

# Wildland Fire Management Current Drought Impacts

## Fire Statistics: 11/17/24 17:00 Hrs

YTD STATE TOTALS:	1167 FIRES	2,150 ACRES BURNED
OCTOBER TOTALS:	212 FIRES	837 ACRES BURNED
NOVEMBER TOTALS:	392 FIRES	769 ACRES BURNED
7 DAY TOTALS:	123 FIRES	51 ACRES BURNED
24 HR:	37 FIRES	22 ACRES BURNED
		(Est.)

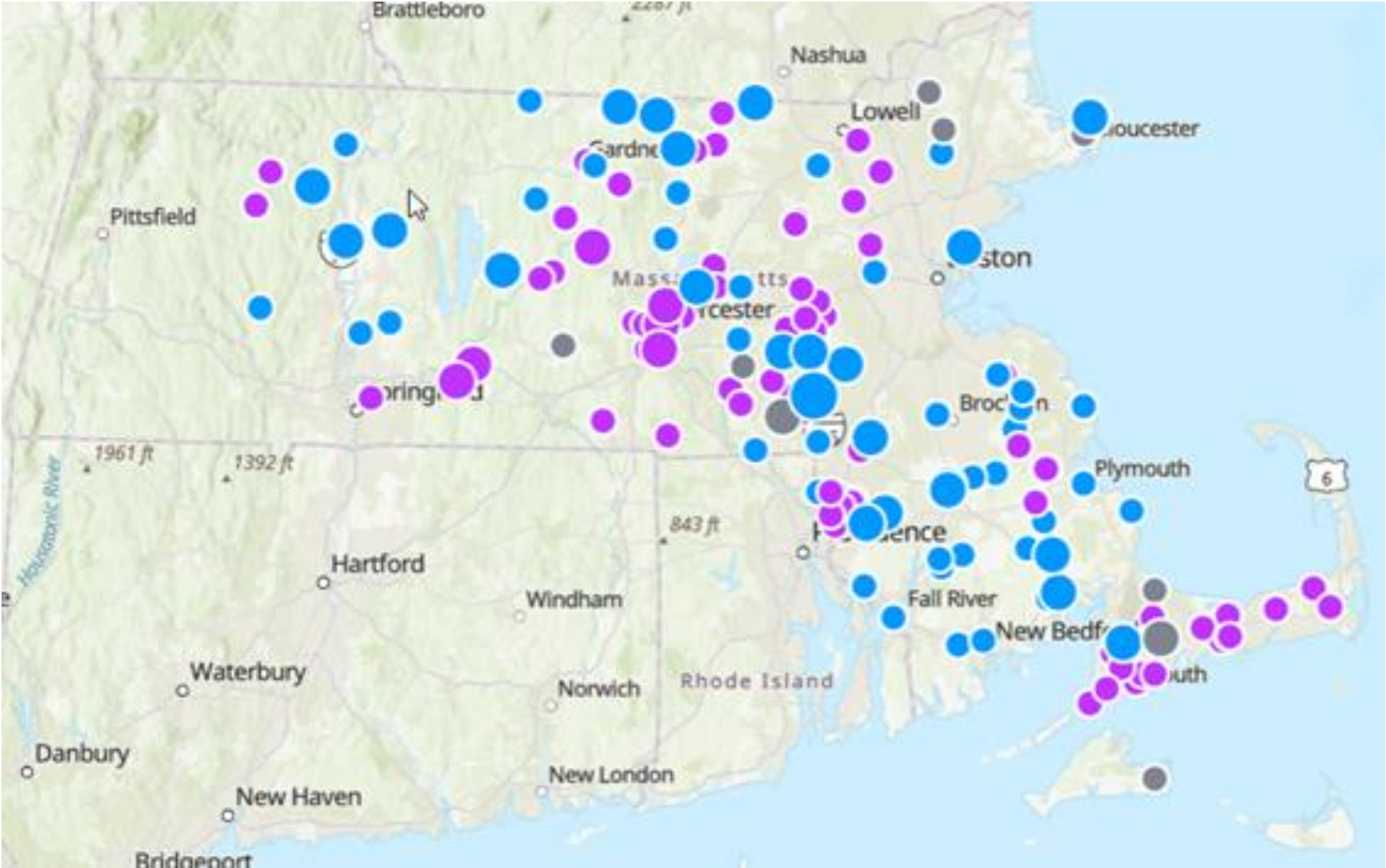
### •Drought Impacts on Fire Behavior and Suppression:

