

XI. MINIMUM STANDARDS FOR WILDLAND FIRE FIGHTING

A. Reference Materials

The jurisdictional entity in which the Wildland Fire Fighter serves must have access to the following training manuals:

NWCG

Firefighter Training S-130 (2003)

B. Applicants must complete one of the following:

1. SFFMA Wildland Fire Fighting Curriculum;
2. Wildland Fire Fighting coursework meeting the requirements of NWCG S-130 or S-190; or
3. Texas Forest Service Wildland Fire Fighting course or equivalent.

C. Applicants must hold the following SFFMA certification:

1. Introductory Fire Fighting

D. Upon meeting all requirements, an application should be completed, signed by the applicant, Certification Coordinator, and Fire Chief and sent to the Austin office, accompanied by the twenty dollar (\$20.00) application processing fee.

E. Upon review the Austin office will issue the appropriate certificate and, upon request, a shoulder patch. A permanent record of the certification will be maintained in the Austin office.

F. Curriculum for Wildland

SECTION 1 BASIC CONCEPTS

Upon the successful completion of this section, participants will be able to recognize basic wildland fire concepts and identify the similarities and differences between structural and wildland fire fighting.

1-01 Trainee shall define basic terminology used in wildland fire. *(25-01.01 A.-O.)*

1-02 Trainee shall identify the parts of a wildland fire.

1-03 Trainee shall describe the ICS and how the incident management structure is organized.

1-04 Trainee shall describe the general responsibilities of each section in the ICS.

1-05 Trainee shall explain the benefits to crew organizations and describe the different types of crew organizations commonly used in initial attack and extended attack.

1-06 Trainee shall identify and describe different types of maps that may be used by wildland firefighters

1-07 Trainee shall identify major topographic features, both in the field and on a map.

1-08 Trainee shall interpret various contour lines and match them with the corresponding land features.

1-09 Trainee shall describe how to locate a point on a map utilizing grid systems, a Global Positioning System (GPS) unit, and township and range.

1-10 Trainee shall describe the parts of a compass.

1-11 Trainee shall describe how to set a declination and determine azimuth on a compass.

1-12 Trainee shall explain how to use a compass with a map.

1-13 Trainee shall determine the direction and distance traveled using a map and compass together.

1-14 Trainee shall describe frequencies and how they affect radio communications.

1-15 Trainee shall identify the types of radios used in wildland fire fighting operations and explain the purpose/function of the basic parts and controls.

1-16 Trainee shall list the elements of proper radio use procedures and describe how to transmit a radio message correctly.

1-17 Trainee shall describe radio troubleshooting practices used to improve radio reception or transmission.

1-18 Trainee shall describe precautions and care to protect the radio from damage.

1-19 Trainee shall discuss the similarities and differences between structural and wildland fire fighting.

SECTION 2 WILDLAND FIRE BEHAVIOR

Upon the successful completion of this section, participants will be able to recognize the factors that affect a wildland fire environment.

2-01 Trainee shall identify the elements of the fire triangle. *(15-01.02)*

2-02 Trainee shall describe the methods of heat transfer. *(15-01.05)*

2-03 Trainee shall identify the fuel characteristics that influence the behavior of wildland fire.

2-04 Trainee shall demonstrate the ability to apply the major fuel types to a specific geographic area, and explain why they are of concern to firefighters.

- 2-05 Trainee shall demonstrate the ability to determine fuel characteristics based on illustrations and descriptions.
- 2-06 Trainee shall describe how weather influences wildland fire behavior.
- 2-07 Trainee shall describe the effect of temperature and Relative Humidity (rH), precipitation, atmospheric stability/instability, winds and wind systems, and critical fire weather conditions on wildland fire behavior.
- 2-08 Trainee shall identify the resources used to aid in the management of wildland fires.
- 2-09 Trainee shall list the basic characteristics of topography and describe how they affect wildland fire behavior.
- 2-10 Trainee shall identify indicators that fire behavior may be increasing and influences that may cause extreme fire behavior.
- 2-11 Trainee shall list fire environment factors to be aware of while monitoring fire behavior.
- 2-12 Trainee shall discuss and predict the outcomes of factors influencing fire behavior.

