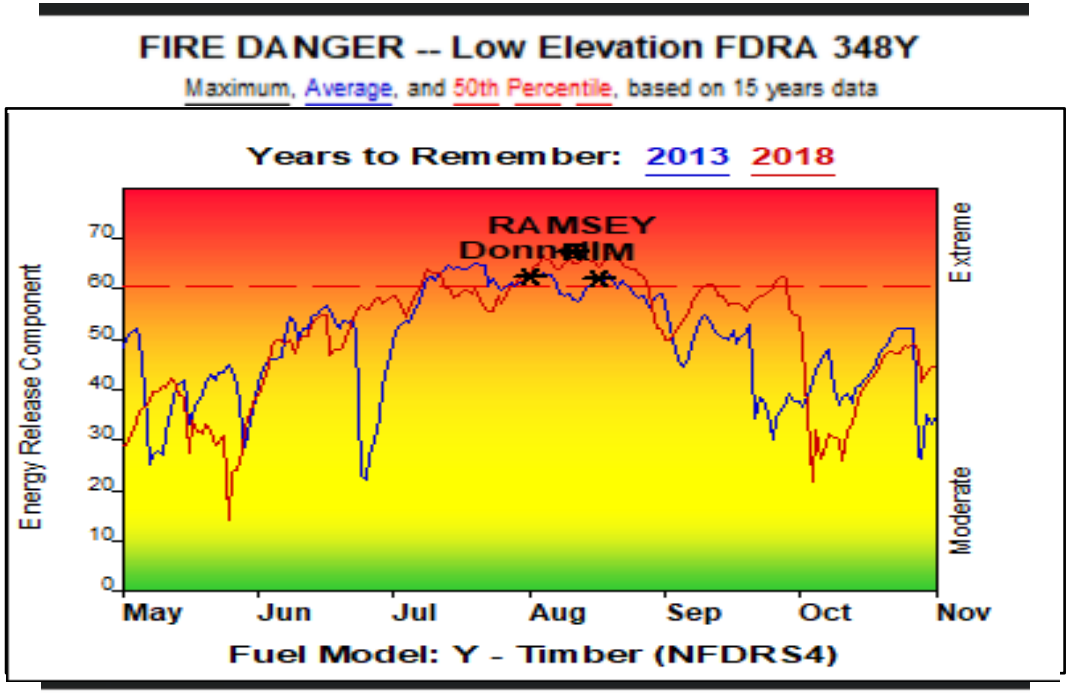
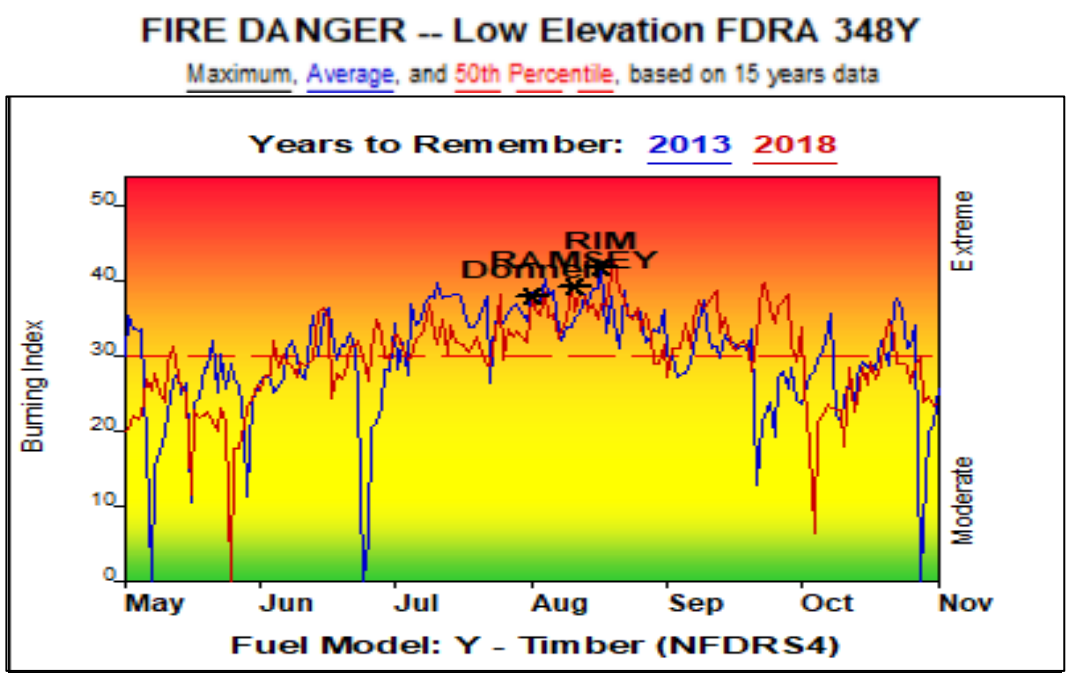
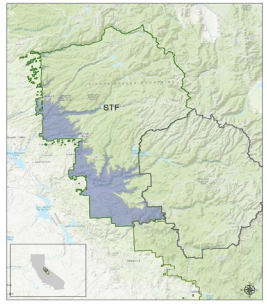






