three agencies: Amarillo, Potter and Randall fire department to TFS for inclusion in developing CWPP.
22 August 2018	Sam Baucom Mylea Lovell	Submitted <i>Final CWPP Plan</i> to TFS for approval.

Section 2.0

Community

Background

2.1 Location:

Amarillo, Potter, Texas;
35° 13' 19", 101° 49' 52"

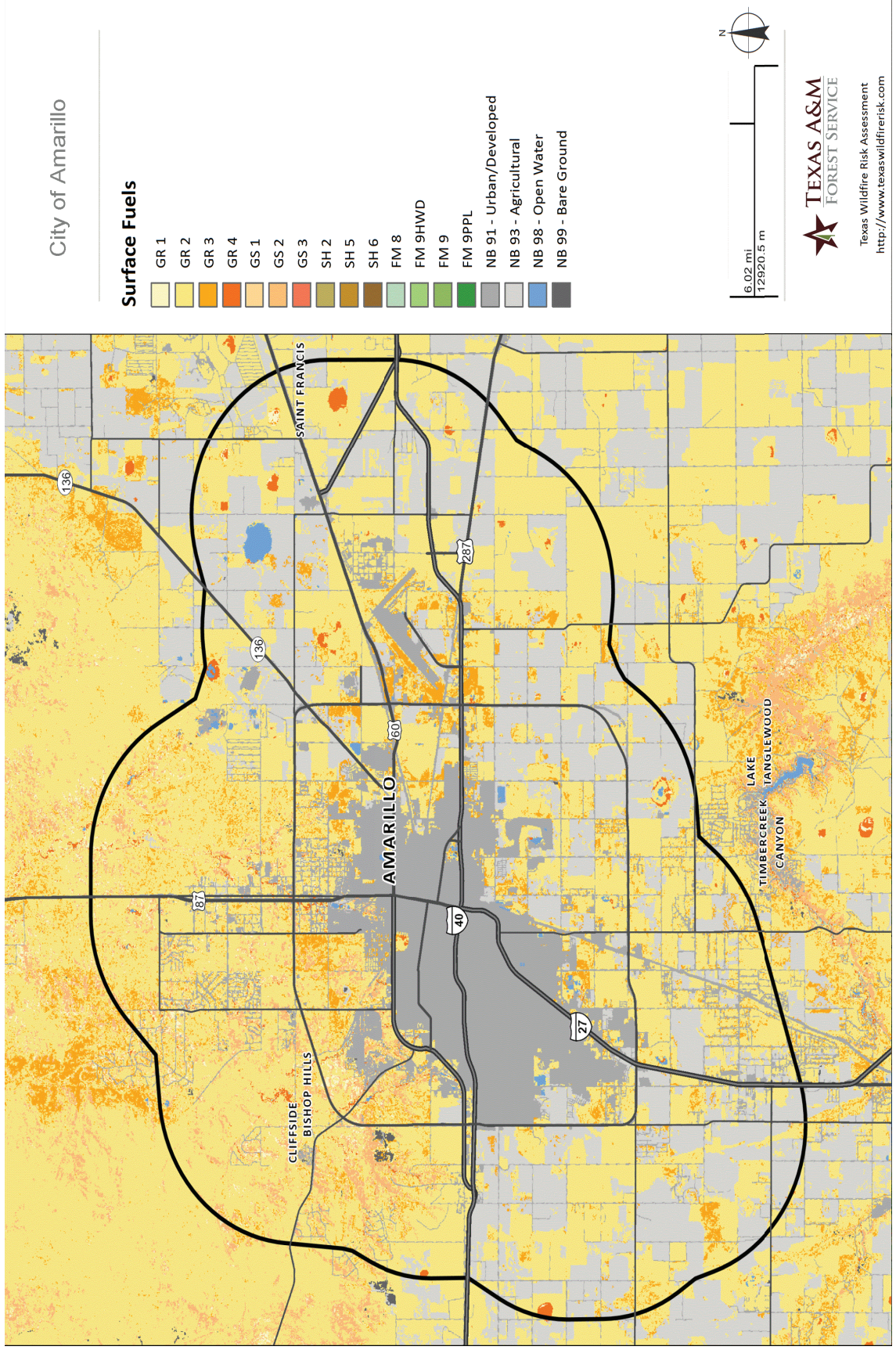


Situated in the Llano Estacado region of the High Plains, the city of Amarillo (TX) was established in 1887 as the county seat for Potter County. Amarillo is the 14th most populous city in Texas, the commercial center of the Texas Panhandle and located at the crossroads of Interstate 40 and Interstate 27 (US Route 287). The city limits encompass more than 100 square miles and extends into Randall County. Amarillo is 259 miles west of Oklahoma City (OK), 285 miles east of Albuquerque (NM), 123 miles north of Lubbock (TX) and 362 miles northwest of Dallas (TX). Other communities located in the Potter-Randall two-county area include: Bushland, Bishop Hills, Canyon, Lake Tanglewood, Timber Creek, Palisades, and Umbarger.

The Alibates Flint Quarries National Monument, the Canadian River, the Bureau of Land Management, and the Lake Meredith National Recreation Area are located in Potter County. The Buffalo Lake National Wildlife Refuge and the second-largest canyon in the United States, Palo Duro Canyon State Park, are situated in Randall County.

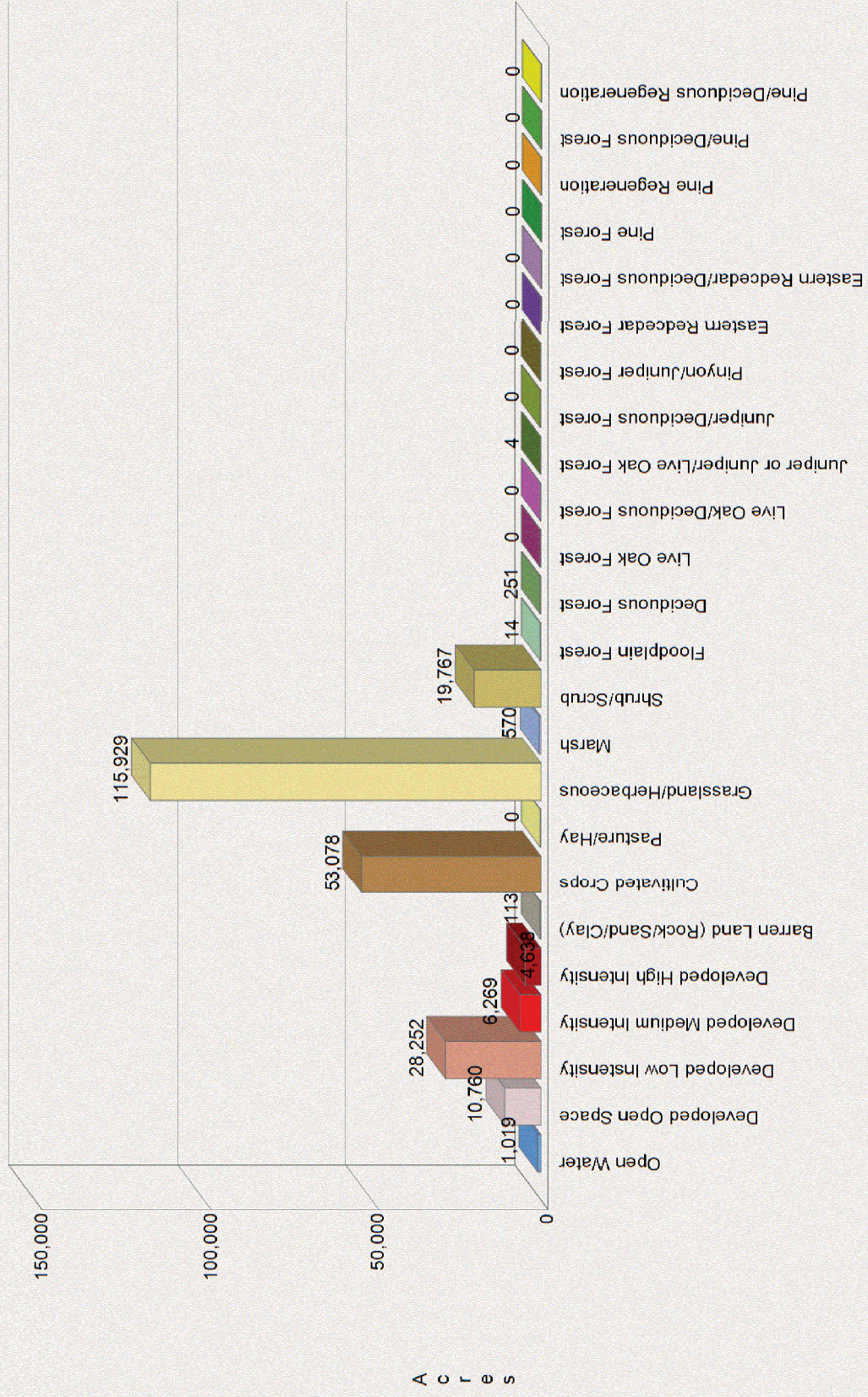
Additional landmarks in the Amarillo area include two Texas Department of Criminal Justice facilities, Amarillo College, West Texas A&M University, CNX Pantex Plant, Bell Helicopter Textron, American Quarter Horse Association, Texas Cattle Feeders Association, and the National Helium Reserves.

2.2 Amarillo Area Landscape and Fuels:



Class	Description	Acres	Percent
Open Water	All areas of open water, generally with < 25% cover of vegetation or soil	1,019	0.4 %
Developed Open Space	Impervious surfaces account for < 20% of total cover (i.e. golf courses, parks, etc...)	10,760	4.5 %
Developed Low Intensity	Impervious surfaces account for 20-49% of total cover	28,252	11.7 %
Developed Medium Intensity	Impervious surfaces account for 50-79% of total cover	6,269	2.6 %
Developed High Intensity	Impervious surfaces account for 80-100%of total cover	4,638	1.9 %
Barren Land (Rock/Sand/Clay)	Vegetation generally accounts for <15% of total cover	113	0.0 %
Cultivated Crops	Areas used for the production of annual crops, includes land being actively tilled	53,078	22.1 %
Pasture/Hay	Areas of grasses and/or legumes planted for livestock grazing or hay production	0	0.0 %
Grassland/Herbaceous	Areas dominated (> 80%) by grammanoid or herbaceous vegetation, can be grazed	115,929	48.2 %
Marsh	Low wet areas dominated (>80%) by herbaceous vegetation	570	0.2 %
Shrub/Scrub	Areas dominated by shrubs/trees < 5 meters tall, shrub canopy > than 20% of total vegetation	19,767	8.2 %
Floodplain Forest	> 20% tree cover, the soil is periodically covered or saturated with water	14	0.0 %
Deciduous Forest	> 20% tree cover, >75% of tree species shed leaves in response to seasonal change	251	0.1 %
Live Oak Forest	> 20% tree cover, live oak species represent >75% of the total tree cover	0	0.0 %
Live Oak/Deciduous Forest	> 20% tree cover, neither live oak or deciduous species represent >75% of the total tree cover	0	0.0 %
Juniper or Juniper/Live Oak Forest	> 20% tree cover, juniper or juniper/live oak species represent > 75% of the total tree cover	4	0.0 %
Juniper/Deciduous Forest	> 20% tree cover, neither juniper or deciduous species represent > 75% of the total tree cover	0	0.0 %
Pinyon/Juniper Forest	> 20% tree cover, pinyon or juniper species represents > 75% of the total tree cover	0	0.0 %
Eastern Redcedar Forest	> 20% tree cover, eastern redcedar represents > 75% of the total tree cover	0	0.0 %
Eastern Redcedar/Deciduous Forest	> 20% tree cover, neither eastern redcedar or deciduous species represent > 75% of the total tree cover	0	0.0 %
Pine Forest	> 20% tree cover, pine species represent > 75% of the total tree cover	0	0.0 %
Pine Regeneration	Areas of pine forest in an early successional or transitional stage	0	0.0 %
Pine/Deciduous Forest	> 20% tree cover, neither pine or deciduous species represent > 75% of the total tree cover	0	0.0 %
Pine/Deciduous Regeneration	Areas of pine or pine/deciduous forest in an early successional or transitional stage	0	0.0 %
Total		240,664	100.0 %

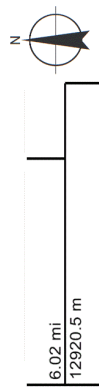
City of Amarillo Vegetation



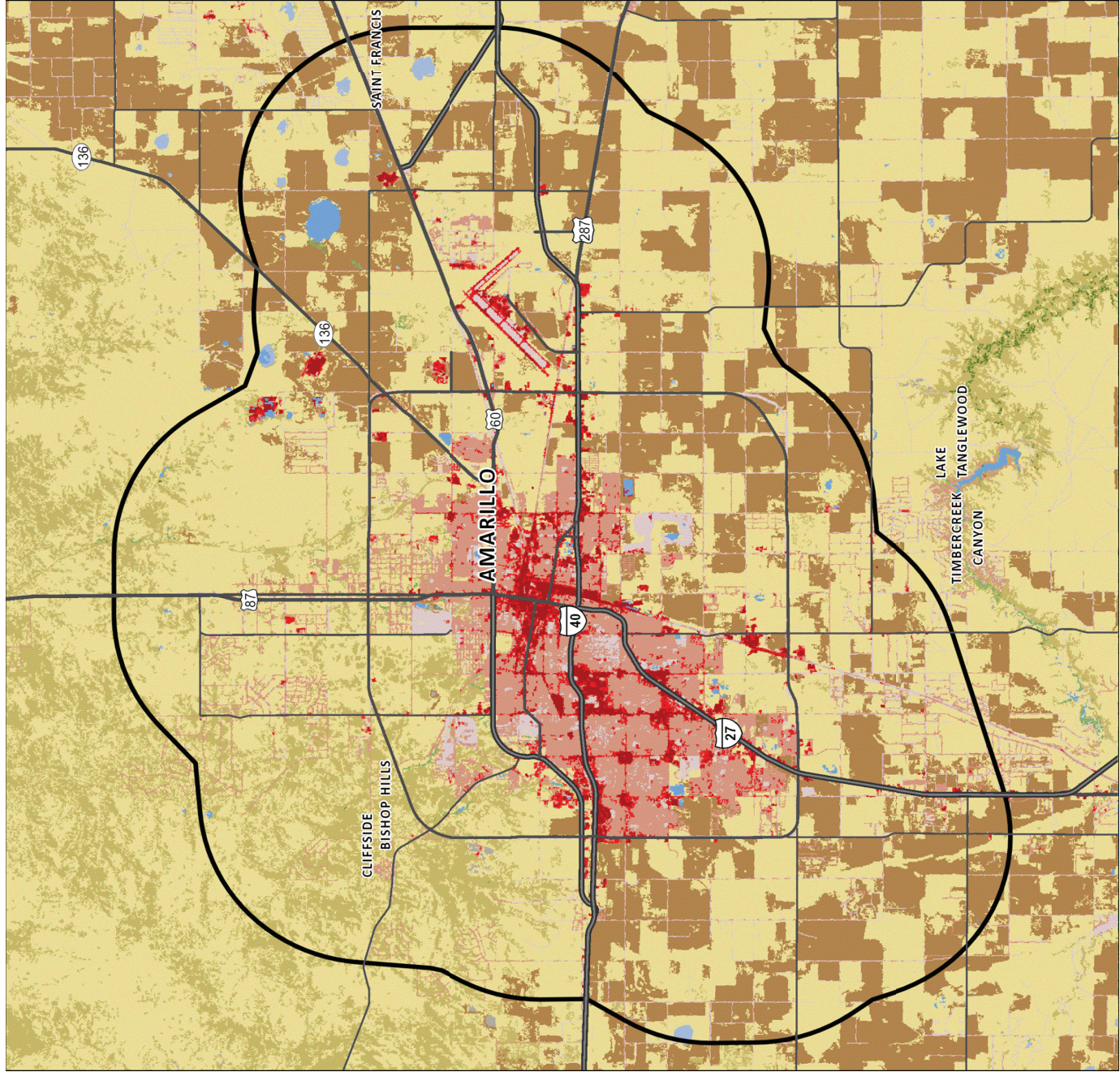
City of Amarillo

Vegetation

- Open Water
- Developed Open Space
- Developed Low Intensity
- Developed Medium Intensity
- Developed High Intensity
- Barren Land (Rock/Sand/Clay)
- Cultivated Crops
- Pasture/Hay
- Grassland/Herbaceous
- Marsh
- Shrub/Scrub
- Floodplain Forest
- Deciduous Forest
- Live Oak Forest
- Live Oak/Deciduous Forest
- Juniper or Juniper/Live Oak Forest
- Juniper/Deciduous Forest
- Pinyon/Juniper Forest
- Eastern Redcedar Forest
- Eastern Redcedar/Deciduous Forest
- Pine Forest
- Pine Regeneration
- Pine/Deciduous Forest
- Pine/Deciduous Regeneration



Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>



Common plants associated within the Texas Panhandle and Amarillo area include mesa top, steep slope, gravely slope, sand hill, and bottomland associations. The mesa top association includes plains prickly pear, yucca, mesquite, blue grama, buffalo grass, Indian blanket, bladder pod, plantain aster, and tansy aster. Steep slope vegetation includes broom weed, skink bush, feather dalea, cat's claw mimosa, side oats grama, little bluestem, fleabane daisy, ragweed, bladder pod and baby white aster. Yucca is also common in these areas.

Gravely slope vegetation includes broom weed, yucca, mesquite, blue grama, hairy grama, side oats grama, cat's claw mimosa, bladder pod, Indian Blanket and the occasional stands of mesquite. The sand hill association includes shrubs such as sand sagebrush and Chickasaw plum, as well as grass species, such as scratches grass, muhly, and sand drop seed. The bottomland vegetation consists of hackberry, soapberry, tamarisk, cottonwood and a variety of grasses and forbs. Many exotics have been identified as occurring within or near the community including salt cedar, Russian thistle, kochia and many other herbaceous forbs and grasses.

All fuels in the area are drastically affected by the weather and wind conditions within a given day and fire hazards change daily based on these conditions. All of the fuels burn readily and all have a history of burning. While each fuel type affects the fire behavior, the biggest impact on fire behavior in the region is the weather conditions – specifically the wind – followed by the terrain. Heavy rains during the spring seasons cause fuel loads to increase over the summer months. This heavy fuel load impacts fire behavior during a wildfire event. The creation of buffer zones and mitigation areas becomes more important because fast moving fires fueled by heavy vegetation loads are more difficult to contain and suppress during severe fire weather periods.

History of the region shows that wildfires occur in all vegetation types around the community and there is not an area that has not experienced wildfires. Hazard classifications, in the community, focus more on proximity to fuels, proximity to terrain, and location relative to the prevailing winds.

2.3 Climate:

Monthly Climate Statistics

MONTHLY NORMALS (based on 1981-2010 data)

TEMPERATURE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<u>MAX</u>	50.6	54.2	62.5	71.1	79.5	87.7	91.4	89.4	82.6	71.9	60	49.7	70.9
<u>MIN</u>	23.4	26.4	33.3	41.6	51.8	61	65.2	64.2	56.4	44.7	32.5	24	43.7
AVG	37	40.3	47.9	56.3	65.6	74.4	78.3	76.8	69.5	58.3	46.3	36.9	57.3

DEGREE DAYS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
HDD	868	692	532	279	83	7	0	1	43	236	564	873	4178
CDD	0	0	2	19	104	288	412	367	178	28	1	0	1399

PRECIPITATION

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<u>LIQUID</u>	0.72	0.56	1.39	1.4	2.29	3.16	2.84	2.91	1.92	1.66	0.8	0.71	20.36
SNOW	4.7	2.9	2.9	0.7	0.2	0	0	0	0	0.2	2.5	3.7	17.8

WIND

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
SPEED	13	14	15.5	15.4	14.6	14.2	12.7	12	12.9	12.9	13.1	12.9	13.6
DIR	SW	SW	SW	SW	S	S	S	S	S	SW	SW	SW	SW

MONTHLY MAXIMUM AND MINIMUM TEMPERATURE RECORDS

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	
	83	88	96	98	103	111	106	106	103	99	87	83	

2.4 Land Use:

Approximately 14 million acres (57,000 km²) of agricultural land surrounds the city with corn, wheat and cotton as the primary crops. Other crops in the area include sorghum, silage, hay and soybeans. Historically, Amarillo has been the ranching hub for the Texas panhandle. Ranches such as the LX, XL, and 6666 surround the outlying area within the EJT. This puts many homes and businesses at risk in the EJT in the event of a fire in this urban interface zone. Oil and gas production / storage is also a concern as some of the production lines (Poly) are above ground and easily compromised by fire. The developed oil and gas fields provide lease access roads scattered throughout the region.

The City of Amarillo, its EJT and additional planning areas find themselves in a locale that contains a wide array of topography, fuel loads, potential ignition sources, and the possibility of accidental ignitions. The majority of the area, even those in rough terrain areas, often contain multiple road access. In addition, area ranch roads provide access to additional remote access. The lack of formal maps and designation of these roads often causes problems in quickly accessing threats in the area. Assistance from local ranch and oil field personnel familiar with the roads often increase response efficiency and speed.

Helium used for industrial purposes is a byproduct of natural gas production, and the Texas Panhandle is the United States' helium capital. In the natural gas fields near Amarillo, the U.S. government maintains the country's largest helium storehouse. Although other countries produce helium, the natural gas fields elsewhere around the globe are much less helium-rich than those near Amarillo. Because helium was critical to military reconnaissance and space exploration in the mid-20th Century, Congress mandated that the government encourage private helium producers nationwide to sell their helium to the government and store it near Amarillo as part of the [Federal Helium Program](#).

2.5 Fire Response Capabilities

The Amarillo Fire Department has 13 fire stations and staffs 270. Firefighters are divided into three shifts that work 24-hour periods. All fire engines are staffed with advanced EMT's or paramedics in order to provide ALS. The Amarillo Fire Department maintains a Technical Rescue Team trained in water rescue, confined space, trench collapse, high angle, building collapse and lost person/wilderness search that responds to calls throughout the Panhandle region. The AFD staffs a fully qualified Hazardous Materials team with Decontamination capabilities. Additionally, the AFD has emergency responsibilities (ARFF) for the Amarillo International Airport and surrounding communities. We have recently added a NWCG qualified wildland firefighting team with mitigation capabilities to include prescribed fire, mowing, tree falling, chipping/mulching, shaded fuel projects, etc.

