CERTIFICATION CURRICULUM MANUAL

CHAPTER ELEVEN

WILDLAND FIRE FIGHTER

NFPA 1051, 2016 Edition (Basic) NFPA 1051, 2012 Edition (Intermediate)

EFFECTIVE JANUARY 1, 2018 (Basic) EFFECTIVE JANUARY 1, 2014 (Intermediate)



Texas Commission on Fire Protection P.O. Box 2286 Austin, Texas 78768-2286 (512) 936-3838

CERTIFICATION CURRICULUM MANUAL – CHAPTER ELEVEN

BASIC WILDLAND FIRE FIGHTER

CHAPTER ELEVEN

BASIC WILDLAND FIRE FIGHTER

CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS
1101-4.1	General	4
1101-4.2	Human Resource Management	0
1101-4.3	Preparedness	4
1101-4.4	Mobilization	0
1101-4.5	Suppression	24
1101	Performance Skills	8
TOTAL	RECOMMENDED HOURS	40

^{*}The total recommend hours is based on a class of 12 students. Actual hours required will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

REFERENCE LIST FOR THE BASIC WILDLAND FIRE FIGHTER CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Firefighter Training S-130, Instructor Guide (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Firefighter Training S-130, Student Work Book (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Incident Response Pocket Guide, *PMS 461* (2014). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Introduction to Wildland Fire Behavior S-190, Instructor Guide (March, 2006). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Introduction to Wildland Fire Behavior S-190, Student Work Book (March, 2006). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

New Generation Fire Shelter (2003). [DVD] Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

As of 8/22/2016, there is a free version of this DVD available for viewing at the following web address: http://www.youtube.com/watch?v=QJsY6foLh80

NFPA 1051: Standard for Wildland Firefighting Personnel Professional Qualifications (2016 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Wildland Fire Incident Management Field Guide, PMS 210 (2014). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

As of 8/22/2016, this guide is only available electronically and is posted at the following web address: www.nwcg.gov/sites/default/files/products/pms210.pdf It is available free of charge for downloading and printing.

OVERVIEW BASIC WILDLAND FIRE FIGHTER

The Basic Wildland Fire Fighter is required to meet the Job Performance Requirements (JPRs) of chapter 4 of National Fire Protection Association (NFPA) 1051, *Standard for Wildland Firefighting Personnel Professional Qualifications*, 2016 edition.

The following items are included in the Basic Wildland Fire Fighter section of Chapter 11 of the curriculum manual:

- Course Instructor Information
- Reference List (textbooks and other recommended course materials)
- Course Outline (establishes the recommended hours for teaching this course)

This is a voluntary (non-mandatory) certification, therefore <u>a formal "curriculum" is not provided</u>. Please use chapter 4 of NFPA 1051 as a guide when creating your own course curriculum.

Performance skills are available in Chapter 11 of the Skills Manual.

All documents in this curriculum manual, and in the skills manual, are available free of charge to download, copy and distribute as necessary. The TCFP does not provide printed copies.

Definition of a Basic Wildland Fire Fighter

A Basic Wildland Fire Fighter is an individual who has met the requirements of NFPA 1051, *Standard for Wildland Firefighting Personnel Professional Qualifications* and has the knowledge, skills, and abilities to conduct wildland fire fighting operations by having and maintaining a knowledge of:

- Fireline safety
- Use of personal protective equipment
- Use of hand tools
- Principles of fireline construction
- Recognizing hazards and unsafe conditions

COURSE INSTRUCTOR INFORMATION

Instructor Qualifications

Basic Wildland Fire Fighter courses must be taught by a person meeting the requirements described in Chapter 427§307 of the TCFP Standards Manual.

Supplemental Information

Instructors are expected to provide supplemental information if the main reference text does not cover all of the knowledge requirements set forth in the NFPA standard.

