The background of the slide is the Texas state flag, featuring a large white five-pointed star on a dark blue field, with a white horizontal stripe above a red horizontal stripe.

TEXAS

Wildfire Risk Assessment and Prescribed Burning

Tom Boggus

State Forester & Director

Texas A&M Forest Service

Briefing for

Agricultural

Air Quality Task Force



Pro Rx Burning

TFS is an advocate of the benefits of prescribed burning

- through public education
- involvement with the Texas Department of Agriculture (TDA) Prescribed Burning Board



<http://www.youtube.com/watch?v=r-VanyPG3QI>



Building the capacity of others

We build partnerships and coalitions because we are stronger together than we are alone



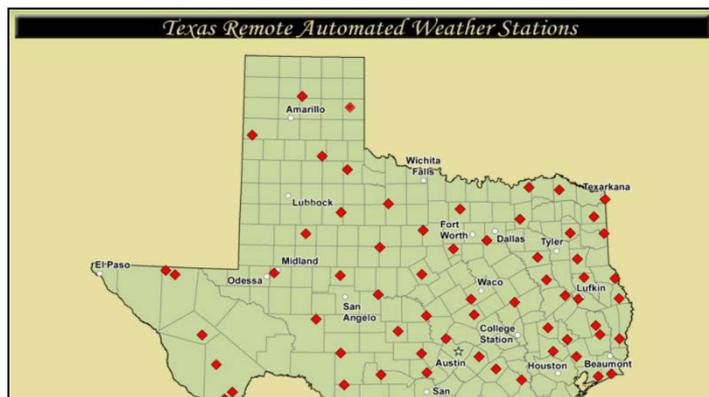


Mitigation

- Efforts to reduce the loss by avoiding or lessening the impact of a disaster and creating safer communities
- Tool: removal of vegetation growth under controlled conditions to reduce fuels available to future wildfires

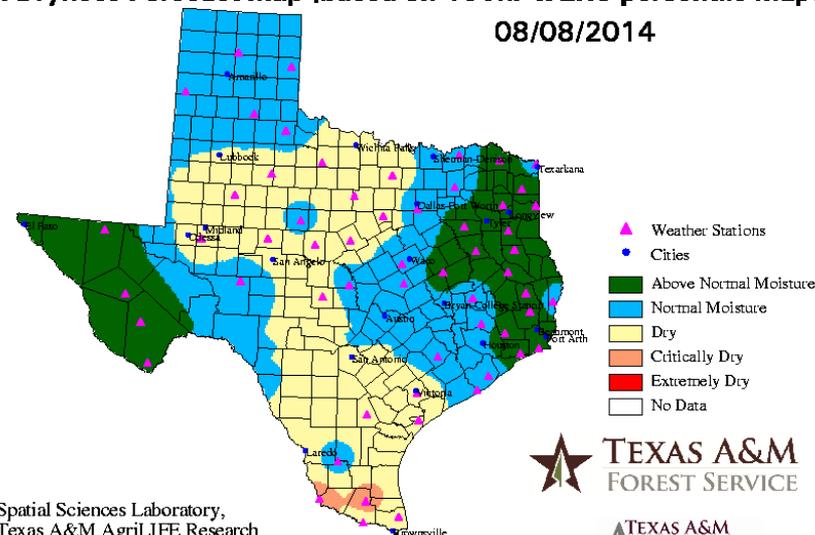


Tools and Education



Fuel Dryness Forecast map (based on 100hr & ERC percentile maps)

08/08/2014



Spatial Sciences Laboratory,
Texas A&M AgriLIFE Research
<http://www-ssl.tamu.edu>

TEXAS A&M
FOREST SERVICE

TEXAS A&M
AGRI LIFE
RESEARCH



SITE INFORMATION

ID: PKLT2
NAME: POSSUM KINGDOM
LATITUDE: 32.567222
LONGITUDE: -98.561667
ELEVATION: 925 ft
MNET: RAW5
WIMS ID: 419402



(Click for topo/terrain map)
(Click for satellite)

[Graphical Display](#)

SITE LINKS

- [Help](#)
- [ROMAN](#)
- [Metric Units](#)
- [Greenwich Mean Time](#)
- [2 Week Summary](#)
- [Past Data](#)
- [Data Quality](#)
- [Station Information](#)
- [Station Status](#)
- [Restrictions](#)
- [Data in Spreadsheet Format](#)

