WILDLAND FIRE POTENTIAL WINTER/SPRING 2018

2018 TMD Wildfire Roundtable

Austin Texas

December 6th 2017

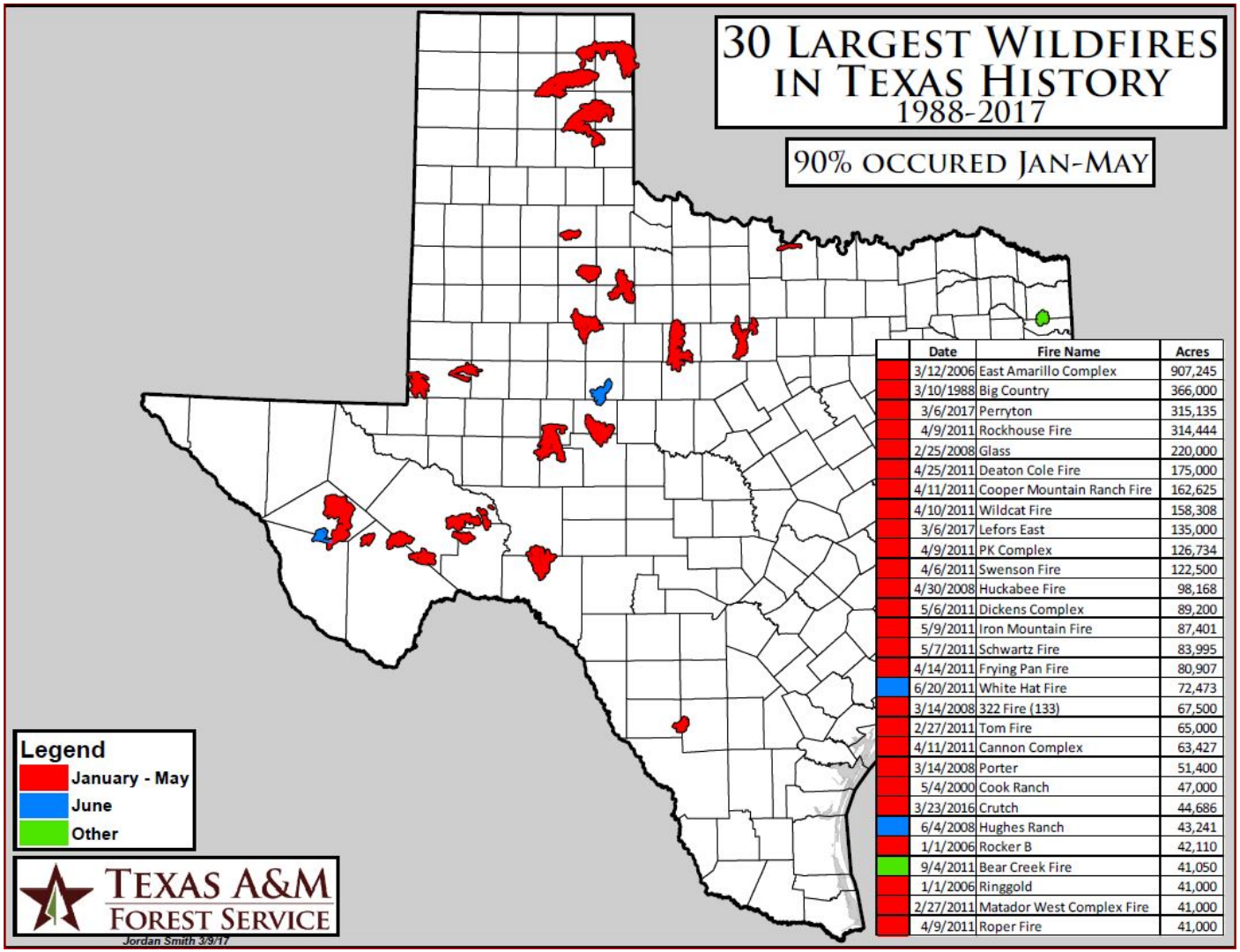
TEXAS A&M FOREST SERVICE

Brad Smith **Wildland Fire Analyst**

Dormant Season
Fire Potential Considerations

- **Drought**
  - Persistent
  - Emerging
- **Fine Fuel Condition**
  - Below-Normal-Above Normal Loading
- **Seasonal Temperature and Precipitation**

Significant fires are more likely to occur in the grass dominant fuelscape of the western Texas Plains during the dormant season