2.5 Fire Response Capabilities (cont.)

Station	Apparatus	Station	Apparatus
Fire Station 1 400 S. Van Buren	Engine 1 – 2017 Ferrara (Type 1, 500 gal.) Ladder 1 – 2008 Ferrara (107’ Aerial, Type 1, 500 gal.) Engine 40 – 2007 Ferrara (Type 1, 500 gal.) Unit 1 – 2015 Chev. SUV (4wd) Unit 3 – 2013 Chev. SUV (4wd) Unit 4 – 2006 Chev. SUV (4wd)	Fire Station 8 108 S. Western	Engine 8 – 2010 Ferrara (Type 1, 500 gal.) Decon – 1997 Freightliner Tractor w/ 2004 Aramsco Decon Shower Trailer
Fire Station 2 9000 W. 34 th Ave.	Engine 2 – 2013 Ferrara (Type 1, 500 gal.) Grass 2 – 2016 F550 (4wd, Type 6, 400 gal) HazMat – 2001 American LaFrance Special	Fire Station 9 3445 S. Western	Engine 9 – 2011 Ferrara (Type 1, 500 gal.) Engine 43 – 2000 American LaFrance (Type 1, 500 gal.) <i>Reserve</i>
Fire Station 3 6009 Estacado	Engine 3 – 2015 Ferrara (Type 1, 500 gal.) Grass 3 – 2008 Ferrara (4wd, Type 3, 1000 gal)	Fire Station 10 11311 Baker	Engine 10 – 2007 Ferrara (Type 1, 1000 gal) Grass 10 – 2011 Ferrara (2wd, Type 3, 1000 gal) Red 1 – 2013 Chev. SUV (4wd) Rehab – Scene Rehab Trailer w/ 1 ton truck
Fire Station 4 208 E. Hastings	Engine 4 – 2008 Ferrara (Type 1, 500 gal.) Grass 4 – 1994 Ford (2wd, Type 3, 800 gal)	Fire Station 11 2401 N. Coulter	Engine 11 – 2008 Ferrara (Type 1, 500 gal.) Engine 8-32 – 2017 Freightliner (4wd, Type 3, crew-cab, 750 gal.) TIFMAS Engine 41 – 2004 Am. LaFrance (Type 1, 500 gal.) <i>Reserve</i> E8-71 – 2010 Gator (4wd, Type 7, 60 gal) Wildland 2 – 1993 Int. Crew (Fuels Mgmt)
Fire Station 5 3200 Washington	Engine 5 – 2014 Ferrara (Type 1, 500 gal.) Grass 5 – 2000 Int. (2wd, Type 3, 1000 gal)	Fire Station 12 3100 SW. 58 th	Engine 12 – 2013 Ferrara (Type 1, 500 gal.) Grass 12 – 2000 Int. (2wd, Type 3, 1000 gal)
Fire Station 6 1904 S. Fairfield	Engine 6 – 2008 Ferrara (Type 1, 500 gal.) Grass 6 – 2017 F550 (4wd, Type 6, 400 gal)	Fire Station 13 6383 SW. 45 th	Engine 13 – 2014 Ferrara (Type 1, 500 gal.) Ladder 13 – 2011 Ferrara (77’ Aerial, Type 1, 500 gal.) Rescue 1 – 2005 Freightliner Tractor w/ 2006 Hackney USAR Trailer Unit 2 – 2018 Chev. ¾ ton crew cickup (4wd)
Fire Station 7 3618 E. Amarillo Blvd.	Engine 7 – 2013 Ferrara (Type 1, 500 gal.) Ladder 7 – 2014 Ferrara (77’ Aerial, Type 1, 500 gal.) Grass 7 – 2008 Ferrara (4wd, Type 3, 1000 gal) Ladder 25 – 2004 American LaFrance (75’ Aerial, Type 1, 500 gal.) <i>Reserve</i>	Reserves at Fire Fleet Maint. 800 SE 23rd	Engine 18 – 1997 Int. (Type 1, 500 gal.) Engine 42 – Am LaFrance (Type 1, 500 gal.) Engine 44 – 2007 Ferrara (Type 1, 500 gal.) Ladder 24 – 2004 American LaFrance (75’ Aerial, Type 1, 500 gal.) Grass 51 – 1994 Ford (2wd, Type 3, 600 gal) Wildland 1 – 2008 F350 recon / support

Amarillo Fire Department Incident Responses

2016: 20542 total incidents with a dollar loss of \$4,634,630.00

Fire: 860

Explosion: 5

EMS/rescue: 14707

Hazardous situations: 684

Service calls (Pub Asst): 439

Weather incidents: 5

Other: 3842

ISO rating: 2/9

2017: 22340 total incidents with a dollar loss of \$7,389,736.00

Fire: 863

Explosion: 8

EMS/rescue: 15759

Hazardous situations: 789

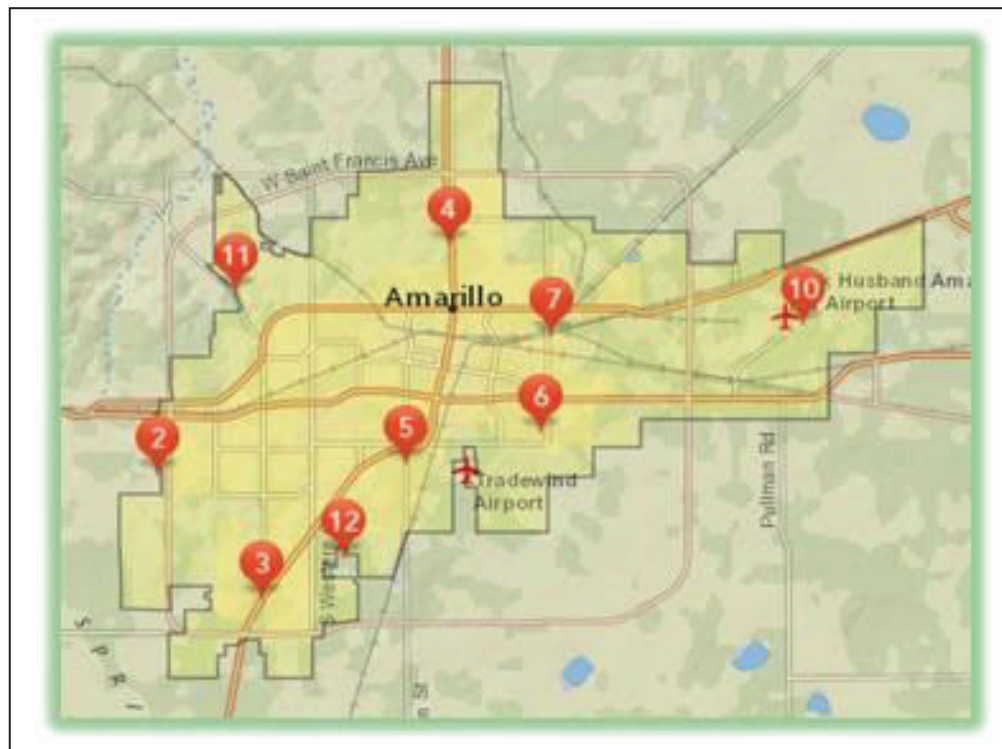
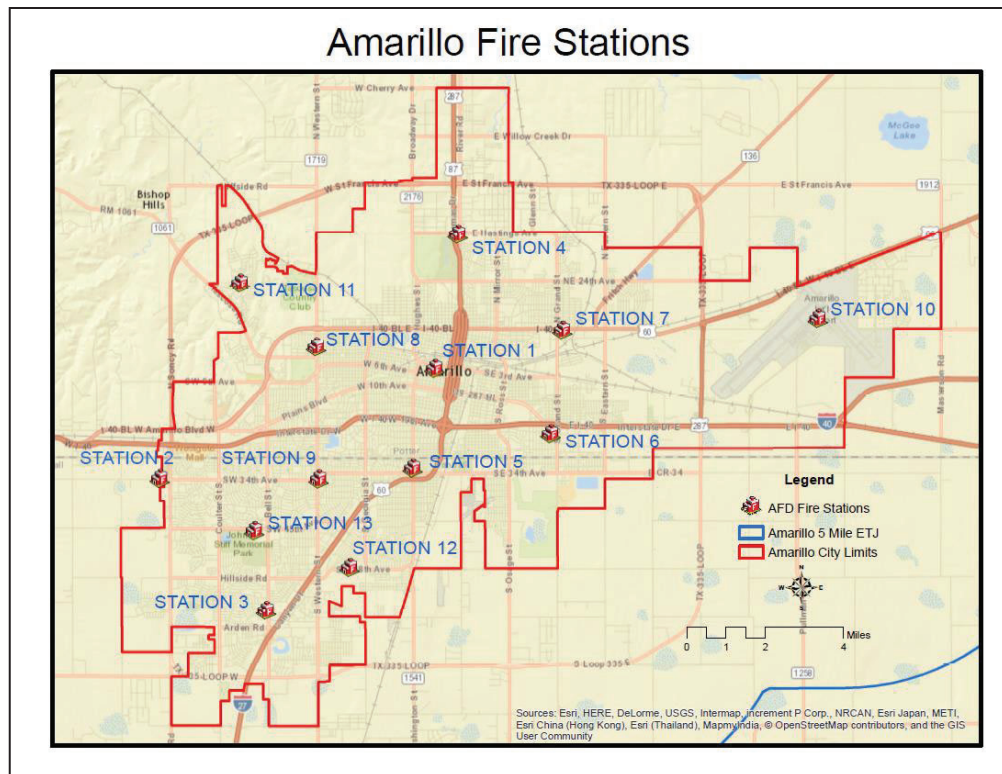
Service calls (Pub Asst): 469

Weather incidents: 19

Other: 4433

ISO rating: full 2 (renewed for 2017)

2.6 Emergency Facilities:



Treatment centers in the Amarillo area include

Northwest Texas Healthcare System; 1501 S. Coulter Amarillo TX. 79106

495-bed acute care facility and medical center

1 CT Scanner

2 MRI Machines

12 Operating Rooms

31 ER beds

22 bed Surgical Intensive Care Unit

22 bed Medical Intensive Care Unit.

Level III Trauma facility

Two air medical transport services:

- [LIFESTAR I and LIFESTAR II](#) rotary-wing
- [RICO Aviation](#) fixed-wing and rotary-wing

BSA Health System; 1600 Wallace Blvd. Amarillo TX. 79106

445-bed acute care facility and medical center

4 CT Scanners

4 MRI Machines

17 Operating Rooms

50 ER beds

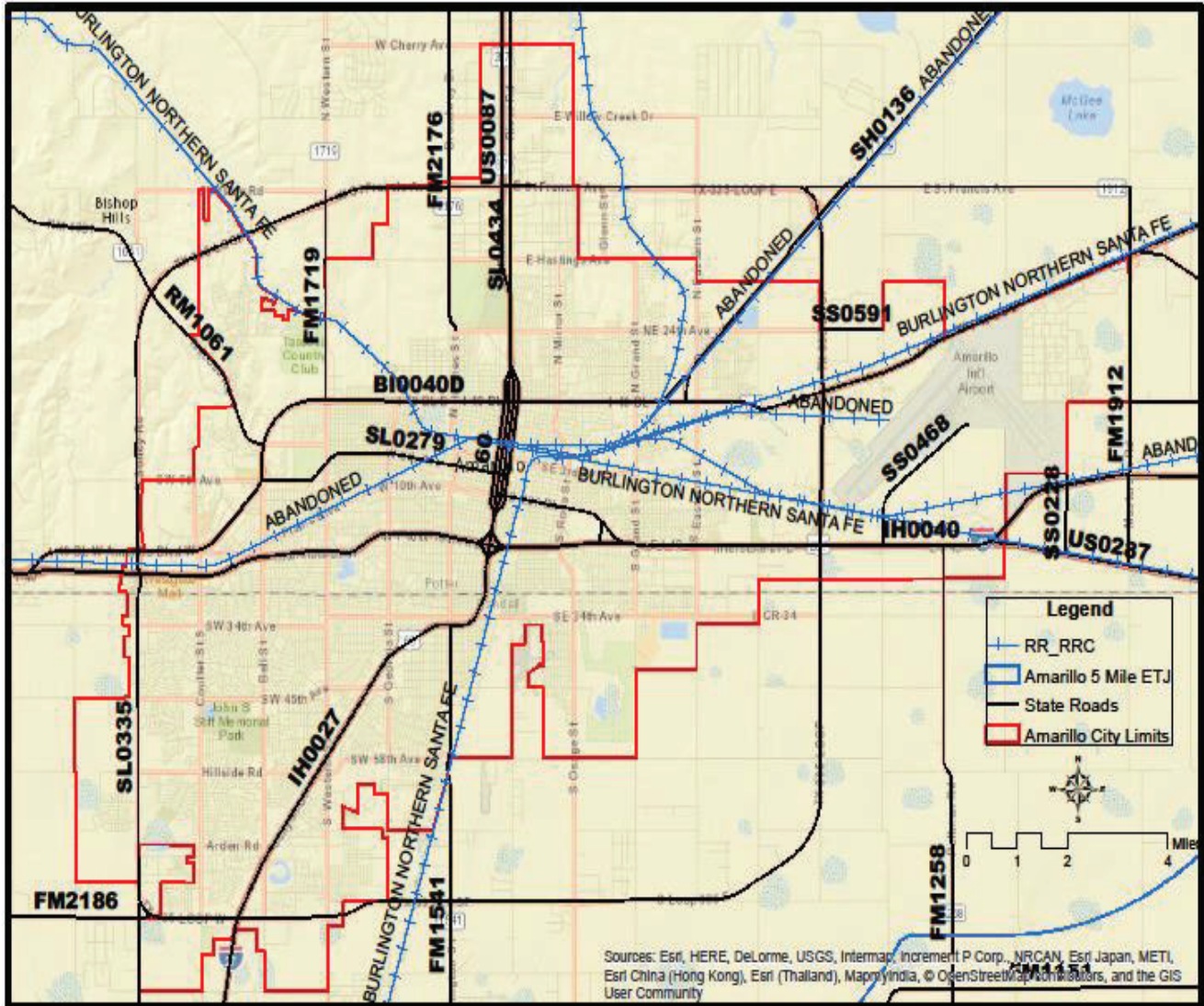
Dialysis-capable throughout the facility

The closest burn units is:

- University Medical Center Harnar burn unit, 602 Indiana Ave, Lubbock, TX 79415

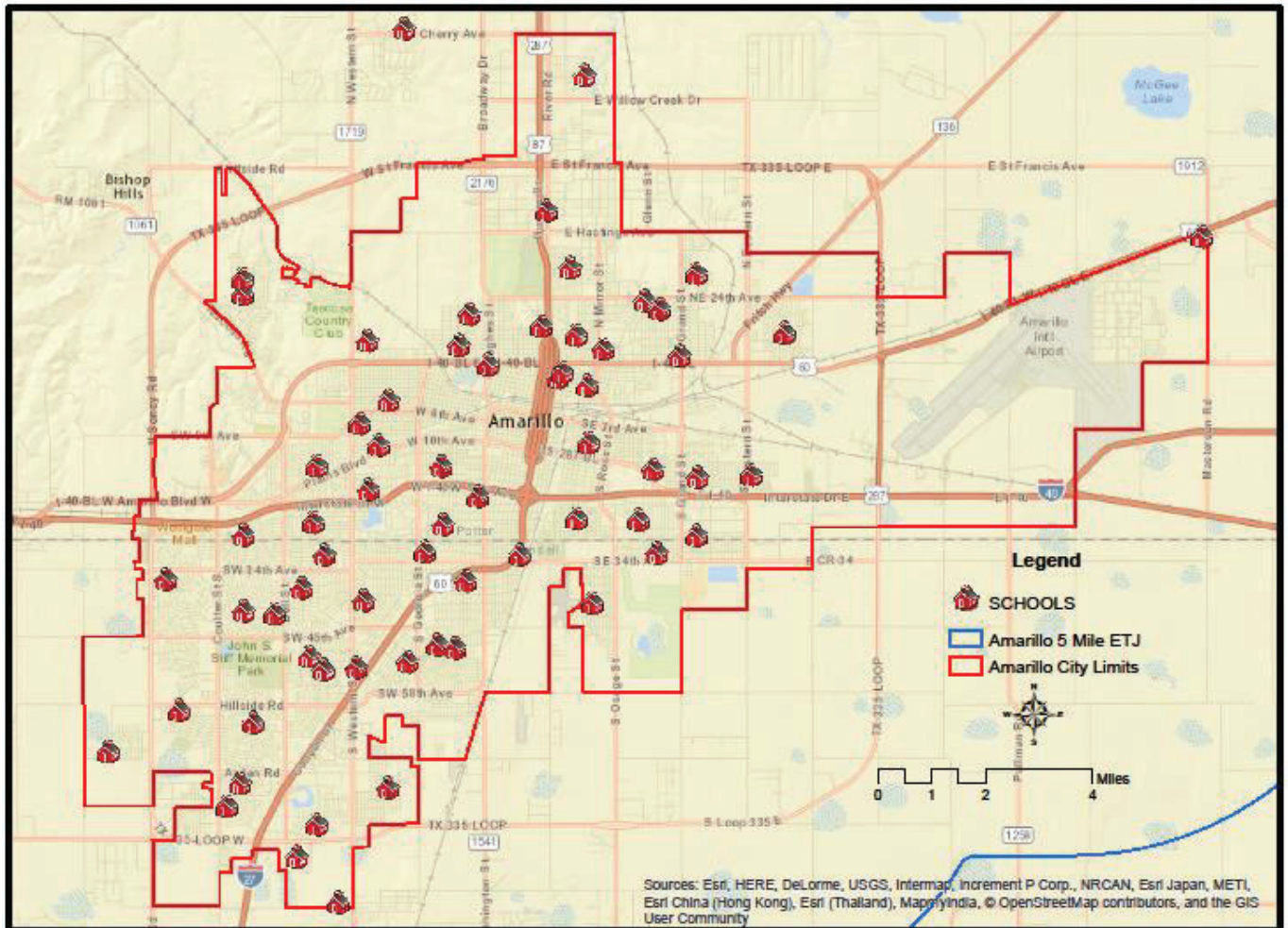
2.7 Utilities and Transportation:

Amarillo State Roads/Hwys/Railroads



2.8 Schools:

Amarillo Schools



2.9 Community Legal Authority:

In 1913, Amarillo became the first Texas city and the fifth in United States to use the council-manager form of municipal government, with all governmental powers resting in a legislative body, called a council (before 2014, it was called a commission). Amarillo's commission is composed of five elected commissioners, one of whom is the mayor of the city. The mayor and each commissioner serves a two-year term.

The role of the commission is to pass ordinances and resolutions, adopt regulations, and appoint city officials, including the city manager. While the mayor serves as a presiding officer of the commission, the city manager is the administrative head of the municipal government and is responsible for the administration of all departments. The city commission holds its regular meetings on Tuesday of each week. In the event of an incident, the first responder on the scene will take charge and serve as the Incident Commander until relieved in accordance with local procedures (*Amarillo Emergency Management Plan*).

The county judge or mayor will likely be responsible for declaring a disaster and ordering evacuations. The City of Amarillo is National Incident Management System-compliant and employs the Incident Command System principles during emergency response.

Burn bans are set by the County (burning is not allowed within the city limits). Burn bans are evaluated based on the Keetch-Byram Drought Index (KBDI), particularly when it is approaching 600, frequency of fire calls and other weather conditions. Fireworks are not permitted in the city. Certain fireworks are banned in the county at a KBDI of 575.

Section 3.0 Fire Environment

3.1 Wildland Urban Interface:

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

WUI – Population and Acres

Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
LT 1hs/40ac	293	0.5 %	15,082	23.8 %
1hs/40ac to 1hs/20ac	419	0.7 %	7,071	11.2 %
1hs/20ac to 1hs/10ac	1,259	2.1 %	8,949	14.1 %
1hs/10ac to 1hs/5ac	2,949	4.9 %	9,117	14.4 %
1hs/5ac to 1hs/2ac	8,379	13.8 %	11,175	17.6 %
1hs/2ac to 3hs/1ac	30,633	50.5 %	10,799	17.1 %
GT 3hs/1ac	16,677	27.5 %	1,136	1.8 %
Total	60,609	100.0 %	63,329	100.0 %

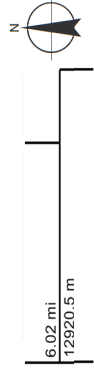
For the **AMARILLO WUI/ETJ 2017** project area, it is estimated that **64,302** people or **30 percent** of the total project area population (**216,219**) live within the WUI.

Population is determined by housing density, which 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.