Fire Danger Rating: Low Elevation 348
Stanislaus NF ~ less than 4000 ft.
Forecast Zone: CAZ221
Weather Stations: 043605 Mt. Elizabeth
044115 Smith Peak
Stations meets NWCG Weather Station Standards
Local Thresholds – WATCHOUT:
Combinations of any of these factors can increase fire behavior: 20ft windspeed over 10 mph; temperatures over 90° F; 1000-hr fuel moisture less than 9%; or relative humidity less than 20%.

Graph Interpretation: Energy Release Component (ERC)
ERC indicates seasonal trends calculated from temperature, RH, precipitation duration, and solar radiation.
Wind is NOT part of ERC calculation.
MAX line: shows highest ERC per day from 2010 to 2025
AVG line: shows average ERC from April 1 to November 1

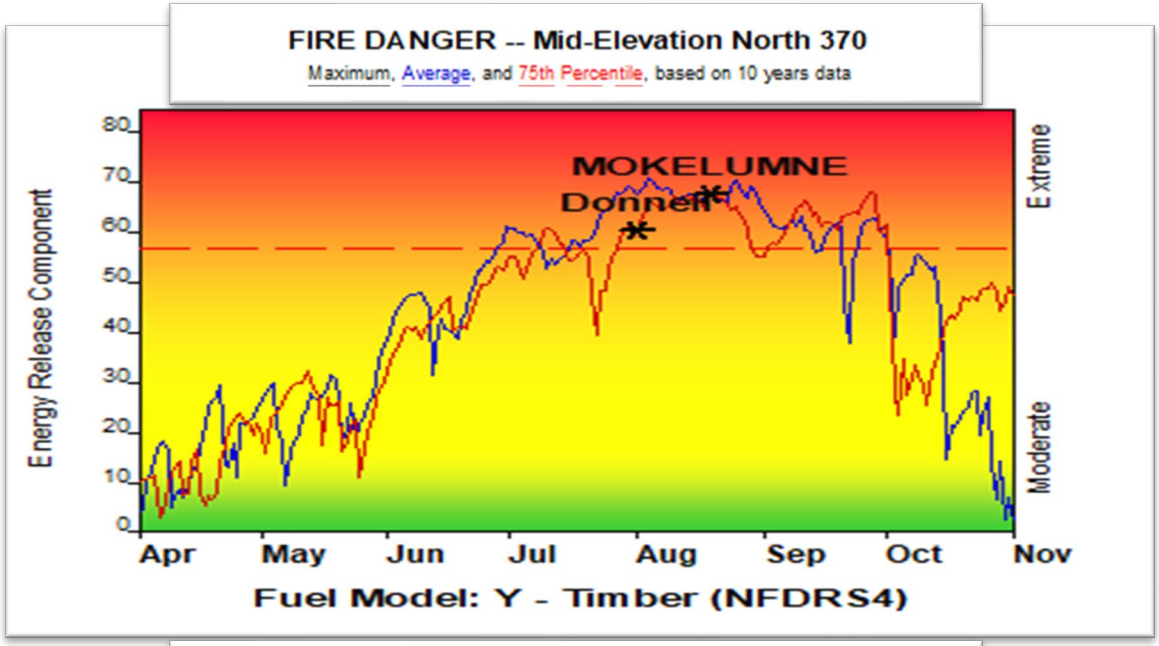
80th percentile ERC and 50th percentile BI are the climatological breakpoints at which only 20% of ERC values and 50% of BI values in the analysis are ranked greater in value. These thresholds increase the chance of extended attack, large fire growth (10+acres), and/or high resistance to control.
Past Experience/Local Knowledge:

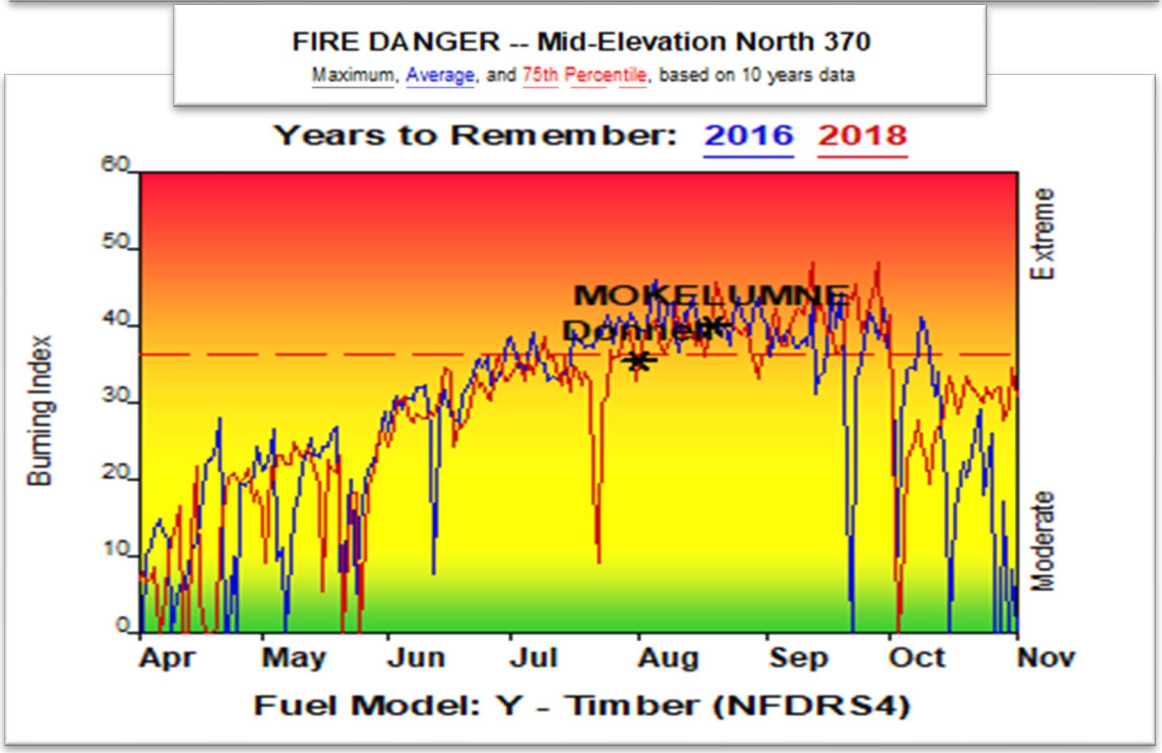
2013 Rim Fire:	Large fire growth of 10,000 acres per day. Created it's own weather patterns
2012 Ramsey Fire:	Started in river canyon with limited access.
2018 Donnell Fire:	Multiple crown runs in timber causing high structure loss at high elevation.

- Expect strong diurnal shifty winds in major river drainages along with eddies formed by diverse topography.
- Expect areas that have experienced drought, bug-kill and/or fire to have heavy dead and down fuels and standing snags.

STF Dispatch broadcasts: 1045 today's predicted, 1430 today's actual, 1600 tomorrow's predicted.

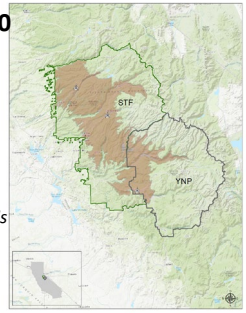
Graph Interpretation: Burning Index (BI)
BI reflects day to day fluctuations calculated from temperature, RH, **wind**, solar radiation, & precipitation.
MAX line: shows highest BI by per day from 2010-2025
AVG line: shows average BI from April 1 to November 1





Fire Danger Area: Mid-Elevation North 370
Stanislaus NF
Forecast Zone: CAZ221 & CAZ592
Weather Stations: 043210 Cottage
043615 Pinecrest2
044102 Crane Flat

Stations *meet NWCG Weather Station Standards*



Local Thresholds – WATCHOUT:
Combinations of any factors can increase fire behavior: 20 ft windspeed over 9 mph; temperatures over 85°F; or relative humidity less than 20%.