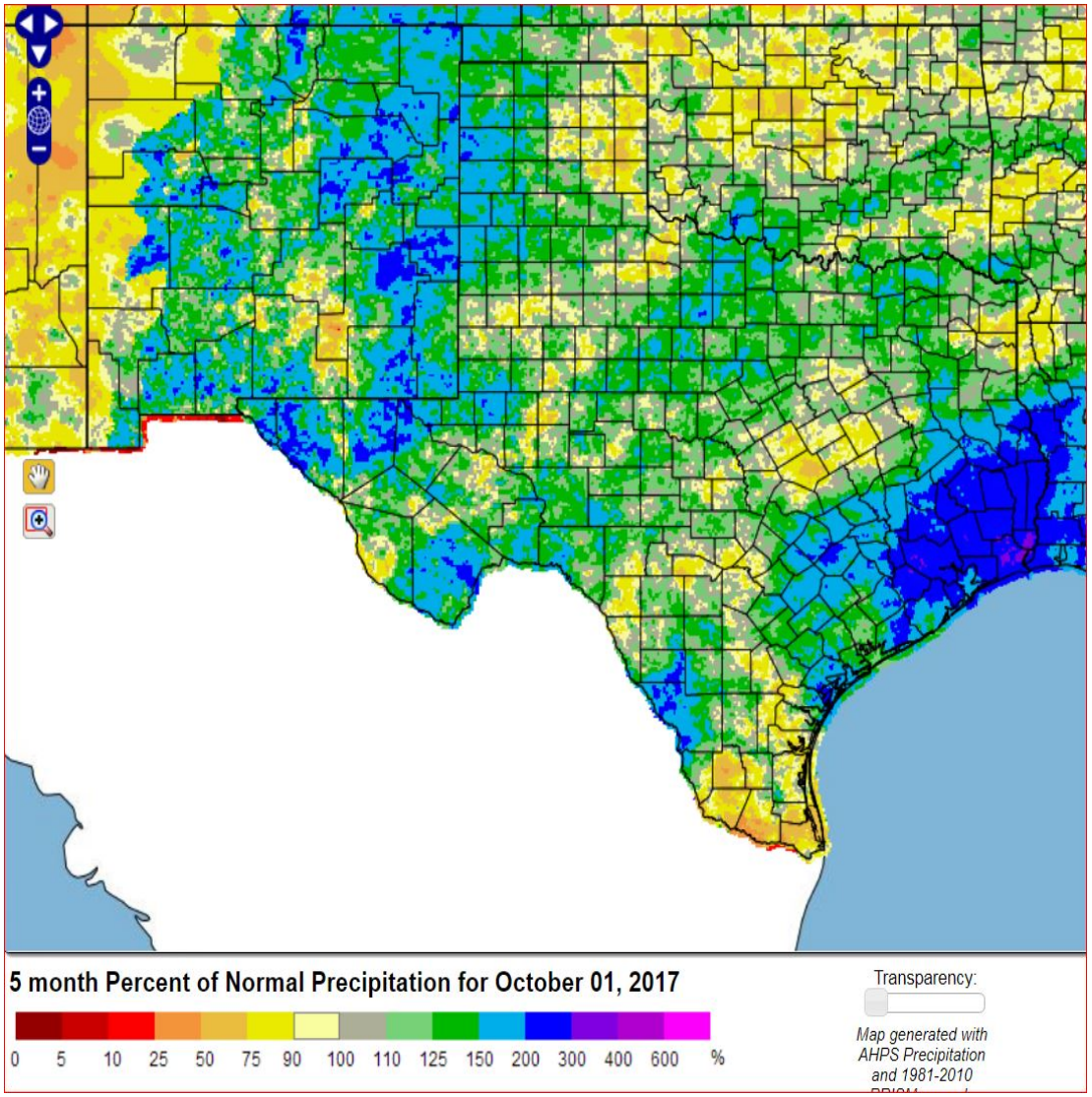
Date	Fire Name	Acres
3/12/2006	East Amarillo Complex	907,245
3/10/1988	Big Country	366,000
3/6/2017	Perryton	315,135
4/9/2011	Rockhouse Fire	314,444
2/25/2008	Glass	220,000
4/25/2011	Deaton Cole Fire	175,000
4/11/2011	Cooper Mountain Ranch Fire	162,625
4/10/2011	Wildcat Fire	158,308
3/6/2017	Lefors East	135,000
4/9/2011	PK Complex	126,734
4/6/2011	Swenson Fire	122,500
4/30/2008	Huckabee Fire	98,168
5/6/2011	Dickens Complex	89,200
5/9/2011	Iron Mountain Fire	87,401
5/7/2011	Schwartz Fire	83,995
4/14/2011	Frying Pan Fire	80,907
6/20/2011	White Hat Fire	72,473
3/14/2008	322 Fire (133)	67,500
2/27/2011	Tom Fire	65,000
4/11/2011	Cannon Complex	63,427
3/14/2008	Porter	51,400
5/4/2000	Cook Ranch	47,000
3/23/2016	Crutch	44,686
6/4/2008	Hughes Ranch	43,241
1/1/2006	Rocker B	42,110
9/4/2011	Bear Creek Fire	41,050
1/1/2006	Ringgold	41,000
2/27/2011	Matador West Complex Fire	41,000
4/9/2011	Roper Fire	41,000

