

Fuels and Fire Behavior Advisory

Rangelands in Eastern Washington and Eastern Oregon

8/26/17

Subject: Potential for extreme fire spread rates, significant fire spread and increased resistance to control due to increased loading and continuity of grasses in rangelands in Eastern Washington and Eastern Oregon.

Discussion: Optimal growing conditions this spring created an above normal grass crop. Many locals are reporting the most grass they have seen and monitoring data show 2 to 3 times the normal grass load. Some locations are reporting grasses that are taller than the shrubs around them.

Extended dry conditions and the recent heat wave have caused fuel moistures to reach critical levels. Grasses are cured at this time and are burning rapidly and intensely with the additional cured grass load. Shrubs are at critical moisture levels and are contributing to increased fire intensity and prolific short range spotting. Extreme rates of spread and continuous spread have been observed on recent fires.

Resistance to control is greatly increased. Recent fires have reported:

- Extreme rates of spread and continuous spread even with moderate winds
- Normal retardant coverage for grass fires is not stopping fires as it normally would
- Increased potential for the fire to rekindle after it has been knocked down
- Prolific short range spotting in brush

Conditions across the area are expected to remain until significant moisture arrives.

Difference from normal conditions: Recent fires are spreading faster than expected, more intensely and typical firefighting tactics are less effective, even with moderate winds. ERC's are trending well above normal for this time of season.

Concerns to Firefighters and the Public:

- Extreme rates of spread with moderate winds can exceed firefighter production rates, and put firefighters and the public at risk. Anticipate rapid rates of spread, even in the absence of slope and wind.
- Fires will be easier to start and spread and spotting will be more problematic with the increased grass continuity.
- Anticipate dust devils and fire whirls to develop in hot, dry and unstable conditions, especially in fine flashy fuels, that may jeopardize control lines and contribute to erratic fire behavior.
- Additional effort is needed to ensure wet lines and retardant lines are secure.
- Fire behavior can change rapidly with changes in relative humidity, wind speed and wind direction.
- Thunderstorms may produce strong outflow winds that may rapidly increase fire behavior and change spread direction.

Mitigation Measures:

- Brief incoming resources about conditions, especially out of area resources not familiar with grass fires
- Increased emphasis of Lookouts, Communications, Escape Routes and Safety Zones is needed.
- Modify tactics to account for potential high rapid rates of spread and high resistance to control. Plan for larger safety zones and plan to escape to them sooner.
- Ensure firefighters have good anchor points and are keeping one foot in the black.
- Indirect tactics may be the most effective, but increased emphasis needs to be placed on LCES.
- Establish trigger points and constantly re-evaluate tactics/weather/fire behavior to ensure safety.
- Always be aware of the latest weather and fire danger information.

Area of Concern: Rangelands in Eastern Washington and Eastern Oregon.