



**Oregon Department of Forestry  
Certified Burn Manager**

**Pre-burn  
Descriptions**

Photo credit: John Punches

Presentation developed by John Punches

COLLEGE OF FORESTRY 

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**What is it?**

- General description of vegetation and fuels
- Inside Unit: Sets ecological context for RX fire
- Outside Unit: Informs burners about potential for fire escape and difficulty in capturing escape. If fuels/conditions vary around burn unit, multiple outside-of-unit descriptions will be needed.



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**What to include**

Systematic description of layers of vegetation and fuels (top-to-bottom or bottom-to-top)

- Overstory
- Midstory
- Surface fuels
- Topography
- Jackpots
- Hazards
- Sensitive areas



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**Overstory**

- Tallest trees or shrub layer
- Species
- Average or range of diameters
- Typical height
- Typical height to base of crown
- Density (dense, open) or forestry term (trees/acre, basal area)
- Arrangement (closed canopy, open canopy, clumpy, gaps)



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**Overstory Desc. Example**

Overstory mixed species including western larch, grand fir, Engelmann spruce. 80 to 100' height, 18 to 28" diameter. Crown base typically 12 to 20' (30' plus in larch). Mostly closed canopy with some openings.



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**Midstory**

- Trees or shrubs existing below the tallest plants – many possible arrangements
- Describe so you can assess ladder fuel and mortality potential



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### Midstory Desc. Example

Midstory mixed species but mostly grand fir, up to 30' height and 8" diameter. Crown bases typically at ground. Concentrated in overstory openings but with significant ladder fuel potential.



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### Surface fuels

- Type, continuity, cover
- Uniformity/pattern
- Plant species if relevant
- Needle drape if present
- Fuel model if known
- Jackpots of fuel if present
- Stumps, coarse wood, deep duff



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### Surface Fuels Example

Surface fuels: continuous herbaceous plant cover, 8" tall. Minimal shrubs and seedlings. Minimal grass. Scattered, decaying stumps. Minimal coarse wood. 2" duff layer. Fuel model TU1.



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### Topography

- General slope and aspect
- Features that would impact burn (gully's, saddles, ridges)
- Variation across unit



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### Topography Example

Burn unit generally flat or slightly west-facing. East side of unit slopes west, reaching 40% slope along road. Steep-sided drainage runs north-south through center of unit.



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### Other Information Ex.

Hazards: Small snags leaning against several live trees. Large larch snag in NE corner of unit. Short section of rimrock (10' high) near midpoint of north boundary.

Sensitive areas: 1-acre opening near center of unit contains camas lilies.



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### Repeat for areas adjacent to your burn unit

- Helps you plan for what could happen if fire escapes your unit
- Typically don't need as much detail as in-unit descriptions
- Conditions may vary by location



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### Outside Unit Example

- North of unit: dense lodgepole with some ladder fuels and significant downed wood up to 8" diameter. Fuel Model SB3 with torching potential.
- East of unit: conditions similar to unit. TU1.
- South of unit: Grazed grass. GR1.
- West of unit: Ungrazed grass (GR2), then forested stand (TU1).



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### We will practice this in the field

- Be systematic (top-to-bottom or bottom-to-top)
- Gather info that will help you craft your burn plan
- ID fuel models if you have that skill
- Take photos – they'll help you convey information to experts if you're seeking assistance



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