

FIRE BEHAVIOR AND TACTICS

Live Fuel Moisture

- 181% - & Above Fires will exhibit **VERY LOW FIRE BEHAVIOR** with difficulty burning. Residual fine fuels from the previous year may carry the fire. Foliage will remain on the stems following the burn. Persons using hand tools can generally attack fires at the head or flanks. Hand line should hold fire without any problems. Fires will normally go out as soon as wind dies down.
- 151% - 180% Fires will exhibit **LOW FIRE BEHAVIOR** with fire beginning to be carried in the live fuels. Both foliage and stem material up to 1/4 inch in diameter will be consumed by the fire. Burns will be generally patchy with many unburned islands. Engines may be necessary to catch fires at the head and the hand line will be more difficult to construct, but should hold at the head and the flanks.
- 126% - 150% Fires will exhibit **MODERATE FIRE BEHAVIOR** with a fast continuous rate of spread that will consume stem material up to 2 inches in diameter. These fires may be attacked at the head with engines but may require support of dozers and retardant aircraft. Hand line will become ineffective at the fire head, but should still hold at the flanks. Under high winds and low humidity's, indirect line should be given considerations.
- 101% - 125% Fires will exhibit **HIGH FIRE BEHAVIOR** leaving no material unburned. Head attack with fire engines and dozers will be nearly impossible on large fires, but may be still be possible on smaller, developing fires. Retardant aircraft will be necessary on all these fires. Flanking attack by engines and indirect attack ahead of the fire must be used. Spotting should be anticipated. Fires will begin to burn through the night, calming down several hours before sunrise.
- 75% - 100% Fires will exhibit **EXTREME FIRE BEHAVIOR**. Extreme rates of spread and moderate to long range spotting will occur. Engines and dozers may be best used to back up firing operations, and to protect structures. Indirect attack must be used to control these fires. Fires will burn actively through the night. Air turbulence caused by the fire will cause problems for air operations.
- 74% - & BELOW Fires will have **ADVANCED FIRE BEHAVIOR** with high potential to control their environment. Large acreage will be consumed in a very short time periods. Backfiring from indirect line, roads, etc. must be considered. Aircraft will need to be cautious of hazardous turbulence around the fire.