Growing Season
Percent of Normal Rainfall

Above normal rainfall during the May through September growing season has produced a widespread crop of abundant grasses.

An above normal crop of grass or fine fuel loading on the grass dominant fuelscape of the Texas Plains increases the underlying risk for wildfire occurrence through the winter and spring season ahead.

The type of wildfire that occurs (initial attack or significant fire) depends on the amount of drying prior to the ignition and the fire weather present at the time of ignition.



Above normal grass loading can lower the fire weather and fuel dryness thresholds normally required to produce wildland fire activity.

Above normal grass loading northwest of Amarillo

Grasses just south of Andrews

Above normal fine fuel loading enhances fire spread and increases a fire's resistance to control

Grazing contrast in Crockett County south of Ozona

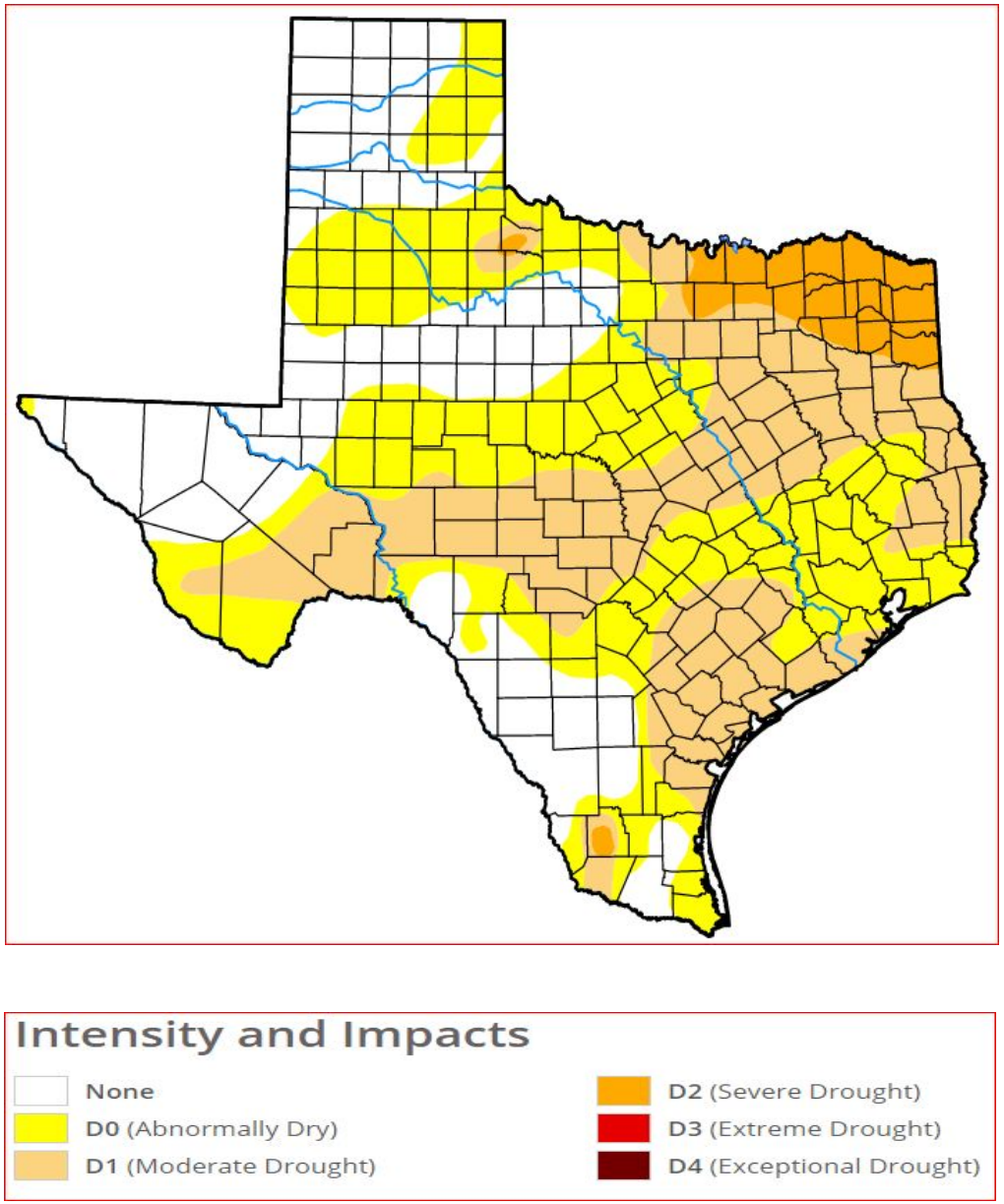
Heavy load grass and brush fuels south of Big Spring

