

Trans Pecos PSA Critical Thresholds and Fire Data

April 2018

Fire Weather Stations:

RAWS – Pinery, Elephant Mountain, Panther Junction, Fort Davis

ASOS – El Paso International, Pecos County Airport, Winkler County Airport



Data Years: 2001-2017

Critical Fire Weather Thresholds:

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



Fuels: Grasslands, Mixed Pinyon/Juniper with grass, Mixed Juniper/Oak brush with grass, Desert shrub



Peak Fire Season:

April through June with lightning 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>	0	0	1	1	2	2	0	0	0	0	0	0	6
<i>Acres</i>	0	0	1,000	1,500	800	1,200	0	0	0	0	0	0	4,500

Dead Fuel Moisture Thresholds

	Percentiles				
	3	4-10	11-25	26-50	51-100
1000-hr	5	6	7	8	9
100-hr	4	5	6	7	8
10-hr	1	2	3	4	5

NFDRS Thresholds (Fuel Model G)

	Percentiles				
	97	90-96	75-89	50-74	0-49
ERC	97	91-96	83-90	74-82	0-73
BI	116	100-115	82-99	67-81	0-66
KBDI	663	620-662	561-619	461-560	0-460

Live Fuel Moisture

	Percentiles				
	3	4-10	11-25	26-50	51-100
Pinyon Pine	71	72-85	86-90	91-96	97+
Juniper	59	60-64	65-71	72-79	80+
Gray Oak	60	61-70	71-75	76-82	83+

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+).

Fort Davis RAWS 2017		Local Preparedness Level Energy Release Component G (ERC)			
		1 0-78	2 79-91	3 92-98	4 99+
Dispatch Level Burning Index G (BI)	1 0-81	Low	Low To Moderate	Moderate To Low	Moderate
	2 82-109	Low To Moderate	Moderate To Low	Moderate	Moderate To High
	3 110-129	Moderate To Low	Moderate	High	High
	4 130+	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: 4/9/2011 Fort Davis RAWS Forecast
 ERC: 94 BI: 137
 SFP Forecast: High
 Rockhouse Fire, 314,444 Acres in Jeff Davis County*