#### North Central Texas Wildland Fire Working Group

**Regional Response Guidelines** 

#### Purpose

These guidelines will outline basic minimum standards for resources being employed during regional response to wildland fire incidents.

## Scope

The Texas Statewide Mutual Aid System (SB11) under Chapter 418 provides the authority for interlocal or regional mutual aid. This does not replace or supersede existing mutual aid agreements or interfere with the ability of municipalities to enter into written mutual aid agreements in the future. It is understood that if a written agreement is entered into by governmental entities or municipalities requesting resources, then the terms of that agreement control the rights and responsibilities of the participating parties to the extent the agreement provides terms that differ from the Texas Statewide Mutual Aid System. These standards are intended to bridge the expectations between local incidents and those requiring state assistance (TIFMAS).

These guidelines will be recommended by the North Central Texas Wildland Fire Working Group (NCTWLF) to the Emergency Preparedness Planning Council (EPPC). EPPC will consider and recommend these guidelines for endorsement to North Central Texas Executive Board. The Executive Board will consider and adopt the regional guidelines. Local jurisdictions may consider these regional guidelines when organizing resources, responding to wildfires, and could adopt these guidelines locally.

These guidelines constitute a living document. It is expected that with additional response lessons will be learned that will predicate a need to update this document. Therefore, the NCTWLF working group will consider and recommend changes as needed.

#### Summary

Wildland fires have the potential to cause catastrophic damage, threaten lives, impose critical infrastructure disruption and impact all sectors of the community. They have the potential to rapidly overwhelm local government capabilities and may quickly deplete resources. When adequately trained and equipped resources are made available quickly, wildland fires have the greatest chance of being successfully contained. This document outlines recommendations regarding the following wildland fire response elements:

- Firefighting Equipment
- Firefighter Personal Protective Equipment
- Firefighter Training and Qualifications
- Incident Command System

## Firefighting Equipment

Apparatus ordered for and responding to requests within the region will be categorized based upon the national standard for equipment typing. The following are minimum standards for each engine type:

Type 7 Engine (Brush Truck, Attack, Booster, Grass Truck, etc.)

- 4WD or AWD
- Tank capacity: 50 gallons
- Pump capacity: 10 GPM at 100 PSI, with pump and roll capability
- Hose compliment: 200' of 1"
- Maximum GVWR: 14000 lbs.
- Personnel: 2

Type 6 Engine

- 4WD or AWD
- Tank capacity: 150 gallons
- Pump capacity: 50 GPM at 100 PSI, with pump and roll capability
- Hose Compliment: 300' of 1.5" and 300' of 1"
- Maximum GVWR: 19500 lbs.
- Personnel: 2

Type 5 Engine

- Tank capacity: 400 gallons
- Pump capacity: 50 GPM at 100 PSI, with pump and roll capability
- Hose Compliment: 300' of 1.5" and 300' of 1"
- Maximum GVWR: 26000 lbs.
- Personnel: 2

Type 4 Engine

- Tank capacity: 750 gallons
- Pump capacity: 50 GPM at 100 PSI, with pump and roll capability
- Hose Compliment: 300' of 1.5" and 300' of 1"
- Personnel: 2
- Type 3 Engine
- Tank capacity: 500 gallons
- Pump capacity: 150 GPM at 250 PSI, with pump and roll capability
- Hose Compliment: 1000' of 1.5" and 500' of 1"
- Personnel: 3

It is imperative that wildland fire apparatus be functional and effective in remote, rugged and demanding environments. The following apply to all wildland fire apparatus:

- Vehicle not to exceed GVWR fully loaded including crew
- Mobile radio and one portable radio with current statewide interoperability frequencies

- Fully functional seat belts for all riding positions
- Ignition devices: 6-12 fusees/flares or 1 drip torch
- Minimum of 4 wildland specific handtools (i.e. Pulaski, Fire Shovel, McLeod, Council Rake, Combi-tool, etc.)
- Mechanic tools and supplies, including appropriate jack, lug wrench and tow strap or chain
- Container(s) for drinking water (1/2 gallon per person)

The following are suggested for wildland fire response:

- Backpack pump (common eponyms Fedco or Indian Pack)
- 300' of 5/8" hose (commonly called toy or ribbon hose with garden hose thread couplings)
- Garden hose barrel nozzle(s)
- Twin tip (forestry) nozzle(s) with 3/16<sup>th</sup> straight bore and 6 gpm spray tips
- Dual GPM fog nozzle(s), 10/24 or 10/30
- 1.5" forestry hose clamp(s)
- 1.5" gated wye(s)
- 1.5" by 1" reducer(s)
- 1" by .75" reducer(s)
- Belt weather kit or Kestrel style electronic weather monitoring device

## Firefighter Personal Protective Equipment

Wildland firefighter clothing and protective equipment is designed specifically to protect firefighters from heat stress, the primary cause of wildland firefighter injuries, in wildland firefighting operations. The following guidelines are adapted from national standards:

