

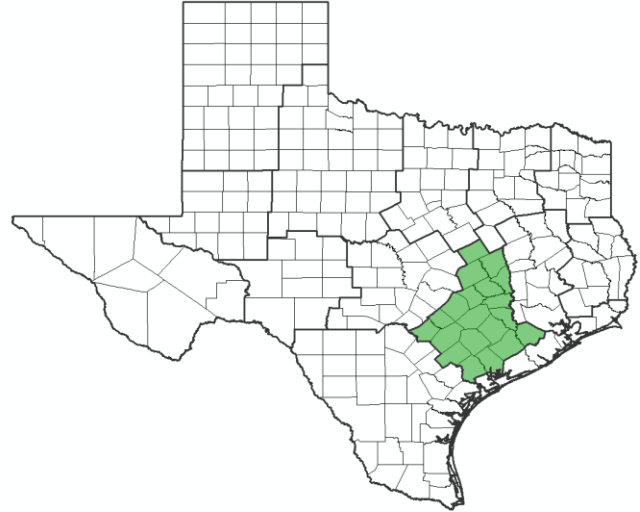
# Central Texas PSA Critical Thresholds and Fire Data

April 2018

## Fire Weather Stations:

**RAWS** – Round Prairie, Temple, East Austin, Bastrop, Neasloney, Victoria, Attwater, LaGrange

**ASOS** – New Braunfels Municipal, Easterwood Field



**Data Years:** 2001-2017

## Critical Fire Weather Thresholds:

Relative Humidity      25% or less  
20' Wind speed        15 mph or greater  
Temperature            90° or greater



**Fuels:** Pine Timber, Mixed Timber, Slash, Improved Grass, Yaupon, Juniper



## Peak Fire Seasons:

July through October with summer/early fall drying.  
January through March with cured grasses and wind events.

## Normal TFS Wildfire Response and Acres Burned by Month

*Based on 2005-2017 Fire Occurrence Data*

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<i>Fires</i>	2	2	1	1	1	2	5	4	2	3	1	1	25
<i>Acres</i>	200	250	50	20	25	50	150	300	150	200	20	50	1,465

## Dead Fuel Moisture Thresholds

	Percentiles				
	3	4-10	11-25	26-50	51-100
<b>1000-hr</b>	14	15	16	17-18	19
<b>100-hr</b>	12	13	14	15	16
<b>10-hr</b>	6	7	8	9	10

**NFDRS Thresholds (Fuel Model G)**

	Percentiles				
	97	90-96	75-89	50-74	0-49
<b>ERC</b>	53	47-52	40-46	32-39	0-31
<b>BI</b>	63	51-62	42-50	31-41	0-30
<b>KBDI</b>	733	661-732	556-660	443-555	0-442

**Live Fuel Moisture**

	Percentiles				
	3	4-10	11-25	26-50	51-100
<b>Loblolly Pine</b>	83	84-105	106-115	117-125	126+
<b>Live Oak</b>	74	75-78	79-81	82-86	87+
<b>Juniper</b>	68	69-77	78-84	85-93	94+
<b>Yaupon</b>	68	69-86	87-93	94-103	104+

**Significant Fire Potential Matrix**

The Significant Fire Potential (SFP) Matrix is a **daily** situational awareness and decision making tool at the local level based on a fire weather station’s observed and forecast ERC and forecast BI. A significant fire is defined as a wildland fire that will require the mobilization of additional resources from outside the area of the fires origin (Extended attack, ICT3+).

Bastrop RAWS 2017		Local Preparedness Level Energy Release Component G (ERC)			
		1 0-37	2 38-49	3 50-56	4 57+
Dispatch Level Burning Index G (BI)	1 0-31	Low	Low To Moderate	Moderate To Low	Moderate
	2 32-46	Low To Moderate	Moderate To Low	Moderate	Moderate To High
	3 47-60	Moderate To Low	Moderate	★ High	High
	4 61+	Moderate	Moderate To High	High	Very High

**To Use:** Find nearest [Fire Weather Station](#) to open Matrix. Open [SFP Indices](#) page for forecast ERC and BI of chosen fire weather station. Plot ERC and BI for intersection and SFP forecast.

*Example: 10/13/15 Bastrop RAWS Forecast*

*ERC: 54 BI: 48*

*SFP Forecast: High*

*Day of 1 of Hidden Pines Fire, 4,582 Acres in Bastrop County*