DATA COURTESY OF
Bureau of Land Management
and
Texas Forest Service

Weather Conditions for PKLT2

Current time: August 8, 2014 - 10:20 CDT

Most Recent Observations at August 8, 2014 - 10:05 CDT

	10-05	Max since Midnight	Min since Midnight	24 Hour Max	24 Hour Min
Temperature	92.0° F	92.0 at 10:05	81.0 at 7:05	104.0 at 15:05	81.0 at 7:05
Dew Point	66.9° F	66.9 at 10:05	58.8 at 3:05	66.9 at 10:05	56.1 at 20:05
Relative Humidity	44%	54 at 7:05	38 at 1:05	54 at 7:05	21 at 15:05
Wind Speed	12 mph from SW	12 at 10:05	4 at 7:05	12 at 16:05	4 at 22:05
Wind Gust	20 mph	20 at 9:05	8 at 7:05	20 at 16:05	8 at 7:05
Solar Radiation	502.0 W/m ² m	502.0 at 10:05	0.0 at 0:05	1100.0 at 13:05	0.0 at 22:05
Fuel Temperature	98.0° F	98.0 at 10:05	78.0 at 7:05	119.0 at 13:05	78.0 at 7:05
10 hr Fuel Moisture	8 gm	8 at 8:05	6 at 0:05	8 at 8:05	4 at 19:05
Battery voltage	13.60 volt	13.60 at 10:05	12.80 at 5:05	13.70 at 18:05	12.80 at 5:05

Precipitation accumulated since midnight: 0.00", in 24 hours: 0.00"

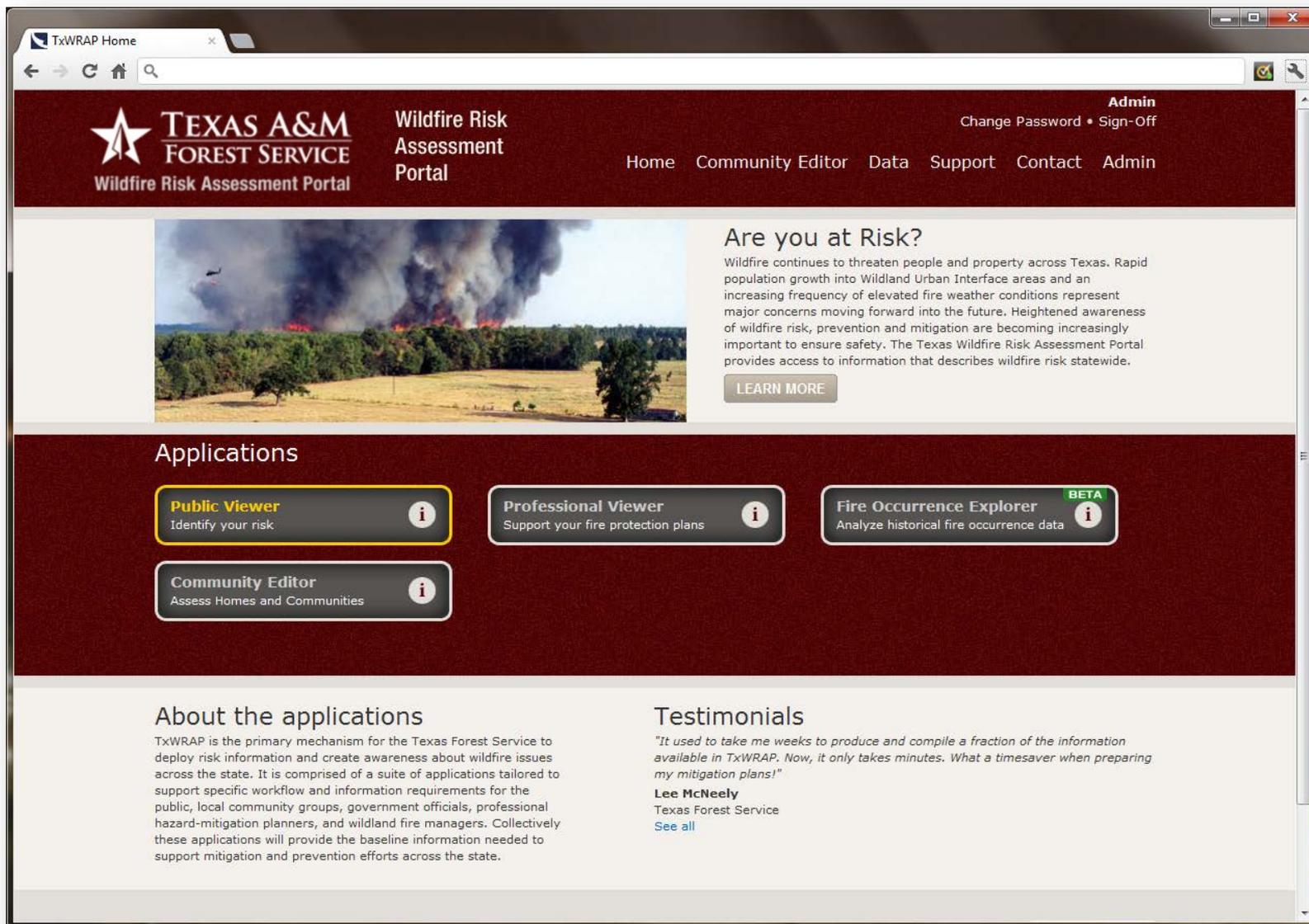
Tabular Listing: August 7, 2014 - 9:20 through August 8, 2014 - 10:20 CDT