Current Drought Conditions

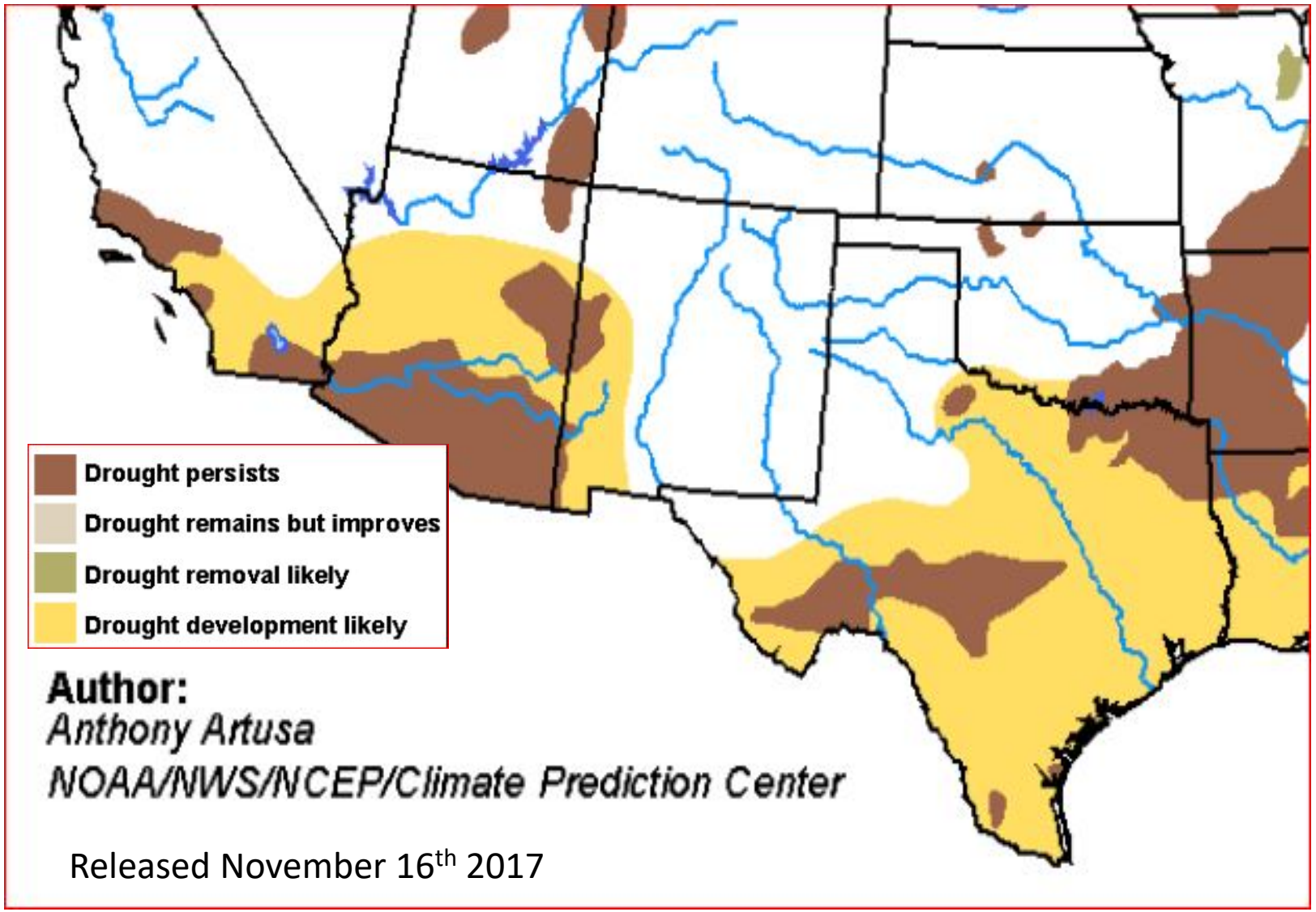
Emerging drought will be a factor for increased fire potential through the dormant season.

