**EXERCISE: Firing Plan Exercise: Azalea Prescribed Burn**

Purpose:

* To aide students in developing a firing plan which meets safety requirements and firing objectives.

Time:

* 1 hour

Format:

* Students will work in groups

Materials Needed:

* Azelea scenario

Hand out: (HO)

* Corresponding map of Azalea Burn Plan

Instructions:

1. **Divide the class into groups of four students.**

2. Read the scenario and h**and out the Azalea Burn map.**

**3.) Allow the students 10 minutes to develop a basic firing plan and present it to the class.**

4. **Instructors may choose to deliver this exercise using sand tables if the classroom facilities allow.**

5. Pick a student from each group to present the groups firing plan.

6. Discuss the components of each groups plan, is it viable, safe and does it meet the firing objectives.

7.) Go through the discussion items with the students, answer any student questions.

Scenario:

Given the following scenario, students will develop a basic firing plan (number of personnel, devices, methods, techniques, patterns, stagger, sequencing) to meet objectives on a prescribed fire unit. Include a test fire location. The burn perimeter is adequately prepped.

Size: 69 acres

Fuels: Mixed conifer with patches of understory brush and fir reproduction (TL7)

Heavy dead and down

Pockets of fir snags

No known previous fire history

Topography: Rolling mountainous country

Average slope – 40%

Elevation range – 6500-6740 feet

Aspect – all present

Prescription: Temperature: 30-85 degrees

Relative Humidity: 20-80%

Mid-flame wind speed: 0-8 mph

Wind direction: Any

1 hour fuel moisture: 3-12%

10 hour fuel moisture: 4-13%

100 hour fuel moisture: 5-14%

1000 hour fuel moisture: 10-40%

Live fuel moisture: 75-150%

Objectives: Reduce dead and down fuels in all size classes by 60-95%.

Induce mortality in 50% of the brush patches and fir reproduction.

Values at Risk: Power lines running through the unit (the corridors have been prepped)

Structures north of the unit

Archeological site in the southeast corner (purposely left off the map)

Current Weather: Winds are light and terrain driven; southwest @ 0-4 mph

All other parameters are within prescription

**Discussion Items**

**There is no textbook answer to this exercise. The students should present a thorough firing plan which addresses the following:**

* **Number of burners**
* **Type and number of firing devices**
* **Firing method**
* **Firing techniques**
* **Firing pattern**
* **Firing team stagger**
* **Firing sequence**
* **Test fire location**
* **How to fire a unit with three different high points, one prominent saddle, and one drainage**
* **How to avoid impacting the power lines**
* **What to do about the archeological site**

**The unit can be divided into three segments using the power line corridors. Each segment could be fired individually. Firing should begin at high points. There may be a need to use more multiple firing teams to treat the saddle and the drainage.**