

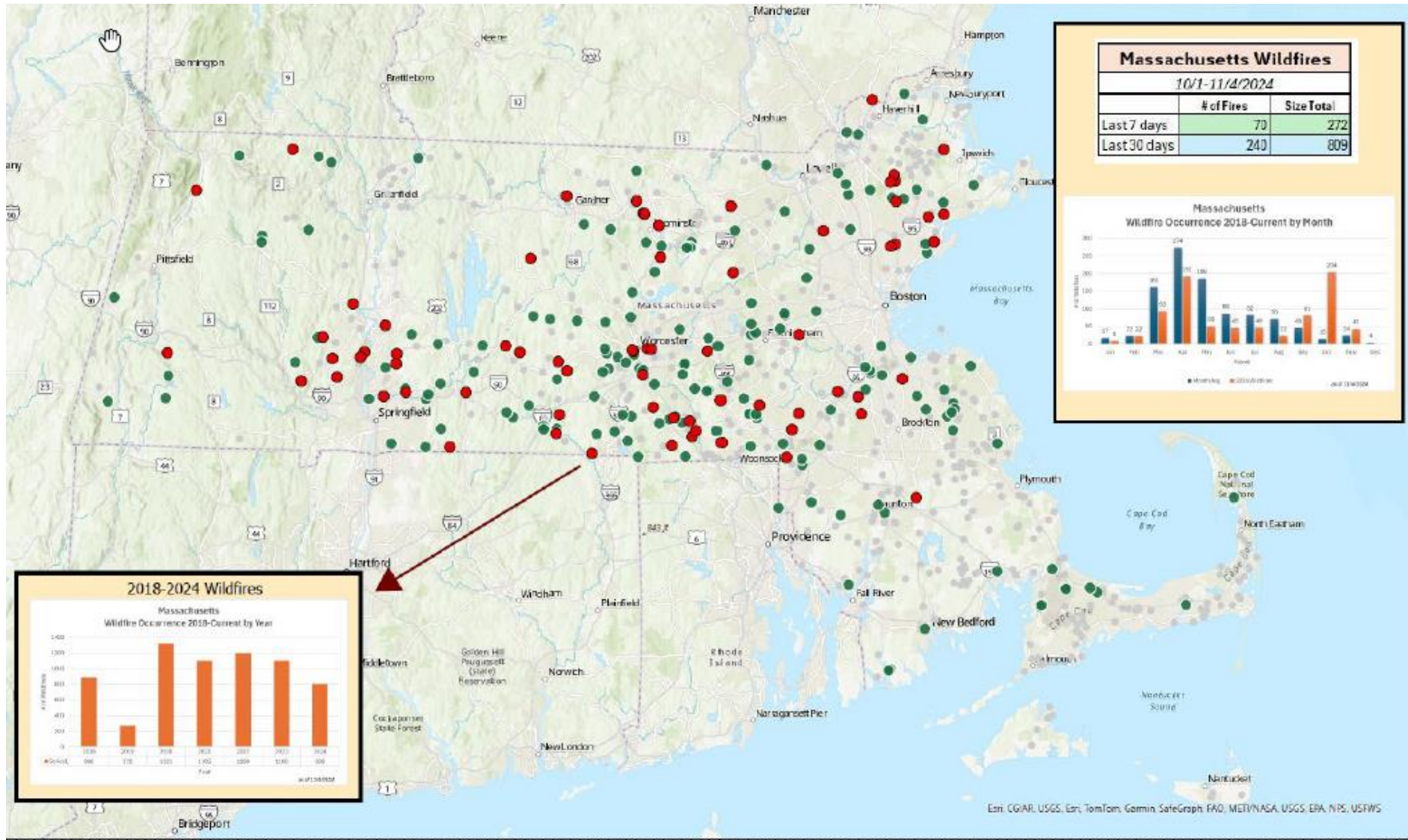
Wildland Fire Management Current Drought Impacts

FIRE STATISTICS:

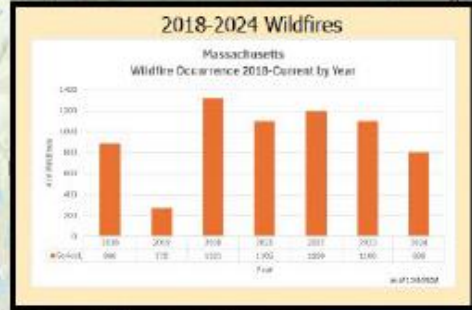
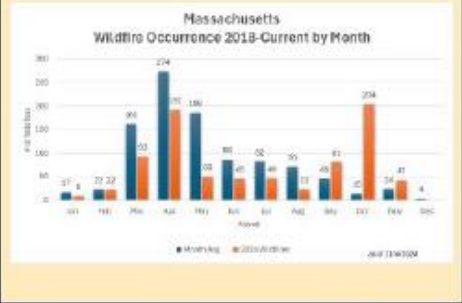
YTD STATE TOTALS:	813 FIRES	1,353 ACRES BURNED
OCTOBER TOTALS:	206 FIRES	623 ACRES BURNED
NOVEMBER TOTALS:	47 FIRES	188 ACRES BURNED
7 DAY TOTALS:	66 FIRES	243 ACRES BURNED
24 HR:	13 FIRES	4 ACRES BURNED (Est.)

•Drought Impacts on Fire Behavior and Suppression:

- KBDI steadily increasing across state. Cooler Temps slow progression.
 - All Districts showing increase in control challenges. Fires burning in up to 8”.
- Fuel moistures historically low for early November.
- Increasing stresses on fire response capacity at state and local level.
- Local Burn Bans going into effect across the state in many communities.
- 10 priority on going incidents across western, central and northeast.
- Smoke effects from extended drought fires have impacted local communities.

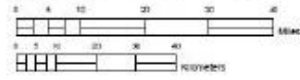


Massachusetts Wildfires		
10/1-11/4/2024		
	# of Fires	Size Total
Last 7 days	70	272
Last 30 days	240	809



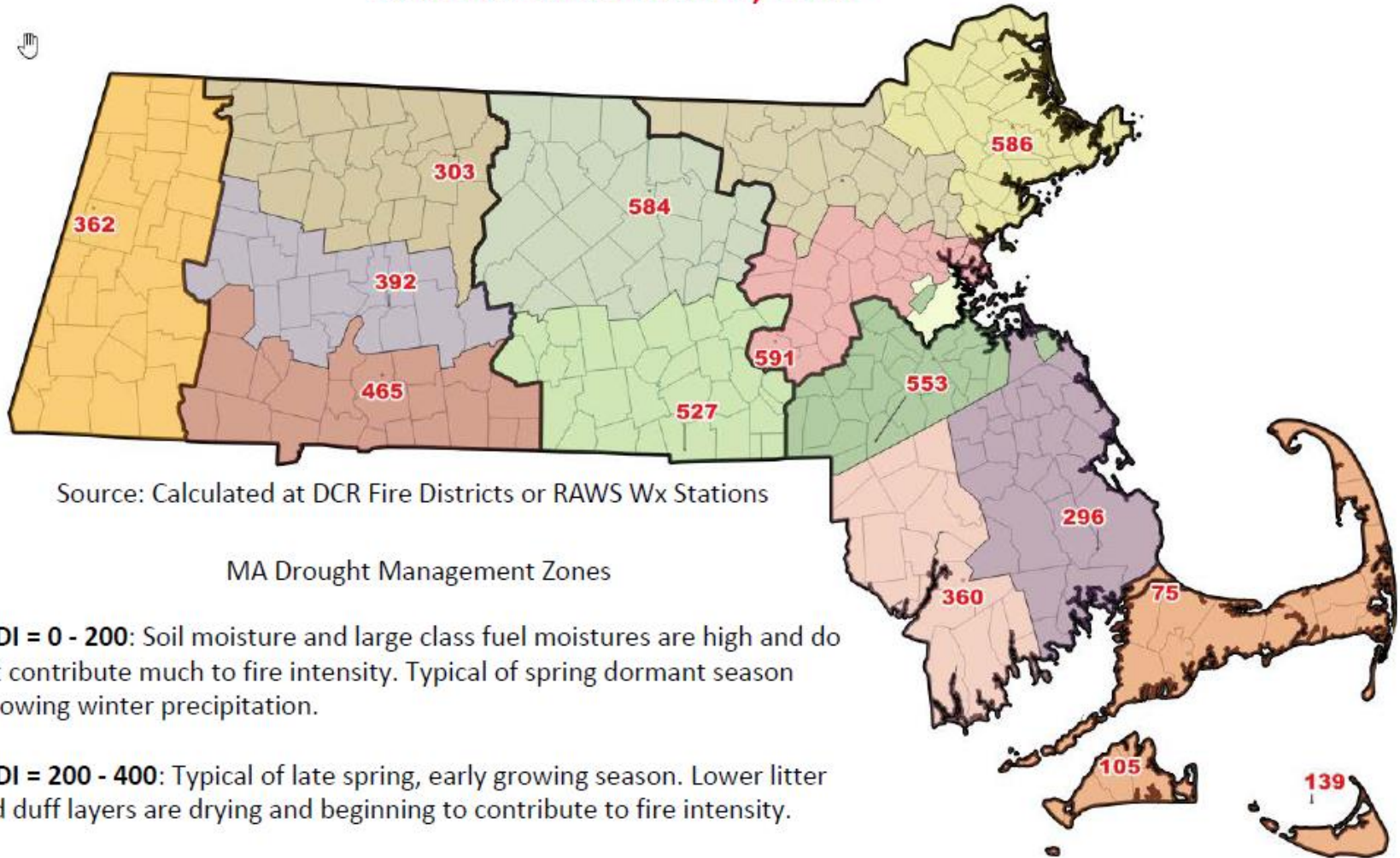
2024 Fire Occurrence
Massachusetts -Statewide
11/4/2024