Graph Interpretation: Energy Release Component (ERC)
ERC indicates seasonal trends calculated from temperature, RH, precipitation duration, and solar radiation.
Wind is NOT part of ERC calculation.
MAX line: shows highest ERC value per day from 2014-2024
AVG line: shows average ERC value from April 1 to Nov. 1

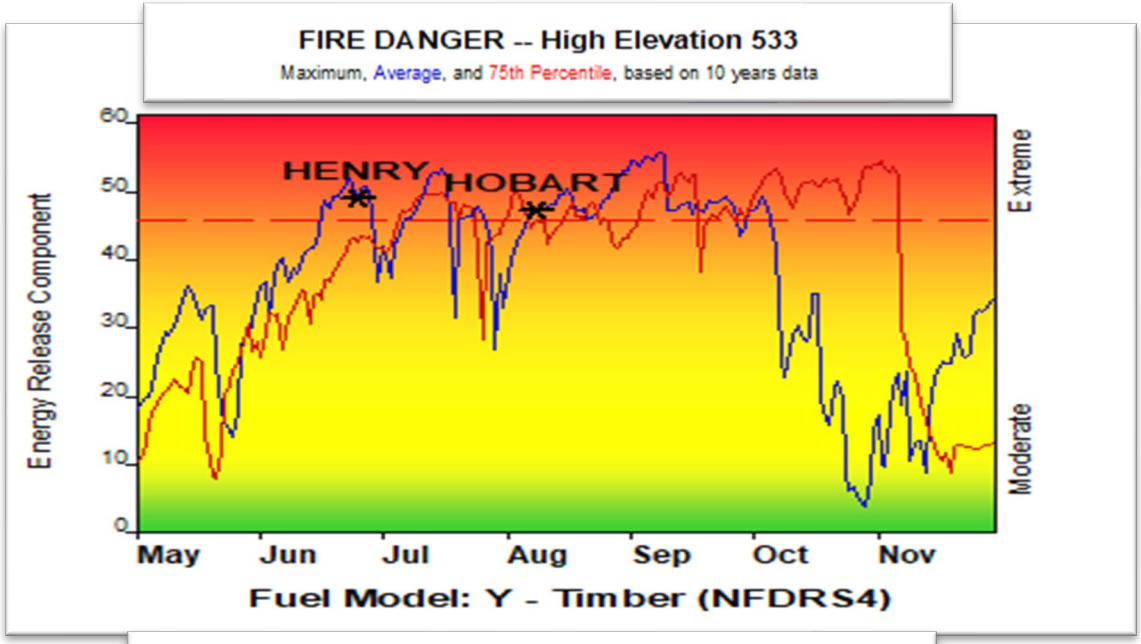
75th percentile ERC and 75th percentile BI are the climatological breakpoints at which only 25% of ERC values and 25% of BI values in the analysis are ranked greater in value. These thresholds increase the chance of extended attack, large fire growth (10+acres), and/or high resistance to control.

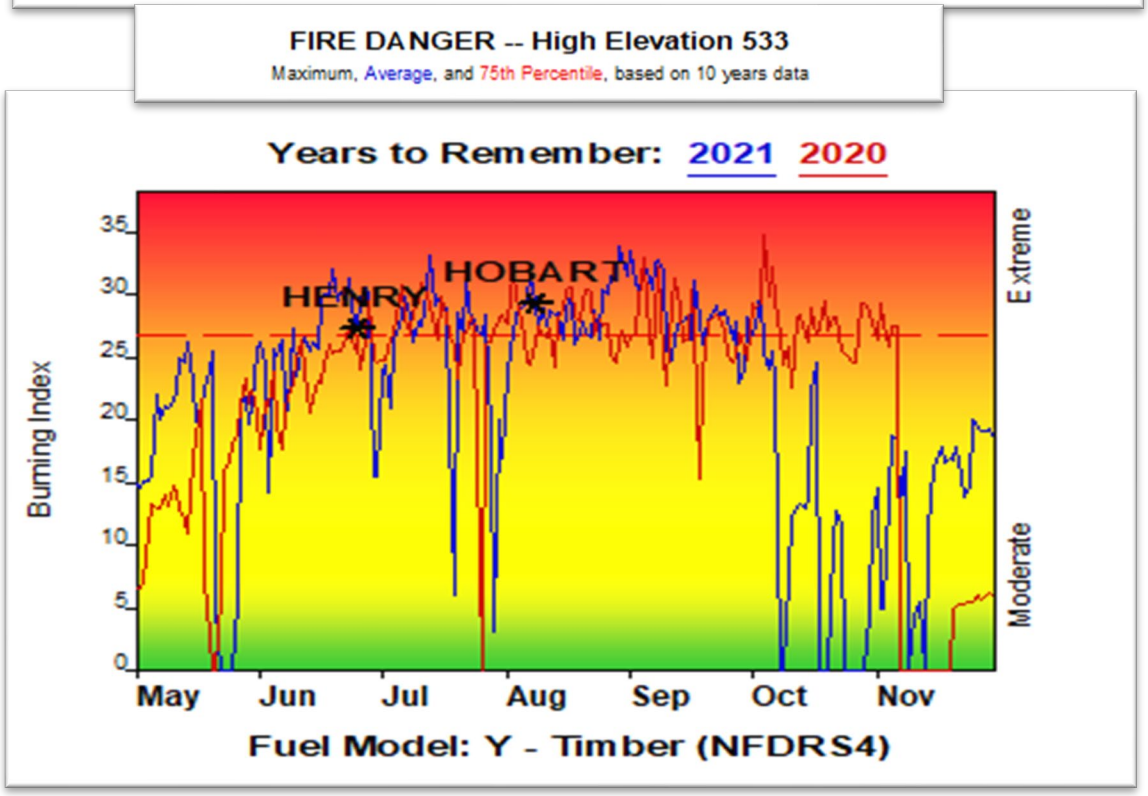
Past Experience/Local Knowledge:
- Expect strong diurnal shifty winds in major river drainages along with eddies formed by diverse topography.
- Expect areas that have experienced drought, bug-kill and/or fire to have heavy dead and down fuels and standing snags.