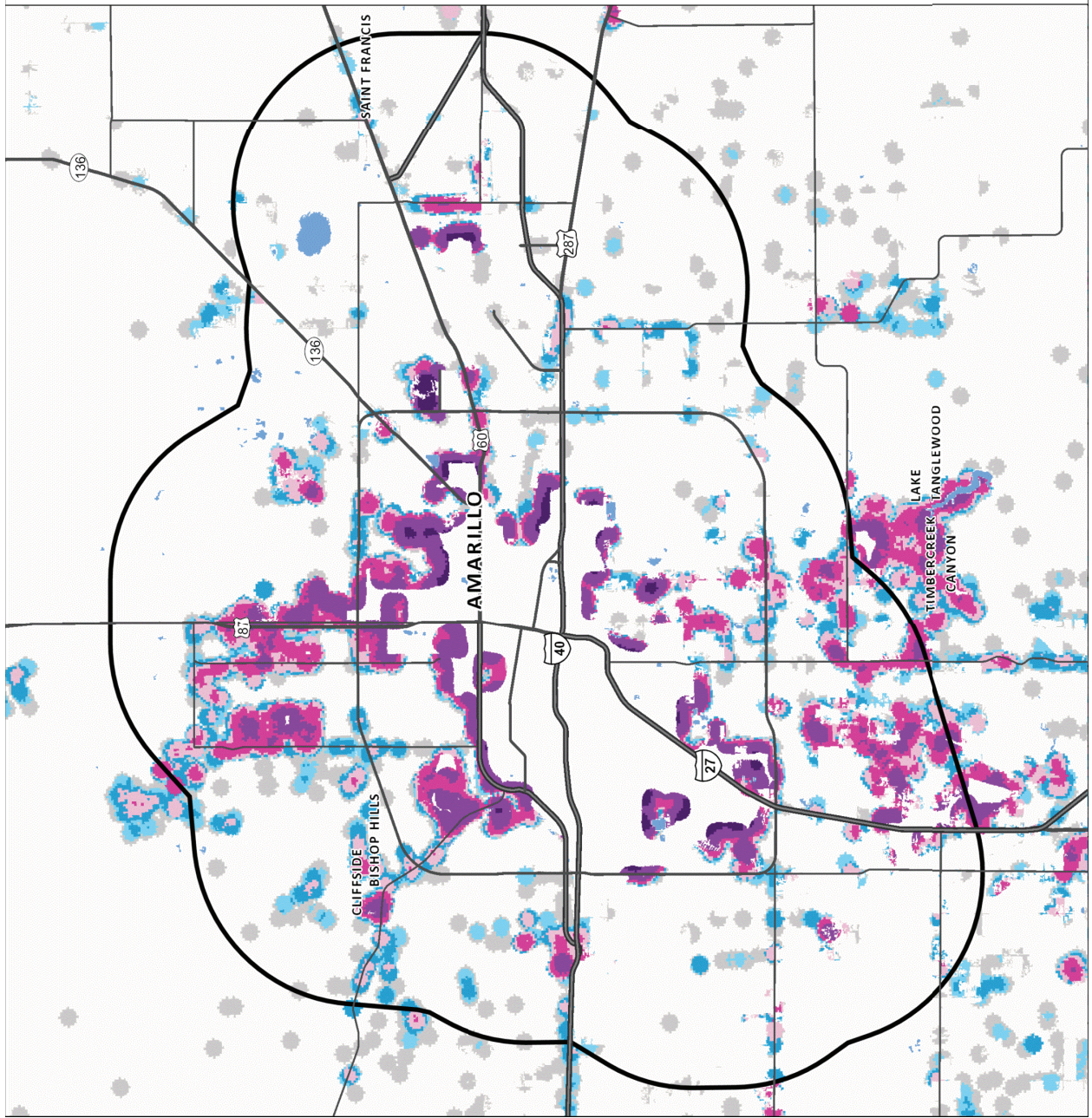
City of Amarillo

Wildland Urban Interface

- 1 - LT 1 hs/40 ac
- 2 - 1 hs/40 to 1 hs/20 ac
- 3 - 1 hs/20 to 1 hs/10 ac
- 4 - 1 hs/10 to 1 hs/5 ac
- 5 - 1 hs/5 to 1 hs/2 ac
- 6 - 1 hs/2 to 3 hs/ac
- 7 - GT 3 hs/ac



Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>



3.2 Fire Occurrence:

The grasslands and brush along with intermix wildland urban interface throughout the area in combination with varied topography create a great risk from wildfires. Wildfire is part of our natural history and has helped shaped the native ecosystem; therefore, the dangers and hazards associated with wildfires must be recognized. While the City has been impacted by multiple wildfires over its history, the rationale and degree that community leaders and citizens use to approach wildfire danger was drastically changed in March 2006.

On March 12, 2006, a wildfire began just east of Borger. Extreme winds along with a heavy and dry fuel load fueled the fire as it came within 3 miles of Borger. When the event was over, the wildfire and its two complexes (Borger Complex and East Amarillo Complex) had burned over 900,000 square miles of land and killed 11 people.

This nationally significant wildfire remains the largest in state history and one of the largest in national history. The wildfire of 2006 caused Panhandle community leaders, fire departments, and citizens to recognize more clearly the danger that wildfires produce. This shift in mindset and the City's desire to provide high quality public safety, along with a proactive fire department, was the starting point of a series of programs and initiatives that guide the creation of this document.

The steps that the City has already completed along with the steps in progress and in the future will be further discussed throughout this documents. The City is dedicated to reducing hazards associated with wildfire through proactive planning and this document represents that dedication to hazard reduction and community education.

The city of Amarillo lies in Potter and Randall counties, where the Willow Creek South and Tanglewood complexes burned. Amarillo Building Official Scott McDonald said homes that were destroyed by many of the Panhandle-area fires shared several common factors including being surrounded by excessive, uncultivated vegetation and combustible items. "These items appear to present the majority of the concern; however, several more factors should also be considered," he said. "In many instances property owners had wood fencing in direct contact

with a building or had planted conifers close to or in direct contact with structures. In my opinion, these common conditions create the greatest hazards and are the simplest to mitigate.”

The fires were eye-opening for property owners, McDonald added. “If greater education on the effects of blowing embers could be provided in simple bite-size pieces, I believe it could help property owners become a little more proactive,” he said. “It’s important for them to have information about roofing materials, exterior envelope materials, soffit vent screening and architectural appendages such as decks, pergolas or carports.”



Willow Creek Fire

The Willow Creek South Complex, which burned more than 24,000 acres and destroyed 30 homes. Many of these homes were made of brick and surrounded by manicured lawns — and yet still they were destroyed because of the high winds and extreme fire behavior on that day. The lesson learned? Don’t assume your community is safe just because it doesn’t appear at first glance to be high-risk. “If you had grass around your home, it would burn right up to wherever there was a break,” said Wildland Urban Interface Specialist Karen Stafford. “Some of those brick homes look fire-resistant, but they’re pier and beam with foundation vents. Fire was igniting the infrastructure of the homes. Once it hit the community, it was spreading from house to house and lot-to-lot”.

Wildfires on Feb. 27 included the Tanglewood Complex in Randall County, Matador West Complex in Motley County, Willow Creek South Complex in Potter and Carson counties and

Mitchell County Complex in Mitchell and Howard counties. These four wildfires burned a combined 85,339 acres and destroyed 80 homes — the most homes destroyed on a single day in the Texas Panhandle.

The 1,659-acre Tanglewood Complex burned in heavy vegetation. Houses caught fire when embers entered through vents and ignited them from the inside. Many of the homes had combustible attachments such as railings, decks or awnings. The topographic features of the community also contributed to fire behavior. Canyons and ravines channeled high winds, increasing fire intensity and the speed at which the flames traveled. Fire travels faster uphill and pre-heats the homes and vegetation ahead of it, building intensity as it burns. Homes at the tops of canyon walls were exposed to large and intense flames.

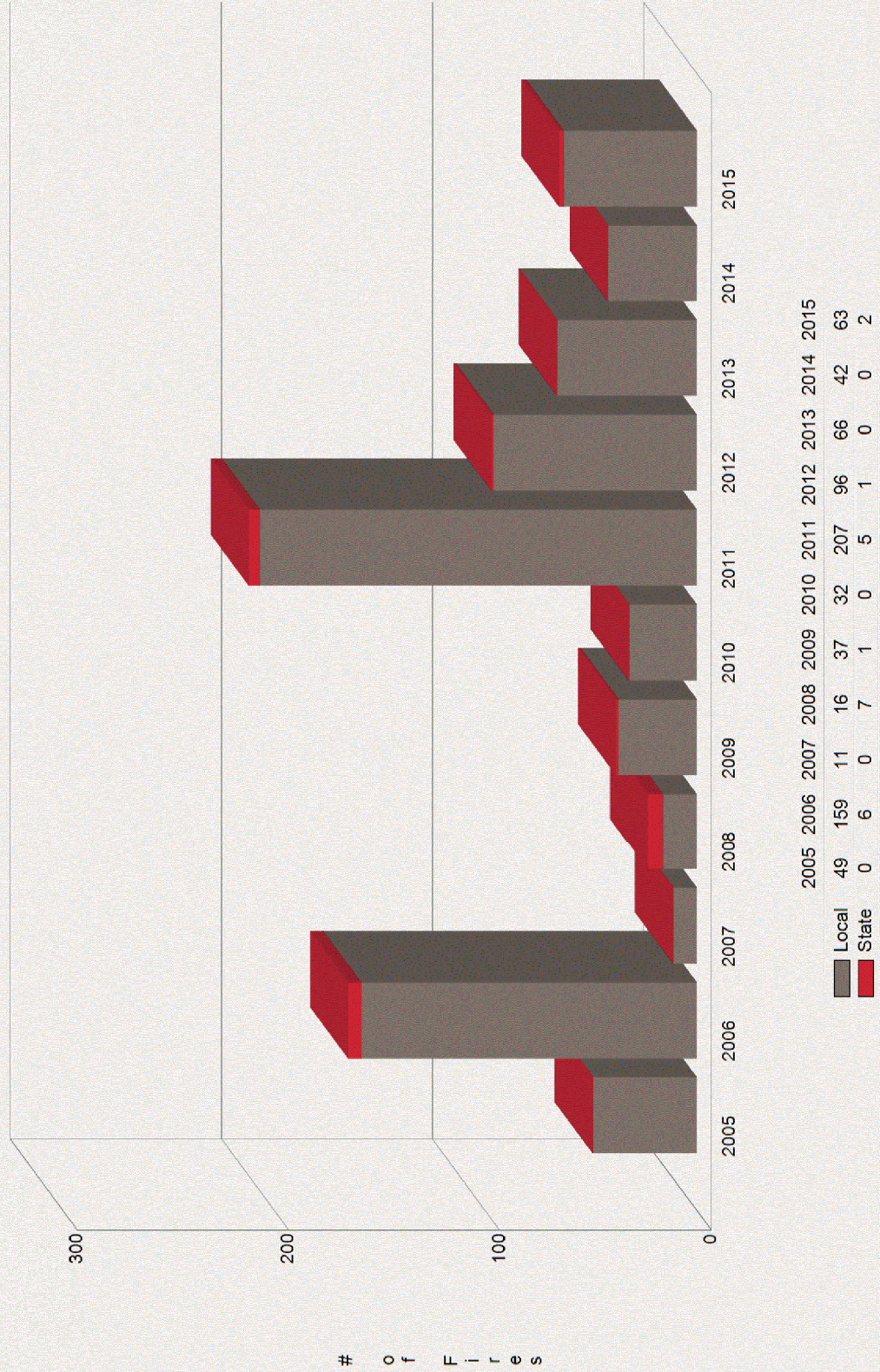
The Tanglewood Complex ignited a little more than a year after the Palisades community — an area within the burn perimeter — was deemed at high risk for wildfire. The designation came in the fall of 2010, when Texas A&M Forest Service wildland urban interface specialists joined with a local fire department to conduct a wildfire risk assessment.



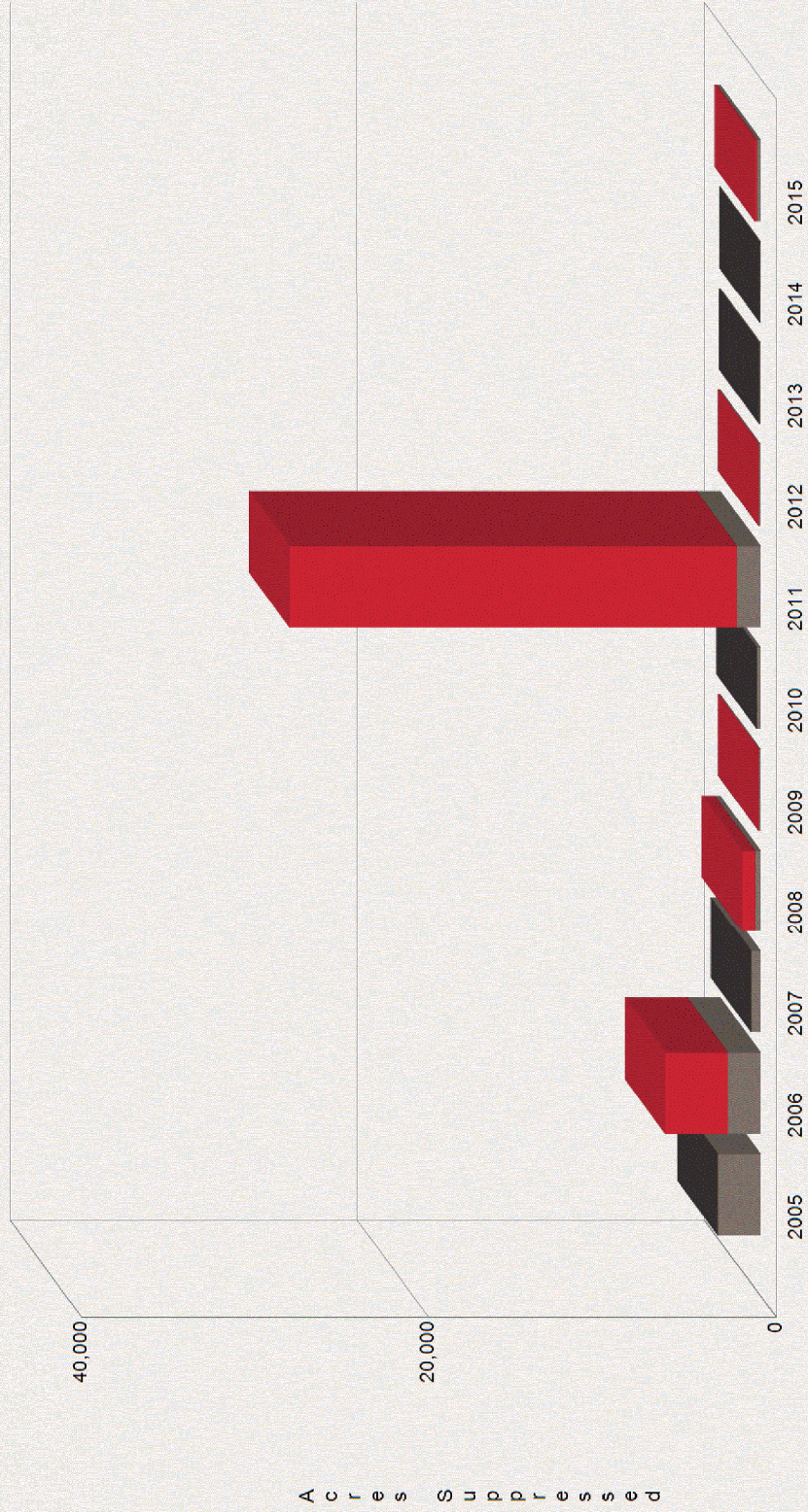
Tanglewood Complex

Many of the 33 homes destroyed during the fire previously had been deemed at risk during that assessment. Some of the homes that did survive were made of fire-resistant materials or had a concrete retaining wall.

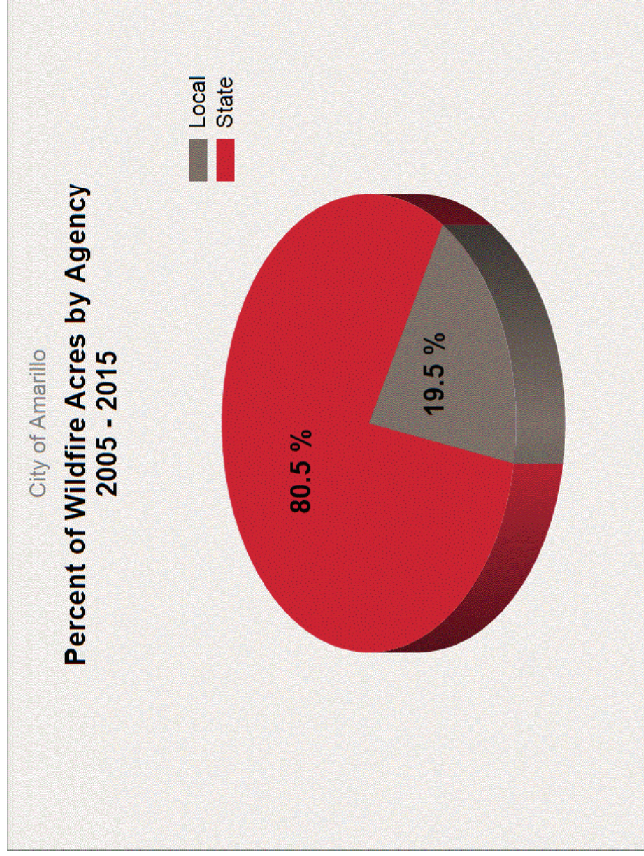
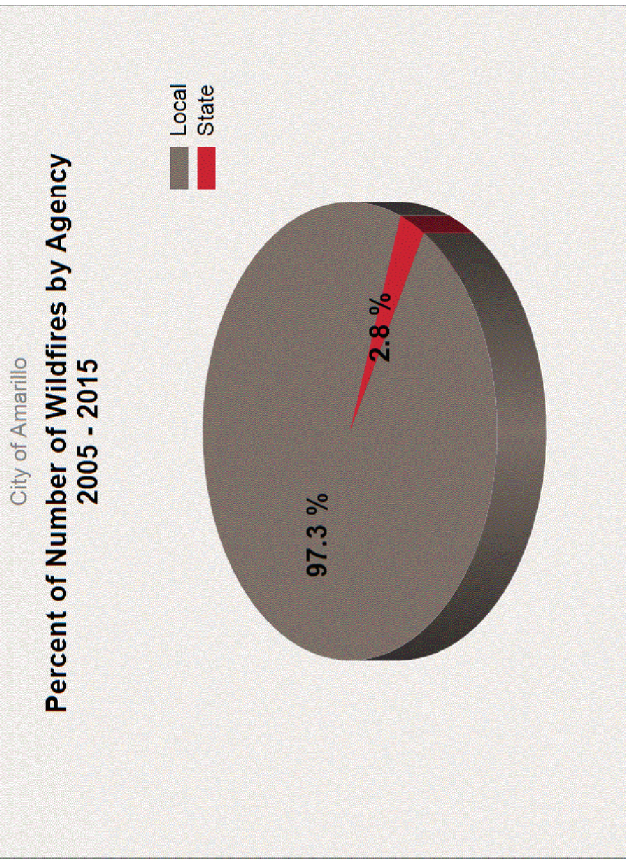
City of Amarillo
**Number of Wildfires Reported by Agency
 2005 - 2015**



City of Amarillo
Wildfire Acres Reported by Agency
2005 - 2015

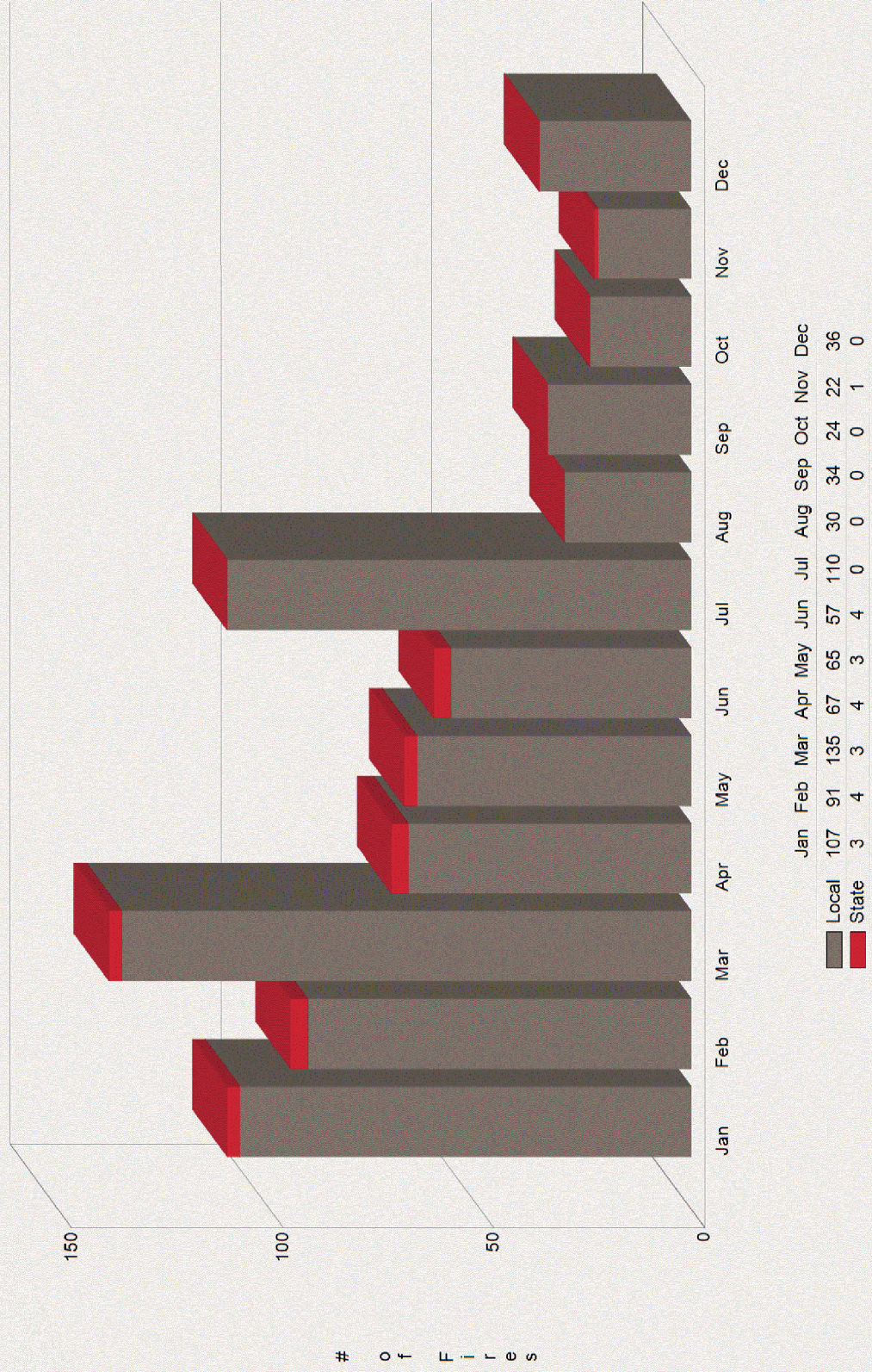


	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Local	2456	1896	535	318	100	210	1371	101	64	40	214
State	0	3580	0	725	4	0	25767	2	0	0	110