Time(CDT)	Temperature	Dew Point	Relative Humidity	Wind Speed	Wind Gust	Wind Direction	Wind Quality	Solar Radiation	Precipitation	Fuel Temperature	10 hr Fuel Moisture	Battery Voltage
	°F	°F	%	mph	mph		check	W/m ² m	in	°F	gm	volt
10:05	92.0	66.9	44	12	20	SW	OK	502.0	9.14	98.0	8	13.60
9:05	88.0	66.4	49	11	20	SSW	OK	289.0	9.14	93.0	8	13.40
8:05	84.0	65.0	53	10	17	SSW	OK	84.0	9.14	86.0	8	13.00
7:05	81.0	62.8	54	4	8	SSW	OK	2.0	9.14	78.0	8	12.80
6:05	82.0	60.9	49	5	10	S	OK	0.0	9.14	79.0	7	12.80
5:05	84.0	59.7	44	6	13	SSW	OK	0.0	9.14	82.0	7	12.80
4:05	86.0	58.8	40	6	16	SSW	OK	0.0	9.14	84.0	7	12.90
3:05	86.0	58.8	40	6	13	SSW	OK	0.0	9.14	84.0	6	12.90
2:05	87.0	59.0	39	7	13	S	OK	0.0	9.14	85.0	6	12.90
1:05	88.0	59.2	38	8	16	S	OK	0.0	9.14	86.0	6	12.90
0:05	89.0	61.5	40	8	14	S	OK	0.0	9.14	87.0	6	12.90
23:05	90.0	60.9	38	4	10	SSE	OK	0.0	9.14	87.0	5	12.90
22:05	92.0	60.4	35	4	14	SSE	OK	0.0	9.14	89.0	5	13.00
21:05	95.0	59.6	31	6	12	SSE	OK	6.0	9.14	93.0	5	13.00
20:05	98.0	56.1	25	9	16	SSE	OK	121.0	9.14	99.0	4	13.20
19:05	102.0	57.1	23	9	19	S	OK	345.0	9.14	107.0	4	13.40

www.ticc.tamu.edu

Remote weather stations
Fire danger and NFDRS indices
Listed in PBB training for
recommended information resources

TexasWildfireRisk.com



The screenshot shows a web browser window with the URL 'TxWRAP Home'. The page features the Texas A&M Forest Service logo and the title 'Wildfire Risk Assessment Portal'. Navigation links include Home, Community Editor, Data, Support, Contact, and Admin. An 'Admin' section offers 'Change Password' and 'Sign-Off' options. A main banner image shows a wildfire with a 'LEARN MORE' button. Below this is an 'Applications' section with four buttons: 'Public Viewer' (Identify your risk), 'Professional Viewer' (Support your fire protection plans), 'Fire Occurrence Explorer' (Analyze historical fire occurrence data, marked BETA), and 'Community Editor' (Assess Homes and Communities). The bottom section contains 'About the applications' and 'Testimonials'.