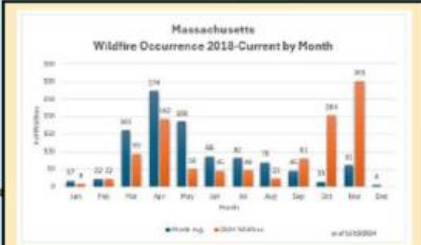
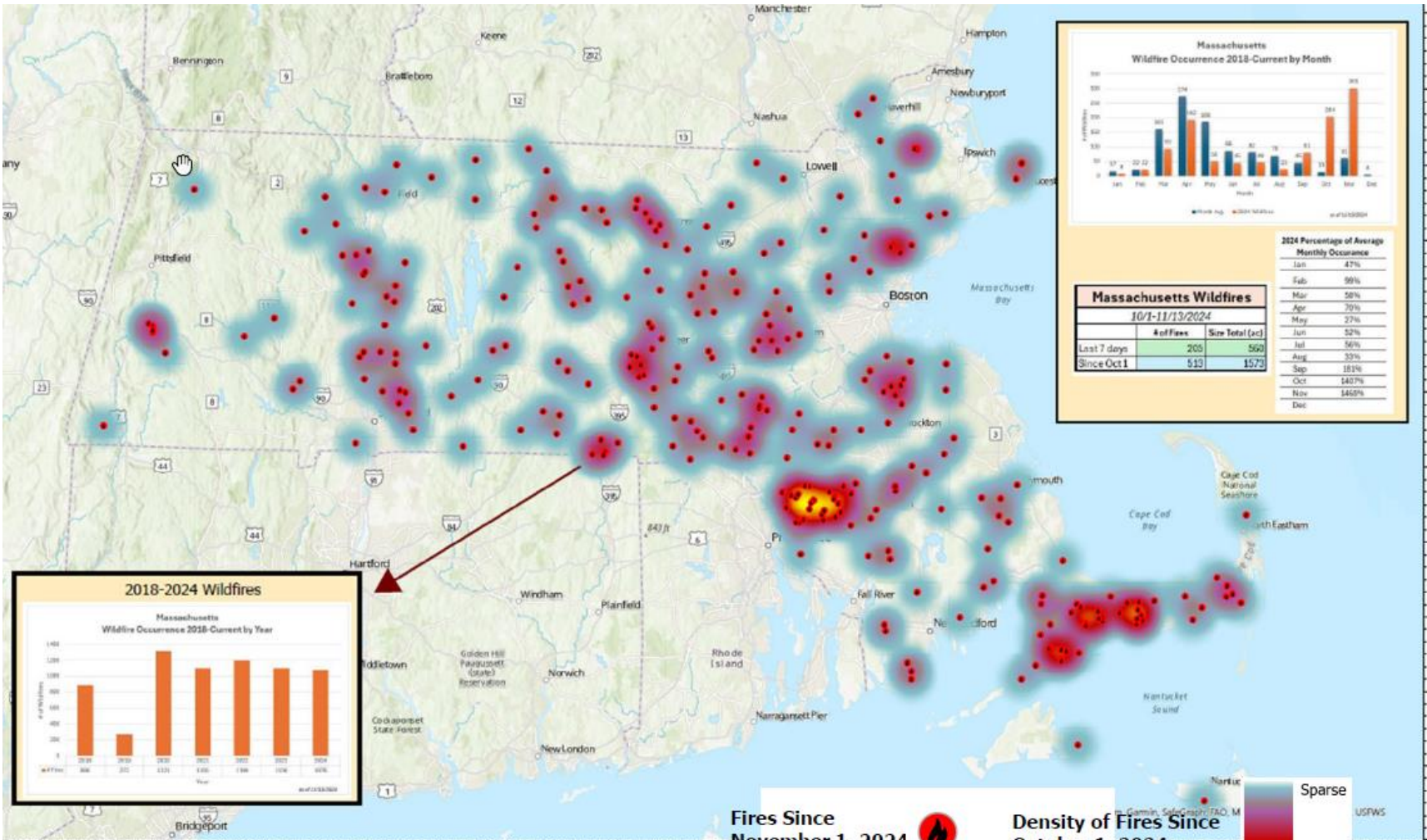
- KBDI steadily increasing across state. Cooler Temps slow progression.
  - All Districts showing increase in control challenges. Fires burning in up to 8”.
- Fuel moistures historically low for early November.
- Increasing stresses on fire response capacity at state and local level.
- Local Burn Bans 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.