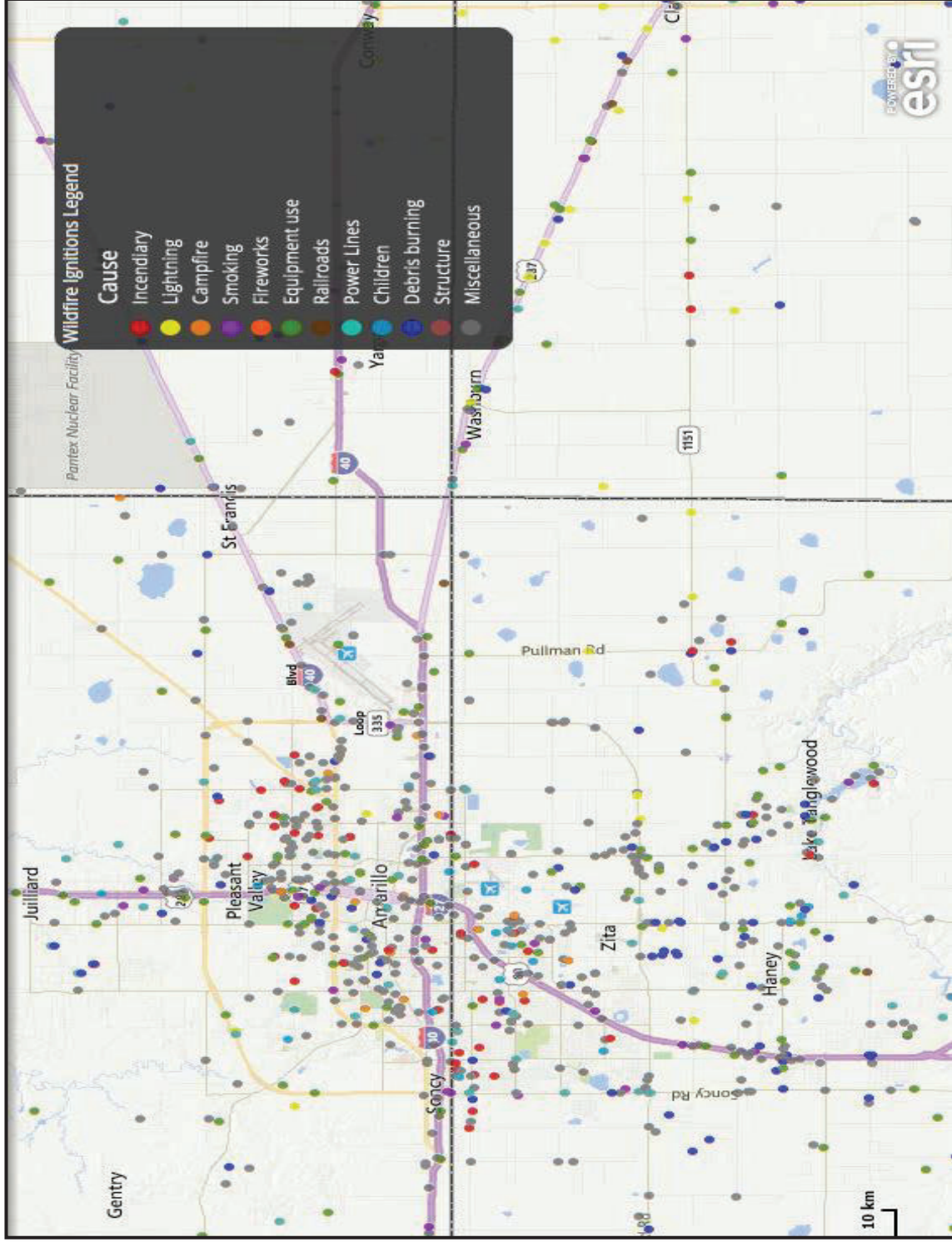


City of Amarillo

Number of Wildfires Reported per Month by Agency 2005 - 2015

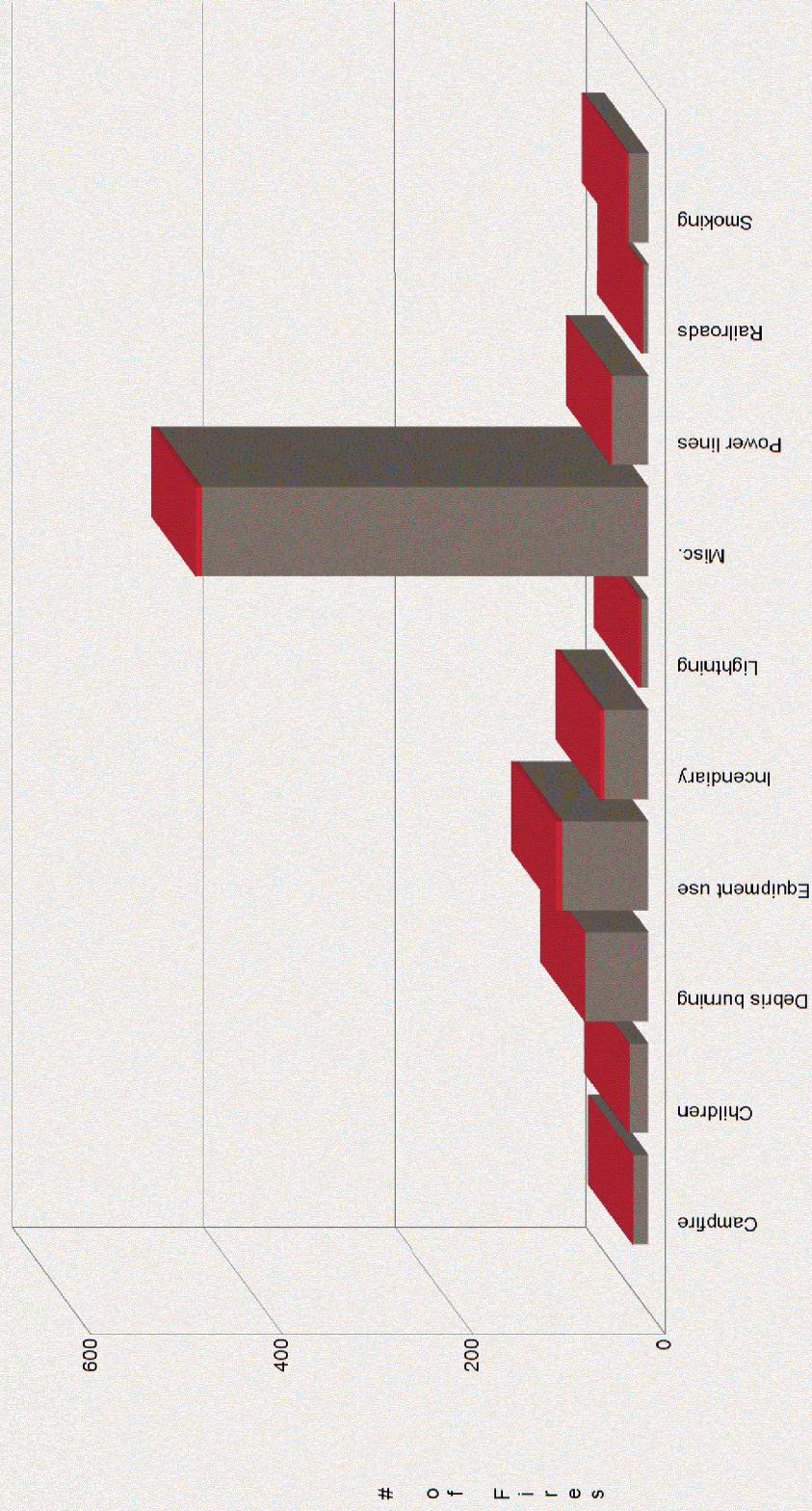


3.3 Fire Cause:



City of Amarillo

Cause of Wildfires Reported by Agency 2005 - 2015



	Campfire	Children	Debris burning	Equipment use	Incendiary	Lightning	Misc.	Power lines	Railroads	Smoking
Local	16	20	66	90	46	8	467	38	6	21
State	0	0	0	6	4	2	6	1	1	2

3.4 Fire Behavior:

The three main attributes that affect fire behavior the most within the planning area are fuels, terrain and wind. Additional factors such as fuel moisture, relative humidity and dew point also affect fire behavior to a lesser extent. Peak fire seasons in the Amarillo area occur: 1) July through September with summer drying; and, 2) December through March with the winter curing of grasses combined with significant wind events.

Fuels: The previous spring and summer months saw a good amount of precipitation. This above normal precipitation had developed an abnormal amount of fuel load within the planning area. The area is now entering an expected extended dry period and a La Nina pattern brings additional wind and dry patterns to the area. The expected dry and windy pattern makes the heavy fuel load a great concern. The higher than normal fuel load allows for a quicker fire spread and easier fire ignition. Wind pushes and fans fire more quickly in heavier loads than in lighter loads and the fire behavior becomes ever more susceptible to wind changes and direction.

Terrain: The terrain in the area has a great impact on the behavior of fire within different areas of the planning area. Canyon breaks and ravines characterize areas to the north, south and west. While this terrain creates response challenges, it does give us a level of predictability in the fire behavior as the terrain will drive the fire generally down the path of least resistance within the general wind direction. The large flat lands of the Llano Estacado characterize the areas in and around Amarillo. In these areas, terrain plays a much smaller role in fire behavior as the wind and fuel load become the driving factors. Fire behavior in these areas generally moves in the direction of the wind as long as a fuel load exists to support the continuation of fire.

Wind: More than any other factor in the planning area, wind affects the fire behavior most dramatically. The direction and strength of the wind determines the general direction of the fire and the intensity the fire. Winds are the most difficult to predict and cannot be controlled by any means. Wind forecasts are often general and vague more than a day or two out. Pre-planning and fuels reductions are most effective at being able to handle unpredictable winds.

Fuels modifications within the planning area would create defensible area areas. When fire interfaces with modified areas, advancement slows and allows responders time to suppress wildfire before it interfaces with populated areas. The southwestern prevailing winds often drive

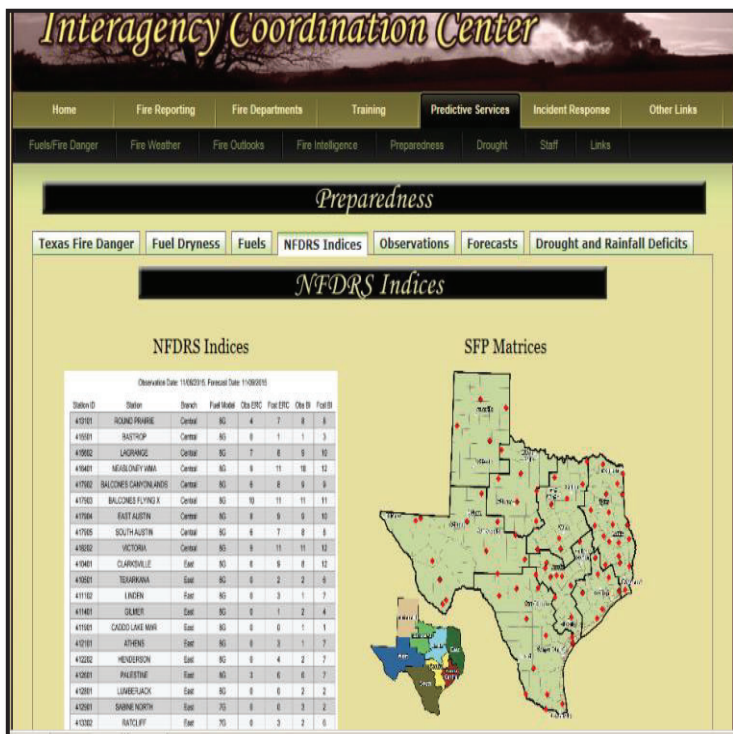
fires directly towards the Urban Interface. Fuels reduction buffer zones are paramount in the planning and defense of the Wildland Urban Interface.

Fire Danger Tools:

Probably the most effective tool for gauging the day-to-day fire behavior in the City of Amarillo is the Significant Fire Potential Matrix that can be found on the Texas Interagency Coordination Center website (<http://ticc.tamu.edu/PredictiveServices/Preparedness.htm>).

The matrix, pictured at right, takes into account the Burning Index (BI) and Energy Release Component (ERC). The BI provides the potential for initial attack activity, while the ERC provides the potential for extended attack activity. Together, these two indices produce a simple and accurate outlook for fire behavior on any given day.

City of Amarillo area values can be found at:



TICC Website

		Preparedness Level Energy Release Component G (ERC)			
		1 0-48	2 49-66	3 67-77	4 78+
Dispatch Level Burning Index G (BI)	1 0-65	Low	Low	Moderate	Moderate
	2 66-96	Low	Moderate	Moderate	Moderate
	3 97-119	Moderate	Moderate	High	High
	4 120+	Moderate	Moderate	High	Very High

SFP Matrix

BI/ERC Calculations: <http://ticc.tamu.edu/PredictiveServices/Preparedness.htm>

Click on “NFDRS Indices”

Fire Potential Matrix: <http://ticc.tamu.edu/PredictiveServices/Preparedness.htm>

Click on the “SFP Matrices” then “Cedar”

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 of the fire front.

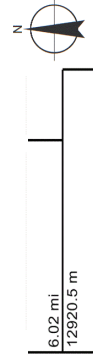
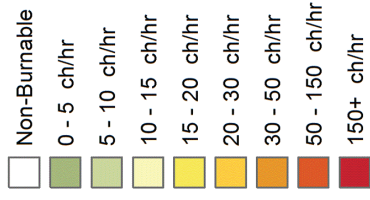
Rate of spread is a fire behavior output, which is influenced by three environmental factors – fuels, weather and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather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

**A chain is 66 feet; 50-150 chains per hour is 0.6-1.8 miles per hour.*

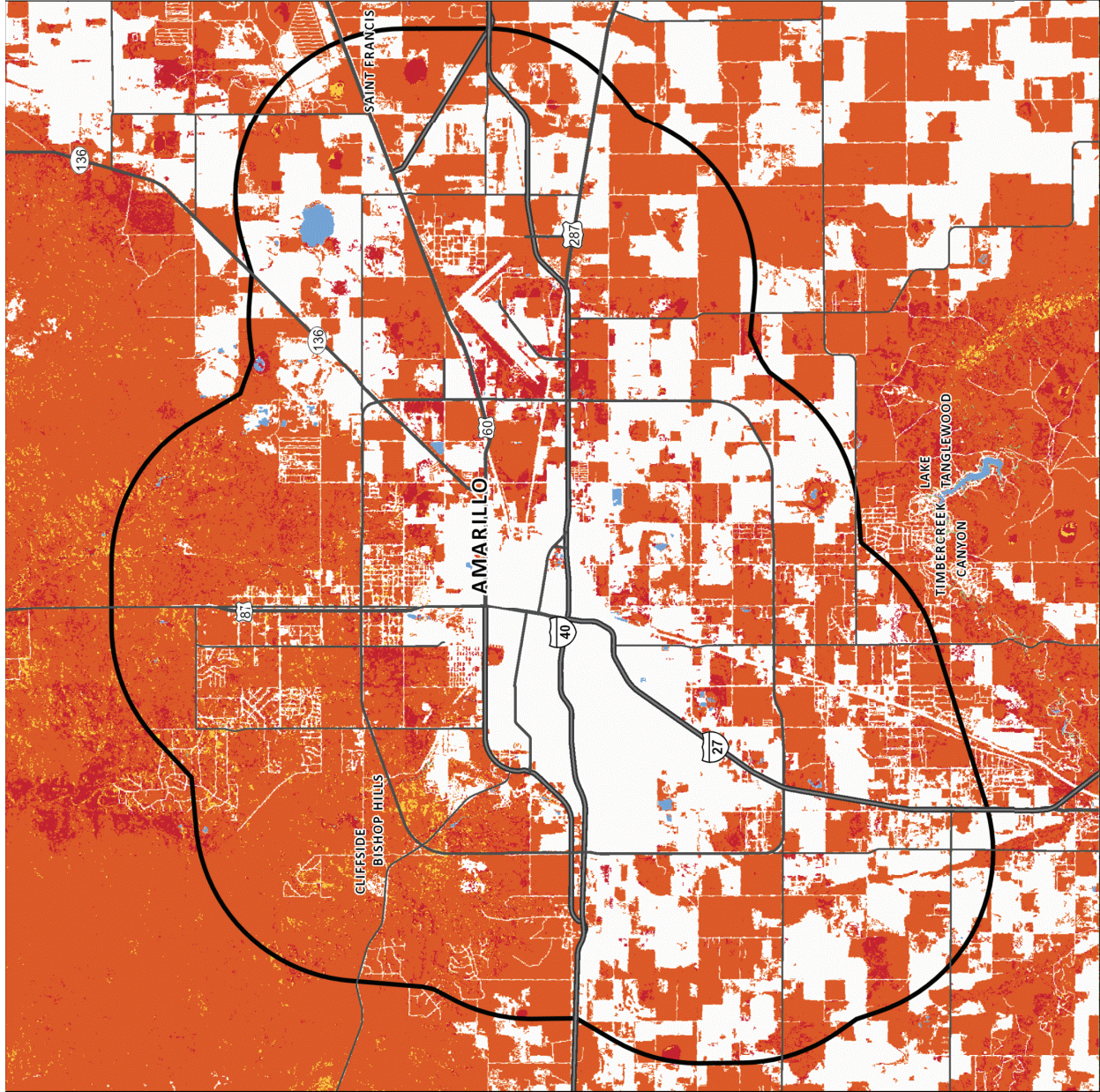
Rate of Spread	Acres	Percent
Non-Burnable	104,249	43.3 %
0 - 5 (ch/hr)	84	0.0 %
5 - 10 (ch/hr)	0	0.0 %
10 - 15 (ch/hr)	0	0.0 %
15 - 20 (ch/hr)	4	0.0 %
20 - 30 (ch/hr)	3,160	1.3 %
30 - 50 (ch/hr)	0	0.0 %
50 - 150 (ch/hr)	120,396	50.0 %
150 + (ch/hr)	12,772	5.3 %
Total	240,665	100.0 %

City of Amarillo

Characteristic Rate of Spread



Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>



Characteristic Flame Length

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

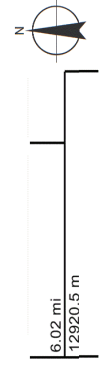
Flame Length	Acres	Percent
Non-Burnable	104,249	43.3 %
0 - 2 ft	88	0.0 %
2 - 4 ft	3,160	1.3 %
4 - 8 ft	33	0.0 %
8 - 12 ft	120,358	50.0 %
12 - 20 ft	12,772	5.3 %
20 - 30 ft	0	0.0 %
30 + ft	4	0.0 %
Total	240,664	100.0 %

Refer to map on following page.

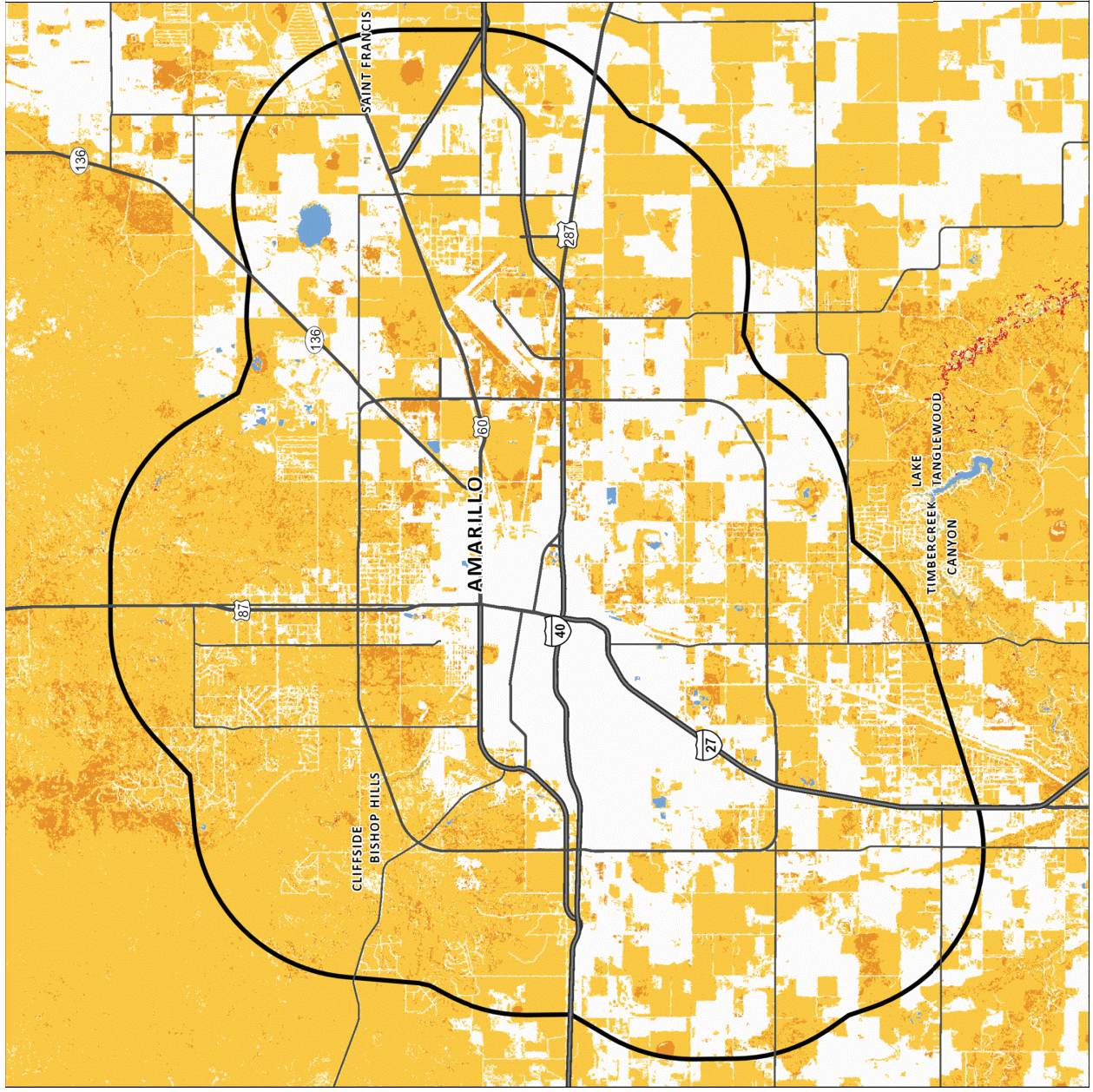
City of Amarillo

Characteristic Flame Length

- Non-Burnable
- 0 - 2 ft
- 2 - 4 ft
- 4 - 8 ft
- 8 - 12 ft
- 12 - 20 ft
- 20 - 30 ft
- 30+ ft



Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>



Section 4.0 Risk Assessment

Wildfire Threat is the likelihood of a wildfire occurring or burning into an area. Threat is derived by combining a number of landscape characteristics including surface fuels and canopy fuels, resultant fire behavior, historical fire occurrence, percentile weather derived from historical weather observations, and terrain conditions.