2016 Mokelumne Fire: 655 acres	Difficult access and all local thresholds were exceeded. ERC and BI were above the 97th percentile.
2018 Donnell Fire: 36,144 acres	Largest fire that originated above 5,000 ft and 5th largest overall on STF. Factors that contributed to rapid fire growth included drainage aligned winds, heavy fuels, low RHs. ERC at 99th percentile & BI at 70th percentile.

Graph Interpretation: Burning Index (BI)
BI reflects day to day fluctuations calculated from temperature, RH, **wind**, solar radiation, & precipitation. MAX line: shows highest BI by per day from 2014-2024
AVG line: shows average BI from April 1 to Nov. 1

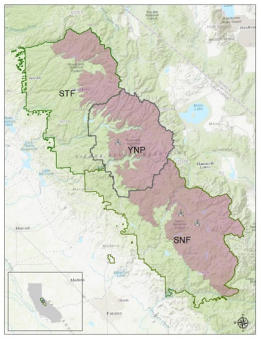
Responsible Agency: USFS CA-STF
Pocket Card Created: 12/18/2024





Fire Danger Area 533: High Elevation
(Yosemite NP, Stanislaus NF, & Sierra NF)
Forecast Zone: CAZ592
Weather Stations: 043612 White Wolf RAWS
044511 Mt Tom RAWS
044520 High Sierra RAWS

Stations meet NWCG Weather Station Standards



Local Thresholds – WATCHOUT:

Combinations of any of these factors can increase fire behavior: 20' windspeed over 10 mph; Temperatures over 75 degrees; Relative humidity < 12. Large fires become more frequent when ERC exceeds the 75th percentile* and BI exceeds the 75th percentile **

Graph Interpretation: Energy Release Component (ERC)

- ***ERC gives seasonal trends calculated from temperature, RH, precipitation duration, & solar radiation. Wind is NOT part of ERC calculation.***

Max: Highest ERC by day 2014-2024
Average: shows peak fire season
***75th percentile** is the climatological breakpoint at which only 25% of ERC values in the analysis are greater in value. These thresholds increase the chance of extended attack, large fire growth (10+acres), and/or high resistance to control.

Past Experience/Local Knowledge:

- 2018 & 2020 both were abnormally dry years, with 2020 resulting in the most acres burned during the analysis period
- Problematic fire behavior is likely if ERC or BI is > 75th percentile
- Expect grass/brush fires to escape initial attack when BI > 75th percentile
- Extended high pressure with low RH recovery= increase potential for large fires
- Steep slopes/inaccessible terrain make suppression difficult

Graph Interpretation: Burning Index (BI)

- ***BI gives day to day fluctuations calculated from temperature, RH, wind, solar radiation, & precipitation.***

Max: Highest Burning Index by day 2014-2024
Average: shows peak fire season
****75th percentile** is the climatological breakpoint at which only 25% of ERC values in the analysis are greater in value. These thresholds increase the chance of extended attack, large fire growth (10+acres), and/or high resistance to control.

Responsible Agencies: NPS CA-YNP, FS CA-STF & CA-SNF
Pocket Card Created: 05/2022