Certification Testing

Testing for certification in the state of Texas will be based on the knowledge and skills requirements in chapter 4 of National Fire Protection Association (NFPA) 1051, *Standard for Wildland Firefighting Personnel Professional Qualifications*, 2016 edition. All training programs must strictly adhere to the NFPA standard.

All test questions and performance skills evaluations will be based on the NFPA Job Performance Requirements (JPRs), requisite knowledge objectives, and requisite skills objectives found in the NFPA standard. Additionally, questions and performance skill evaluations may include information found in, or derived from, the NFPA standard annex, particularly Annex A which includes explanatory material that may further clarify JPRs. The following is an example from NFPA 1051, section 4.5.2:

NFPA Standard/Curriculum		Explanation
4.5.2	Assemble and prepare for response, given an assembly location, an assignment, incident location, mode of transportation, and the time requirements, so that arrival at the incident with the required personnel and equipment meets agency guidelines.	NFPA JPR number 4.5.2
	(A)* Requisite Knowledge: Equipment requirements, agency time standards and special transportation considerations (weight limitations), agency safety, and operational procedures for various transportation modes.	Requisite knowledge objectives for 4.5.2 Written test questions and/or performance skills will be used to test these knowledge components on the state certification exam.
	(B) Requisite Skills: None specified.	Requisite skills objectives for 4.5.2

	Only performance skills will be used to test these objectives on the state certification exam. In this example, there are no skills specified, so there will be no skills tested.
A.4.5.2(A): Personal equipment standards, response and travel time standards, personal equipment weight limitations, and preferred modes of transportation all can vary by the AHJ.	Appendix A: Explanatory Material for 4.5.2(A)

TCFP Standards Manual

It is critical that the Course Instructor review the chapters in the TCFP Standards Manual that apply to this curriculum. Of primary importance are the following chapters:

Chapter 421, Standards for Certification

Chapter 427, Training Facility Certification

Chapter 435, Fire Fighter Safety

Chapter 437, Fees

Chapter 455, Standards for Wildland Fire Protection Certification

These chapters do not address every issue that could impact this curriculum; therefore, the Course Instructor is encouraged to become familiar with the TCFP Standards Manual.

Descriptions of Certification Levels

For additional information, see Chapter 421 of the Texas Commission on Fire Protection Standards Manual for Fire Protection Personnel.

CERTIFICATION CURRICULUM MANUAL – CHAPTER ELEVEN

INTERMEDIATE WILDLAND FIRE FIGHTER

CHAPTER ELEVEN

INTERMEDIATE WILDLAND FIRE FIGHTER

CURRICULUM OUTLINE

SECTION	SUBJECT	RECOMMENDED HOURS			
Intermediate Wildland Fire Fighter					
1102-6.1	General	2			
1102-6.2	Human Resource Management	3			
1102-6.3	Preparedness	3			
1102-6.4	Mobilization	0			
1102-6.5	Suppression	12			
TOTAL RECOMMENDED HOURS		20			

^{*}The recommend hours total is based on a class of 12 students. Actual hours required will depend on the number of students, the number of examiners, availability of equipment, and the student skill level.

REFERENCE LIST FOR THE INTERMEDIATE WILDLAND FIRE FIGHTER CURRICULUM

Certified Training Facilities approved to teach this curriculum must have the following reference materials:

Firefighter Training S-130, Instructor Guide (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Firefighter Training S-130, Student Work Book (2003). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Incident Response Pocket Guide (IRPG) (2010). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

NFPA 1051: Standard for Wildland Fire Fighter Professional Qualifications (2012 Ed.). Quincy, MA: National Fire Protection Association. NFPA Publications

Portable Pumps and Water Use, S-211, Student Work Book (2012). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Standards Manual for Fire Protection Personnel. Austin, TX: Texas Commission on Fire Protection.

Wildland Fire Chain Saws, S-212 Student Workbook (February, 2004). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

Wildland Fire Incident Management Field Guide, PMS 210 (2014). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

This guide is only available electronically and is posted at the following web address: http://www.nwcg.gov/pms/pubs/catalog.htm. It is available free of charge for downloading and printing.