## **ONGOING SAFETY ALERT for ALL FIRE RESPONSE STAFF:**

Both live and dead trees (Snag Trees) within active fire perimeters continue to be an **INCREASING RISK** to fire fighters. There are daily reports of near misses and increasing concerns of snags posing safety risks to firefighters on the fireline. Please brief all personnel, insist on wearing proper PPE, including hardhats or helmets, and if in doubt avoid areas with burning dead snags. Adjust tactics to make **firefighter safety the top priority objective for daily operations.**

# 7 Day Fire Locations as of 11/17/24



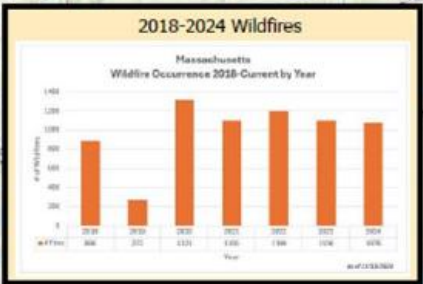


### 2024 Percentage of Average Monthly Occurrence

Jan	47%
Feb	99%
Mar	58%
Apr	70%
May	27%
Jun	52%
Jul	56%
Aug	33%
Sep	181%
Oct	1407%
Nov	1465%
Dec	

### Massachusetts Wildfires 10/1-11/13/2024

	# of Fires	Size Total (ac)
Last 7 days	205	560
Since Oct 1	510	1573



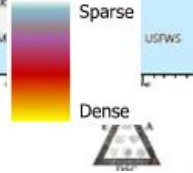
**Fire Occurrence since Nov. 1st**  
Massachusetts -Statewide  
11/13/2024

Legend  
 Sparse  
 Wildfires Nov 1-13th, 2024  
 Dense

**Fires Since November 1, 2024**



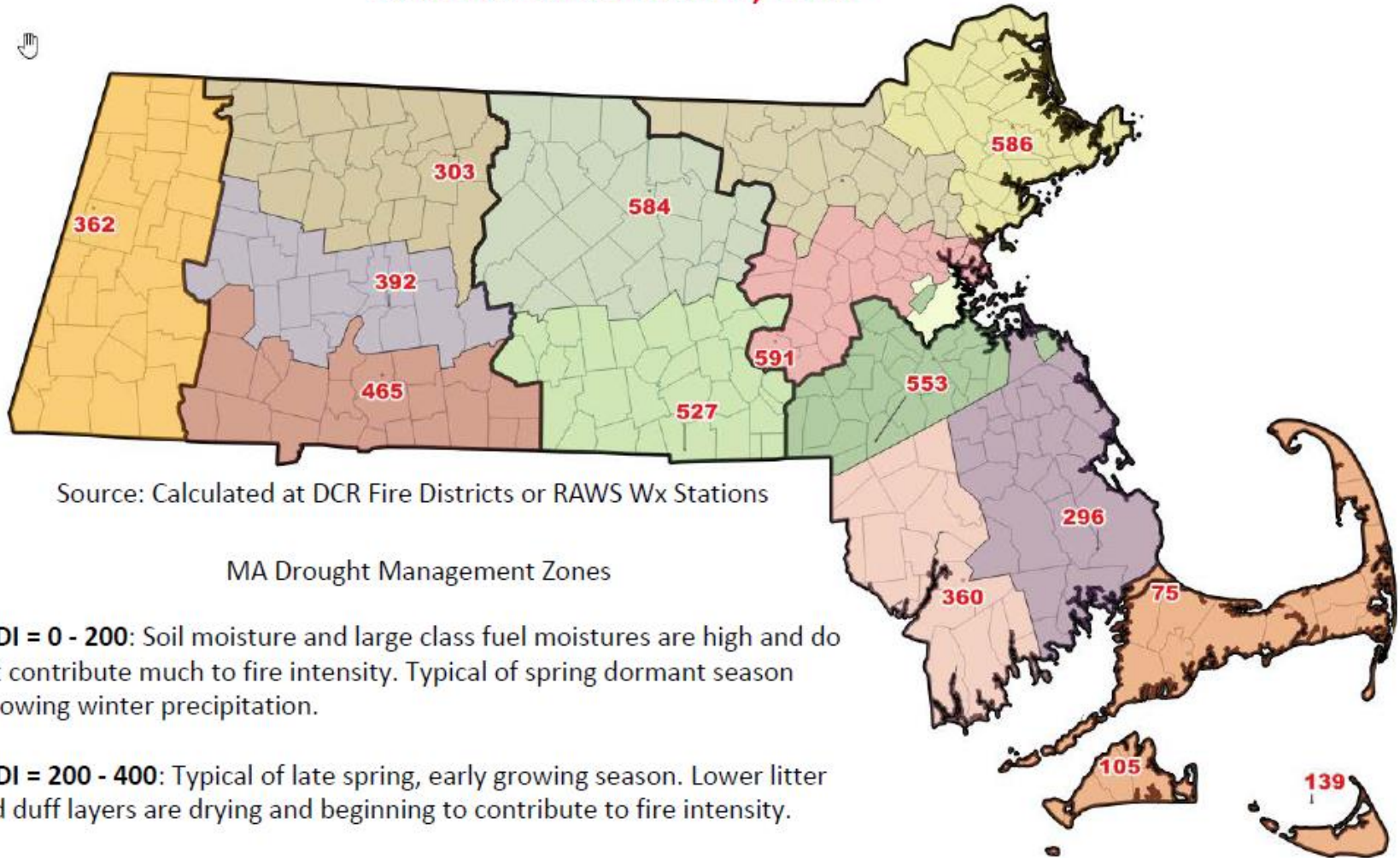
**Density of Fires Since October 1, 2024**