SECTION 3 WILDLAND FIRE FIGHTING SAFETY

Upon the successful completion of this section, participants will be able to analyze and safely apply accepted strategies and tactics in the wildland fire environment.

- 3-01 Trainee shall define safety and describe the importance of the steps of the risk management process. *(25-02.06)*
- 3-02 Trainee shall define situational awareness and describe its importance.
- 3-03 Trainee shall identify potential hazards in the wildland fire environment.
- 3-04 Trainee shall identify the common denominators of fire behavior on tragedy fires.
- 3-05 Trainee shall describe the communication responsibilities of the wildland firefighter.
- 3-06 Trainee shall describe actions that foster teamwork.
- 3-07 Trainee shall discuss and apply the appropriate “Watch-Out” situations and Standard Firefighting Orders to minimize the potential for serious injury or death. *(25-02.06)*
- 3-08 Trainee shall describe the relationship between Lookouts, Communications, Escape routes, and Safety Zones (CLES) and the Standard Firefighting Orders. *(25-02.06)*
- 3-09 Trainee shall analyze video presentations of incident situations where LCES was misapplied and determine what should have been done.
- 3-10 Trainee shall determine the minimum safety zone for a given set of incident facts.
- 3-11 Trainee shall describe the difference between deployment sites and safety zones.
- 3-12 Trainee shall explain the purpose of an After Action Review (AAR) and the role of the firefighter in the review process.

SECTION 4 FIREFIGHTER AND EQUIPMENT PREPAREDNESS

Upon the successful completion of this section, participants will be able to identify the requirements of the individual’s preparedness and demonstrate the readiness of all tools, equipment and vehicles utilized on a wildland fire assignment.

- 4-01 Trainee shall list the benefits of maintaining a high level of physical fitness and health.
- 4-02 Trainee shall develop a list and describe types of personal gear needed for an extended period away from the wildland firefighter’s home station.
- 4-03 Trainee shall explain the importance of keeping personal gear and assigned area clean and organized.
- 4-04 Trainee shall explain the importance of the proper use, maintenance, inspection, and accountability of assigned Personal Protective Equipment (PPE).
- 4-05 Trainee shall explain the functions of the fire shelter.
- 4-06 Trainee shall discuss the inspection and care of the fire shelter.
- 4-07 Trainee shall describe and demonstrate the correct deployment procedures for the fire shelter in twenty-five (25) seconds or less.
- 4-08 Trainee shall discuss commonly used hand tools in wildland fire fighting, and describe the function of each and how to inspect, maintain, and sharpen them. *(25-01.01 O.)*
- 4-09 Trainee shall describe the proper carrying, passing, spacing, and storing techniques for commonly used hand tools.
- 4-10 Trainee shall, given a description of fireline jobs and a choice of hand tools, select the hand tool that would be used for each job.
- 4-11 Trainee shall describe and demonstrate the safe operation of firing devices commonly used in wildland fire suppression.
- 4-12 Trainee shall discuss safety procedures to follow when traveling by:
 - 4-11.01 vehicle;
 - 4-11.02 helicopter; or

4-11.02 on foot

4-13 Trainee shall discuss and demonstrate the safety inspection of a crew transport vehicle.

4-14 Trainee shall explain the importance of respecting cultural differences while on a fire assignment.

SECTION 5 WILDLAND SUPPRESSION STRATEGIES AND TACTICS

Upon the successful completion of this section, participants will be able to demonstrate proper wildland suppression activities including initial size-up, recognition of strategies, and application of tactics.

5-01 Trainee shall describe and perform the initial at-the-scene size-up process for wildland fire suppression. (25-02.03)

5-02 Trainee shall identify the information needed for successful size-up reporting. (25-02.03)

5-03 Trainee shall explain procedures for designating and protecting the area of fire origin for follow-up investigation.

5-04 Trainee shall describe three methods for breaking the fire triangle.

5-05 Trainee shall describe the three strategies of attack on a fire. (25-01.01)

5-06 Trainee shall describe various fire suppression techniques and their uses. (25-01.01)

5-07 Trainee shall describe types of firelines and the effective standards for fireline construction.

5-08 Trainee shall describe the threats and hazards to control lines.

5-09 Trainee shall describe two kinds of coordinated crew techniques used for fireline construction.