Class	Acres	Percent
Non-Burnable	80,743	33.6 %
1 (Low)	0	0.0 %
2	998	0.4 %
3 (Moderate)	2,194	0.9 %
4	11,412	4.7 %
5 (High)	18,057	7.5 %
6	118,119	49.1 %
7 (Very High)	9,141	3.8 %
Total	240,664	100.0 %

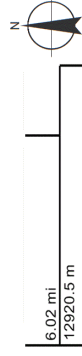
Wildfire Ignition Density is the likelihood of a wildfire starting based on historical ignition patterns. Occurrence is derived by modeling historic wildfire ignition locations to create an average ignition rate map. The ignition rate is measured in the number of fires per year per 1000 acres.

Class	Acres	Percent
Non-Burnable	104,249	43.3 %
1 (Low)	49,018	20.4 %
2	23,171	9.6 %
3 (Moderate)	21,814	9.1 %
4	11,467	4.8 %
5 (High)	11,197	4.7 %
6	10,302	4.3 %
7 (Very High)	9,447	3.9 %
Total	240,665	100.0 %

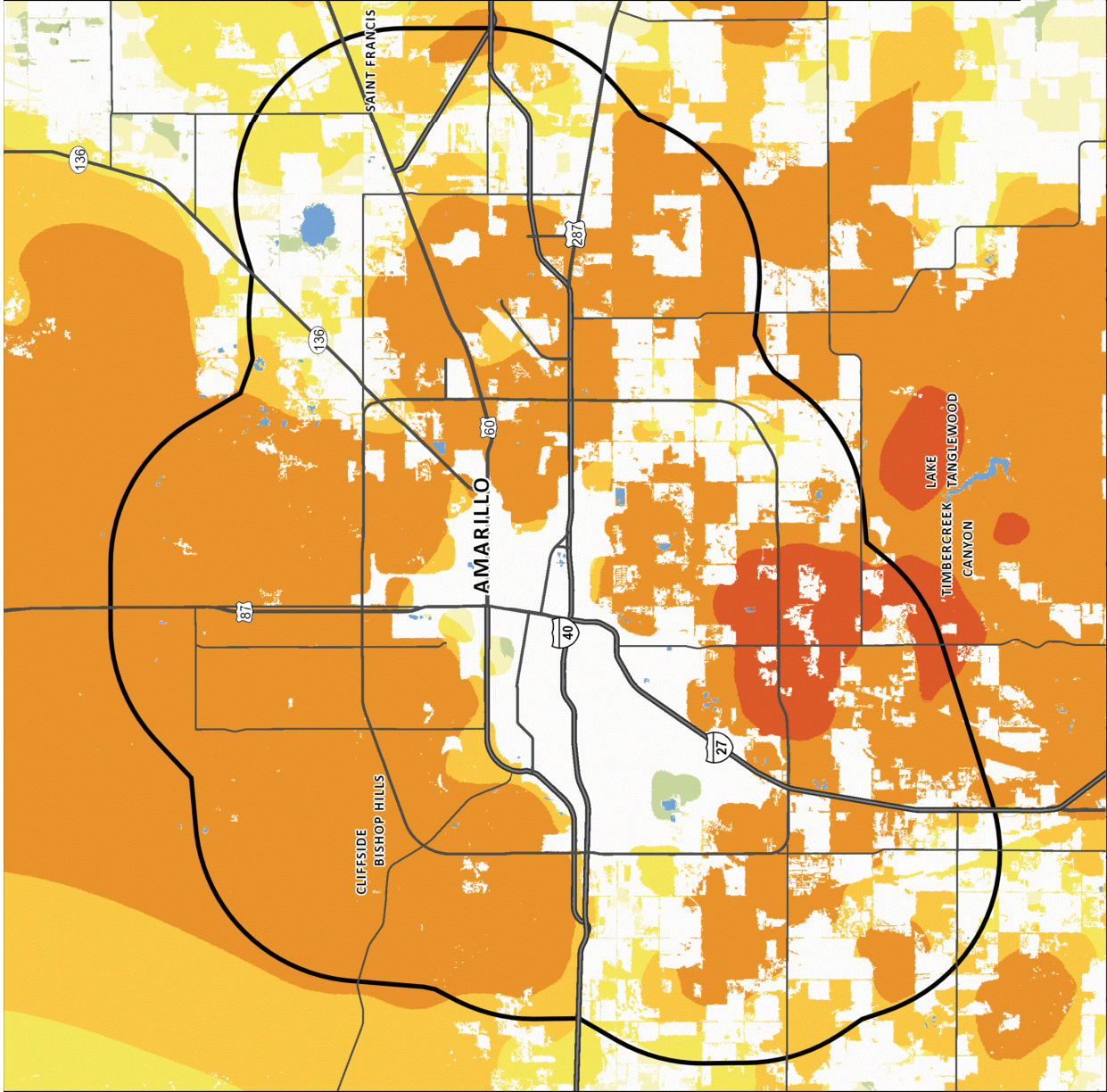
City of Amarillo

Wildfire Threat

- Non-Burnable
- 1 (Low)
- 2
- 3 (Moderate)
- 4
- 5 (High)
- 6
- 7 (Very High)

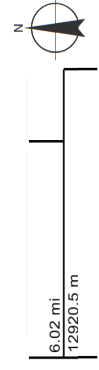
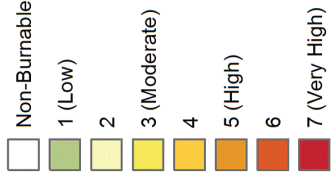


Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>

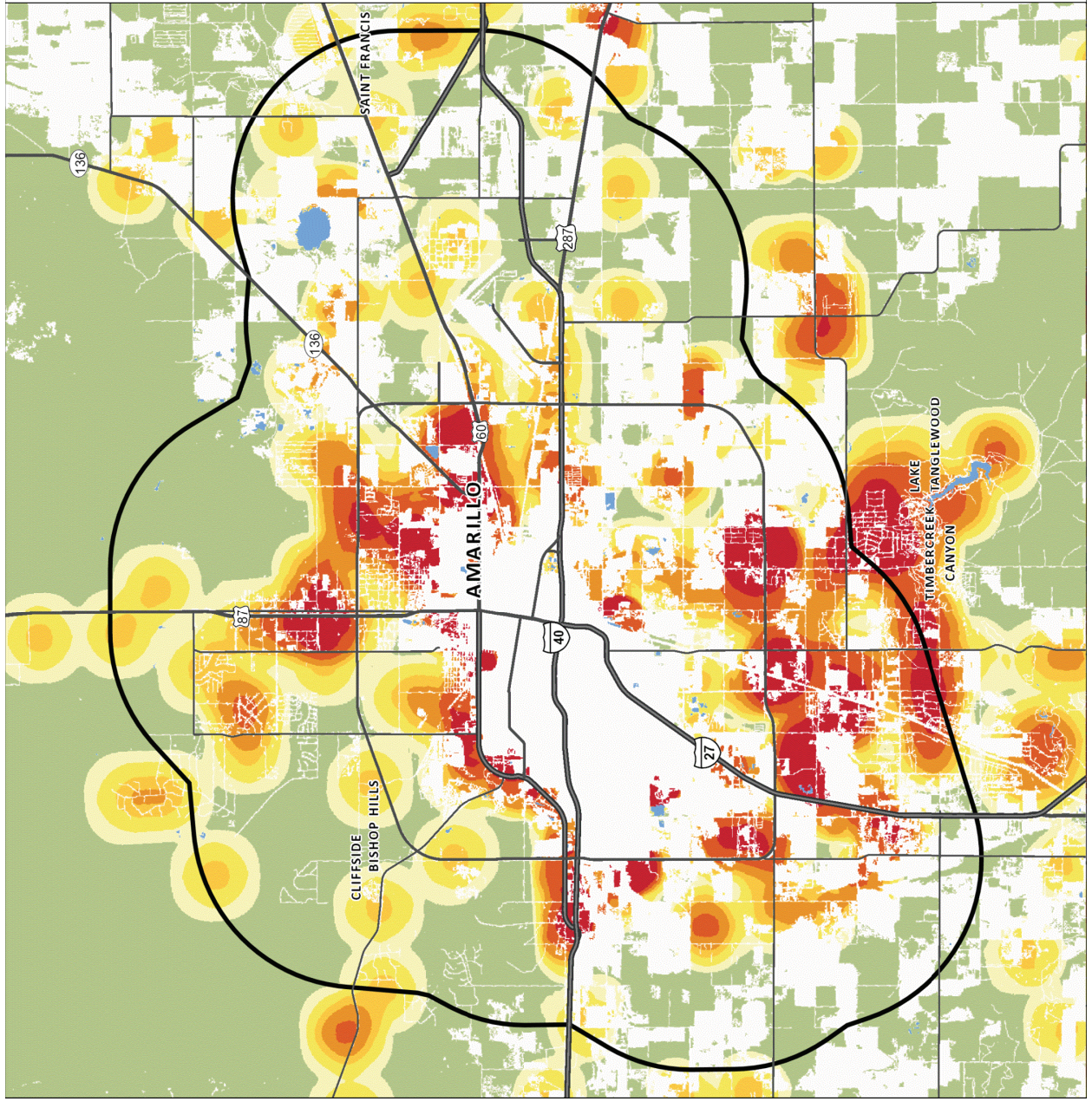


City of Amarillo

Wildfire Ignition Density



Texas Wildfire Risk Assessment
<http://www.texaswildfirerisk.com>



Texas Wildfire Risk Assessment Portal (TxWRAP)

The TxWRAP program enables fire professionals to identify, assess and compare wildfire risks in the WUI and adjacent communities both in the city limits and within the two counties that make up the Potter-Randall area.

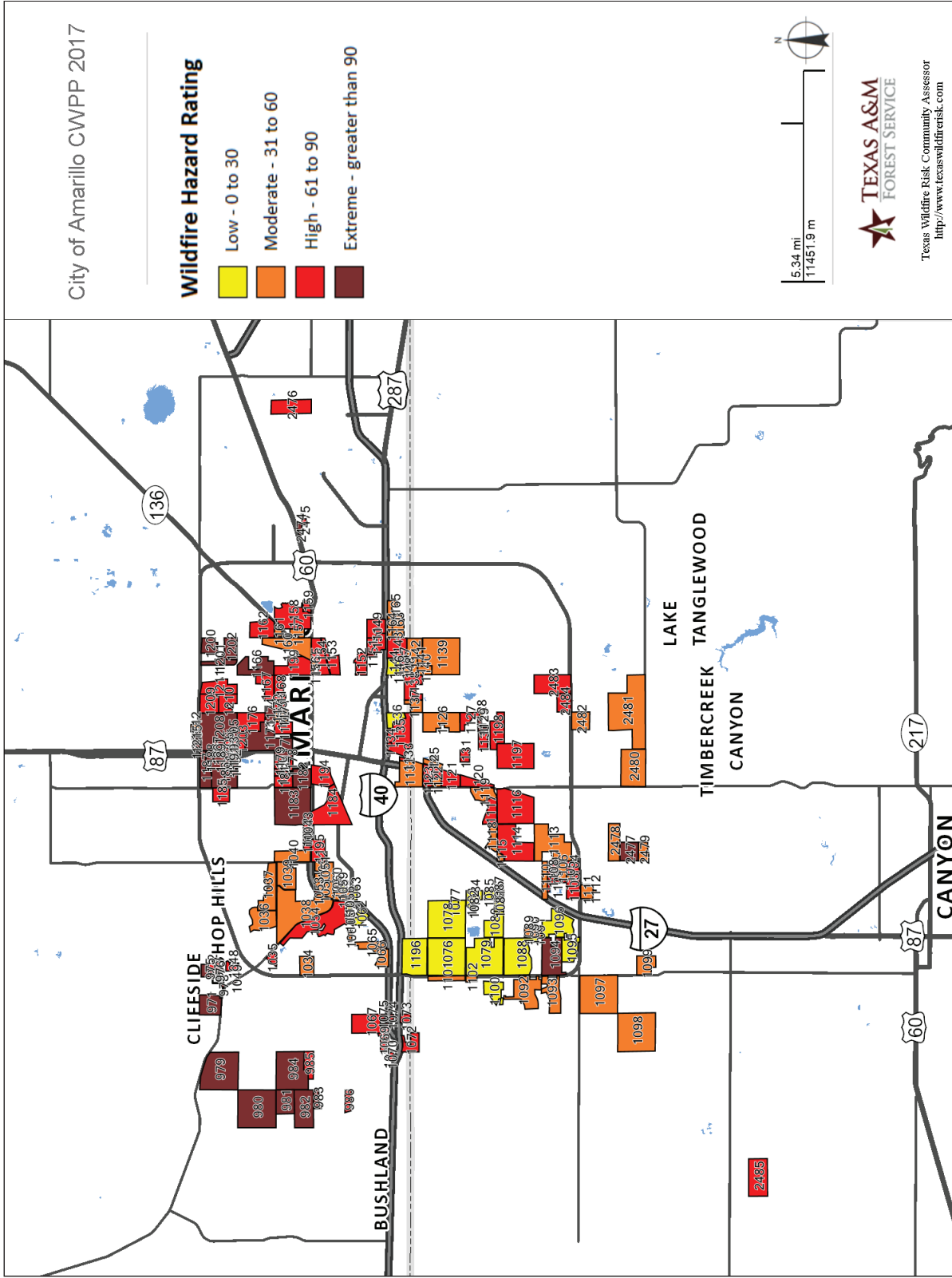
A color-coded scale is based on a numerical scale that values the wildfire risks for each community. The lower the score is, the lower the wildfire risks in that neighborhood. Yellow indicates the lowest risk communities with a score of 0-30. Dark brown indicates a community at the highest risk (Extreme Risk) with a score in excess of 90. The highest a neighborhood can score is 130. The highest scoring community that was evaluated in this process was 123. This project identified 32 communities in the Potter-Randall counties WUI that meet the Extreme Risk classification. An additional 84 communities identified at the High Risk (61-90) classification.

Neighborhood Planning Zones

A Neighborhood Planning Zones (NPZ) allows the department to analyze information and response data, and evaluate the wildfire risks within a neighborhood or community in more detail. This initial plan identified more than 200 NPZs, which are somewhat based on the 57 census tracts established by the U.S. Census Bureau within the city limits of Amarillo. The NPZ are more reliably based on the development of each community since the building materials, model codes or standards, landscaping and spacing of structures are likely be more consistent during construction of a same or similar time frame.

Some of the neighborhoods or communities are split into different NPZs because they either developed at different times using dissimilar building materials and techniques, were developed with differing standards (i.e. site-built vs. mobile homes), or may have different socio-economic impacts that would require a unique public education campaign from that of adjacent neighborhoods.

Community Wildfire Risk Assessment Summary



Id	Community Name	Number of Homes	Acres	Residential Type	One Way In/Out	Road Width	Surrounding Environment	Home Construction	Total Hazard Score
971	Bishop Hills Subdivision	35	199.47	Fixed	Yes	> 24 ft	Severe	Severe	123
980	Bishop Estates 1 Subdivision	35	666.44	Mobile	No	> 24 ft	Severe	Severe	114
979	Bishop Estates 2 Subdivision	35	612.36	Mobile	No	> 24 ft	Severe	Severe	109
981	Quail Canyon Subdivision	35	201.77	Fixed	Yes	> 24 ft	Severe	Severe	109
975	M N Twadell Subdivision	25	66.91	Mobile	No	> 24 ft	Severe	Severe	105
1182	MILLER HEIGHTS	200	157.33	Mobile	No	> 24 ft	Severe	Severe	102
2477	McMurtry Acres	50	157.84	Mobile	No	> 24 ft	Severe	Severe	101
1187	GEO W KLOCK'S SUB	125	151.02	Mobile	No	> 24 ft	Severe	Severe	100
1188	HENRY REED'S SUB	60	54.98	Mobile	No	< 20 ft	Severe	Severe	100
2474	Sunny Hill Village #1	120	23.05	Mobile	No	< 20 ft	Severe	Severe	100
983	Alta Vista Estates Subdivision 1	1	51.04	Fixed	Yes	> 24 ft	Severe	Significant	99
1129	SOUTHEAST PLACE	1	32.99	Mobile	Yes	> 24 ft	Severe	Severe	99
1175	HAMLET	300	387.14	Mobile	No	> 24 ft	Severe	Severe	99
1177	PARK HILLS ADDN	300	59.27	RV	Yes	> 24 ft	Severe	Severe	99
1186	HETRICK ACRES	50	225.27	Mobile	No	< 20 ft	Severe	Severe	99

982	2 Deer Creek Subdivision	40	334.90	Mobile	Yes	> 24 ft	Severe	Severe	98
984	Eagle Tree Subdivision	60	527.27	Fixed	Yes	> 24 ft	Severe	Significant	95
1166	MESA VERDE ADDN	175	226.10	Mobile	No	> 24 ft	Severe	Severe	95
1189	WEYMOUTH SUB	65	113.37	Mobile	No	> 24 ft	Severe	Severe	95
1190	BECKWITH ADDN	15	5.49	Mobile	No	> 24 ft	Severe	Severe	95
1191	WEBB SUB	45	38.24	Mobile	No	> 24 ft	Severe	Severe	95
1192	J M MULLEN SUB	40	13.59	Mobile	No	< 20 ft	Severe	Severe	95
1200	NORTH LOOP VILLAGE	20	109.07	Mobile	No	> 24 ft	Severe	Severe	95
1201	NORTHSIDE ACRES	25	86.72	Mobile	No	> 24 ft	Severe	Severe	95
1202	North Ridge Drive	35	126.70	Mobile	No	> 24 ft	Severe	Severe	95
1205	FORDS SUB	45	31.57	Mobile	No	> 24 ft	Severe	Severe	95
1208	PLEASANT VALLEY	150	543.46	Mobile	No	> 24 ft	Severe	Severe	95
1213	F P WORKS SUB	15	23.93	Mobile	No	> 24 ft	Severe	Severe	95
1214	F P WORKS SUB 2	35	23.36	Mobile	No	> 24 ft	Severe	Severe	95
1174	HILLCREST ADDN	100	64.88	Mobile	No	> 24 ft	Significant	Severe	94
1183	UNIVERSITY HEIGHTS	350	617.75	Mobile	No	24 ft < 20 ft	Significant	Severe	94
1094	COULTER ACRES	150	334.48	Mobile	No	< 20 ft	Severe	Significant	91
1072	SUNSET ACRES	80	112.60	RV	Yes	> 24 ft	Significant	Severe	90

1073	INTERSTATE 40 W ACRES	50	40.98	RV	Yes	< 20 ft	Significant	Severe	90
1074	FORT AMARILLO ADDN	50	9.49	RV	Yes	> 24 ft	Significant	Severe	90
1104	C R AUSTIN'S SUB	80	98.20	Mobile	Yes	24 ft < 20 ft	Severe	Significant	90
1152	FAIRVIEW TOWNSITE ADDN	180	113.62	Fixed	No	> 24 ft	Significant	Severe	90
1193	J M MULLEN SUB 2	45	15.14	Mobile	No	> 24 ft	Significant	Severe	90
1204	FORD'S FIRST SUB	50	58.49	Mobile	No	> 24 ft	Significant	Severe	90
1206	INGRAM SUB	25	14.31	Mobile	No	> 24 ft	Significant	Severe	90
1207	MINTER ACRES	25	6.66	Mobile	No	> 24 ft	Significant	Severe	90
2475	KOA Journey	50	12.73	RV	Yes	< 20 ft	Severe	Significant	90
1069	INDIAN HILLS ACRES	20	30.88	Fixed	No	> 24 ft	Severe	Significant	87
1121	BROADMOOR ADDN	450	124.90	Fixed	No	> 24 ft	Significant	Severe	86
1130	MERRIT ESTATES	25	77.83	Mobile	Yes	24 ft < 20 ft	Severe	Significant	85
1179	WHITTINGTON ADDN	40	29.31	Fixed	No	> 24 ft	Severe	Significant	85
1203	HASTINGS ADDN	4	70.00	Mobile	Yes	> 24 ft	Significant	Severe	85
1068	INDIAN HILL ESTATES 2	30	47.57	Fixed	No	> 24 ft	Severe	Significant	84
977	King Hill Addition Subdivision	20	19.56	Fixed	No	> 24 ft	Severe	Significant	81
1035	TASCOCITA	15	39.64	Fixed	Yes	> 24 ft	Severe	Moderate	81

