

High Plains PSA Critical Thresholds and Fire Data

April 2018

Fire Weather Stations:

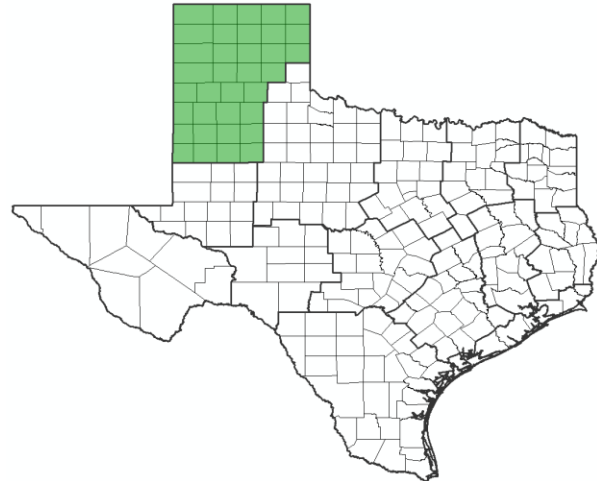
RAWS – Bootleg, Caprock, Cedar, Gail, Wheeler

ASOS – Amarillo International, Dalhart Municipal, Lubbock International

Data Years: 2001-2017

Critical Fire Weather Thresholds:

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



Fuels: Improved and native grasses, Sagebrush, Juniper/Mesquite



Peak Fire Season:

January through April 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	4	2	0	1	0	0	0	0	0	1	12
<i>Acres</i>	1,700	4,500	6,000	1,000	0	300	0	0	0	0	0	10	13,600

Dead Fuel Moisture Thresholds

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

NFDRS Thresholds (Fuel Model G)

	Percentiles				
	97	90-96	75-89	50-74	0-49
ERC	76	64-75	54-63	44-53	0-43
BI	106	89-105	72-88	57-71	0-56
KBDI	677	541-676	478-540	338-477	0-337

Live Fuel Moisture

	Percentiles				
	3	4-10	11-25	26-50	51-100
Sand Sage	48	49-73	74-88	89-108	109+
Juniper	66	67-77	78-84	85-94	95+
Mesquite	58	59-92	93-104	105-119	120+

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+).

Amarillo Int. Airport ASOS 2017		Local Preparedness Level Energy Release Component G (ERC)			
		1 0-51	2 52-67	3 68-76	4 77+
Dispatch Level Burning Index G (BI)	1 0-67	Low	Low To Moderate	Moderate To Low	Moderate
	2 68-96	Low To Moderate	Moderate To Low	Moderate	Moderate To High
	3 97-117	Moderate To Low	Moderate ★	High	High
	4 119+	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: 3/6/2017 Amarillo Int. Airport ASOS Forecast

ERC: 55 BI: 113

SFP Forecast: High

Dumas Complex, 28,800 Acres in Potter County