



Forest Fires

Training Needs Analysis

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Training needs Analysis



- Training Needs Analysis (TNA) for forest fire management provides information on the training and skills development of all responders. It enables to;
 - *identify gap between current and required levels of KSA.*
 - *identify what general content of training should be.*
 - *form foundation of a training plan.*
 - *ensure relevant and appropriate training is delivered.*
- Forest fire fighting requires;
 - *Stamina*
 - *Fortitude*
 - *Awareness*
 - *Understanding of the factors that drive the fire*

Who requires training?



The training allows acquiring thorough knowledge & skills about forest fires thereby transforming human attitude and activities.

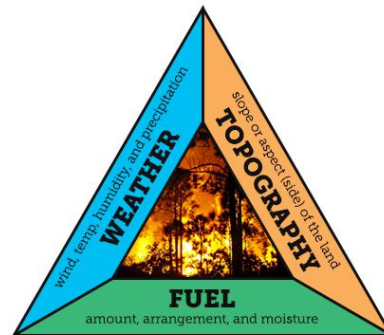
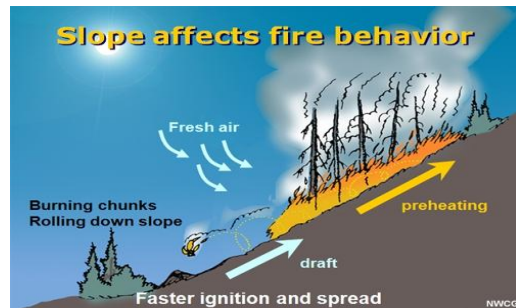
❑ It can be carried out targeting:

- *Young people, during their education.*
- *Teachers, who sensitize their pupils.*
- *People working in the forest.*
- *Elected officials of local communities.*
- *Personnel working in fire prevention and suppression.*
- *People volunteering (NGO's) for forest fire protection.*

Training Needs – Forest Fire Management

Topic: 1

Forest Fire Behaviours



Fire Behavior Triangle

Learning Objectives:

- Describe how forest fire spreads.
- List the types of forest fuels and how they burn.
- Identify forest fuel characteristics.
- Explain the effect of topography has on fire.
- Explain how weather factors influence a fire.
- Identify extreme fire behaviour watchouts.

Training Needs – Forest Fire Management

Topic: 2

Safety on Forest Fires



Learning Objectives:

- Use PPE properly.
- Use fire shelter correctly.
- Respond when trapped by fire in a vehicle or building.
- Identify forest fire behavior watchouts.
- Explain safety procedure when working around snags.
- Describe safety precautions for working near a bulldozer/aircraft.
- Explain the term LECS.
- Explain the “Fire Orders” and 18 situations that shout “watch out”.
- Explain additional forest fire hazards.

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Topic: 3

Water Supplies



Learning Objectives:

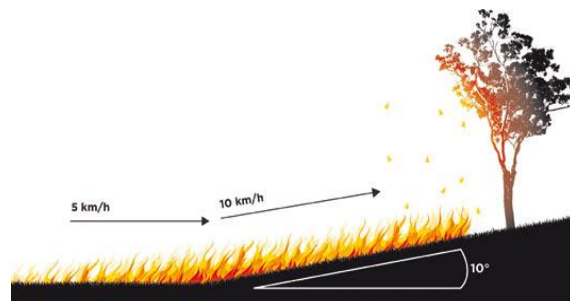
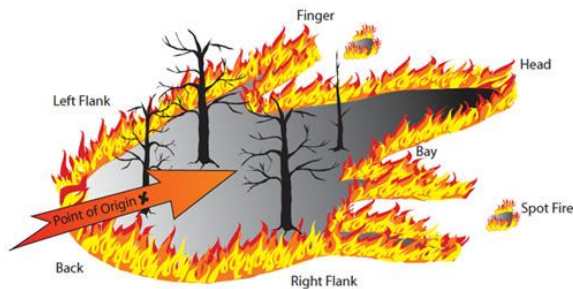
- Identify water sources for use at a forest fires.
- Describe the different types of water sources.
- Explain the different equipment used to supply water.



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Topic: 4

Tactics and Strategy



Learning Objectives:

- Explain the difference between tactics and strategy.
- Describe the size-up process.
- Identify the factors to be evaluated upon arrival at the fire.
- Describe operational plan of action.
- Explain in establishing initial fireground operation by fire officer.