USFWS



# Keetch – Byram Drought Index Data For November 5, 2024



Source: Calculated at DCR Fire Districts or RAWS Wx Stations

## MA Drought Management Zones

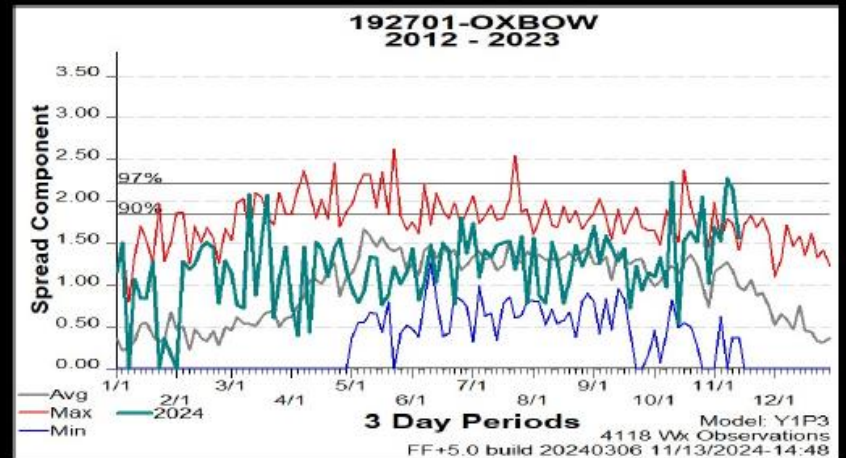
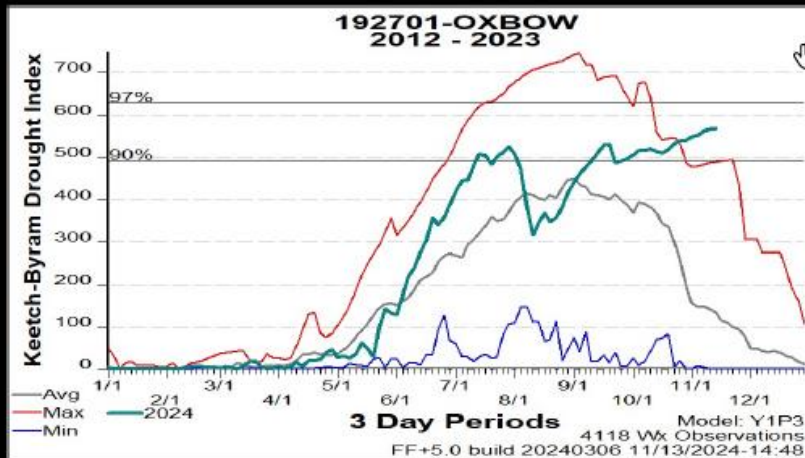
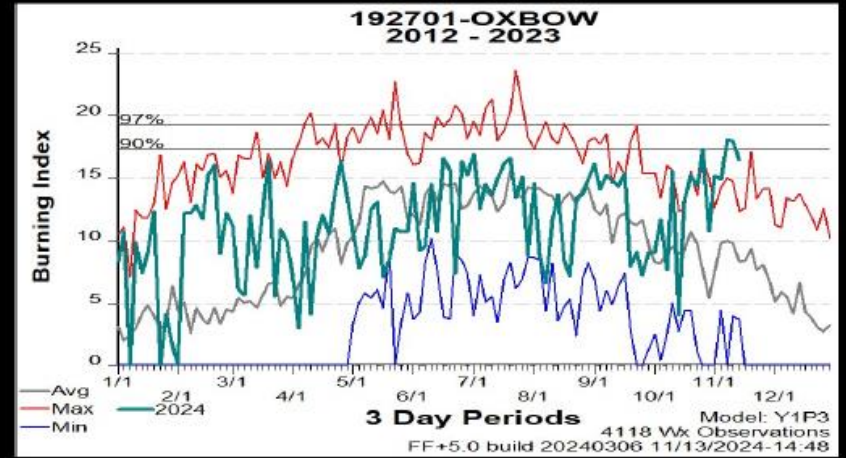
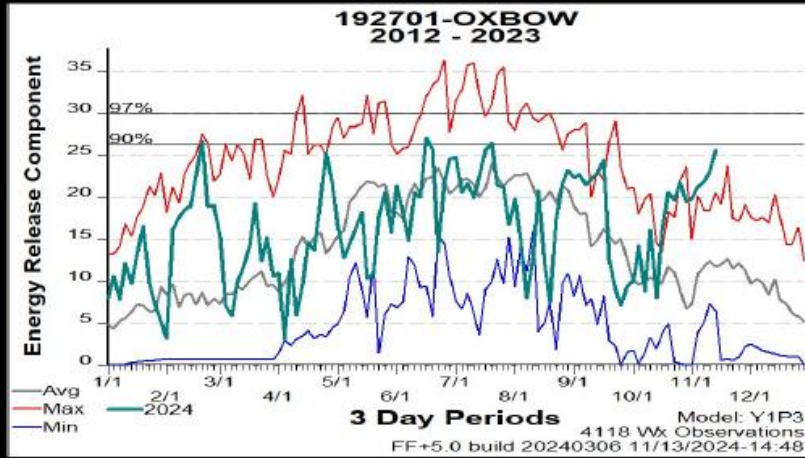
**KBDI = 0 - 200:** Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. Typical of spring dormant season following winter precipitation.