Wildland Training for Structural Firefighters, G-131 (September 2008). Boise, ID: National Wildfire Coordinating Group. National Interagency Fire Center.

SECTION 1102 INTERMEDIATE WILDLAND FIRE FIGHTER

<u>1102 – 6.1</u> General

1102-6.1.1 Prior to progressing to the Intermediate Wildland Fire Fighter level, the Basic Wildland Fire Fighter shall meet the JPRs defined in Sections 1102-6.1 through 1102-6.5

Requisite Knowledge. The Intermediate Wildland Fire Fighter role within the incident management system, basic map reading and compass use or other locating device, radio procedures, and record keeping.

- 1. The Intermediate Wildland Fire Fighter role within the incident management system
- 2. Basic map reading
- 3. Compass use or other locating device
- 4. Radio procedures
- Record keeping

Requisite Skills. Orienteering and radio use.

1102-6.2 Human Resource Management

1102-6.2.1 Evaluate the readiness of assigned crew members, given a wildland fire, an assigned task, and agency equipment standards, so that crew members are equipped and supplied for suppression duties.

Requisite Knowledge. Agency standards and personnel inspection procedures.

- 1. Agency standards (AHJ)
- 2. Personnel inspection procedures
 - a. PPE
 - b. Tools
 - c. Supplies
 - d. Qualifications
 - e. Physical fitness level

Requisite Skills. Inspect members' personal protective equipment, tools, supplies, qualifications, and physical fitness level.

1102-6.2.2 Brief assigned personnel, given an assignment, supporting information, and equipment requirements, so that the personnel are informed of specific tasks, standards, safety, operational, and special interest area considerations.

Requisite Knowledge. Incident and task information necessary to carry out assignments.

- 1. Incident and task information necessary to carry out assignments
 - a. Briefing checklist
 - 1) Situation
 - 2) Mission/execution
 - 3) Communications
 - 4) Service/support
 - 5) Risk management
 - 6) Questions or concerns

Requisite Skills. Briefing skills.

1102-6.2.3 Lead wildland fire fighters in the performance of a task, given an assignment and performance standards, so that the task is safely completed within the standards in accordance with agency guidelines.

Requisite Knowledge. Leadership techniques for small groups.

- Leadership techniques for small groups
 - a. Personnel safety
 - b. Timely completion of assigned tasks
 - c. Communication
 - 1) Face-to-face
 - 2) Radio
 - 3) Written

Requisite Skills. The application of requisite knowledge to lead wildland fire fighters to complete the task in a manner that is within the standard.

- 1102-6.3.1 **Definition of Duty**. Responsibilities in advance of fire occurrence to ensure that tools, equipment, and supplies are fire ready.
- 1102-6.3.2 Maintain power tools and portable pumps, given agency maintenance specifications, supplies, and small tools, so that equipment is maintained and serviceable and defects are recognized and repaired.

Requisite Knowledge. Maintenance procedures for power tools and portable pumps.

- Maintenance procedures for power tools AHJ, per manufacturers' recommendations
- 2. Maintenance procedures for portable pumps AHJ, per manufacturers' recommendations

Requisite Skills. Power tool and portable pump preventative maintenance and repair.

1102-6.3.3 Inspect tools and equipment, given agency specifications, so that availability of the tools and equipment for fire use is ensured.

Requisite Knowledge. Tool and equipment inspection guidelines.

- 1. Tool inspection guidelines AHJ, per manufacturers' recommendations
- 2. Equipment inspection guidelines AHJ, per manufacturers' recommendations

Requisite Skills. Ability to inspect the tools and equipment according to quidelines.

<u>1102-6.4</u> <u>Mobilization</u>. No JPRs at this level.

1102-6.5 Suppression

- 1102-6.5.1 **Definition of Duty.** All activities to contain and extinguish a wildland or wildland/urban interface fire beginning with dispatch.
- 1102-6.5.2 Select fireline construction methods, given a wildland fire and line construction standards, so that the technique used is compatible with the conditions and meets agency standards.