1075	HELIUM HEIGHTS	1	9.11	Mobile	No	> 24 ft	Severe	Significant	81
1176	BEVERLY GARDENS	200	219.21	Mobile	No	< 20 ft	Severe	Significant	81
1194	GLIDDEN & SANBORN	175	177.54	Fixed	No	24 ft < 20 ft	Severe	Significant	81
1197	Tradewind Rd	60	425.20	Mobile	No	> 24 ft	Severe	Significant	81
1210	YARBROUGH & MC MINN SUB	50	128.54	Mobile	No	> 24 ft	Severe	Significant	81
1114	SOUTH SIDE ACRES	100	442.62	Mobile	No	> 24 ft	Severe	Moderate	80
1127	WINDMILL ACRES	240	89.53	Mobile	No	> 24 ft	Significant	Significant	80
1167	SKYLINE TERRACE	125	142.95	Fixed	No	> 24 ft	Significant	Significant	80
1168	MARTIN ADDN	250	132.10	Fixed	No	> 24 ft	Significant	Significant	80
1170	MARTIN	40	7.78	Fixed	No	> 24 ft	Significant	Significant	80
1172	BELMONT PARK ANNEX	110	98.17	Mobile	No	> 24 ft	Significant	Significant	80
1198	East CR 58	40	197.59	Fixed	No	> 24 ft	Severe	Significant	77
1067	INDIAN HILL ESTATES	1	287.13	Fixed	No	> 24 ft	Significant	Significant	76
1162	PARK TERRACE	120	186.88	Mobile	No	< 20 ft	Significant	Significant	76
1169	BILRO ADDN	90	20.12	Fixed	No	< 20 ft	Significant	Significant	76
1184	ORIGINAL TOWN OF AMARILLO	350	418.32	Fixed	No	24 ft < 20 ft	Significant	Significant	76
1209	A R GLENN	35	161.91	Mobile	No	> 24 ft	Significant	Significant	76

1211	GLENN ESTATES	75	205.43	Mobile	No	> 24 ft	Significant	Significant	76
1215	VALLEY VIEW	15	13.34	Mobile	No	> 24 ft	Significant	Significant	76
1180	HAMPTON PARK	75	36.87	Fixed	No	> 24 ft	Severe	Moderate	74
1117	SOUTH LAWN	400	132.95	Fixed	No	> 24 ft	Significant	Significant	72
1123	ROY LINDSEY'S ADDN	90	38.36	Fixed	No	> 24 ft	Significant	Significant	72
1135	GLENWOOD ADDN	720	336.31	Fixed	No	> 24 ft	Significant	Significant	72
1143	FAMOUS HEIGHTS ADDN	100	179.00	Fixed	No	> 24 ft	Significant	Significant	72
1147	HAWKINS SUB	45	9.90	Mobile	No	> 24 ft	Significant	Significant	72
1149	SUNRISE PARK ADDN	250	138.38	Fixed	No	> 24 ft	Significant	Significant	72
1150	SUNRISE ADDN	250	143.06	Fixed	No	> 24 ft	Significant	Significant	72
1151	MC CARTNEY SUB	25	13.48	Fixed	No	> 24 ft	Significant	Significant	72
1178	NORTH HILLS ADDN	40	15.84	Fixed	No	24 ft < 20 ft	Significant	Significant	72
1181	NORTH HEIGHTS ADDN	155	97.50	Fixed	No	24 ft < 20 ft	Significant	Significant	72
1042	PRIVATE ENTERPRISE HOMES	33	10.66	Fixed	No	24 ft < 20 ft	Significant	Significant	71
1043	WEBSTER HEIGHTS ADDN	74	22.66	Mobile	No	24 ft < 20 ft	Significant	Significant	71
1054	QUAIL CREEK ADDN	200	488.36	Fixed	No	> 24 ft	Severe	Moderate	71
1153	INDUSTRIAL CITY	100	126.99	Mobile	No	24 ft < 20 ft	Significant	Significant	71

1154	MC KINSTRY GILVIN & WILLIAMS SUB	50	192.99	Mobile	No	24 ft < 20 ft	Significant	Significant	71
2476	Highland Park Village	250	259.49	Fixed	No	< 20 ft	Severe	Moderate	71
986	Alta Vista Subdivision 2	2	62.64	Fixed	Yes	> 24 ft	Severe	Moderate	70
2485	Laguna Vista	150	328.28	Mobile	Yes	< 20 ft	Severe	Moderate	69
1053	WESTCLIFF PARK ADDN	2	8.65	Fixed	Yes	< 20 ft	Severe	Slight	68
1103	HOLLYWOOD ADDN	200	116.96	Fixed	No	> 24 ft	Severe	Moderate	68
1107	C R AUSTIN'S SUB 2	50	17.70	Fixed	No	> 24 ft	Severe	Moderate	68
1108	WESTERN MANORS	30	40.46	Fixed	No	> 24 ft	Severe	Moderate	68
1109	OAKWOOD ADDN	73	33.03	Fixed	No	> 24 ft	Severe	Moderate	68
1116	SOUTH GEORGIA PLACE	400	539.24	Fixed	No	> 24 ft	Severe	Moderate	68
972	Bates Subdivision	8	20.20	Fixed	Yes	> 24 ft	Severe	Moderate	67
976	M N Twaddell 2 Subdivision	3	4.80	Fixed	Yes	> 24 ft	Severe	Moderate	67
978	Aren Acres Subdivision	15	3.88	Fixed	No	> 24 ft	Severe	Moderate	67
1041	PARK CITY ADDN	104	42.42	Fixed	No	24 ft < 20 ft	Significant	Significant	67
1048	KING HILL ADDN	8	43.53	Fixed	Yes	> 24 ft	Severe	Moderate	67
1049	RANCH ROAD ACRES	10	4.13	Fixed	Yes	> 24 ft	Severe	Moderate	67
1070	KERI RIDGE	10	15.28	Fixed	No	> 24 ft	Severe	Moderate	67

1071	BATTENFIELD ESTATES	15	2.73	Fixed	No	> 24 ft	Severe	Moderate	67
1134	LEE GREEN'S ADDN	2	6.89	Fixed	No	> 24 ft	Significant	Moderate	67
1199	EAST AMARILLO	750	250.73	Fixed	No	24 ft < 20 ft	Significant	Significant	67
1195	SAN JACINTO HEIGHTS	260	141.04	Fixed	No	24 ft < 20 ft	Significant	Significant	66
985	Drippin' Springs Subdivision	10	102.33	Fixed	Yes	> 24 ft	Significant	Moderate	65
1120	WASHINGTON IND TRACTS ADDN	20	109.00	Fixed	No	> 24 ft	Severe	Slight	64
1124	EDGEFIELD ADDN	300	93.18	Fixed	No	> 24 ft	Significant	Significant	63
1131	TRADEWIND SQUARE	50	52.45	Fixed	No	> 24 ft	Severe	Moderate	63
1133	SOUTH SIDE ADDN	23	15.73	Fixed	No	> 24 ft	Significant	Significant	63
2483	Grand Ave Estates	100	319.90	Mobile	No	24 ft < 20 ft	Significant	Moderate	63
1138	GRANDVIEW	670	177.52	Fixed	No	> 24 ft	Moderate	Significant	62
1158	EASTRIDGE ADDN	650	346.10	Fixed	No	24 ft < 20 ft	Significant	Significant	62
1159	Homestead Acres	100	36.30	Mobile	No	24 ft < 20 ft	Significant	Moderate	62
1185	THE VINEYARDS	35	105.89	Fixed	No	> 24 ft	Significant	Moderate	62
2484	Potter and Binder Roads	30	119.22	Mobile	No	24 ft < 20 ft	Significant	Significant	62
1105	PHILLIPS-WEBER SUB	30	10.65	Fixed	No	> 24 ft	Significant	Moderate	59
1106	SCOTSMAN ADDN	300	79.39	Fixed	No	> 24 ft	Significant	Moderate	59

1111	HOLLYWOOD SOUTH	1	79.04	Fixed	No	> 24 ft	Significant	Moderate	59
1171	BROWNING ADDN	80	37.91	Fixed	No	24 ft < 20 ft	Significant	Moderate	59
1173	DIXON ACRES	50	26.48	Fixed	No	24 ft < 20 ft	Significant	Moderate	59
1089	WINDSOR SQUARE	80	27.62	Fixed	No	> 24 ft	Significant	Moderate	58
1141	WIND SONG	60	16.71	Fixed	No	> 24 ft	Moderate	Significant	58
1125	LEFTWICH ADDN	3	42.97	Fixed	Yes	> 24 ft	Significant	Moderate	57
1155	CHESHIRE'S SUB	5	15.49	Mobile	No	24 ft < 20 ft	Significant	Moderate	57
1212	FOX HOLLOW	50	25.95	Fixed	No	> 24 ft	Significant	Moderate	57
2478	Beacon Road	60	196.09	Fixed	No	24 ft < 20 ft	Significant	Moderate	56
1036	WOODLANDS OF AMA	350	228.24	Fixed	No	24 ft < 20 ft	Significant	Slight	55
1160	AMARILLO INDUSTRIAL PARK	35	293.78	Fixed	No	24 ft < 20 ft	Significant	Moderate	55
1097	GREYHAWK LANDING	100	664.21	Fixed	No	< 20 ft	Significant	Slight	54
1098	BOATWRIGHT-TREW SUB	100	670.70	Fixed	No	< 20 ft	Significant	Slight	54
1099	SUN-AIR ESTATES	25	151.47	Fixed	No	< 20 ft	Significant	Slight	54
1110	ARDEN'S SUB	55	93.65	Fixed	No	> 24 ft	Significant	Slight	54
1126	TRADEWIND AIR PARK	1180	302.19	Fixed	No	> 24 ft	Significant	Moderate	54
1142	OAK DALE	1180	195.05	Fixed	No	> 24 ft	Moderate	Moderate	54

1037	LA PALOMA ESTATES	300	252.59	Fixed	Yes	24 ft < 20 ft	Significant	Slight	53
1148	O'BRIEN SUB	25	5.45	Fixed	No	> 24 ft	Moderate	Moderate	53
1163	BEL-AIRE ADDN	50	96.64	Fixed	No	> 24 ft	Moderate	Moderate	53
1057	OSLER ADDN	1	9.94	Fixed	No	> 24 ft	Significant	Slight	52
1122	GABLES ADDN	60	38.46	Fixed	No	> 24 ft	Significant	Moderate	50
1132	MRS M D OLIVER-EAKLE'S SUB	800	280.20	Fixed	No	> 24 ft	Significant	Moderate	50
2480	Holiday South #1	75	425.74	Fixed	No	24 ft < 20 ft	Significant	Slight	50
1115	SOUTHTREE CENTER	10	22.81	Fixed	No	> 24 ft	Significant	Slight	49
1157	GREENBRIER	60	48.71	Fixed	No	24 ft < 20 ft	Significant	Slight	49
1165	MEMORY ACRES	5	75.85	Fixed	No	> 24 ft	Significant	Slight	49
2481	Osage Acres	150	902.84	Fixed	No	24 ft < 20 ft	Significant	Slight	49
1034	SECT 45 B S & F-ESTATES AT STONERIDGE	8	120.47	Fixed	Yes	24 ft < 20 ft	Significant	Slight	47
1161	GREENTREE VILLAGE	75	25.05	Fixed	No	> 24 ft	Significant	Slight	47
1058	LOS ALTOS	35	66.93	Fixed	No	24 ft < 20 ft	Significant	Slight	45
1118	THE SHORES	200	93.40	Fixed	No	> 24 ft	Significant	Slight	45
1050	WEST ACRES	50	101.11	Fixed	No	24 ft < 20 ft	Significant	Slight	44
1052	CRESTVIEW	190	51.35	Fixed	No	24 ft < 20 ft	Significant	Slight	44

1090	WINDRIDGE PLACE	80	19.98	Fixed	No	> 24 ft	Significant	Slight	44
1091	GLEN ARDEN ADDN	31	14.92	Fixed	No	> 24 ft	Significant	Slight	44
1102	SONCY ESTATES	3	28.09	Fixed	No	> 24 ft	Significant	Slight	44
1128	SOUTH HAVEN ADDN	25	7.27	Fixed	Yes	> 24 ft	Moderate	Moderate	44
1137	SOUTHEAST PARK ADDN	260	79.82	Fixed	No	> 24 ft	Moderate	Moderate	44
1140	BROOKHOLLOW	130	56.39	Fixed	No	> 24 ft	Moderate	Moderate	44
1145	FAMOUS HEIGHTS ADDN 3	75	66.18	Fixed	No	> 24 ft	Moderate	Moderate	44
1038	WESTCLIFF PARK	150	707.07	Fixed	No	> 24 ft	Moderate	Slight	42
1112	THE PINNACLE	1	2.92	Fixed	No	> 24 ft	Significant	Slight	42
1064	MEDICAL INSTITUTE SUB	6	16.45	Fixed	No	> 24 ft	Significant	Slight	40
1040	WEST AMARILLO INDUSTRIAL PARK	50	183.21	Fixed	No	24 ft < 20 ft	Significant	Slight	39
1119	WILLOW GROVE	400	132.96	Fixed	No	> 24 ft	Moderate	Slight	39
1156	HENSON SUB	5	9.22	Fixed	No	24 ft < 20 ft	Significant	Slight	39
1164	SKYLINE ADDN	3	45.63	Fixed	No	> 24 ft	Significant	Slight	39
1061	LES MAISONS	5	2.92	Fixed	Yes	< 20 ft	Significant	Slight	38
1093	HERITAGE HILLS	200	222.98	Fixed	No	< 20 ft	Significant	Slight	38
1101	SONCY PARK	8	81.18	Fixed	No	24 ft < 20 ft	Significant	Slight	37

1051	WEST HILLS	240	101.76	Fixed	No	24 ft < 20 ft	Moderate	Slight	35
1113	CITY VIEW ESTATES	800	451.56	Fixed	No	> 24 ft	Moderate	Slight	35
1139	MOLYNEAUX HEIGHTS	1	591.02	Fixed	Yes	> 24 ft	Moderate	Slight	35
2482	Arrowhead Addition	50	146.82	Fixed	No	24 ft < 20 ft	Moderate	Slight	35
1039	TASCOSA ESTATES	75	209.03	Fixed	Yes	> 24 ft	Moderate	Slight	33
1060	MATHIS-ARDEN SUB	5	10.03	Fixed	No	< 20 ft	Moderate	Slight	33
1092	HILLSIDE TERRACE ESTATES	200	323.74	Fixed	No	< 20 ft	Moderate	Slight	33
2479	High Plains Children's Home	20	84.13	Fixed	Yes	24 ft < 20 ft	Moderate	Slight	33
1065	RIDGEVIEW MEDICAL CENTER	5	95.39	Fixed	No	> 24 ft	Moderate	Slight	32
1066	POINT WEST BUSINESS CAMPUS	5	95.93	Fixed	No	> 24 ft	Moderate	Slight	32
1055	AMARILLO COLLEGE ADDN	1	38.86	Fixed	No	> 24 ft	Moderate	Slight	30
1059	TEALWOOD LAKES	45	20.29	Fixed	Yes	< 20 ft	Moderate	Slight	28
1076	SLEEPY HOLLOW	250	644.42	Fixed	No	24 ft < 20 ft	Moderate	Slight	28
1077	AMARILLO HIGH SCHOOL ADDN	1	34.41	Fixed	No	24 ft < 20 ft	Moderate	Slight	28
1095	WESTOVER VILLAGE	200	157.40	Fixed	No	24 ft < 20 ft	Moderate	Slight	28

1196	PUCKETT WEST	200	419.07	Fixed	No	24 ft < 20 ft	Moderate	Slight	28
1080	CITY PARK	250	190.45	Fixed	No	24 ft < 20 ft	Slight	Slight	25
1081	SOUTH PARK	50	48.13	Fixed	No	24 ft < 20 ft	Slight	Slight	25
1085	BELL PARK ADDN	150	30.69	Fixed	No	24 ft < 20 ft	Slight	Slight	25
1086	BELL STREET ADDN	10	24.53	Fixed	No	24 ft < 20 ft	Moderate	Slight	25
1087	GREENWOOD	150	25.77	Fixed	No	24 ft < 20 ft	Slight	Slight	25
1100	TOWN SQUARE	8	151.79	Fixed	No	24 ft < 20 ft	Moderate	Slight	23
1144	FAMOUS HEIGHTS ADDN 2	1	85.67	Fixed	No	> 24 ft	Slight	Slight	23
1056	TASCOSA MEDICAL CENTER	2	5.61	Fixed	No	> 24 ft	Slight	Slight	21
1146	SAM B DANNIS' SUB	1	10.31	Fixed	No	> 24 ft	Slight	Slight	21
1063	BARNES HIGHLANDS	1	28.12	Fixed	No	24 ft < 20 ft	Slight	Slight	20
1083	ELMER BROWN SUB	10	19.15	Fixed	No	24 ft < 20 ft	Slight	Slight	20
1084	FOUNTAIN PARK ADDN	200	66.63	Fixed	No	24 ft < 20 ft	Slight	Slight	20
1062	AMARILLO MEDICAL CENTER	1	70.69	Fixed	No	> 24 ft	Slight	Slight	19
1078	PUCKETT PLACE	250	613.17	Fixed	No	24 ft < 20 ft	Slight	Slight	18
1079	THE COLONIES	250	579.87	Fixed	No	24 ft < 20 ft	Slight	Slight	18
1082	S P S ADDN	5	13.63	Fixed	No	24 ft < 20 ft	Slight	Slight	18

1088	GREENWAYS AT HILLSIDE	250	461.16	Fixed	No	24 ft < 20 ft	Slight	Slight	18
1096	WESTOVER PARK	200	290.02	Fixed	No	24 ft < 20 ft	Slight	Slight	18
1136	AIR PARK	5	87.86	Fixed	No	> 24 ft	Slight	Slight	16

(204) Communities Identified as being in the Wildland Urban Interface									
(32) Communities including an estimated (2737) Homes are at Extreme Risk to Wildfire									
(84) Communities including an estimated (10253) Homes are at High Risk to Wildfire									
(63) Communities including an estimated (8671) Homes are at Moderate Risk to Wildfire									
(25) Communities including an estimated (2491) Homes are at Low Risk to Wildfire									
(32) Communities have been identified as One Way In/Out Communities									

Section 5.0 Mitigation Strategies

5.1 Public Education

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

Additional opportunities for public education include:

- Homeowner Education programs
- Fire Safety House
- Kid Safe Program
- Ready, Set, Go! (or other) town hall meetings with Texas A&M Forest Service
- Firewise USA™
- School programs
- Amarillo Fire Department and City of Amarillo social media sites
- Amarillo Fire Department web page and City of Amarillo website
- Targeted outreach with Code Enforcement and Neighborhood Enforcement Team to high-risk areas
- Partnerships with local media outlets

Firewise USA™ : A National Fire Protection Association (NFPA) program that “encourages local solutions for wildfire safety by involving homeowners, community leaders, planners, developers, firefighters and others in the effort to protect people and property from wildfire risks.”

The program is co-sponsored by the USDA Forest Service, the U.S. Department of the Interior and the National Association of State Foresters. Its goal is to teach people — civic leaders,

developers, firefighters and the public — how to adapt to living with wildfire. It encourages neighbors to work together and take action now to prevent losses.

These homeowner education programs can include the “Wildfire Preparedness for Homeowners” workshop, which covers Firewise USA™ construction, rehabbing for fire prevention and non-flammable construction materials, among other wildfire preparedness information; and a “Firewise USA™ Family Guide,” which outlines how a family can effectively create defensible space around their home.

Ready, Set, Go!: A program managed by the International Association of Fire Chiefs (IAFC), seeks to develop and improve the dialogue between fire departments and the residents they serve. The program helps fire departments to teach individuals who live in high risk wildfire areas – and the wildland-urban interface – how to best prepare themselves and their properties against fire threats.

The program encourages homeowners to:

Be Ready: Take personal responsibility and prepare long before the threat of a wildland fire so your home is ready in case of a fire. Create defensible space by clearing brush away from your home. Use fire-resistant landscaping and harden your home with fire-safe construction measures. Assemble emergency supplies and belongings in a safe place. Plan escape routes and make sure all those residing within the home know the plan of action.

Be Set: Be situationally aware. Pack your emergency items. Stay aware of the latest news and information on the fire from local media, your local fire department and public safety.

Go!: Follow your personal wildland fire action plan. Doing so will not only support your safety, but will allow firefighters to best maneuver resources to combat the fire.

5.2 Hazardous Fuels Reduction

The City of Amarillo will aggressively focus on fuels reduction as a primary means of mitigation and hazard reduction. The Fuels Reduction Program began after adoption by ordinance of the Amarillo City Council. By the very nature of the program, our Fuels Reduction Program is incorporated into this CWPP.

The City of Amarillo has identified numerous areas within the planning area for hazardous fuels reduction through prescribed burns and other reduction methods such as: mechanical (mowing, clearing, and saw work), chemical (herbicides). The reduction is intended to provide a buffer zone to slow the encroachment of wildfire into the urban interface to allow for suppression prior to its interface with the urban areas and property. Each reduction area must be monitored and maintained to achieve maximum benefit of the fuels reduction.

Fuels reduction projects are intended to clear overgrown vegetation, which can reduce the rate of spread and intensity of a wildfire and keep it out of the crowns of trees. In addition, these projects usually provide a safer environment for firefighters to work and extinguish a fire. Fuels reduction projects along evacuation routes may also give evacuees and incoming resources a safer ingress/egress.

Methods of treatment can vary. Treatment options include: mechanical (mulching, chipping, and mowing), hand clearing (chainsaws, hand tools), herbicide application, and prescribed fire. Some methods may be more effective than others, depending on the fuel types. Certain methods may also be preferred when working around neighborhoods. The scope of each project will vary, but generally fuels reduction projects are completed along the border of neighborhoods and/or breaks in fuels (i.e. roads). Generally, fuels reduction projects are 100 to 200 feet wide depending on the fuel type.

5.3 Priority Projects

On June 25, 2018, a meeting with numerous stakeholder fire and code enforcement agencies was held to identify and prioritize the most at-risk communities in three primary fire jurisdictions located within Amarillo and its 5-mile Extra-Territorial Jurisdiction (ETJ): 1) Amarillo fire Department; 2) Potter County Fire Rescue; 3) and Randall County Fire Department. The following list of projects was determined by participants to be the highest priority targets for wildfire risk education and fuels reduction. They were selected using the results of the Community Wildfire Risk Assessment, neighborhood planning zones (NPZs), and local knowledge of the area. The top five priority projects are: 1) Coulter Acres; 2) University Heights; 3) Sunny Hill Village #1; 4) Eagle Tree East; and 5) Foxtail Mobile Subdivision.

City of Amarillo

Community Name: **Coulter Acres**

Area: 81st and Soncy

Hazard Rating: 91 Extreme

Fuels Reduction Projects:

- Increase and maintain a defensible space outside the wood fence of the mobile home development.

Estimated Completion Date: October 2019, time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on how to harden their properties.
- Host a community clean up week end, and provide food and education material, and dumpsters free to help community wide clean up.