Wildfire Risk
Assessment
Portal

Admin
Change Password • Sign-Off

Home Community Editor Data Support Contact Admin



Are you at Risk?

Wildfire continues to threaten people and property across Texas. Rapid population growth into Wildland Urban Interface areas and an increasing frequency of elevated fire weather conditions represent major concerns moving forward into the future. Heightened awareness of wildfire risk, prevention and mitigation are becoming increasingly important to ensure safety. The Texas Wildfire Risk Assessment Portal provides access to information that describes wildfire risk statewide.

[LEARN MORE](#)

Applications

Public Viewer

Identify your risk



Professional Viewer

Support your fire protection plans



Fire Occurrence Explorer

Analyze historical fire occurrence data

BETA



Community Editor

Assess Homes and Communities



About the applications

TxWRAP is the primary mechanism for the Texas Forest Service to deploy risk information and create awareness about wildfire issues across the state. It is comprised of a suite of applications tailored to support specific workflow and information requirements for the public, local community groups, government officials, professional hazard-mitigation planners, and wildland fire managers. Collectively these applications will provide the baseline information needed to support mitigation and prevention efforts across the state.

Testimonials

"It used to take me weeks to produce and compile a fraction of the information available in TxWRAP. Now, it only takes minutes. What a timesaver when preparing my mitigation plans!"

Lee McNeely
Texas Forest Service

[See all](#)

TexasWildfireRisk.com

The screenshot displays the 'Public Viewer' interface for the Texas A&M Forest Service Wildfire Risk Assessment Portal. The main map area shows a wildfire risk assessment over an aerial view of a region including Sayville, Camp Swift, Lake Bastrop, and Bastrop State Park. A color-coded risk overlay is visible, with a red circle highlighting a specific area of high risk. A 'WUI Response Index Legend' is shown on the right, ranging from -9 (Most Negative Impact) in red to -1 (Least Negative Impact) in white.

Getting Started
What's Your Risk?
 Click on the map to determine the potential wildfire intensity within the general vicinity of the location you define. Results are based on high to extreme fire weather conditions.
 Draw Point Zoom To Clear

Explore Map Themes

- Reference Base Layers
- Wildfire Risk Themes
 - WUI Response Index
 - Wildland Urban Interface (WUI)
 - Where People Live
 - Community Protection Zones
 - Characteristic Fire Intensity Scale
 - Wildfire Ignition Density
- Landscape Characteristics
- Historical Wildfire Ignitions

Active Layer Description
 Represents a rating of the potential impact of a wildfire on people and their homes

Hide Legend Full Description
 Transparency 29

Print Map
Zoom To...
Zoom To Results

What's Your Risk? Results

High

Large flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective.

Significant potential for harm or damage to life and property.

Increased to extensive preparedness measures may be needed to better protect your home and property. This is an important consideration in a scenario where sufficient firefighting resources are not available to protect your home or property. Be firewise and take the necessary steps to protect your home and property today.

[Learn more about reducing your risk](#)

Logos for dtsagile and esri are visible in the bottom right corner.



TexasForestInfo.com



Texas Forest Information Portal

Log In

Home Support Contact



ECONOMIC DEVELOPMENT

Providing an in-depth analysis of the resources and economics of the Texas forest sector. Promoting the wise, efficient, and sustainable harvesting, utilization, and marketing of woody vegetation and wood products.

