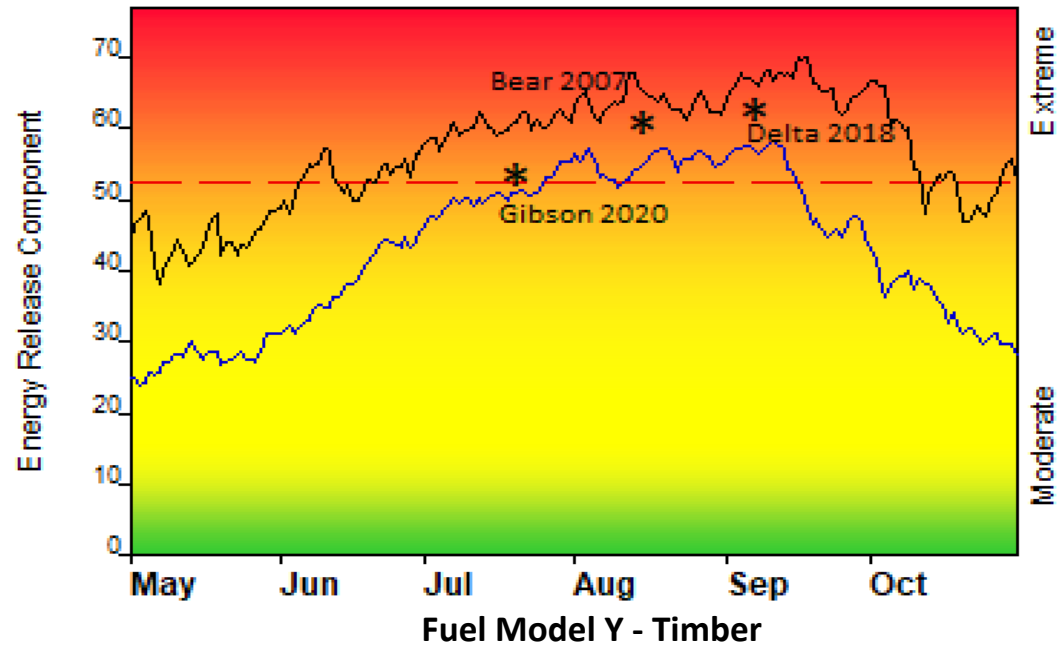


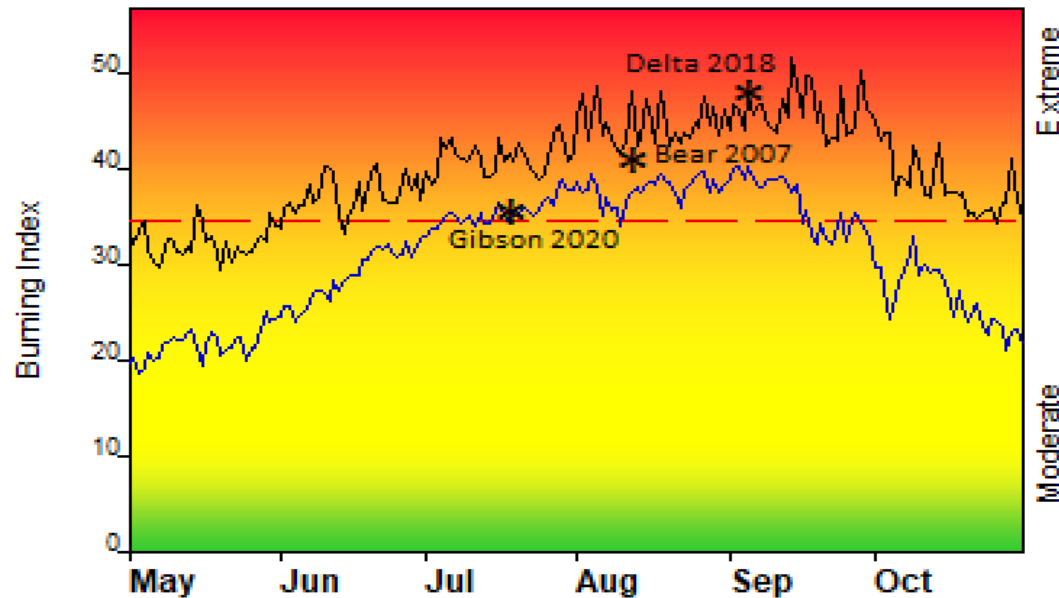


FIRE DANGER -- SHF Northeast

Maximum, Average, and Critical Value based on 15 years data



Maximum, Average, and Critical Value based on 15 years data



Fire Danger Rating Area: S-240 & S-243 Fire Weather Zone: 282, 284 and 213 in Sac. Canyon



- All analyses use NFDRS 16 Fuel Model Y (timber litter) and data from May 1st-October 31st.
- Threshold values determined using 2006-2020 data, cross walked to percentiles from 2010-2019 gap filled data.
- NFDRS Compliant RAWs: Sims, Mt Shasta, Bolam, Ash Creek and Round Mountain



Fire Danger Interpretation

- **Extreme – Use extreme caution**
- **High – Watch for Change**
- **Moderate – Low Potential, maintain awareness**
- Maximum – Highest Daily Value 2006-2020
- Average – Shows daily average index values over 15 years, peaks in this line indicate the peak of fire season – running from late July through mid-September in an average year.
- 71st Percentile ERC (dashed line upper left) – 29% of days from 2010-2019 had ERC above 52
- 75th Percentile BI (dashed line lower left) – 25% of days from 2010-2019 had BI above 34

Remember What Fire Danger Tells You:

- ✓ Energy Release Component (ERC) - Wind is NOT part of ERC calculation (Upper Left)
 - Represents overall seasonal trend – driven by heavy dead & live fuel moistures.
- ✓ Burning Index (BI) - Wind IS part of BI calculation (Lower Left)
 - Represents day-to-day fluctuations – driven by fine dead moisture and wind
- ✓ Fire danger is general - Look for local variations in fuels, topography & weather
- ✓ Listen to weather forecasts – especially wind!



Past Experience:

- Fire season often begins later than the rest of SHF due to higher elevation and heavier winter snow.
- **Winds are a significant driver of growth in this area!** Critical Winds include: 1) Strong diurnal winds in the Sacramento River Canyon 2) Downslope winds from Mt Shasta to the N/NW are common and often dry (Weed Winds). 3) McCloud Flats lack topography – winds can fuel large fire growth in any direction. T-storm outflows in NE California have resulted in large fire growth & entrapments on similar terrain (Crank 1987, Frog 2015)
- 66% of ignitions in this area human caused, ignition density is highest along I - 5 corridor and near communities. Industrial timber operations are considered values at risk and contribute to ignitions.
- Bear (2007) was a human caused fire driven by SSW winds on the McCloud Flats (FDRA S-243). Gibson (2020) and Delta (2018) were both human starts along I-5 with different outcomes. Gibson provided control difficulties, but spread was stopped during first shift. Delta occurred at extremes of BI and ERC; driven by strong up canyon winds, Delta grew over 20,000 acres during the first shift and became a major fire, closing I-5 and rail traffic for days.
- Problem fires (> 5 ac) become common at these thresholds, problem fire frequency increases beyond these values:

NFDRS	ERC > 52	BI > 34	
Weather	Temp > 81F	Min Rh < 28%	Rh Recovery < 75%