Drought increases the potential for above normal fire activity in central and Eastern Texas during the dormant season.

Week	Date	None
Current	2017-11-28	28.73
Last Week	2017-11-21	40.02
3 Months Ago	2017-08-29	96.14
Start of Calendar Year	2016-12-27	75.85
Start of Water Year	2017-09-26	70.54
One Year Ago	2016-11-29	66.37



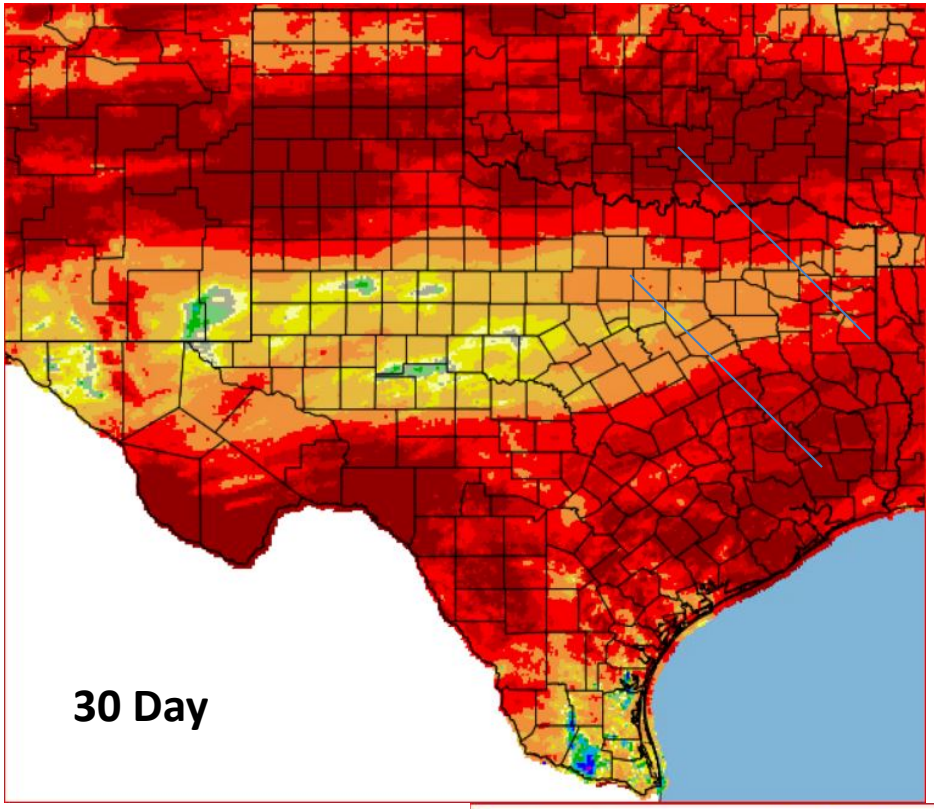
Seasonal drought outlook through February 2018