Estimated Completion Date: October 2018 and annually, or time and funding permitting.

Community Name: **University Heights**

Area: University Heights/ Miller Heights

Hazard Rating: 94 Extreme

Fuels Reduction Projects:

- Increase and maintain a defensible space on the north end of the community.
- Set up and provide dumpsters free to help community wide clean up over a weekend.

Estimated Completion Date: December 2018, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on how to harden their properties.
- Host a community clean up week end, and provide food and education material, and dumpsters free to help community wide clean up.

Estimated Completion Date: October 2018 and annually thereafter, or time and funding permitting.

Community Name: **Quail Creek Addn.**

Area: Quail Creek

Hazard Rating: 71 High

Fuels Reduction Projects:

- Increase and maintain a defensible space on the West end of the community.
- Saw project to thin and limb up trees along the canyon and west end of community.
- Look into a prescribed burn to reduce the accumulated fuel along canyon.

Estimated Completion Date: October 2019, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on how to harden their properties.
- Attempt to have a community clean up week end, and provide food and education material, and dumpsters free to help community wide clean up.

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting.

Community Name: **Highland Park Village**

Area: Amarillo College East Housing Area

Hazard Rating: 71 High

Fuels Reduction Projects:

- Increase and maintain a defensible space on the north end of the community.
- Look into a prescribed burn to reduce the accumulated fuel around the community.

Estimated Completion Date: October 2019, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on how to harden their properties.
- Host a community clean up weekend, and provide food and education material, and dumpsters free to help community wide clean up.

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting.

Community Name: **Sunny Hill Village #1 /Journey**

Area: Hwy 60 and Folsom

Hazard Rating: 100 Extreme

Fuels Reduction Projects:

- Increase and maintain a defensible space on the north end of the community.
- Look into a prescribed burn to reduce the accumulated fuel around the community.

Estimated Completion Date: October 2019, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on how to harden their properties.
- Have a community clean up week end, and provide food and education material, and dumpsters free to help community wide clean up.

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting.

Potter County

Community Name: **Eagle Tree East** (Potter County)

Area: Eagle Tree Subdivision

Hazard Rating: 95 Extreme

Fuels Reduction Projects:

- Community Clean Up program – with trash haul off
- Develop a fire break program to break up the continuity of fuels between sections of the community
- Implement and maintain a defensible space on the north & east perimeters of the community.

Estimated Completion Date: October 2021 and annually thereafter, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Use this community as a partner to the showcase Firewise USA™
- Promote Firewise USA™ during annual HOA meetings and other opportunities as available
- Develop list of defensible properties vs non-defensible properties
- Continue to promote Ready, Set, Go at the HOA meetings and to community members
- Educate surrounding property owners
- Use Bushland Independent School District to host educational meetings and to distribute educational materials for students to take home
- Look at ways to use Next Door Neighbor App to share wildfire information
- Signage at community postal collection

Estimated Completion Date: October 2020 and annually thereafter, or time and funding permitting.

Community Name: **Bishop Hills** (Potter County)

Area: Bishop Hills Village

Hazard Rating: 123 Extreme

Fuels Reduction Projects:

- Create a defensible space between the community and surrounding properties
- Promote a shaded fuel break project
- Establish a fuel removal project to reduce the dead trees and blow down

Estimated Completion Date: October 2021 and annually thereafter, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Collaborate with HOA to provide Ready, Set, Go and Firewise USA™ programs
- Work with HOA to host several S-212 Wildland Chain Saws Classes
- Advise on how to harden their properties against wildfire threats
- Plan a community clean up week end, and provide education material, and trash truck to haul off large items.

Estimated Completion Date: October 2019 and annually, or time and funding permitting.

Community Name: **Eagle Tree West** (Potter County)

Area: Quail Canyon Subdivision

Hazard Rating: 109 Extreme

Fuels Reduction Projects:

- Host a community clean up weekend, and provide education material, and trash truck to haul of large items.
- Establish / maintain recommended mow strips for defensible spaces

Estimated Completion Date: October 2020 and annually, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Establish a community group or neighborhood association
- Host a meeting to bring Ready, Set, Go to the community
- Introduce Firewise USA™ to the community and advise on how to harden their properties
- Develop and distribute a Traffic & Evacuation Plan

Estimated Completion Date: October 2020 and annually, or time and funding permitting.

Community Name: **Quail Creek Addn.** (Potter County)

Area: 2 Deer Trail

Hazard Rating: 98 High

Fuels Reduction Projects:

- Attempt to have a community clean up week end, and provide education material, and trash truck to haul of large items.
- Establish / maintain recommended mow strips for defensible spaces

Estimated Completion Date: October 2021 and annually, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Establish a community group or neighborhood association
- Host meeting to bring Ready, Set, Go to the community
- Introduce Firewise USA™ to the community and advise on fire hardening properties.
- Develop and distribute a Traffic & Evacuation Plan

Estimated Completion Date: October 2020 and annually, or time and funding permitting.

Community Name: **Tascosita** (Potter County)

Area: Tascosita

Hazard Rating: 81 High

Fuels Reduction Projects:

- Create and maintain a defensible space between the community and surrounding properties.
- Community slash and vegetation debris clean up weekend

Estimated Completion Date: October 2021 and annually, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- Have community meeting to bring Ready, Set, Go to community.
- Introduce Firewise USA™ to the community and advise on fire hardening properties.
- Host a community clean up week end, and provide food and education material, and dumpsters free to help community wide clean up.
- Signage and handouts / flyers to be distributed to stakeholders

Estimated Completion Date: October 2021 and annually, or time and funding permitting.

Randall County

Community Name: **Sundown Acres** (Randall County)

Area: Beacon Road housing subdivision

Hazard Rating: 56 Moderate

Fuels Reduction Projects:

- Work with the land owner adjacent to this subdivision to see if we could get a mow line to reduce flame length and BTU's as it approached Lafayette Ln and Koetting Ln.

Estimated Completion Date: October 2018 and annually, or time and funding permitting

Prevention & Mitigation Education Opportunities:

- RSG Door Hangers
- Funding allows, make some small RSG signs and post them on the major entrances to this area with a quick message asking if your home is ready for a wild fire.

Estimated Completion Date: October 2019 and annually, or time and funding permitting.

Community Name: **Foxtail** (Randall County) (Still needs a neighborhood assessment)

Area: Foxtail Mobile Subdivision

Hazard Rating: Moderate to High (estimated)

Fuels Reduction Projects:

- Work with the land owner(s) adjacent to this subdivision to see if we could get a few mow lines to reduce flame length and BTU's as it approached Foxtail St, Sideoats and Fescue Ave.

Estimated Completion Date: October 2019 and annually, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- RSG Door Hangers
- Funding allows, make some small RSG signs and post them on the major entrances to this area with a quick message asking if your home is ready for a wild fire.
- Help the community in a cleanup day
- Social Media Outreach

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting.

Community Name: **Grand Avenue Estates** (Randall County)

Area: Mobile Subdivision Grand Avenue Estates

Hazard Rating: 63 Moderate

Fuels Reduction Projects:

- Work with land owners around this subdivision on fuel reduction work with mow lines.
- Work in cooperation with AFD Wildland Team on a RX burn on the land adjacent to this at the waste water treatment plant.

Estimated Completion Date: October 2019, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- RSG Door Hangers
- Funding allows, make some small RSG signs and post them on the major entrances to this area with a quick message asking if your home is ready for a wild fire.
- Help the community in a cleanup day.
- Social Media Outreach

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting.

Community Name: **Southland Acres** (Randall County)

Area: Osage Acres area near Waste Water Treatment Facility

Hazard Rating: 49 Moderate

Fuels Reduction Projects:

- Work with land owners around this subdivision on fuel reduction work with mow lines.
- Work in Cooperation with AFD Wildland Team on a RX on the land adjacent to this at the waste water treatment plant.

Estimated Completion Date: October 2019, or time and funding permitting.

Prevention & Mitigation Education Opportunities:

- RSG Door Hangers
- Funding allows, make some small RSG signs and post them on the major entrances to this area with a quick message asking if your home is ready for a wild fire.
- Help the community in a cleanup day.
- Social Media Outreach

Estimated Completion Date: October 2019 and annually thereafter, or time and funding permitting

5.4 Fuels Management Program

By establishing a self-sustaining fuels management program in the city, the Amarillo Fire Department can continuously identify and mitigate high-risk fuels. Fuels reduction projects can slow the spread of wildfire and create a safer atmosphere for firefighters to protect structures. Equipment and training needs should be identified by the fire department before a fuels management program is implemented.

Considering the fuel types in the City of Amarillo, mulchers, chippers and chainsaws would be beneficial for fuels reduction. Such equipment could target oak, cedar and elm, especially the drought killed trees in the area which are numerous and are themselves hazardous. Grazing, prescribed fire and herbicide treatments would be more beneficial in the grass fuel types.



Fuels management crews should invest time and training in wildfire behavior, fuels treatment methods, prescribed fire and best management practices. Texas A&M Forest Service can offer all these courses, either through one of its wildfire academies (<http://ticc.tamu.edu/Training/training.htm>) or by contacting a local TFS office.

5.5 Tree Trimming

The City of Amarillo uses various City departments for trimming trees in their respective jurisdictions. Utility Right of Ways are generally contracted out to specialized private sector companies. However, the AFD Wildland Team Sawyers can and do cooperate with these departments to mitigate and clear drainages, fell hazard trees, and reduce the impact of wildfire in and around the EJT. Texas A&M Forest Service staff forester Brian Scott is an excellent resource for the area and can be contacted through Texas A&M Forest Service-

<http://texasforestservicetamu.edu/main/contactUs/inc/popup.aspx?ctrl=20&empID=1277>

The AFD wildland team has completed two Felling projects in conjunction with city departments to improve flow in drainages and reduce the impact of heavy fuels in and around these locations in the event of a wildfire. We are currently conducting a multi-phase project with the Amarillo International Airport to reduce the risk of wildfire around the facility as well as reduce habitat for various raptor species that could potentially cause disastrous strikes to arriving /departing aircraft.



5.6 Code Enforcement

Code Enforcement may involve adopting new codes or enforcing previously adopted codes. The International Code Council WUI code is designed to create safer living conditions in the wildland urban interface. This code may give a jurisdiction the opportunity to enforce vegetation management, ignition-resistant construction, sprinkler systems, storage of combustible materials and land use limitations.

Adopting and enforcing certain parts of the International WUI Code could be beneficial to the City of Amarillo, particularly the sections of code that reference combustible attachments and vegetation management. High-risk neighborhoods would especially benefit from this during wildfire response. The goal of these codes is to develop neighborhoods that are more resilient to wildfires.



Adjacent to John David Circle

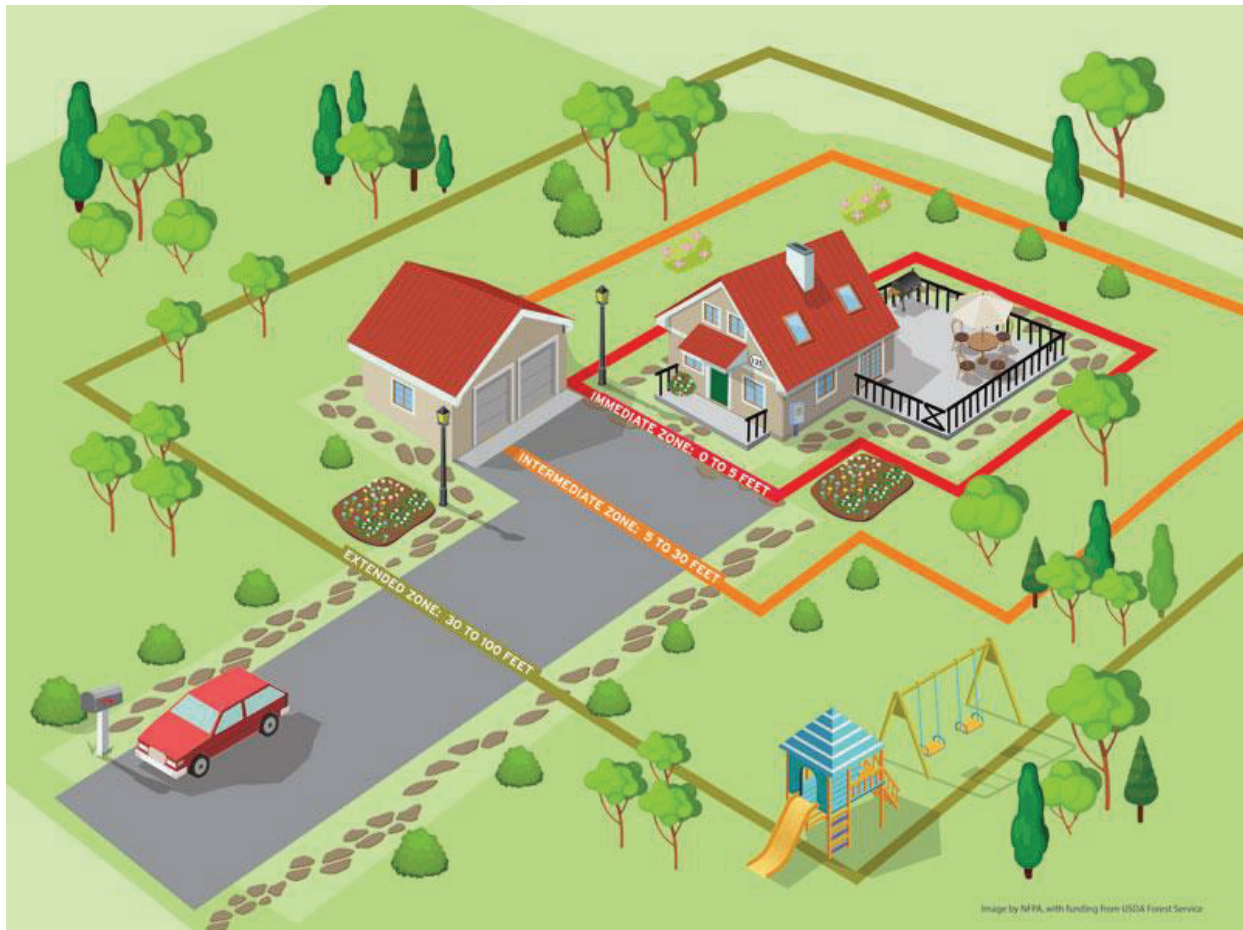


1400 N. Johnson

5.7 Defensible Space

Using the Zone Concept

The primary goal for Firewise USA™ landscaping is fuel reduction — limiting the amount of flammable vegetation and materials surrounding the home and increasing the moisture content of remaining vegetation. The home itself and everything around it up to 200 feet is known as the ‘home ignition zone.’ The home ignition zone extends up to 200 feet beyond the actual home structure. Within this 200 foot area, there are three zones:

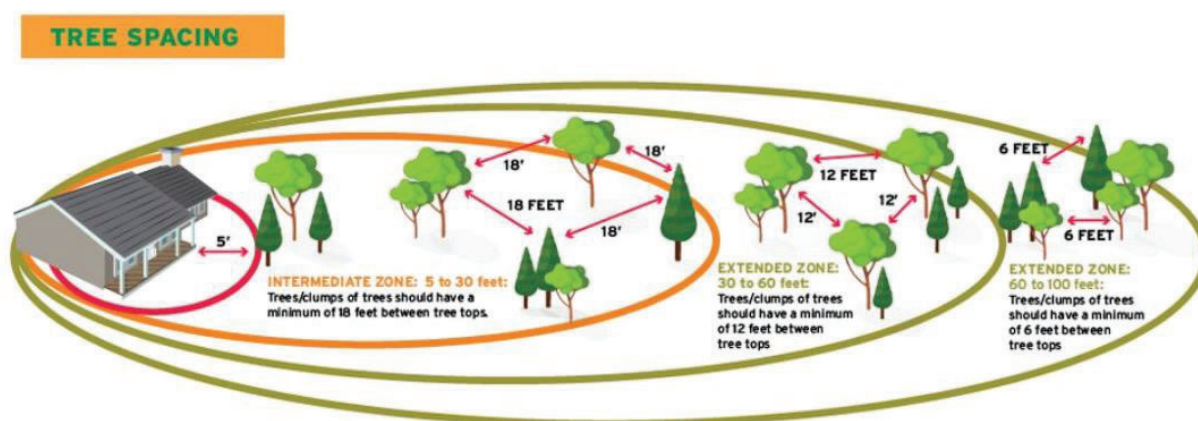


Home Ignition Zone

Immediate Zone encircles the structure and all its attachments (wooden decks, fences, and boardwalks) for 5 feet on all sides from the furthest attachment to the exterior of the home. This is proven to be the most important zone to take immediate actions, since it is most vulnerable to embers.

Intermediate Zone is 5 to 30 feet from the furthest attachment to the exterior of the home, and the approach in this zone should include landscaping/hardscape that creates breaks in fuel continuity that can help influence and decrease fire behavior. **Note:** the 30-foot number comes from the very minimum distance, on flat ground, that a wood wall can be separated from the radiant heat of large flames without igniting.

Extended Zone 3 is 30-100 feet, and extending out to 200 feet from the home. Primarily landscaping, the goal here is not to eliminate fire but to interrupt fire's path and keep flames smaller and on the ground. Trees in this area should be thinned and limbed up to 6 feet to break the vertical continuity of vegetation fuels.



5.8 Treatment of Structural Ignitability

The treatment of areas within the WUI for the reduction of structural ignitability is a matter of high importance. According to information presented by Ready, Set, Go, and Firewise USA™ Communities USA, the following three issues present the greatest common hazard impacting structural ignitability within the planning area and the urban interface:

- Inadequate defensible space in relation to outbuildings and storage sheds within the home ignition zone.
- Wooden fences with large amounts of debris stacked up and along high wildland fuel loading within the home ignition zone.
- Flammable yard debris within the home ignition zone with high wildland fuel loading.

Through education and reduction programs, these hazards have already started to be addressed. The Firewise USA™ Council identifies projects and supports methods and cooperation to reduce

such hazards. The following guidelines are being used to recommend modifications and should continue to be the focus for reducing structural ignitability:

- Reduction or treatment of overlapping home ignition zones
- Application of fuels reduction programs to reduce dense/unhealthy fuel loadings adjacent to neighborhood areas
- Reduction, through education, of fences, outbuildings, and yard debris within the home ignition zone
- Reduction of yard waste and ignition hazards located in back alley ways
- Pursuing grants through Ready, Set, Go!, Firewise USA™ and the Texas A&M Forest Service for the following activities:
 - Slash and Chipping projects
 - Thinning and pruning fuel reduction projects on private property
 - Community education projects
- Support Firewise USA™ landscape modifications and vegetation free zones
- Support and encourage installation of paved alleys
- Support replacement of cedar fencing with steel

Consideration should be given to adopt the Urban Interface building code and support and enforcement of additional fire and building codes within the urban interface to reduce structural ignitability. Most all-future developments will likely be built within the urban interface and action should be taken to prepare the developments at the time of construction. Treatment of structural ignitability can be accomplished through adoption of the International WUI Code.

5.9 Evacuation Planning

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. Evacuation plans will be included on the individual Geographic Planning Zone pre-attack plans.

General Evacuation Checklist:

PLANNING:

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

ADVANCE WARNING:

- Use social media outlets for dissemination of information
- Distribute press release to all local media outlets
- Coordinate with EOC to use social media, notification software and emergency sirens
- Request APD to share critical information on the Nixle Alert system
- Provide advance warning to special needs facilities and advise them to activate evacuation, transportation and reception arrangements. Determine if requirements exist for additional support from local government.
- Provide advance warning of possible need for evacuation to the public, clearly identifying areas at risk.
- Develop traffic control plans and stage traffic control devices at required locations
- Coordinate with special needs facilities regarding precautionary evacuation. Identify and alert special needs populations.
- Ready temporary shelters selected for use.
- Coordinate with transportation providers to ensure vehicles and drivers will be available when and where needed.
- Coordinate with school districts regarding closure of schools.

EVACUATION:

- Advise neighboring jurisdictions and the local Disaster District that evacuation recommendation or order will be issued.
- Disseminate evacuation recommendation or order to special needs facilities and populations. Provide assistance in evacuating, if needed.
- Disseminate evacuation recommendation or order to the public through available warning systems, clearly identifying areas to be evacuated.
- Provide amplifying information to the public through the media. Emergency public information should address:
 - What should be done to secure buildings being evacuated What evacuees should take with them
 - Where evacuees should go and how should they get there
 - Provisions for special needs population and those without transportation
- Staff and open temporary shelters.
- Provide traffic control along evacuation routes and establish procedures for dealing with vehicle breakdowns on such routes.
- Provide transportation assistance to those who require it.
- Provide security in or control access to evacuated areas.
- Provide Situation Reports on evacuation to the local Disaster District.

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

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



SPECIAL CONSIDERATIONS FOR LIVESTOCK:

- Livestock are sensitive and responsive to wildfire anywhere within their sensory range.
- Normal reactions vary from nervousness to panic to aggressive and resistive escape attempts.
- Livestock often are injured or killed by fleeing from a wildfire into fences, barriers and other fire risks.
- Once the flight syndrome kicks in, it is retained long after the smoke, heat and noise stimuli are removed.
- Some animal species such as alpacas, llamas and especially horses become virtually unmanageable in the face of oncoming wildfire.
- In situations like this, experienced handlers (as many as possible), proper equipment and a firm and prompt evacuation approach is needed.
- If time is limited because of fire ground speed, open possible escape routes and recapture animals later.

In the case of a fast-moving fire, some landowners spray paint their phone numbers on the sides of livestock before

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.

5.10 Structure Protection Planning

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

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

Firewise USA™ Communities Online Course; [Structure Protection Strategies](#) also gives a comprehensive way to plan for and execute a Structure Protection Plan.

CHECK AND GO

“Check and Go” is a rapid evaluation to check for occupants requiring removal or rescue.

Structure Triage Category – Threatened Non-Defensible

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

PREP AND GO

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

Structure Triage Category – Threatened Non-Defensible

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

PREP AND DEFEND

“Prep and Defend” is a tactic used when a Safety Zone and Temporary Refuge Area are present and adequate time exists to safely prepare a structure for defense prior to the arrival of the fire front.