Requisite Knowledge. Resource capabilities and limitations, fireline construction methods, and agency standards.

- 1. Resource capabilities
 - a. Resource type and kind
- 2. Resource limitations
- 3. Fireline construction methods
 - a. Hand crew
 - b. Dozer
 - c. Wet line
 - d. Foam
 - e. Retardant
- 4. Agency standards (AHJ)
- IRPG downhill checklist

Requisite Skills. None specified.

1102-6.5.3 Effect the reduction of fire exposure to improved properties given a wildland or wildland/urban interface fire and available tools and equipment so that improvements are protected and the risk from fire is reduced.

Requisite Knowledge. Knowledge of fire behavior in both wildland and improved properties, and the effects of fuel modification to reduce the hazard.

- 1. Fire behavior in wildland and improved properties
 - a. Fuel
 - b. Weather
 - c. Topography
- Effects of fuel modification to reduce the hazard
 - a. Fuel type
 - b. Fuel loading
 - c. Fuel moisture
 - d. Size and shape
 - e. Horizontal continuity
 - f. Vertical arrangement

Requisite Skills. The use of tools and equipment to protect the improved property.

1102-6.5.4 Operate a chain saw, given an assignment at a wildland fire and operational standards, so that the assignment is safely completed.

Requisite Knowledge. Agency operational standards for chainsaw operation and safety, tool selection, and personal protective equipment used during saw use.

- Agency operational standards for chainsaw operation and safety (AHJ)
- 2. Agency operational standards for tool selection (AHJ)
- 3. Agency operational standards for personal protective equipment used during chain saw use (AHJ)

Requisite Skills. Site preparation, handling and cutting techniques, use of wedges, and saw and equipment transportation.

1102-6.5.5 Operate water delivery equipment, given an assignment at a wildland fire and operational standards, so that the proper equipment is selected, desired nozzle pressure is attained, and flow is maintained.

Requisite Knowledge. Basic hydraulics, pump and water delivery system capabilities, operation of pumps, basic drafting and associated equipment.

- 1. Basic hydraulics
- 2. Pump capabilities
- 3. Water delivery system capabilities
- 4. Operation of pumps
- Basic drafting
- 6. Equipment associated with drafting

Requisite Skills. Placement, operation, and system setup.

1102

PAGE 5

1102-6.5.6 Secure the area of suspected fire origin and associated evidence, given a wildland fire and agency procedures, so that all evidence or potential evidence is protected from damage or destruction and reported to a supervisor.

Requisite Knowledge. Knowledge of types of evidence and the importance of site security and evidence preservation.

- 1. Knowledge of types of evidence
- 2. The importance of site security
- 3. The importance of evidence preservation

Requisite Skills. Evidence preservation techniques and use of marking devices for site security.

1102-6.5.7 Serve as a lookout, given an assignment at a wildland fire as per agency procedures, so that fire fighters are updated or warned when conditions change.

Requisite Knowledge. Basic fire behavior and how to recognize hazardous situations, communications methods, equipment, and procedures.

- 1. Basic fire behavior
 - a. Fuel
 - b. Topography
 - c. Weather
- 2. How to recognize hazardous situations
 - a. Operational engagement (IRPG)
 - 1) Risk management
 - 2) LCES
 - 3) Look up, down and around
 - 4) Standard firefighting orders
 - 5) Watch out situations
 - Common denominators of fire behavior on tragedy fires
 - 7) Common tactical hazards
 - 8) Safety zones
 - 9) Downhill checklist
 - 10) Wildland urban interface firefighting

- 3. Communications methods
 - a. Face-to-face
 - b. Radio
 - c. Written
- 4. Communications equipment (AHJ)
- 5. Communications procedures (AHJ)

Requisite Skills. The ability to accurately describe fire behavior and changes in fire behavior through verbal communication, hand signals, or use of communication equipment.