- Legend
- Incidents_Last 7Days
 - Incidents_Last 30Days
 - Incidents_1/1 to 9/30



Esri, CGIA, USGS, Esri, TomTom, Garmin SafeGraph, FAO, MET/NASA, USGS, EPA, NPS, USFWS

Keetch – Byram Drought Index Data For November 5, 2024



Source: Calculated at DCR Fire Districts or RAWS Wx Stations

MA Drought Management Zones

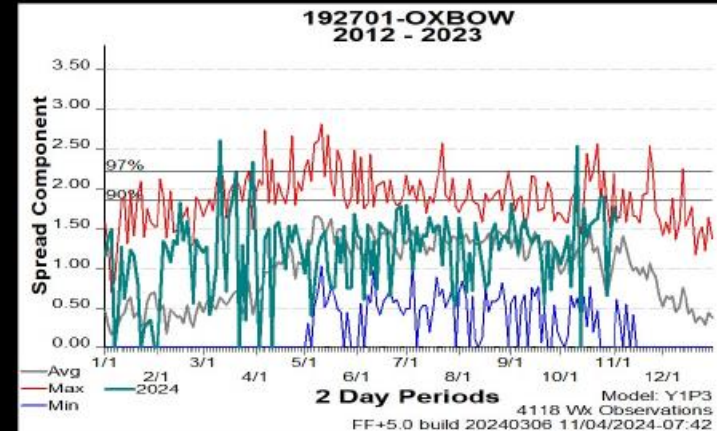
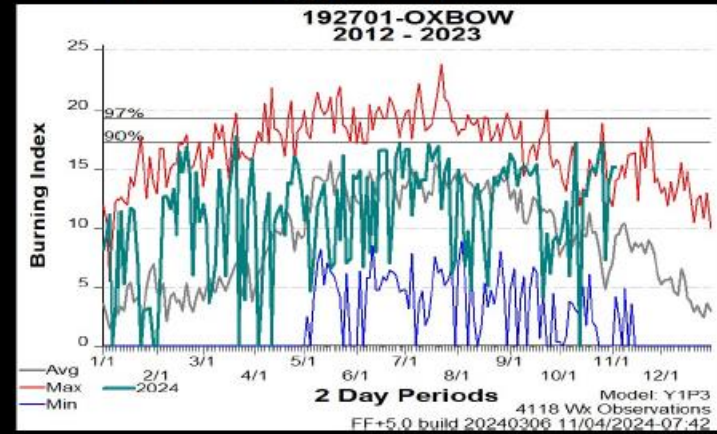
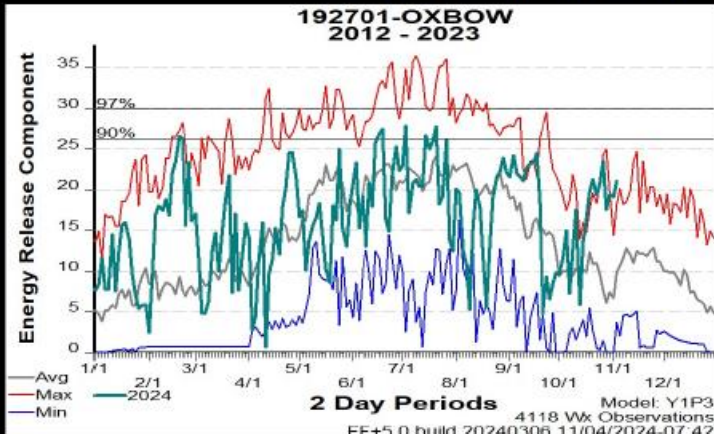
KBDI = 0 - 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. Typical of spring dormant season following winter precipitation.