- All personal protective equipment (PPE) will meet or exceed agency policy and should be in compliance with the NFPA 1977, 2011 edition.
- Wear flame-resistant clothing on the fireline and do not wear clothing, even undergarments, made of synthetic materials, which can burn and melt on your skin. Roll your sleeves down to the wrist.
- Flame-resistant clothing should be cleaned or replaced whenever soiled, especially when soiled with petroleum products. Flame-resistant clothing will be replaced when the fabric is so worn as to reduce the protection capability of the garment, or is so faded as to significantly reduce the desired visibility qualities. Yellow long-sleeved aramid shirts are recommended.
- Wear a hard hat and leather gloves while on the fireline.
- Personnel assigned to wildland fires must wear a minimum of 8-inch-high, laced-type exterior work boots, with Vibram-type, melt-resistant soles. The 8-inch height requirement is measured from the bottom of the heel to the top of the boot.
- Use eye and face protection whenever there is a danger from material being thrown back in your face.
- Determine and comply with host agency requirements regarding fire shelters on fireline suppression assignments or follow your own agency's requirements if they are more restrictive.
- Use hearing protection when working with high-noise-level firefighting equipment, such as helicopters, air tankers, chain saws, pumps, etc.

- When operating chain saws, sawyers and swampers will wear additional safety equipment, including approved chaps, gloves, hard hat, and eye and hearing protection. Swampers should wear chaps when the need is demonstrated by a risk analysis considering proximity of the chain saw to the sawyer, and the slope, fuel type, etc.
- Face and neck protection (Nomex shrouds) are not required PPE. If issued, shrouds should be deployed only in impending flash fuel or high-radiant heat situations and not routinely worn throughout the operational period, due to an unacceptable increase in physiological heat stress.

# Firefighter Training and Qualifications

Fire suppression personnel responding to wildland fire incidents outside local agreements should be trained to national standards. The TIFMAS guidelines require that basic wildland firefighters have the following training:

- NWCG \$130/\$190/L180 or,
- TIFMAS \$130/\$190/L180 or,
- SFFMA Wildland Certification completed as of June 2008 with TFS/NWCG or TIFMAS basic wildland or,
- TCFP Basic Wildland certification

In an effort to maintain the highest level of personal effectiveness, and thus the safest and most effective response effort, firefighters participating in operations at the regional level should meet these basic standards.

There are two handcrews (Modules) available regionally. The members of these crews exceed the minimum training requirements and are held to a rigorous physical standard. Each module is self-sufficient, and arrives with 8-10 members (minimum of 2 paramedics with ALS gear), chainsaws, drip torches, handtools, and their own sustenance. They are a versatile resource that can be employed in a number of ways:

- Fire suppression functions such as, constructing handline, conducting burnouts, supporting heavy equipment or engine operations, mop up, and line medics
- Chainsaw support and assistance with other types of disasters (i.e. tornadoes, ice storms, flood damage, wide area searches, etc.)
- Assistance with wildland fire training

# Incident Command System

In accordance with the "Texas Disaster Act" and other applicable provision of law and except as otherwise provided by law, the responsible local official in whose jurisdiction an incident requiring regional mutual aid has occurred shall remain in charge at such incident.

Extended Attack (regional response) is the suppression activity for which a wildfire that has not been contained or controlled by initial attack (local mutual aid) forces and for which more firefighting resources are arriving, en route, or being ordered by the Incident Commander. An Extended Attack Incident is the phase of the incident when initial attack capabilities have been exceeded. This transition has a historically high potential for serious accidents and injuries. All planned actions must consider firefighter and public safety as the number one priority. Resources responding to a regional incident

(Extended Attack) should be working under a standard framework of command and control (ICS), and be familiar with the following:

- Incident Commander or Unified Commander who is responsible for the following:
  - Establish an Incident Command Post (ICP) and check-in location(s) to receive, brief, and assign incoming resources.
  - ✓ Determine and document incident objectives.
  - Employ strategy and tactics that will follow the Standard Firefighting Orders, ensure Watch-Out Situations are mitigated, ensure work/rest requirements are met and ensure entrapment situations are avoided.
  - ✓ Keep Dispatch or other higher level officers informed of the status of the fire, progress of the suppression effort, additional resources needed, weather conditions and special situations, such as values threatened, etc.
  - ✓ Divide the fire into areas of responsibility and assign capable individuals to supervise these areas (i.e. Divisions, Groups, Task Forces and Strike Teams).
- Operations Chief, whose responsibilities are:
  - ✓ Use the risk management process, and supervise operations.
  - ✓ Maintain accountability of assigned resources.
  - ✓ Brief and assign Operations personnel according to the IAP.
  - $\checkmark$  Facilitate and coordinate the ordering and release of operation resources.
  - ✓ Assemble and disassemble Task Forces/Strike Teams and assigned to operations.
  - ✓ Report special activities, events, and occurrences to Incident Commander.
- Division/Group Supervisor, who is responsible to:
  - Ensure that assigned personnel and equipment get on and off the fireline in a timely and orderly manner.
  - ✓ Maintain accountability of assigned resources at all times.
  - ✓ Brief and assign specific work tasks to Task Forces/Strike Team Leaders.
  - ✓ Coordinate activities with adjacent Divisions.
  - ✓ Resolve logistics problems within the Division/Group.

Of course, as the incident evolves, many more functional positions may be assigned. Fire personnel should be familiar with ICS and be able to function within this system, regardless how large or complex the incident becomes.