



*Burn Unit
Preparation &
Firing Techniques*

Session Overview:



Success lies in your preparation and understanding of the landscape and fire behavior factors.

1. Understanding of Fire behavior
2. Fuel arrangement and what you can do about it
3. Topography influences
4. Weather influences and projections
5. Sequencing and Techniques

Prescribed fire Objective



Removal of hazard fuels

Ecosystem restoration

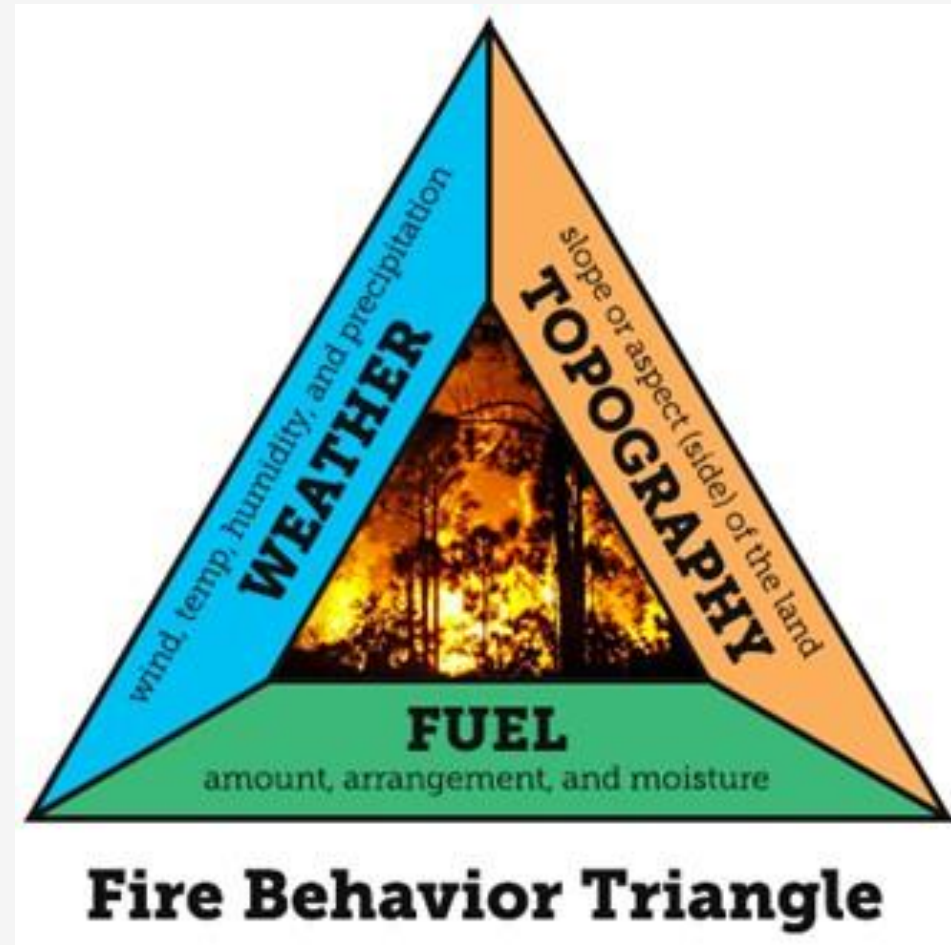
**Manage for acceptable fire
behavior**



FACTORS of Fire Behavior

Have an understanding of what
you can manipulate.

Have an understanding of what
you can plan for.





***CONSIDER:
Fuel
Arrangement***

NATURAL:

Loading

Horizontal Continuity

Vertical Continuity

Ladder Fuels

MODIFIED:

Piles

Limbed up trees

Burn prep buffers

CONSIDER: Topography



Fire spreads faster up hill-your control lines and burn activity needs to anticipate this.

- Do you have what you need for a worst case scenario? (tools, water, a contingency plan)
- Are you trying to hold your fire on a mid slope?
- Are you burning during, or, in front of adverse conditions?

Factors that may be working against you

- Upslope winds in the afternoon.
- Convective heating drying out the fuels upslope from you.
- Spot fires ignite fuel upslope.
- Receptive fuels upslope.

CONSIDER: Weather

Do you know what is forecasted,
and what conditions are present?

Current conditions and forecast: Where and how do you get your information?

- NWS Hanford or your local area.
- Predictive Services

Understand the Following:



**Critical Thresholds in your
area:**

- Fuel Moisture
- Relative Humidity
- Temperature and wind.



Weather Outlook:

- Moisture
- Wind
- Relief in weather
- Amount vs. Duration

Firing Techniques



Sequence your operation:

- Daily activities and ongoing activities
- Consider
 - ✓ High elevation to low
 - ✓ Buffer around values at risk
 - ✓ Develop a sequence that will allow you to build momentum over time.

Apply only as much fire as needed:

- You can always put more fire on the ground but you can't take it back
- Give it time to do what it is going to do, then progress.

Philosophy:

- Across all landscapes, **NO BOUNDARIES!**
- Develop a new systematic approach with required resources.