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Topic: 5

Fire Tender Crew Operations



Learning Objectives:

- Describe how to use a forest fire tender effectively.
- Explain the different types of fire attack methods.
- Explain the different types of hose lays.
- Describe use of mobile pump fire fighting.
- Explain fire crew tactics on both forest and urban interface fires.

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Topic: 6

Handcrew Operations



Learning Objectives:

- Identify the different types of handcrews.
- Explain the different methods of attack a handcrew uses.
- Describe the rules for working around inmate crews.
- Identify the different handtools a handcrew uses.
- Demonstrate the use of various handtools.

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Topic: 7

Backfire/Burnout Basics



Learning Objectives:

- Define the term backfire and burnout.
- Explain the difference between backfire and burnout.
- Explain the steps to be taken before undertaking a firing operations.
- Identify the tools to be used in firing operations.
- Explain three different ignition techniques used in firing operations.

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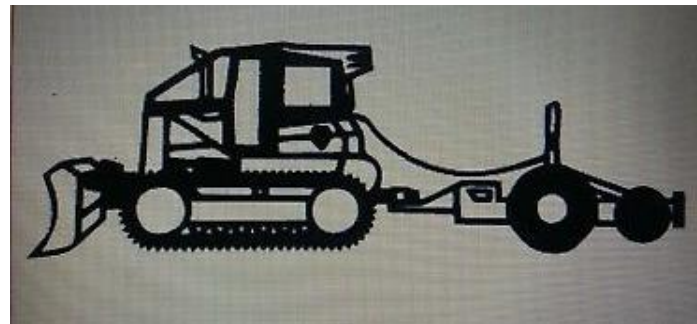
Topic: 8

Bulldozers and Tractor Plows



Learning Objectives:

- Identify the different types of bulldozers.
- Explain the different types of control systems and blades used on a bulldozers.
- Demonstrate use of a bulldozer
- Identify a tractor plow.
- Demonstrate use of a tractor plow.



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Topic: 9

Class A foam and Fire-Blocking Gels



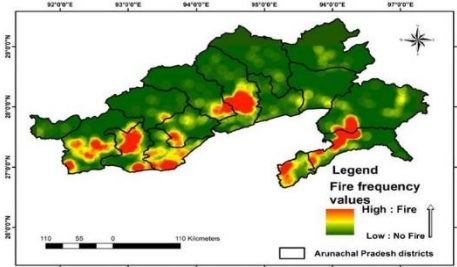
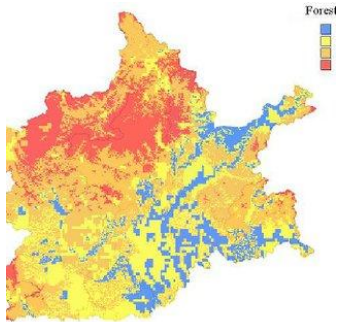
Learning Objectives:

- Explain Class A foam and its working principles.
- Describe the foam generation techniques.
- Differentiate between CAFS and low-energy foam systems.
- Describe different types of FB/nozzles used to apply Class A foam.
- Explain tactical application of Class A foam.
- Explain fire blocking gels and its tactical applications.

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Topic: 10

Use of GPS and Maps



Learning Objectives:

- Explain the GPS.
- Describe the limitations of the GPS.
- Identify the GPS reference lines on a GSI topographic map.
- Demonstrate GSI map reading.
- Describe latitude and longitude.
- Demonstrate a coordinate rules to find own position on map.

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Topic: 11

Firefighting Aircraft



Learning Objectives:

- Explain the different types of aircraft used in forest fire.
- Describe the difference between fixed-wing aircraft types.
- Explain the capabilities of air tankers.
- Explain the different coverage levels used by fixed-wing aircraft.
- Explain the capabilities of helicopters.
- Identify the tactics used by helicopters.

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Topic: 12

The Incident Response System (IRS)



Learning Objectives:

- Explain the importance of IRS.
- Describe the five major functional units in the IRS.
- Describe the IRS forms used.
- Identify the forms used in an incident action plan.
- Demonstrate application of IRS in simulated fire situation.



Conclusion

- There is a need of having a structured training program for forest fire management.
- To achieve desired outcome, well developed training resources/facilities (trainers/equipment/appliances) are pre-requisite.
- Development of training module is required for different level of functionaries.
- Application of modern simulation technology is desirable in learning process.

**Thank you
so much**