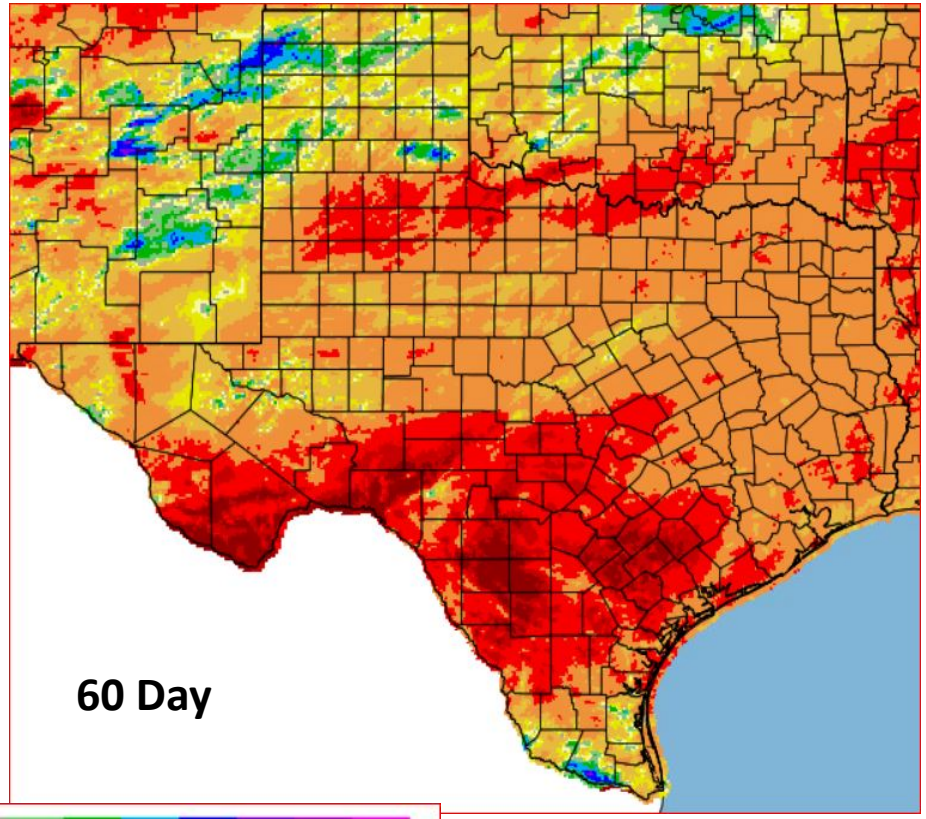


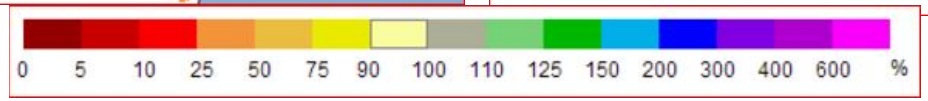
Percent of Normal Rainfall

Rainfall deficits continue to climb across a large portion of the state. Wildland fuels in areas depicting rainfall deficits less than 25% of normal over the last 60 days are more likely to support significant fire activity when critical fire weather is present.

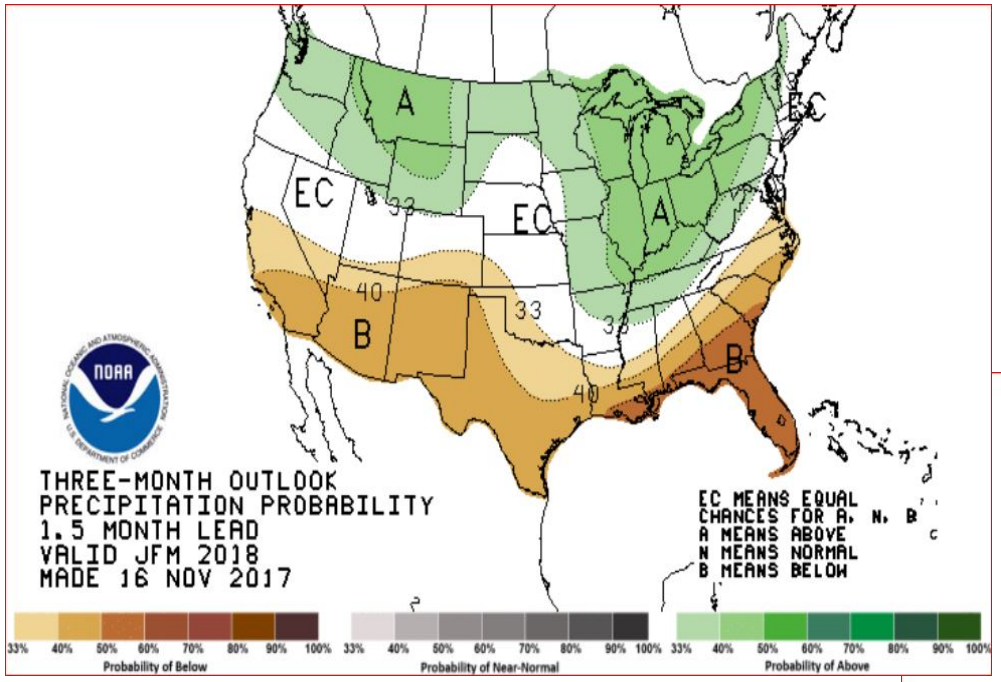
Current precipitation trends could be signaling an earlier onset of winter fire activity.

