Eastern Hill Country PSA
Critical Thresholds and Fire Data

April 2018

Fire Weather Stations:
RAWS – Coleman, Colorado Bend, Mason, Bird, Lost Maples, Guadalupe River, South Austin, East Austin, Balcones, Balcones Flying X, Temple, McGregor, Comanche
ASOS – New Braunfels Regional

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: Mixed Live Oak with Juniper brush, Juniper/Mesquite brush, Native and Improved grasslands, Mixed Grassland with Oak/Juniper

Peak Fire Seasons:
July through September with summer drying
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
Fires	1	4	2	1	1	1	3	6	1	1	0	1	22
Acres	400	915	400	250	75	100	500	1000	100	100	0	50	3,890

Dead Fuel Moisture Thresholds

	Percentiles				
	3	4-10	11-25	26-50	51-100
1000-hr	11	12-13	14-15	16	17
100-hr	10	11	12-13	14	15
10-hr	5	6	7	8-9	10

NFDRS Thresholds (Fuel Model G)

	Percentiles				
	97	**90-96**	**75-89**	**50-74**	**0-49**
ERC	65	54-64	46-53	36-45	0-35
BI	74	62-73	51-61	39-50	0-38
KBDI	704	612-703	510-611	358-509	0-357

Live Fuel Moisture

	Percentiles				
	3	**4-10**	**11-25**	**26-50**	**51-100**
Juniper	62	63-71	72-81	82-90	91+
Live Oak	72	73-77	78-81	82-86	87+
Post Oak	78	79-80	81-86	87-90	91+
Mesquite	89	90-99	100-110	111-121	122+

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+).

Mason RAWS 2017		**Local Preparedness Level** Energy Release Component G (ERC)			
		1 0-41	**2** 42-59	**3** 60-71	**4** 72+
Dispatch Level Burning Index G (BI)	**1** 0-54	Low	Low To Moderate ★	Moderate To Low	Moderate
	2 55-78	Low To Moderate	Moderate To Low	Moderate	Moderate To High
	3 79-92	Moderate To Low	Moderate	High	High
	4 93+	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: 8/27/15 Mason RAWS Forecast
ERC: 57 BI: 39
SFP Forecast: Low to Moderate
Day 1 Eaton Cemetery Fire, 10,468 Acres in Mason County