Structure Triage Category – Threatened Defensible

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

FIRE FRONT FOLLOWING

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

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

BUMP AND RUN

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

- Bump and Run may be effective in the early stages of an incident when the resource commitment is light and structure protection is the priority.
- Bump and Run may be used on fast-moving incidents when there are adequate resources available but where an effort must be made to control or steer the head and shoulders of the fire to a desired end point.
- Perimeter control and structure protection preparation are secondary considerations with the Bump and Run tactic.

- Resources must remain mobile during Bump and Run and must constantly identify escape routes to Safety Zones and Temporary Refuge Areas as they move with the fire front.
- Control lines in front of the fire should be identified and prepared with dozers and fire crews enabling the bump and run resources to direct the fire to logical end point. This is a frontal attack strategy and a watch out situation.

ANCHOR AND HOLD

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

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

TACTICAL PATROL

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

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

5.11 Wildland Capacity Building

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

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:

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

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:

- 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.).

- 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.
- 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.
- 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.
- 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).
- The Authority Having Jurisdiction is responsible for insuring and documenting the 4 hours of CE annually.
- 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. Faller 3 trainee work 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).

- Successful completion of S-212, including the field exercise.
- Successful completion of NWCG Faller Class 3 position taskbook.
- 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) Business 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 may range from 4 hours upto 16 hours. That field day time can be spent working on tree and brush removal at the proposed fuel reduction sites, which enhances the fuel reduction program while at the same time developing or qualifying personnel to safely and effectively operate chainsaws in the wildland environment.





NWCG Engine Types

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

Table 2—NWCG Engine Types—Minimum Requirements.

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

Recommended Equipment

Amarillo Fire Department works closely with Potter and Randall County resources to suppress wildfires. While this has been and will continue to be effective, it would be beneficial for AFD to invest in several Type 6 engines.

Recommended Protective Equipment

Nomex pants (should be made of flame-resistant Aramid cloth)

Nomex shirt (should be made of flame-resistant Aramid cloth)

Nomex jacket (should be made of flame-resistant Aramid cloth)

Wildland gloves

Wildland hardhat

Eye protection

Ear/neck/face protectors

Fire shelter

Wildland fire pack

Chainsaw chaps

Wildland Firefighting Tools:

ENGINES

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



Type 4



Type 5



Type 7 (UTV)

HEAVY EQUIPMENT

Bulldozers fitted with safety cages are critical tools for containing wildfires. Large, commercial bulldozers often are used on the open plains in South and West Texas. The City of Amarillo also has 6 maintainers available for use on extreme fire days. These apparatus (Blades) are instrumental in putting in fire line around the Panhandle area. Both dozers and tractor plows are used to put a control line — often called a fire line or fire break — around the flames. Doing so removes all the vegetation, or fuel, that would spread the fire.



Maintainer Cutting Line



Maintainer with Engine

WATER TENDERS

Because wildland firefighters don't have access to fire hydrants, they must bring the water they need with them. Tenders are capable of ferrying large quantities of water — up to 5,000 gallons — to fire engines working on the fireline, allowing crews to fight the fire without stopping.

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



TIFMAS Tender

HAND CREWS

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



Handcrew

AIRCRAFT

Firefighting aircraft are a valuable tool for wildland firefighters. The specially-equipped helicopters and airplanes can be used to drop water or fire retardant, but they don't always extinguish the fire. Helicopters often drop water, which can help extinguish a blaze. Additionally, air tankers can drop retardant, which slows the spread of flames and cools off the surrounding area. Retardant drops allow ground crews to get closer and make more progress in containing the fire.



Helicopter



Air Tanker



SEAT

5.12 Mitigation Funding Resources

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.

<https://www.fema.gov/hazard-mitigation-grant-program>

Texas A&M Forest Service – Integrated Hazardous Fuels Program (Mitigation and Prevention Department)

One of the tools in hazard reduction efforts is the removal of heavy vegetation growth under controlled conditions to reduce the fuels available for future wildfires. Vegetation is generally removed using mechanical methods – such as mulching or chipping – or prescribed (controlled) fires under manageable conditions. The local TFS office can provide assistance in determining the best treatment methods for the area.

<http://texasforestservicetamu.edu/default.aspx>

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://tfsweb.tamu.edu/FireDepartmentPrograms/>

Texas Intrastate Fire Mutual Aid System

Training, prescribed fire projects and funding Texas Intrastate Fire Mutual Aid System (TIFMAS) is supported by various elements of the Texas A&M Forest Service. The program includes training, qualification and mobilization systems to make statewide use of local

resources. The program was first used during Hurricane Ike, and has since been used in response to the Presidio flooding, the April 9, 2009, wildfire outbreak in North Texas, Hurricane Alex and the 2011 wildfire season. The system was successful in all incidents.

TIFMAS, a product of Senate Bill 11 enacted in 2007, does not require departments to send resources to incidents. It is a voluntary process. During the 2011 wildfire season, TIFMAS mobilized 13 times with a total of 207 departments, 1,274 firefighters and 329 engines.

<http://ticc.tamu.edu/Response/TIFMAS.htm>

5.13 Incorporating Prescribed Fire

Prescribed fire can be an effective and cost-efficient tool to mitigate the negative impacts of uncontrolled wildfires. When applied correctly by properly-trained people, prescribed fire can reduce hazardous fuel loading and return an ecosystem to a more natural cycle. The right fire at the right place at the right time:

- Reduces hazardous fuels, protecting human communities from extreme fires;
- Minimizes the spread of pest insects and disease;
- Removes unwanted species that threaten species native to an ecosystem;
- Provides forage for game;
- Improves habitat for wildlife;
- Recycles nutrients back to the soil; and
- Promotes the growth of trees, wildflowers, and other plants;

The wind component of weather affects wildfire behavior and development the most within the Texas Panhandle, not only is the precipitation forecast to be below normal, the wind in the region is forecast to be above normal as the *la Niña* pattern sets in over the winter and spring. This adds a significant increase in the threat of wildfires over the coming year. An increase in the ignitable materials within the Home Ignition Zone has also been observed over the previous year within areas in the urban interface. Steps to reduce these risks must be increased to protect the urban interface areas. Many of these hazards exist within the ETJ; which lacks many of the zoning and restriction tools available within the City Limits.

More prescribed fires mean fewer extreme wildfires.

Specialists write burn plans for prescribed fires. Burn plans identify – or prescribe – the best conditions under which trees and other plants will burn to get the best results safely. Burn plans consider temperature, humidity, wind, moisture of the vegetation, and conditions for the dispersal of smoke. Prescribed fire specialists compare conditions on the ground to those outlined in burn plans before deciding whether to burn on a given day.



For more information about prescribed fires, go to this link: www.goodfires.org

More about prescribed fire...

Less than a year removed from another fairly bad wildfire season that included the Dumas complex fire (29,000 ac) it's no wonder that when fire is mentioned the first thing that comes to most Texans' minds is fear. However, fires aren't always bad. In fact, they can boost the health of the land. For generations, Texans have used prescribed—or “good”—fire to help manage the landscape, depending on the flames, to clear brush, control vegetation, maintain wildlife habitats and even boost nutrients in the soil.

“Prescribed burns save lives and are critical tools for private landowners to protect property,” Texas Agriculture Commissioner Todd Staples said. “In Texas, we must be strategic with stewardship of the land and resources. It takes everyone coming together—first responders, local and state officials, public land managers and private landowners—to keep our landscapes healthy, and our citizens and communities safe.”

According to state officials, prescribed burning isn't just good for the land, it's also good for people. Prescribed burning doesn't eliminate wildfires, but the strategic reduction of brush and other vegetation can decrease the intensity of wildfires when they do ignite.

“Prescribed burning helps reduce the risk of potential wildfires that may threaten lives and damage communities, crops, livestock and wildlife,” Sonora AgriLife Extension Center Superintendent Butch Taylor said.

Texas A&M Forest Service supports the use of prescribed fire and conducts burns on public lands. They also have help on the private sector. TFS offers grants to landowners to complete prescribed fires on private land. Each grant targets landowners in different priority areas across the state and can be accessed for more information and applications at <http://texasforestsERVICE.tamu.edu/cppgrant/> Landowners interested in learning more about prescribed fire and its applications may visit the Prescribed Burn Alliance of Texas website at <http://pbatexas.org>.



JA Ranch Rx Fire



JA Ranch Rx Fire



JA Ranch Rx Fire

Section 6.0 Recovery Strategies

Recovering from a wildfire can be difficult and complex. It also can take a long time to fully recover. That’s why it’s important to plan for recovery and begin the process alongside incident response. By creating a recovery plan that can be adapted to other disasters outside of wildfire, a community can become more disaster resilient. A recovery plan can mirror an Incident Action Plan by creating functional groups with a list of short-term and long-term objectives and resources. Pictured below is an example from the Bastrop Recovery Plan following the Bastrop Complex Wildfire.

A website is another tool that can be beneficial during the recovery process. Several wildfire-stricken communities have found it helpful to create a website for organizing donations and volunteers, tracking resources and providing information to the public. The same website also can be used to disseminate preparedness information throughout the year. Some examples of recovery websites include coloradospringstogether.org and lincolncountyready.com

6.1 Recovery Funding Sources

The following table provides a few examples of disaster assistance programs that may be available after a wildfire. Some funding sources may not become available until a Presidential Disaster Declaration has been issued.

AGENCY RECOVERY PROGRAM	
<i>Recovery Resources</i>	<i>WEBSITE</i>
NATIONAL	
US Dept of Agriculture	https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/
FEMA	https://www.disasterassistance.gov/
American Red Cross	http://www.redcross.org/
STATE	
US Dept of Agriculture-Texas	https://www.nrcs.usda.gov/wps/portal/nrcs/main/tx/programs/
Texas Forest Service	http://texasforestservation.tamu.edu/WestTexasNursery/
State of Texas	http://www.dps.texas.gov/dem/Recovery/

Section 7.0 Appendices

7.1 City of Amarillo Proclamation

CITY OF
AMARILLO, TEXAS
City Council

Proclamation

WHEREAS, Texas is experiencing unprecedented growth and development in areas that were once rural coupled with an increase in the occurrence of wildfires. It is in these areas where developments meet vegetation or the Wildland Urban Interface that the greatest risk to public safety and property from wildfire exists; and

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

WHEREAS, a Community Wildfire Protection Plan (CWPP) is authorized under the provisions outlined in Title I of the Healthy Forest Restoration Act of 2003. A CWPP is a written document, mutually agreed upon by local, state and federal representatives and stakeholders that identifies how a community will reduce its risks from wildland fire; and

WHEREAS, a CWPP addresses structural ignitability, prioritizes hazardous fuel reduction efforts on public and private lands and is developed collaboratively. The development of a CWPP gives a community an opportunity to influence the manner in which hazardous fuels are reduced on Federal lands in proximity to communities. Communities with a CWPP offer the best solution for communities at risk from wildfire to mitigate said risks;

NOW, THEREFORE, the Amarillo City Council urges all citizens of this community to participate in the development of a citywide Community Wildfire Protection Plan in accordance with the Healthy Forest Restoration Act.

GIVEN UNDER OUR HANDS AND SEAL OF OFFICE
WE, MAYOR AND CITY COUNCILMEMBERS, this 16th day of August 2016.

7.2: City of Amarillo Prescribed Fire Ordinance

8/18/16

ORDINANCE NO. 7618

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AMARILLO, TEXAS: AMENDING THE MUNICIPAL CODE OF THE CITY OF AMARILLO, CHAPTER 10-2, ARTICLE II, SECTIONS 10-2-16; ADDING ARTICLE IV, FIRE MITIGATION, SECTIONS 10-3-54 THROUGH 10-3-57; PROVIDING FOR CONTINUATION OF PRIOR LAW; SEVERABILITY; REPEALER; PENALTY; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the FEMA guide *Understanding Your Risks: Identifying Hazards and Estimating Losses* defines a wildfire as "an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures;" and,

WHEREAS, wildfires present a critical danger to the life, safety, and property of the citizens within the corporate city limits and the extraterritorial jurisdiction of the City of Amarillo; and,

WHEREAS, Section 342.006 of the Texas Health and Safety Code gives municipalities the authority to abate dangerous weeds, rubbish, brush, and unsanitary material; and,

WHEREAS, Section 4-3-2, Unlawful accumulation; definitions; nuisance; notice; abatement by city; Excess vegetation, of the Code of Ordinances of the City of Amarillo allows the City to abate, without notice, the nuisance of weeds which are an immediate danger to the health, life or safety of any person; and,

WHEREAS, Section 4-3-1 of the Amarillo Municipal Code references the International Wildland-Urban Interface Code (WUIC) and allows for the application of the

same to construction, alteration, movement, repair, maintenance and use of any building or premises within the Wildland- Urban Interface areas in this jurisdiction; and

WHEREAS, Section 111.215 of the Texas Commission on Environmental Quality's Administrative Code allows outdoor burning, not otherwise authorized by TCEQ Code, upon written permission from the TCEQ Executive Director if no practical alternative exists and the burning will not contribute to a nuisance, traffic hazard or to a violation of any federal or state primary or secondary ambient air standard; and,

WHEREAS, the City desires to implement a hazard mitigation program to reduce the threat of said wildfires within the corporate city limits and extraterritorial jurisdiction of the City of Amarillo through the execution of authorized and outdoor burning.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AMARILLO, TEXAS, THAT:

SECTION 1. The Amarillo Municipal Code, Chapter I 0-2, Article II, Section I 0-2-16 be and hereby is amended to read as follows:

307.1.1 Prohibited open burning. Open burning shall be prohibited when atmospheric conditions or local circumstances make such fires hazardous.

Exceptions:

1. Prescribed burning for the purpose of reducing the impact of wildland fire when authorized by the fire code official. The fire code official may authorize Fire Hazard Mitigation procedures in accordance with the City's Fire Hazard Mitigation Plan.

2. Any fire lawfully kindled by the City of Amarillo for the purposes of hazard mitigation that meets all of the requirements of section 4-3-2 (Sec. 4) of the Code of Ordinances of the City of Amarillo, Texas.

SECTION 2. The Amarillo Municipal Code, Chapter 10-2, Article III, reserving Section 10-2-44 through Section 10-2-53 as follows:

**

Sec. 10-2-44 - 10-2-53 - Reserved

SECTION 3. The Amarillo Municipal Code, Chapter 10-2, Article IV, Section 10-2-54 through Section 10-2-57 be and hereby added to read as follows:

ARTICLE IV. FIRE HAZARD MITIGATION

Section 10-3-54. - Definitions

Extinguished -The absence of any visible flames, glowing coals, or smoke.

Neighborhood - A platted subdivision or property contiguous to and within 300 feet of a platted subdivision.

Practical alternative - An economically, technologically, ecologically, and logistically viable option.

Authorized Burn - The controlled application of fire to naturally occurring vegetative fuels under specified environmental conditions and confined to a predetermined area, following appropriate planning and precautionary measures.

Section 10-3-55 - Rural/Urban Interface Hazard Mitigation Program

Hazard mitigation is an important part of any cities plans and procedures for protecting the life and property of their citizens. The City of Amarillo recognizes that a large hazard exists from wildfires and their interface with the urban areas of the City. In order to mitigate this

hazard, the City of Amarillo adopts the Rural/Urban Interface Hazard Mitigation Program to reduce the hazardous fuel loads in the rural/urban interface through authorized burns of land deemed a public hazard based on the height and amount of weeds.

Section 10-3-56 - Authorized Burns within the Corporate City Limits

(a) Preparation:

1. Targeted areas for authorized burning will be determined by assessing levels of hazards to the area. An advisory group consisting of the City's Emergency Management Coordinator, the City of Amarillo Building Official, the City of Amarillo's Fire Marshal, and the Amarillo Fire Chief will make the determination. Final approval for any authorized burn rests with the Amarillo Fire Chief.
2. Landowners will be notified by mail or personal contact by Fire Department Personnel when possible. Landowners must be notified in writing that the property has been deemed a public hazard and that the City of Amarillo will be abating the hazard. When possible, release of liability and written permission from the property owner will be obtained.
3. Specific information regarding authorized burns will be posted on the public information sources of the City.
4. Prior to burning, sufficient planning shall have been conducted and the area shall have been prepared. Preparations include the removal of harmful debris and trash, removal of disproportionate fuel loads, the creation of fire breaks where needed, and any other appropriate action as deemed necessary. Electrical insulation, treated lumber, plastics, non-wood construction/demolition materials, heavy oils, asphaltic materials, potentially explosive materials, chemical wastes, and items containing natural or synthetic rubber must not be burned.

5. Notification will be made to all applicable agencies as required by state law.

6. Authorization from the TCEO's executive director shall be required as outlined in section 111.215 of the TCEO's Texas Administrative Code prior to burning unless state law states otherwise.

(b) Burning:

1. Any authorized burn will be conducted on a day when the weather is deemed appropriate. The Fire Chief will develop a check list of required signatures to sign off on the burn before the activities commence. In no instance shall burning start: more than one hour before sunrise, when the predicted wind speed is less than six miles per hour (mph) (5 knots) or greater than 23 mph (20 knots) during the burn period and during periods of actual or predicted persistent low level atmospheric temperature inversions. In all cases, any authorized burn must be completed and extinguished no later than one hour before sunset.

2. The National Incident Management System (NIMS) shall be utilized throughout any and all authorized burns. Appropriate individuals from all participating agencies shall be directly involved in all stages of the operations and management of the authorized burn.

3. The Fire Chief shall insure that sufficient personnel and equipment will be available at the scene and/or at the fire station to ensure the proper containment of the authorized burn and to assure proper staffing for other emergency calls during the burn period.

4. The Fire Chief shall develop a checklist outlining the steps to be completed for the conducting of a safe prescribed burn and the completed checklist shall be maintained as documentation of the authorized burn.

5. All outdoor burning conducted under this section shall be consistent with the Texas Clean Air Act and the TCEO's Texas Administrative Code.

(c) Documentation:

1. All steps of the authorized burn shall be documented.
2. Pictures shall be taken to document the before and after state of the burn area.

Section 10-3-57 - Authorized Burns within the Extraterritorial Jurisdiction

(a) Preparation:

1. Targeted areas for authorized burning will be determined by assessing levels of hazards to the area. An advisory group consisting of the City's Emergency Management Coordinator, the Randall or Potter County Fire Chief, The City of Amarillo's Fire Marshal', and the Amarillo Fire Chief will make the determination. Final approval for any authorized burn rests with the Amarillo Fire Chief.

2. Landowners must be notified and provide a release of liability and written permission for the burn.

3. Specific information regarding the authorized burns will posted on the public information sources of the City.

4. Prior to burning, sufficient planning shall have been conducted and the area shall have been prepared. Preparations include the removal of harmful debris and trash, removal of disproportionate fuel loads, the creation of fire breaks where needed, and any other appropriate action as deemed necessary by the County Fire Chief and the Amarillo Fire Chief. Electrical insulation, treated lumber, plastics, non-wood construction/demolition

materials, heavy oils, asphaltic materials, potentially explosive materials, chemical wastes, and items containing natural or synthetic rubber must not be burned.

5. Notification will be made to all applicable agencies as required by state law.

(b) Burning:

1. Any authorized burn will be conducted on a day when the weather is deemed appropriate. The Amarillo Fire Chief will develop a check list of required signatures to sign off on the burn before the activities commence. In no instance shall burning start: more than one hour before sunrise, when the predicted wind speed is less than six miles per hour (mph) (5 knots) or greater than 23 mph (20 knots) during the burn period and during periods of actual or predicted persistent low level atmospheric temperature inversions. In all cases, any authorized burn must be completed and extinguished no later than one hour before sunset.

2. The National Incident Management System (NIMS) shall be utilized throughout any and all controlled burns. Appropriate individuals from all participating agencies shall be directly involved in all stages of the operations and management of the authorized burn.

3. The Fire Chief and the Randall or Potter County Fire Chief shall insure that sufficient personnel and equipment will be available at the scene and/or at the fire station to ensure the proper containment of the authorized burn and to assure proper staffing for other emergency calls during the burn period.

4. The Fire Chief shall develop a checklist outlining the steps to be completed for the conducting of a safe authorized burn and the completed checklist shall be maintained as documentation of the authorized burn.

5. All outdoor burning conducted under this section shall be consistent with the Texas Clean Air Act and the TCEO's Texas Administrative Code.

(c) Documentation:

1. All steps of the authorized burn shall be documented and each burn shall have a file maintained.
2. Pictures shall be taken to document the before and after state of the burn area.

Sec. 10-3-58 - 10-3-67. - Reserved.

SECTION 4. Severability. If any provision, section, subsection, sentence, clause or the application of same to any person or set of circumstances for any reason is held to be unconstitutional, void or invalid or for any reason unenforceable, the validity of the remaining portions of this ordinance or the application thereby shall remain in effect, it being the intent of the City Council of the City of Amarillo, Texas in adopting this ordinance, that no portion thereof or provision contained herein shall become inoperative or fail by any reasons of unconstitutionality of any other portion or provision.

SECTION 5. Repealer. All ordinances, parts of ordinances resolutions and parts of resolutions in conflict with this ordinance are hereby repealed to the extent of conflict with this ordinance.

SECTION 6. Continuation. That nothing in this ordinance (or any code adopted herein) shall be construed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed by this ordinance and such prior law is continued in effect for purposes of such pending matter.


SECTION 7. Penalty. A violation of this ordinance is an offense punishable in accordance with Section 1-1-5 of this code of ordinances.

SECTION 8. Publishing and Effective Date. This ordinance shall be published and become effective according to law.

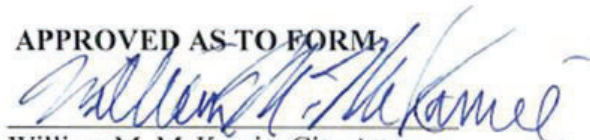
INTRODUCED AND PASSED by the City Council of the City of Amarillo, Texas, on First Reading this the 23 day of August, 2016; and **PASSED** on Second and Final Reading the 30 day of August, 2016.


Paul Harpole, Mayor

ATTEST:


Frances Hibbs, City Secretary

APPROVED AS TO FORM


William M. McKamie, City Attorney