LEARN MORE

Discover & Explore an array of maps depicting forest conditions

Query & Download data and reports on a variety of forest interests

Applications

Timber Supply Analysis



Forest Distribution



Forest Ecosystem Values



Economic Impact



Timber Decision Simulator



Forest Action Plan



Forest Products Directory



Map My Property



About this Portal

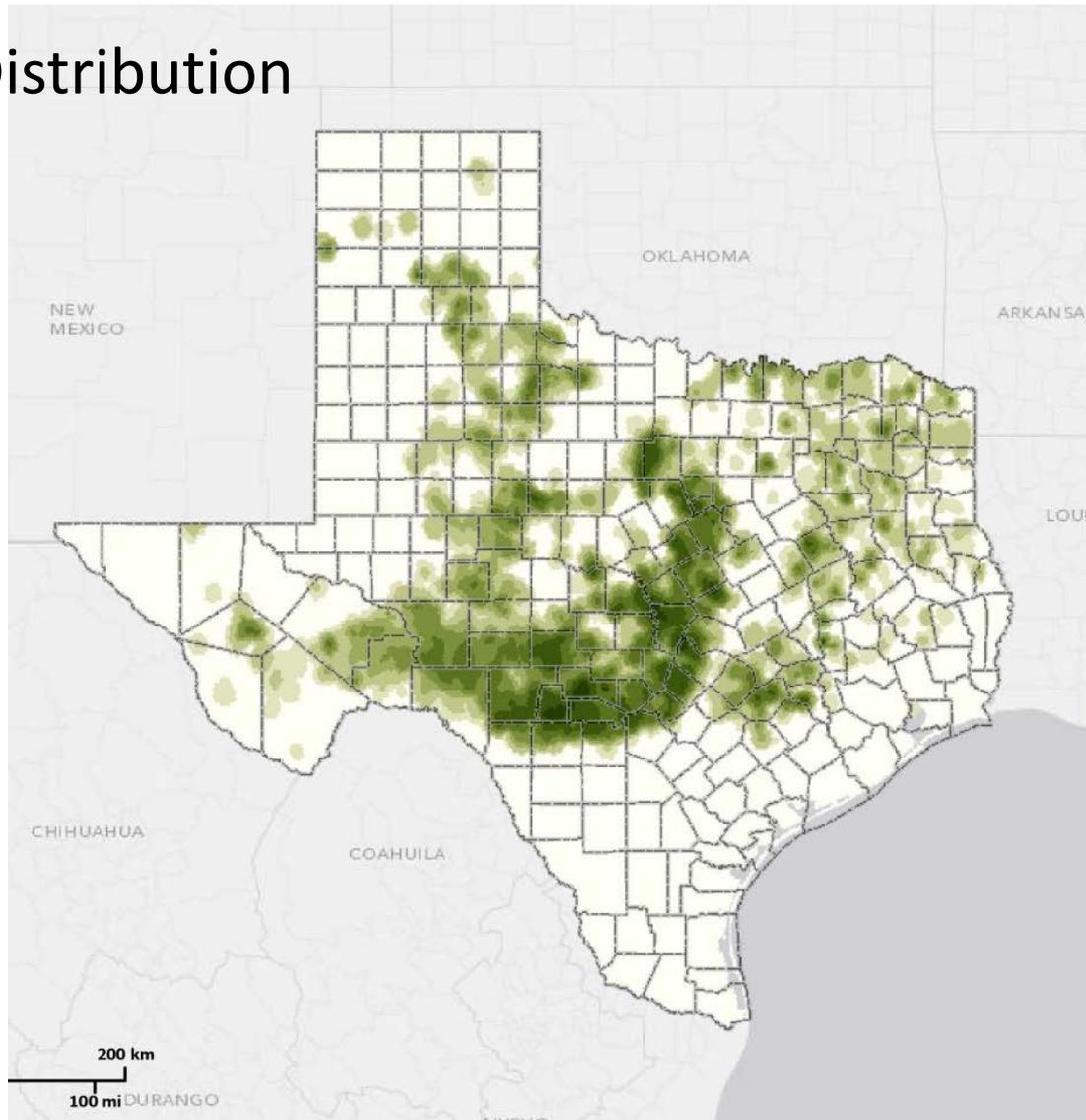
Through TxFIP, Texas A&M Forest Service provides landowners, managers, government officials, local community groups, and the public state-of-the-art access to information about trees and forest lands across the state.