KBDI = 200 - 400: Typical of late spring, early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 400 - 600: Typical of late summer, early fall. Lower litter and duff layers actively contribute to fire intensity and will burn actively.

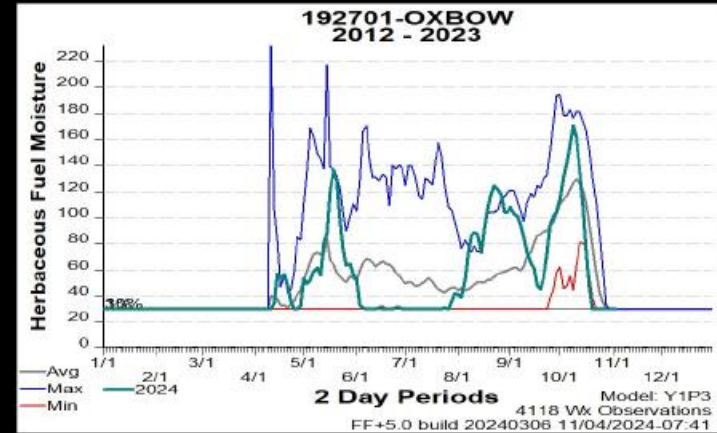
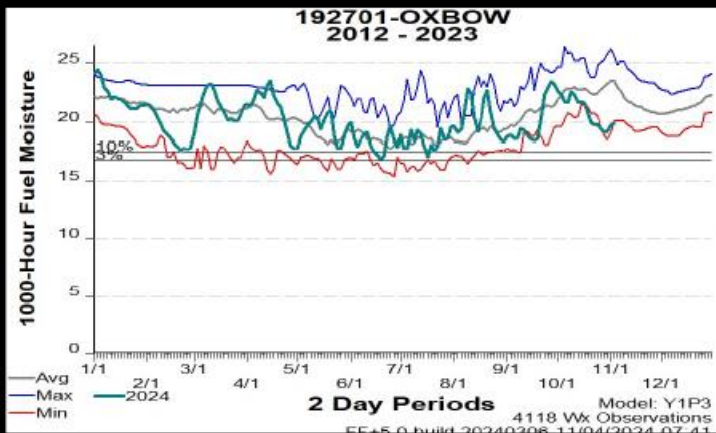
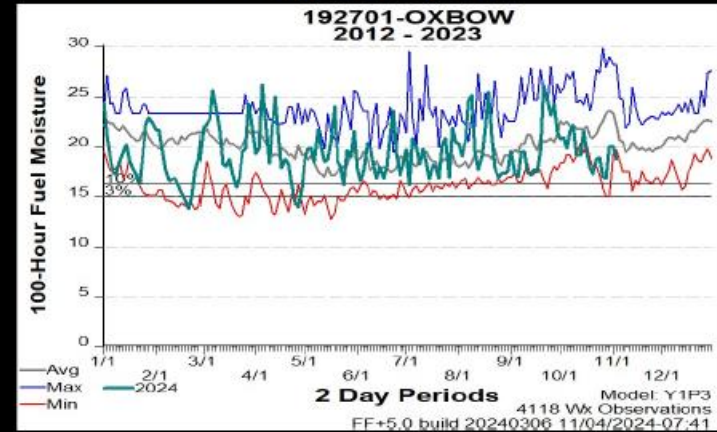
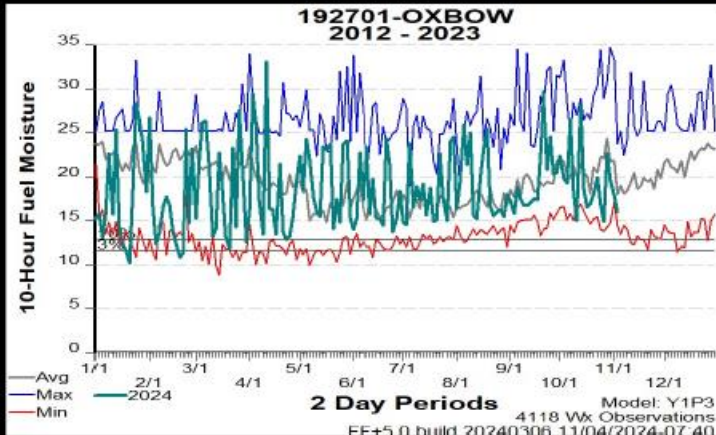
KBDI = 600 - 800: Often associated with more severe drought with increased wildfire occurrence. Intense, deep burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

