

Eastern/Western Great Basin Fuels and Fire Behavior Advisory

Issued 2 July 2007

Subject: Very High to Extreme fire conditions across the Great Basin.

Discussion: Fuels across the Great Basin are extremely dry, compounded by a variety of factors which include low winter snowpacks, below normal spring rains, very hot and dry June weather, and increased vegetation stress and mortality from drought, disease and insects. As of July 1, Energy Release Component (ERC) numbers are at or above historical maximums in much of eastern Idaho/western Wyoming, most of Utah, Nevada and the Arizona Strip. Thousand-hour (1000-hour) dead fuel moistures are approaching records. Winter and spring precipitation deficits have created exceptionally low soil moisture and a deep, dry duff layer.

Recent fire activity in Utah has exhibited rapid spread and erratic behavior in juniper, where live fuel moistures (LFMs) are generally between 70 and 90 percent, well below seasonal averages. Other concerns lie with the manzanita and interior chaparral in southwest Utah and the Arizona Strip where fuel moistures are quite low and leaves on manzanita have turned brown. Grass continuity varies around the region but reports from the field suggest fire is spreading rapidly in light winds and heavy fuel loads. Live timber fuel moistures vary but are generally below normal while large dead fuels are near or at record minimum values. In Nevada, Utah and Wyoming, recent fires in timber have exhibited profuse long range spotting, rapid rates of spread, intense crown fires in disease and bug-killed forests, and predominantly fuels-driven fires that can overpower light to moderate winds. Carryover grasses in the lower desert elevations are contributing to heavy fuel loadings.

Concerns to Firefighters and the Public:

- Anticipate rapid runs in very dry live fuels such as juniper and pinyon, especially with windy conditions. **With low live fuel moistures, do not assume “green” fuels will not burn.**
- Anticipate easy ignition and rapid spread in flashy fine fuels. **You cannot outrun it!**
- Watch for moderate to long range spotting from intense surface fires, torching trees or areas of active crown fires.
- Anticipate fire whirls in hot, unstable conditions which can **rapidly enhance fire behavior, jeopardize control lines and quickly increase fire growth rates.**
- Watch for prolific cheatgrass growth which can allow fire to spread into old burn areas. **Old burns may not provide adequate fire breaks.**
- Anticipate fires to exhibit extreme spread rates, elongated flaming fronts and an increase in fire brands. **Expect more long range spotting.**
- Expect large amount of acres to be consumed in a short period of time.

Mitigation Measures:



- **Remember L.C.E.S. in all decisions.**
- Ensure firefighters have good anchor points, keeping one foot in the black. Consider indirect attack where adequate safety zones are available.
- Have adequate numbers of Field Observers who understand the effects of weather changes, topography and can see the flaming front. **Post lookouts!**

Area of Concern: While the entire Great Basin is in a critical state, some areas are in an unusually extreme condition. The areas of most immediate concern include most of Nevada; much of southwestern, north central and northeastern Utah; eastern Idaho and western Wyoming. For additional information, please visit websites for Western Great Basin (http://gacc.nifc.gov/wgbc/predictive/fuels_fire-danger/fuels_fire-danger.htm) or Eastern Great Basin (http://gacc.nifc.gov/egbc/predictive/fuels_fire-danger/fuels_fire-danger.htm).

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Legend

-  PSA Boundaries
-  Areas of Concern