- Timber Supply Analysis
- Forest Distribution
- Forest Ecosystem Values Economic Impact
- Timber Decision Simulator
- Forest Products Directory

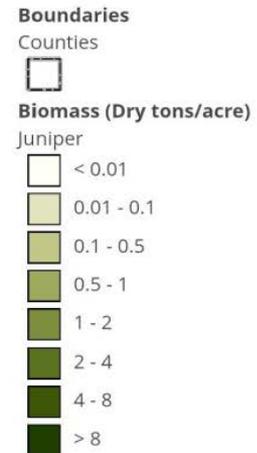


TexasForestInfo.com

Forest Distribution



Texas Forests
Distribution of Juniper



TexasForestInfo.com

Map My Property

File Edit View Favorites Tools Help

Suggested Sites Free Hotmail Upgrade Your Browser

Convert Select

Home Page Safety Tools

TEXAS A&M FOREST SERVICE Map My Property

TexasForestInfo.com | About | Contact | Help | TFS Home

Mouse Coordinates: Lat/Long is: 41.432915 / -83.955697

Zoom In Zoom Out Pan Previous Extent Next Extent Full Extent Hybrid Streets Aerial Topo

Find Location of Property

Address:
200 Munson College Station, TX

Find Address Clear Point

Found:
Texas, OH

Draw Property Boundary

Measure

Area Line

Clear Labels Clear Drawing

Add Labels

Add Symbols

Print or Export Map to PDF

County Road 15

County Road 5B

County Road 5

County Road 4A

24

24

24

200m

500ft

Approximately 108.50 acres

bing

POWERED BY esri



TFS Prescribed Fire

- TFS fire crews burn on state/public lands
- TFS-lead burning or support cooperators
 - TMF, GLO, TxDOT, TPWD, USFWS, USFS, City of Austin, SFA University
- 32,613 acres over past 5 years (147 burns)
- TFS-lead burns planned for 2015
 - 33 units totaling 8,219 acres

GOVERNMENT CANYON PRESCRIBED BURN

Several agencies collaborated in 2012 to conduct a prescribed burn at Government Canyon State Natural Area in northwest Bexar County.



CAMP BOWIE FUEL MITIGATION

Texas A&M Forest Service joined the U.S. Army National Guard and Brownwood-area fire departments to conduct several prescribed burns during the February 2013 Central Texas Wildfire Academy.

The burns served as a training exercise for students in the academy's introductory wildland firefighting course and also helped reduce hazardous vegetation in the area that can contribute to the spread of wildfire. Objectives for the burns included restoring the oak savannah ecotype and reducing the amount of encroaching juniper.

Camp Bowie, south of Brownwood in Brown County, is adjacent to wildlands, increasing its risks for wildfire. Because the camp is used as a training facility, accidental ignitions occasionally occur. Base personnel have developed a fire management plan to address training, wildfire suppression and prescribed burning.



So far this year, prescribed burns have helped reduce vegetation on 1,791 acres around the camp.

Three Texas A&M Forest Service task forces – Lost Pines, Merkel and Heart of Texas – assisted with the prescribed burns, as well as several firefighters from the agency's Northwest Branch and Mitigation and Prevention Department. The task forces also taught basic and advanced wildland firefighting and ignition operations courses to students at the academy.

Camp Bowie base commander Lt. Col. Jamey Creek said the prescribed burns were beneficial for many reasons.

"We all know ... we have soldiers here training, and some of their training duties, under certain circumstances, create fires," he said. "If we reduce fuels, then the fires are easier to suppress and we're able to handle them internally rather than having to call for outside assets."