**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.

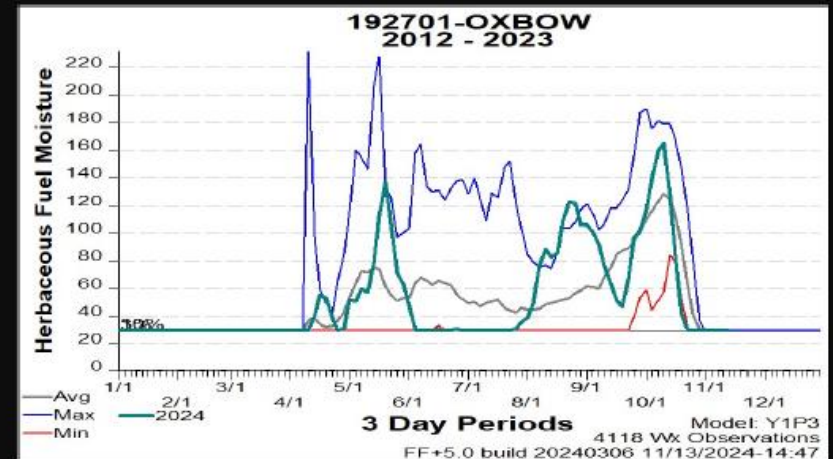
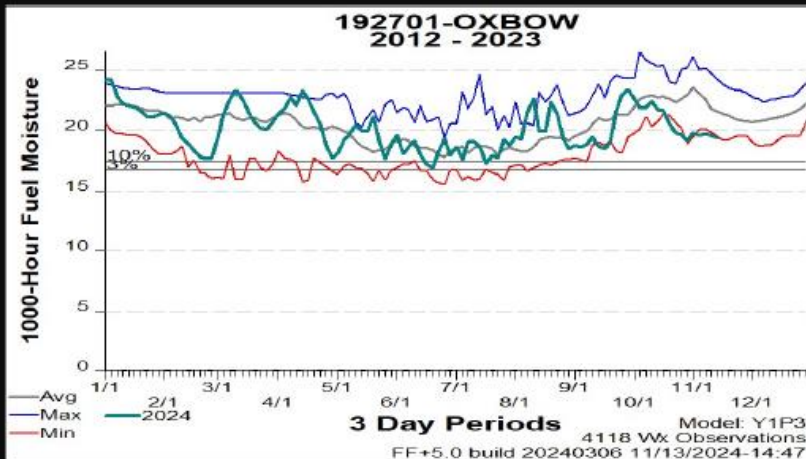
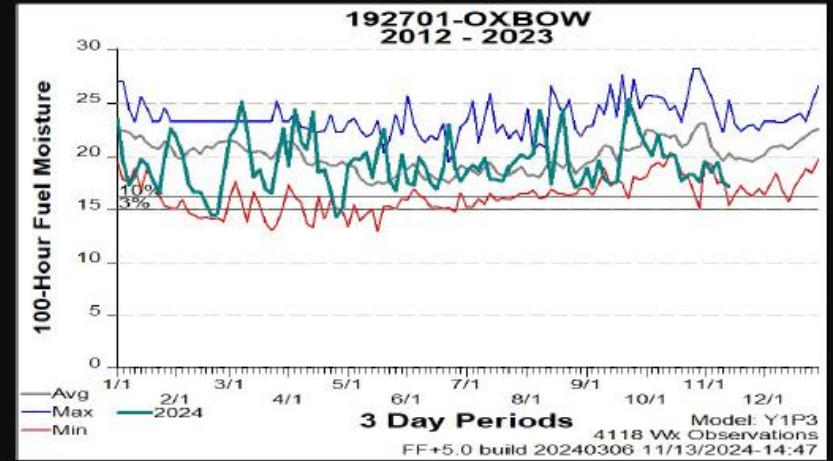
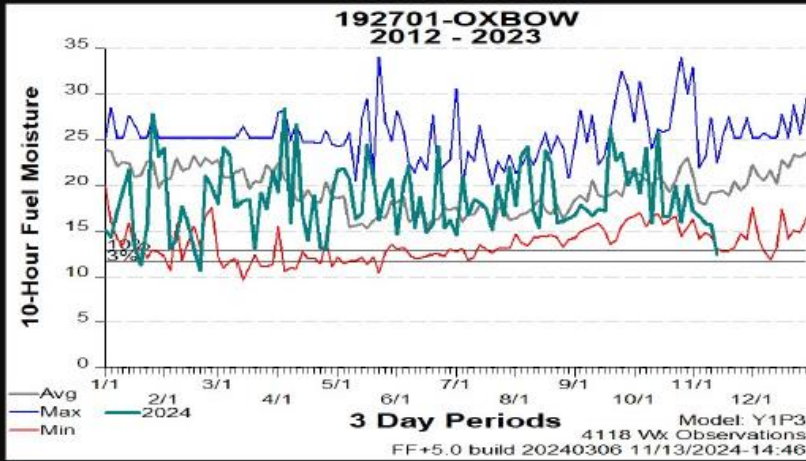
# Oxbow RAWS NFDRS Indices- Climatology Graphs