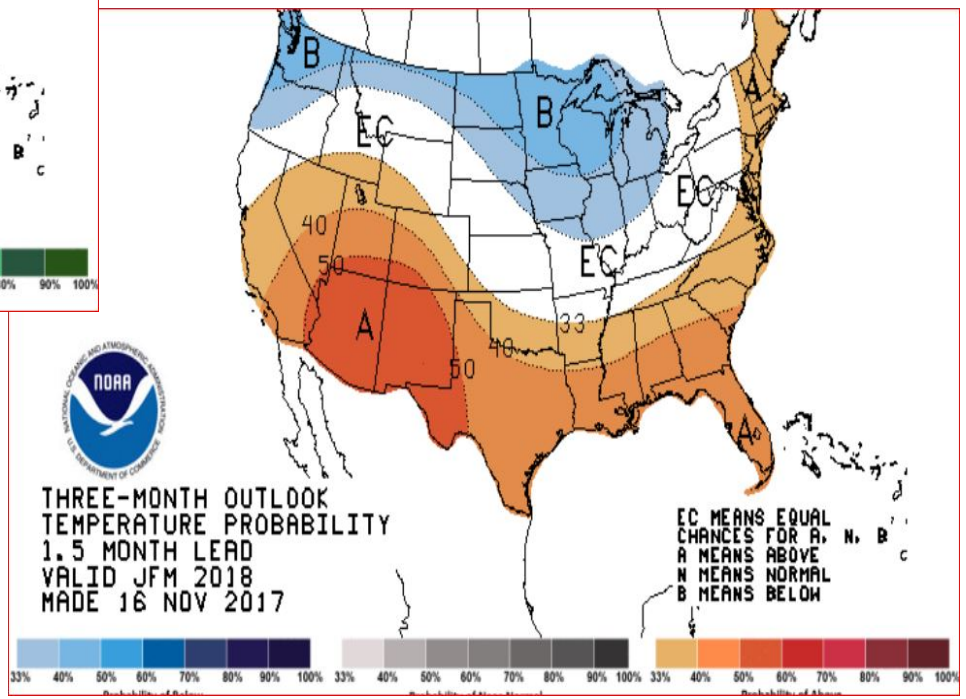




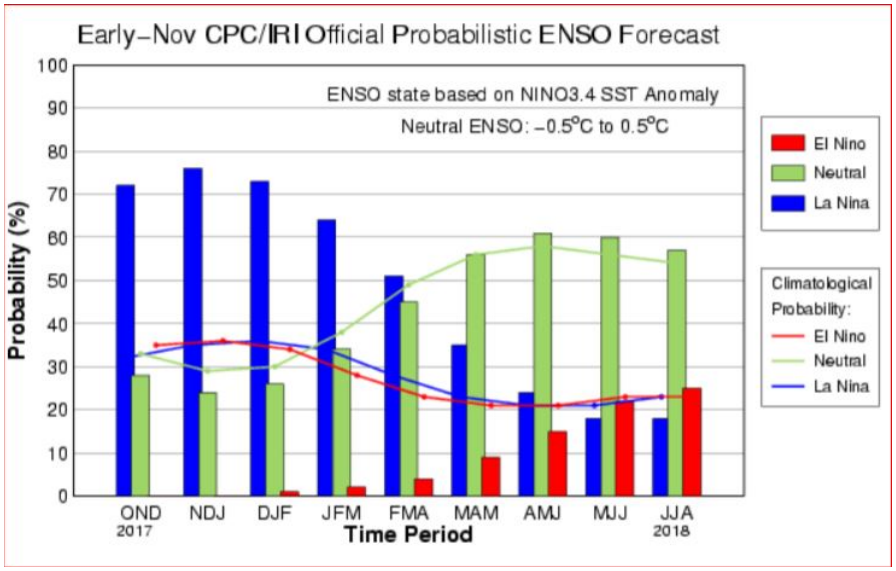


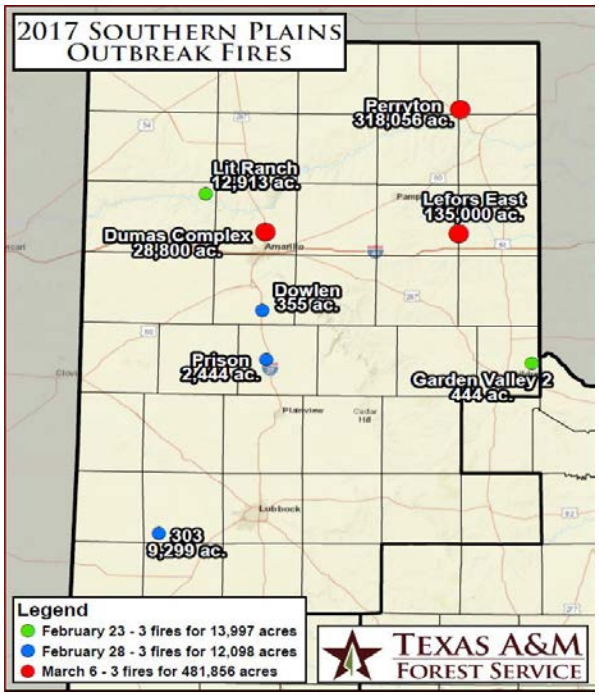
Precipitation and Temperature Outlook for January, February and March