AM Forest Service burns on the

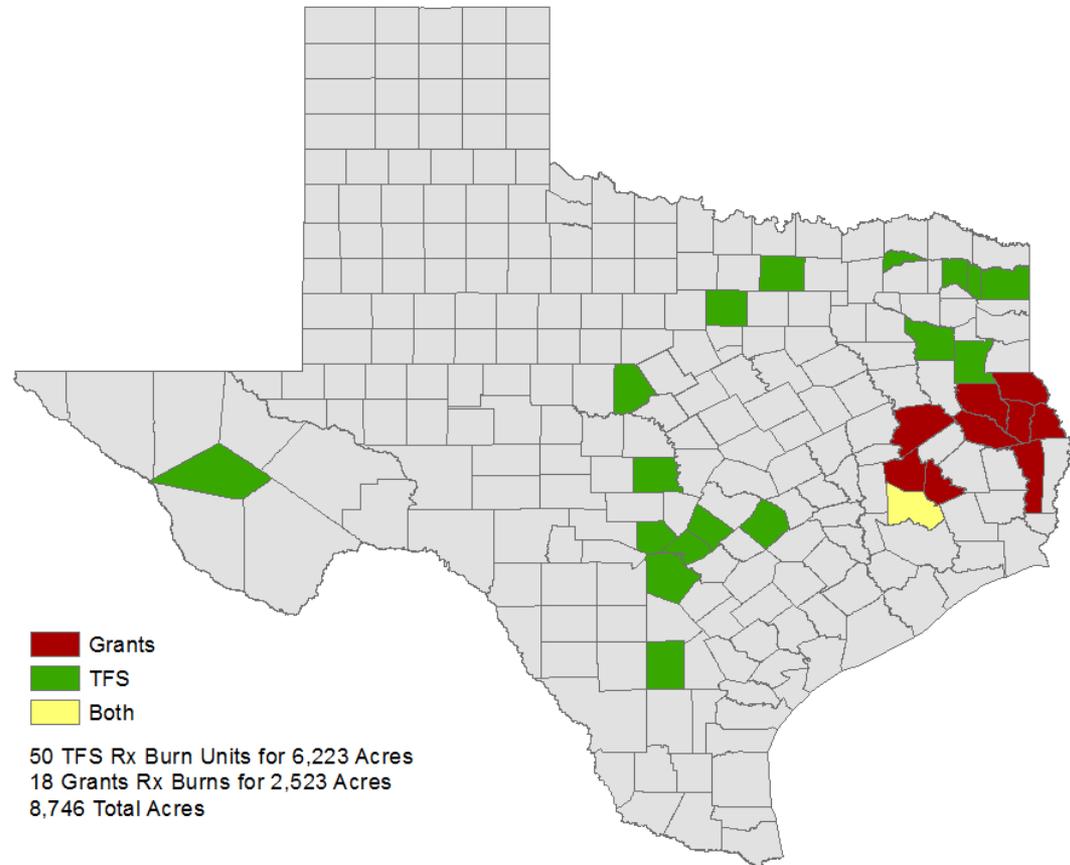
objective reducing fuel load," said TFS as another and area added benefit of urban





Grants

- TFS administers federal pass-through grants to assist private burning
- Approximately \$60,000 per year
- 20 burns for 2,860 acres so far this year