- Fire danger indices all trend above historic daily highs for this time of year. Longer term drying and drought have significantly amplified wildfire danger and risk.

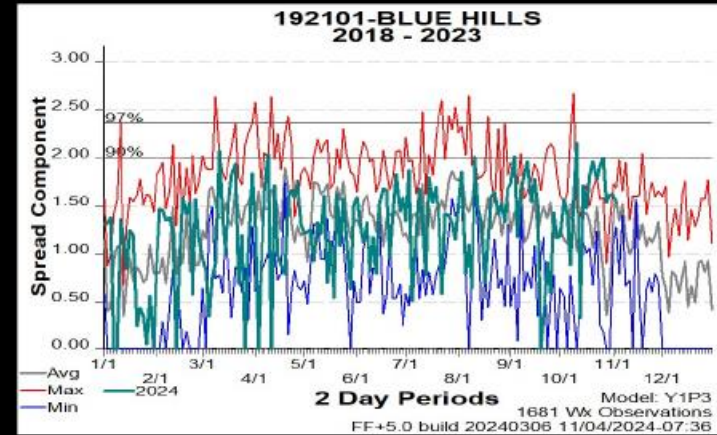
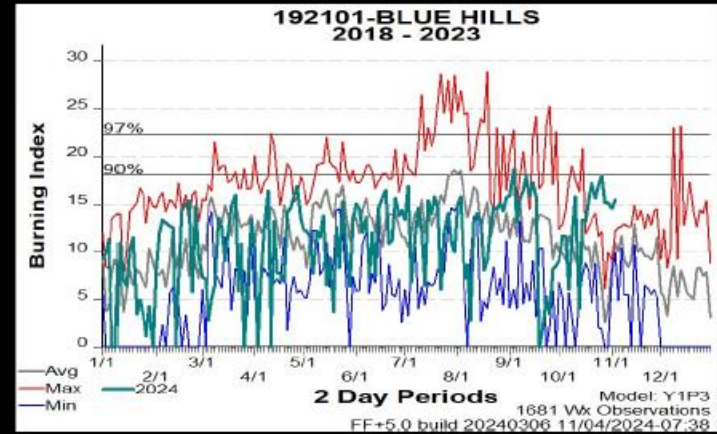
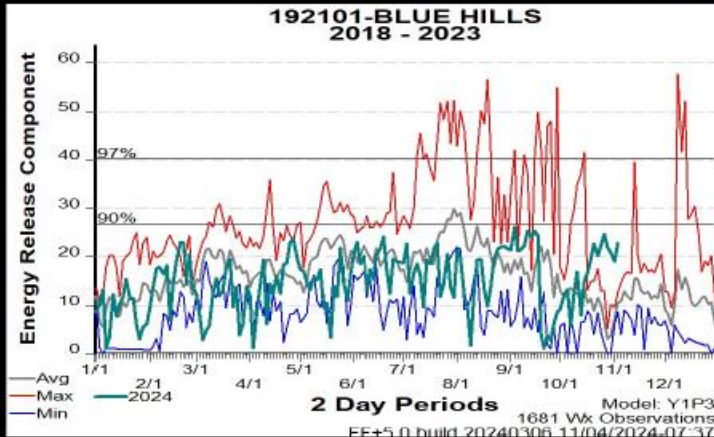


# Oxbow RAWS NFDRS Indices- Climatology Graphs



- Herbaceous and woody fuel moistures reduced to fully cured ~7-10 days ahead of average for this time of year.
- 10 and 100-Hour timelag dead fuels remain at or below historical lows for this time of year, continuing to trend dryer.

