

## FIRE BEHAVIOR FORECAST

FORECAST NUMBER: 03	TYPE OF FIRE: Wildland Fire
FIRE NAME: Bolt Creek	OPERATIONAL PERIOD: 0700-0700 09/15-09/16, 2022
DATE ISSUED: 09/14/22	TIME ISSUED: 1900
UNIT: WA-NWS-000150	SIGNED: Wm. Scott MacDonald, FBAN ebb-6241@charter.net 541-993-3444

### INPUTS

**WEATHER SUMMARY** – See IMET Forecast; Temps in the mid-60's, RH's in upper 60's, winds 4mph, G-8.

**Fuel:** Primary fuels are High Load Conifer Litter (TL5) and Very high load, Dry climate Timber-Shrub (TU5). Primary carrier of fuels are the coarse dead woody fuel and duff layer.

**ERC:** Below 85<sup>th</sup> percentile for Johnson Ridge RAWs, due to higher RH and nighttime recovery.

**1000 hr. fuels = 16%**, fairly dry for the area; smaller fuel categories are increasing in moisture values.

**Topography:** Very steep terrain with high rocky peaks, and deep valleys; river bottoms at about 800' to ridges near 5000'. Slopes range from 20% at the bottom of slopes to 90% plus towards the tops of the ridges. Limited access to many areas due to steep terrain and thick timber/brush fuels.

### OUTPUTS

#### FIRE BEHAVIOR

**General:** Fuels have been dry, and move primarily with wind and slope in the steep terrain. The fire environment is still capable of large runs if winds increase above 25 mph (at 20'). **Spotting distances are generally short ranged (under 500 feet).** Fine dead fuel moistures increasing as moisture and RH recovery increase. Larger fuels not as reactive to RH changes, so will continue to burnout and smolder.

Fuel Type	Head Fire - Day		Head Fire - Night	
High Load Conifer Litter (TL5)	FL: 1 – 3 feet	ROS: 1 – 4 Ch/Hr	FL: 1 – 2 feet	ROS: 1 – 4 Ch/Hr
Very High Load, Timber-Shrub (TU5)	FL: 2 - 10 feet	ROS: 2 - 8 Ch./hr.	FL: 2 – 8 feet	ROS: 2 – 6 Ch/Hr

Probability of Ignition for most areas is **25%-30% day, 5%-10% night**; ROS / FL table is **worse case**; lower slope percent, less wind, discontinuous fuels, will reduce these values.

**All Divisions:** Be alert for threats to the control line or fire edge; mainly from fuels **rolling out** (small and large) and starting spots below main fire edge, which could make short runs back to main fire. If wind/slope align, ROS/FL will increase (see above table); generally, fire will follow the steep terrain and available fuels. With moderating weather, passive or active crown fire is limited in the fire area; some short range spotting is possible from single/small groups of trees torching. Fire should continue to back downslope with low intensity backing fire; aggressive smoldering/creeping fire behavior likely in more open canopy areas where RH increases affect fuels more readily.

### AIR OPERATIONS

Low level inversion will break around 1500 (see IMET forecast).

**SAFETY** – Know what your fire is doing at all times. Ensure communications with lookouts, who can see fire and any changes to fire behavior.