5-10 Trainee shall describe the proper follow-up procedures for a dozer or tractor plow fireline.

5-11 Trainee shall describe safety procedures to follow when working around engines, tractor plows, and dozers.

5-12 Trainee shall describe safety procedures to follow in an area where retardant or water drops are being made.

5-13 Trainee shall identify and describe common water-handling devices and delivery systems used during wildland fire suppression, and demonstrate the application of each.

5-14 Trainee shall identify and describe the operation of the most common type of pump used in wildland fire suppression.

5-15 Trainee shall identify the responsibilities and Personal Protective Equipment (PPE) of the portable pump operator.

5-16 Trainee shall describe and demonstrate proper setup and operation of a portable pump and water delivery system for wildland fire suppression.

5-17 Trainee shall describe safe brush truck operation techniques used in fire suppression.

5-18 Trainee shall describe and demonstrate how to properly retrieve, clean, inspect, and store deployed hose, fittings and accessories.

5-19 Trainee shall describe the hazards to hose lays and how to mark non-serviceable sections of hose and couplings.

SECTION 6 WILDLAND/URBAN INTERFACE

Upon the successful completion of this section, participants will be able to recognize the wildland/urban interface, the special considerations associated with that environment, and appropriate safety practices when responding to wildland/urban interface fires.

6-01 Trainee shall discuss the challenges associated with wildland/urban interface fires. (25-02.05)

6-02 Trainee shall discuss personnel safety concerns and the associated “Watch-Out” Situations in wildland/urban interface fires. (25-02.05)

6-03 Trainee shall define hazardous materials and explain the general guidelines when reacting to a possible hazardous material emergency.

6-04 Trainee shall list and describe the six steps in the D.E.C.I.D.E. process.

6-05 Trainee shall list and explain the six clues for detecting the presence of hazardous materials.

6-06 Trainee shall define the phrase “cultural resources” and describe the effects of fire suppression activities on them.

6-07 Trainee shall describe the methods to protect cultural resources during fire suppression activities.

SECTION 7 MOP UP AND PATROLING

Upon the successful completion of this section, participants will be able to recognize the importance of effective mop-up and patrol activities on wildland fire.

7-01 Trainee shall describe how to extinguish burning materials during mop-up activities.

7-02 Trainee shall describe systematic methods of mop up.

7-03 Trainee shall explain how four of the senses aid in detecting burning materials.

7-04 Trainee shall discuss the technique of cold trailing on a fire perimeter and the importance of breaking up and dispersing machine piles and berms adjacent to the control line.

7-05 Trainee shall discuss the factors that determine the amount of additional work required for a water or retardant

line and the associated safety concerns.

7-06 Trainee shall describe the process of strengthening the fire control line to facilitate holding.

7-07 Trainee shall describe factors to consider when patrolling a fire, such as looking for spot fire conditions and responding to them.

SECTION 8 FINAL EXERCISE

Upon the successful completion of this section, participants will be able to apply the knowledge and skills associated with wildland fire suppression to safely respond to wildland fire incidents.

8-01 Trainee shall demonstrate proper travel procedures en route to and from a fire. (25-02.02)

8-02 Trainee shall demonstrate how to properly read a compass and/or GPS unit.

8-03 Trainee shall locate and protect the area of fire origin.

8-04 Trainee shall demonstrate the proper use and maintenance of appropriate hand tools and equipment during fire suppression activities.

8-05 Trainee shall, using appropriate PPE, demonstrate the proper inspection, maintenance, sharpening, carrying, passing, and spacing techniques for commonly used hand tools.

8-06 Trainee shall construct progressive and leap frog firelines.

8-07 Trainee shall demonstrate the ability to choose escape routes to promptly retreat to a safety zone.

8-08 Trainee shall demonstrate the ability to apply clear and concise communications on the fire ground.

8-09 Trainee shall demonstrate how to properly operate and maintain the backpack pump.

8-10 Trainee shall select, prepare, and demonstrate the safe use of the appropriate firing device for a given situation.

8-11 Trainee shall construct simple and progressive hose lays.

8-12 Trainee shall select and operate the appropriate system for the delivery of water on a wildland fire.

8-13 Trainee shall demonstrate the proper mop-up and patrol techniques.

8-14 Trainee shall participate in an After Action Review (AAR).