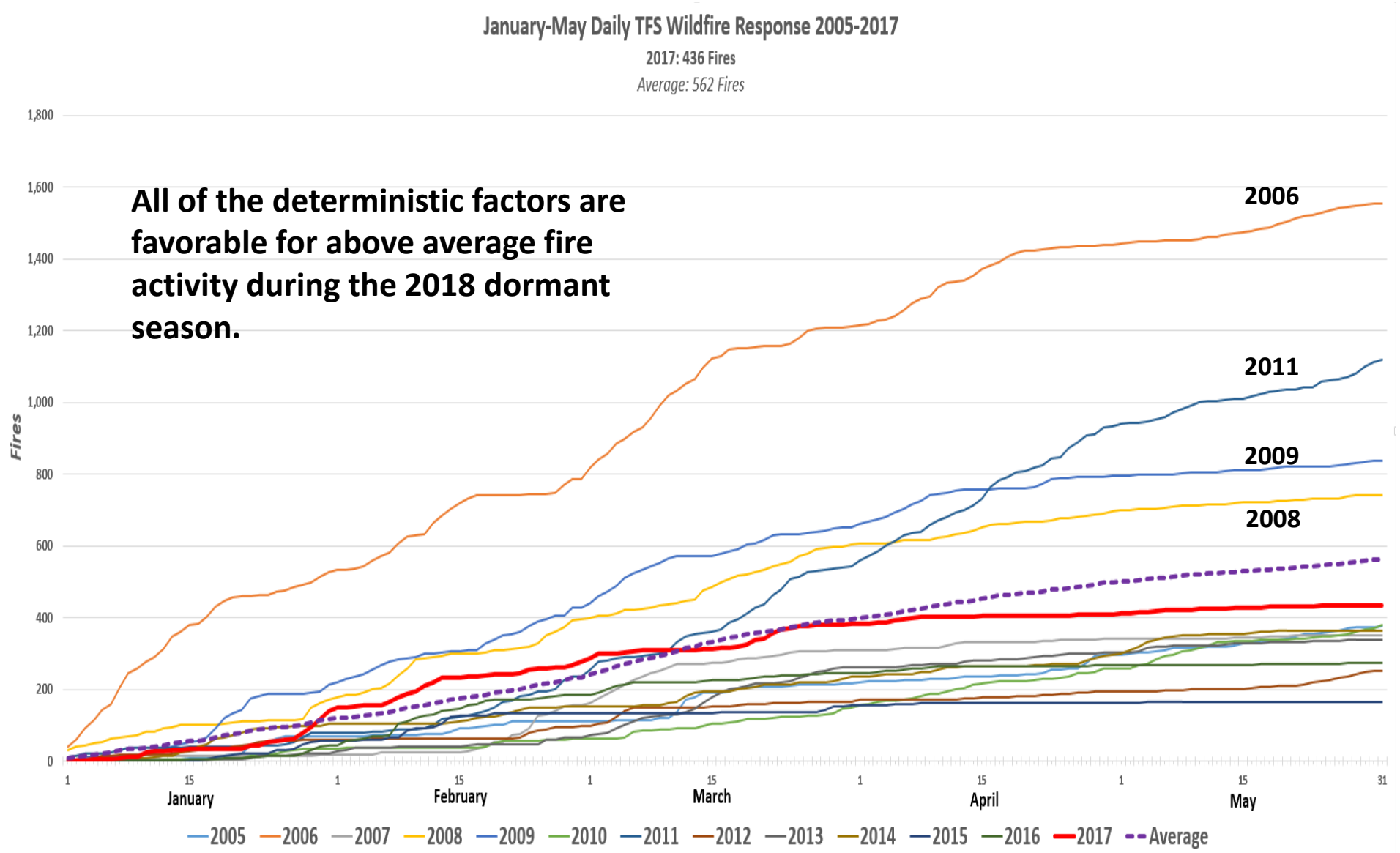


The March 6th Dumas Complex was one of six significant wildfires occurring last winter during high impact fire weather events in an ENSO neutral winter. Current winter ENSO forecasts advertise a 50-70% chance for La Nina conditions. La Nina conditions are more favorable for high impact fire weather events than ENSO neutral or El Nino conditions.





Historical Dormant Season Fire Activity



2018 Dormant Season Summary

- A widespread above normal crop of grass, emerging drought and the potential for an active fire weather pattern signals above normal fire activity through the 2018 dormant season.

- There is a strong possibility for multiple high impact fire weather events that are capable of producing wildfire outbreaks.

- Central and Eastern Texas will be in play this winter with continued drought development.