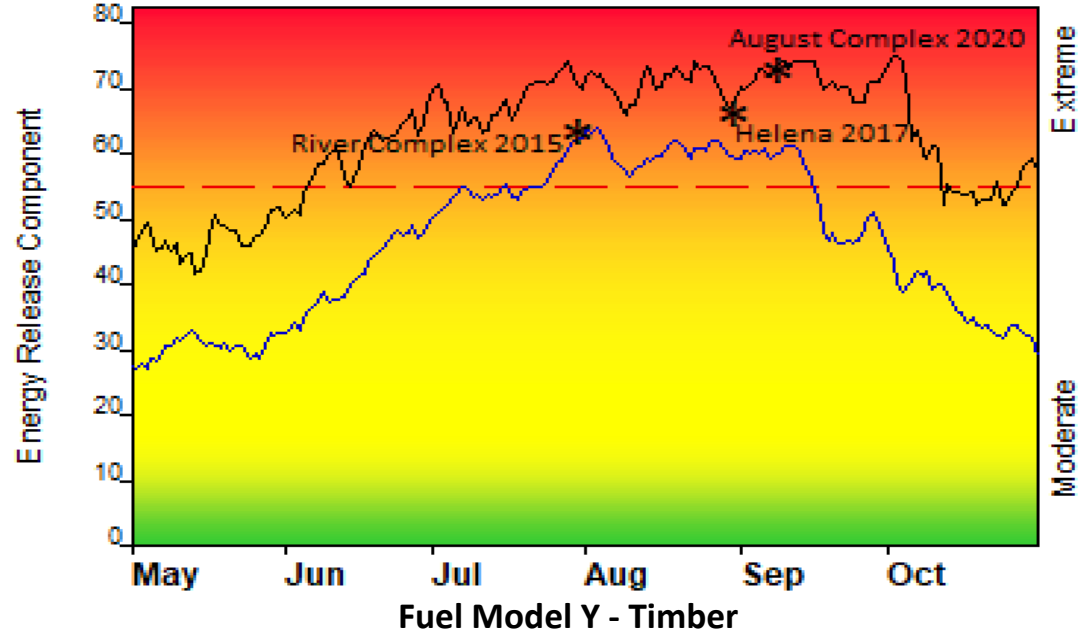




FIRE DANGER -- SHF West Side

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

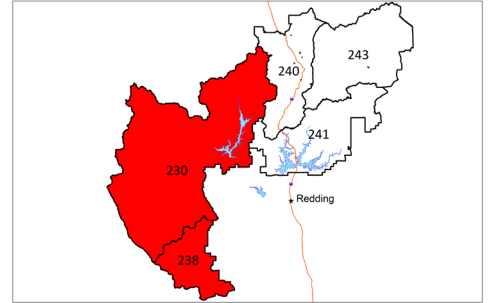


Fire Danger Rating Areas: S-230 & S-238 Fire Weather Zone: SHF portions of 283 and 263

- 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: Big Bar, Backbone, Scorpion, Trinity Camp, Hayfork, Friend Mountain, Yolla Bolla and Pattymocus

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 mid-July through mid September in an average year.
- **68th Percentile ERC** (dashed line upper left) – 32% of days from 2010-2019 had ERC above 55
- **65th Percentile BI** (dashed line lower left) – 35% of days from 2010-2019 had BI above 38

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!**



Past Experience:

- Large fire growth may occur without significant wind due to fuels and topography. The 2015 River complex grew steadily in this manner, driven by fuels and topography, with limited large growth driven by critical weather.
- Local winds often not captured by RAWs due to highly variable terrain and canyon influences. Diurnal canyon winds often dominate in main stem and South Fork of the Trinity River. Helena (2017) exemplifies this as a human caused start driven by canyon winds that were not well captured by the BI at RAWs across the 2 FDRAs.
- Dry lightning events are a frequent driver of multi-fire days and may not coincide with the thresholds below (River Complex 2015). Numerous fires overwhelm initial attack capacity, large growth may occur days to weeks after initial ignition. Nearly 60% of ignitions in period analyzed resulted from lightning.
- August Complex (2020) resulted from a major dry lightning event, similar to 2015. The complex burned onto SHF and experienced massive growth during multiple offshore wind events post-ignition. The date of largest growth on September 8th - 9th during one such offshore event is shown, not ignition date.
- Problem fires (> 5 ac) become common at these thresholds, problem fire frequency increases beyond these values:

NFDRS	ERC > 55	BI > 38	
Weather	Temp > 89F	Min Rh < 21%	Rh Recovery < 70%

Responsible Agency: USFS Shasta-Trinity NF
Updated 6/2/2021