# BLUE HILLS RAWS NFDRS Indices- Climatology Graphs

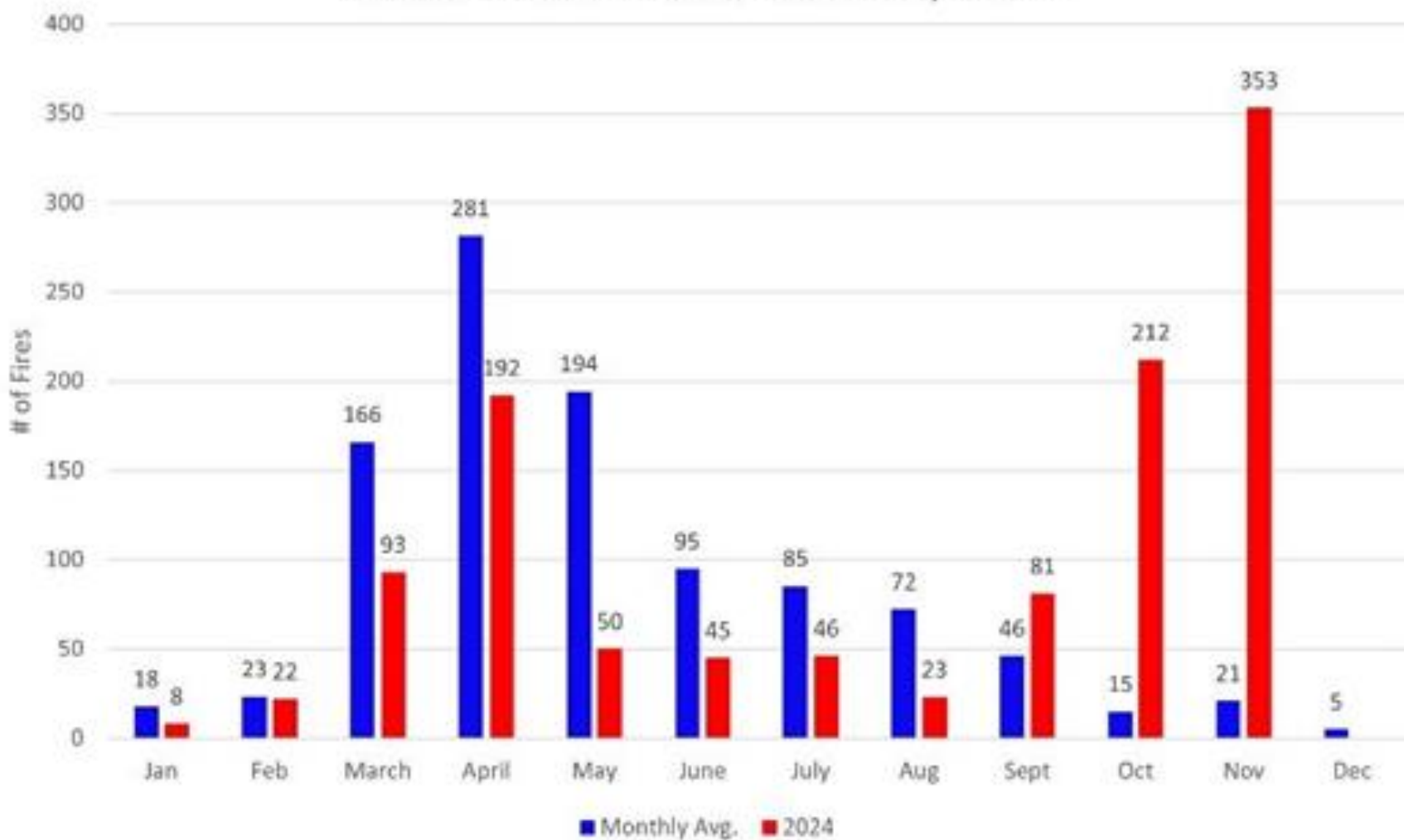


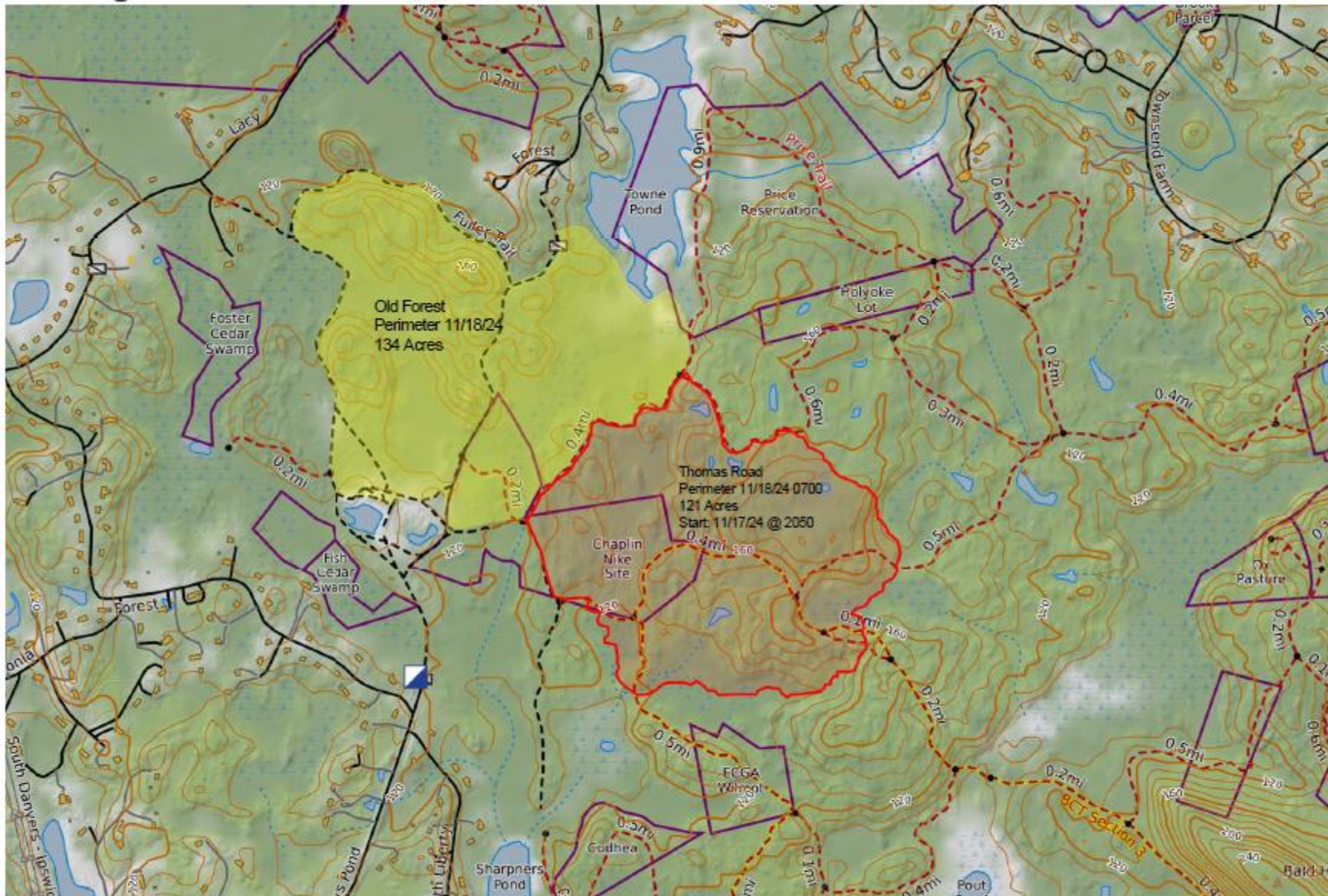
- All indices above are above historical maximum values and percentiles for this time of year.
- The relationship of these indices to precipitation deficits yield increased availability of fuels that are typically not seen this time of year.

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

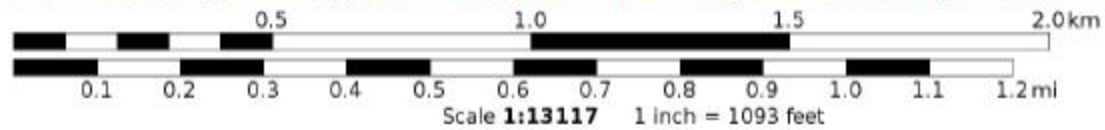


## Massachusetts Wildfire Occurrence 2018 - Current by Month





Thomas Rd Fire  
 WGS84  
 UTM Zone 19T  
 SARTOPO







Firefighters from New Hampshire and Maine assisted DCR Fire Control, and Middleton Fire Department with initial attack on the last day of their deployment on 11/15.