OXBOW RAWS NFDRS Indices- Climatology Graphs



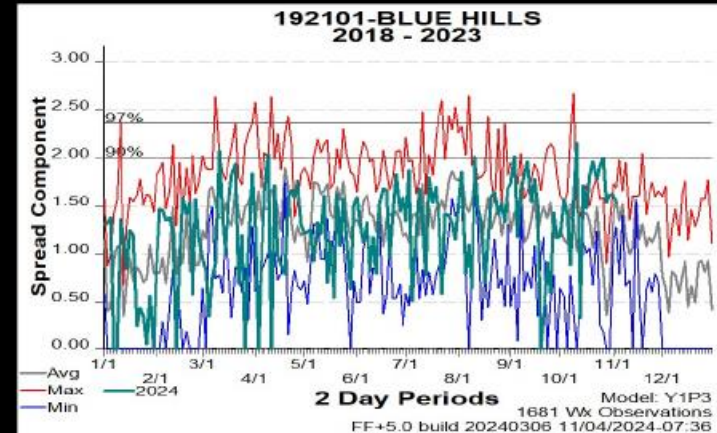
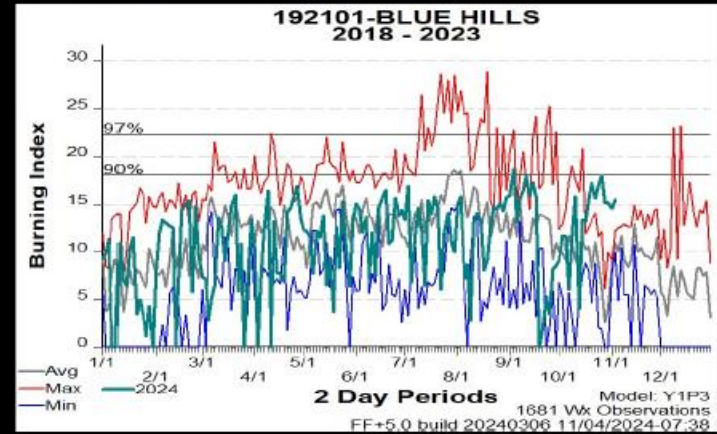
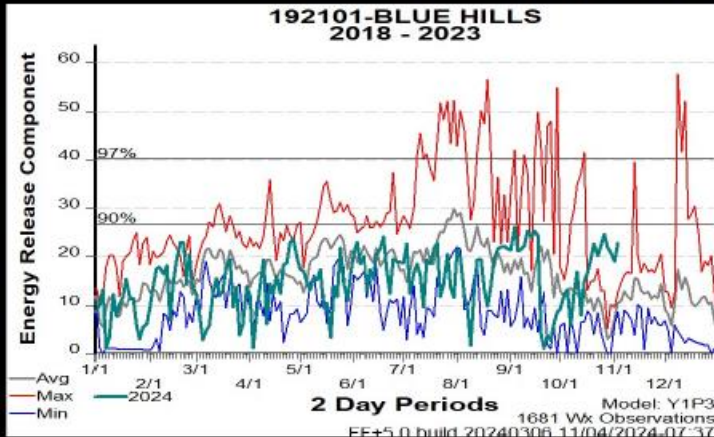
- Recent precipitation shows the short-term effect on some indices (BI, SC) whereas longer term indices had less of a decrease (KBDI, ERC).
- Long term precipitation deficits are allowing some indices to remain above the average and near maximum values for this time of year.
- BI and SC have decreased closer to average for this time of year but could trend higher with limited forecasted precipitation over the area.

OXBOW RAWS NFDRS Indices- Climatology Graphs



- Herbaceous and woody fuel moistures reduced to fully cured ~7-10 days ahead of average for this time of year.
- 100 and 1,000-hour fuel moistures are below average with Oxbow RAWs continuing to trend below historic ranges.
- 10-hour fuels rebounded closer to average following recent precipitation but will likely dry out with limited moisture in the forecast.

BLUE HILLS RAWS NFDRS Indices- Climatology Graphs



- All indices above are above historical maximum values and percentiles for this time of year.
- The relationship of these indices to precipitation deficits yield increased availability of fuels that are typically not seen this time of year.

*Note that there is only 6 years of historical data for Blue Hills RAWS

Massachusetts Wildfire Occurrence 2018 - Current by Month