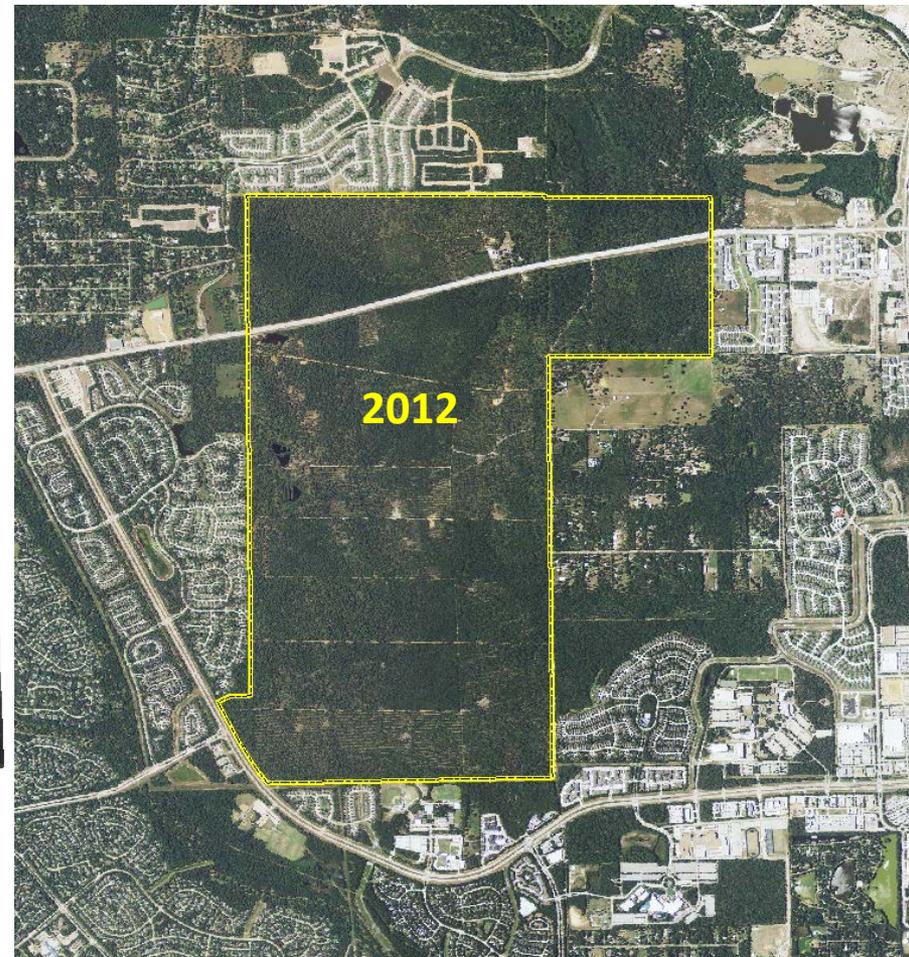
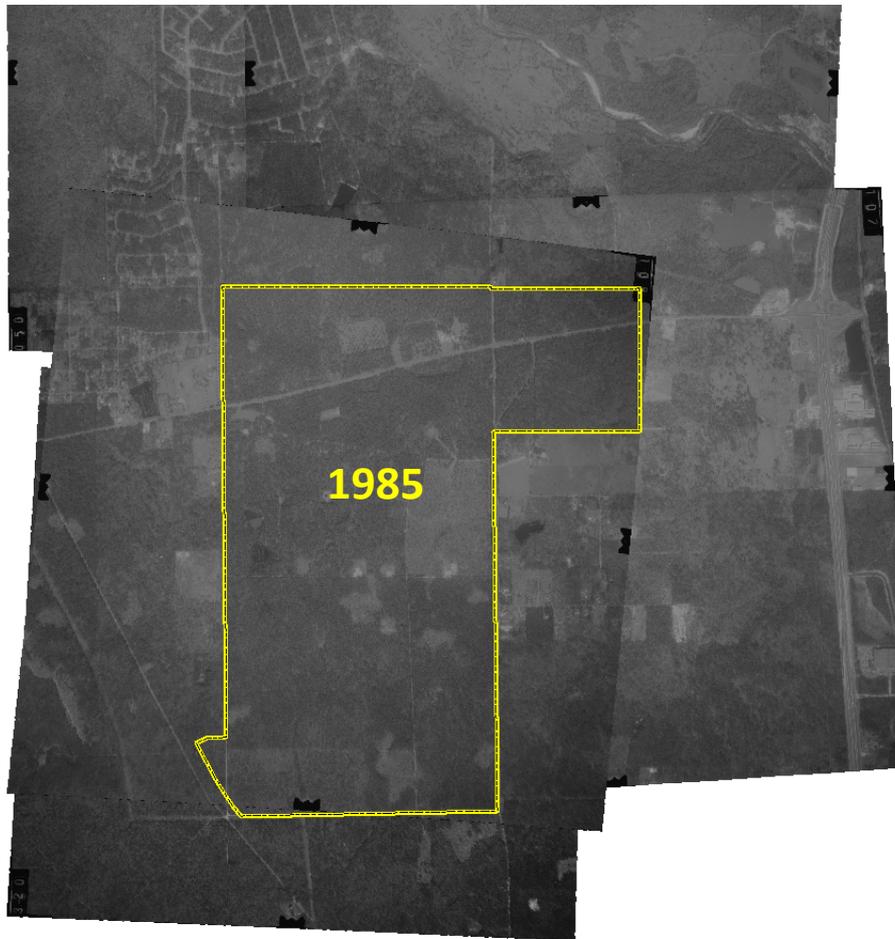
Non-traditional Mitigation

TFS promotes healthy, fire-resistant forests

- **Southern Pine Beetle Prevention** encourages the thinning of dense southern pine stands. Helps prevent beetle infestations, improves the health forests and reduces wildfire hazard. Since the SPB cost share program began in 2003, there have been **1,706 cases** completed and **\$5.8 million in cost shares paid** to thin **101,917 acres**. An additional 119 cases have been approved and are in the process of being thinned.



Prescribed Burning on state/public lands





Thanks, &

