Bernalillo County Wildland Urban Interface Area Vegetation

The fuel models described below are only general descriptions of wildfire fuels within Bernalillo County. The fuel models are from the National Fire Danger Rating (NFDR) System 1978. The following fuel models were used is the assessment of the Wildland Urban Interface Areas with in Bernalillo County.

Fuel Model A: This fuel model represents western grasslands vegetated by annual grasses and forbs. Brush or trees may be present but are very sparse, occupying less than one third of the area. The quantity and continuity of the ground fuels vary greatly with rainfall from year to year.

Fuel Model B: Mature dense fields of brush 6 feet or more in height. Model B fuels are potentially dangerous, fostering intense, fast-spreading fires. This fuel model was used for the salt cedar, and other brush found along the Rio Grande Bosque.

Fuel Model C: Open pine stands typify Model C fuels. perennial grasses and forbs are the primary ground fuel, but there is enough needle litter and branch wood present to contribute significantly to the fuel loading. Some brush and shrubs may be present but they are of little consequence. situation covered by Model C are open, longleaf, slash, ponderosa, and sugar pine stands.

Fuel Model E: This model represents hardwoods after leaf fall for hardwood and mixed hard wood conifer types where the hardwoods dominate. The fuel is primary the leaf litter. In high winds, the fire danger may be underrated because rolling and blowing leaves are not accounted for. This model was used for the cottonwoods of the Rio Grande Bosque.

Fuel Model F: Represents mature closed chemise stands and oak brush fields. It also applies to young closed stands and mature open stands. Pinion-Juniper is represented; however fire activity will be overrated at low wind speeds and where there are sparse ground fuels.

Fuel Model G: Fuel Model G is used for dense conifer stands where there is a heavy accumulation of litter and downed woody material. Such stands are over mature and may also be suffering insect, disease, wind or ice damage. The litter duff and litter are deep and much of the woody material is more than 3 inches in diameter. The undergrowth is variable, but shrubs are usually restricted to openings.

Fuel Model H: Fuel Model H represents short needle conifers. In contrast to Model G fuels, Model H describes a healthy stand with sparse undergrowth and a thin layer of ground fuels. fires in H fuels are typically slow spreading and are dangerous only in scattered areas where downed woody material is concentrated**.**

Fuel Model I: Fuel Model I was designed for clear-cut conifer slash where the total loading of materials less than 6 inches in diameter exceeds 25 tons/acre.

Fuel Model J: This model is complementary to Fuel Model I. it is for clear cuts and heavily thinned conifer stands where the total loading of materials less than 6 inches in diameter is less than 25 tons/acre. Again as the slash ages, the fire potential will be overrated**.**

Fuel Model K: Slash fuels from light thinning and partial cuts in conifer stands are represented by Fuel Model K. Typically, the slash is scattered about under an over story. This model applies to hardwood slash and to southern pine clear cuts where the loading of fuels is less than 15 tons/acre

Fuel Model L: This fuel model is meant to represent western grasslands vegetated by perennial grasses. The principal species are coarser and the loadings heavier than those in Model A fuels. Otherwise, the situations are very similar; shrubs and trees occupy less than one-third of the area. The quantity of fuel in this area is more stable from year to year.

Fuel Model N: This fuel model represents marsh situations where the fuel is coarse and read like. This model assumes that one-third of the aerial portion of the plants is dead. Fast spreading fires can occur even over standing water. This fuel model was used for the cattails found along the Rio Grande Bosque.

Fuel Model T: The bothersome sagebrush grass types are characteristic of T fuels. The shrubs burn easily and are not dense enough to shade out grass and other herbaceous plants. Fuel Model T might be used for immature scrub oak and desert shrub associations, and the scrub oak-wire grass type.

Fuel Model U: this model covers closed stands of western long-needled pines. The ground fuels are primary litter and small branch-wood. The dense canopy precludes grass and shrubs, which may occur in the occasional natural opening.

Carriers	Fuel Model	Description	Hazard Class
Grass	A	Western grasslands	L
Brush	B	Dense brush 6 ft of more in height	H
Open Pine Stands	C	Pine needle litter	M
Litter	E	Hardwood litter	M
Brush	F	Chemise and oak brush/Pinyon-Juniper	M
Diseased Conifer	G	Over mature stands suffering from disease/insects	H
Healthy Confer	H	Short needle conifer with sparse undergrowth	M
Slash	I	Medium logging slash	H
Slash	J	Heavy logging slash	H
Slash	K	Light logging slash	H
Grass	L	Western grasslands heavier loading than A	H
Grass	N	Marsh grass/coarse reed like grasses	M
Brush	T	Sage-brush-grass	M
Litter	U	Closed stand of long needle pines	M

* Some of the fuel types have been left out (types found on the east coast and Alaska)

Fuels within Bernalillo County are drought stricken, diseased, and insect infested. These fuels will only lead to a furious, fast-spreading fire that will be uncontrollable. There needs to be an emphasis placed on homeowners developing defensible space around their property, to reduce the risk of fire spreading into the Urban Interface. There are subdivisions in the East Mountains that state in their homeowner's association by-laws that there will be no clearing of natural landscaping. The Urban Wildland Interface Code addresses this and there should be a heavy consideration for adopting this code.