

	TRAVIS COUNTY ESD #5 MANCHACA FIRE RESCUE	<h1>A401</h1>
	Department Best Practices Authorized by:  Fire Chief Chris Barron	
<h2>Wildland Fire Response</h2>		

I. Purpose

To provide basic guidelines for wildland firefighting procedures.

II. Background

Wildland firefighting requires different strategies than that of structural fire suppression. This policy is intended to provide a basic guideline to wildland firefighting activities for the Austin Fire Department. This policy reflects the strike team/task force concept that has been introduced to the Central Texas region.

This document is a direct adaptation of the Austin Fire Department SOG on Wildland Fire Response. It has been adopted by Manchaca Fire Rescue as an Auto Aid partner to maximize standardization between partner agencies. Variations and additions to the language from the parent AFD document will be signified by text in italics. Generic changes that do not affect content such as formatting and changing "AFD" to "MFR" will not be noted.

III. Policy

- A. **Terminology.** Definitions will be aligned with National Wildfire Coordinating Group (NWCG) and National Incident Management System (NIMS) terminology. These definitions may be found at <http://www.nwcg.gov/pms/pubs/glossary/index.htm>.
- B. **IMS.** All firefighting operations and emergency scene operations shall be conducted under the direction of an Incident Commander (Command). An Incident Management System in accordance with NIMS will be established for all incidents.
- C. **Incident priorities.** Incident Priorities are consistent with other incidents: Life Safety, Incident Stabilization, and Property Conservation.
- D. **Attack from the black.** Fighting a wildland fire "from the black" is preferred, as this is one of the safest methods of operation given the nature of direct fire attack.

- E. **Off-road operations.** Apparatus not designed for off-road use will not be driven off of any improved roadway.
- F. **PPE.** Full Wildland Personal Protective Equipment will be worn on all active wildland incidents. Incident Command will determine when lesser levels of PPE will be allowed.
- G. **Alarm Types.** Refer to MFR Policy G101 - Alarm Types , Resources and Response Plans, for specific alarm resource assignments
 - 1. **GRASS.** This alarm type will be generated for a situation in which the probability for the alarm to escalate is low. Examples include a grass fire in the median of a roadway and a grass fire where the caller indicates an extremely small area in short fuels.
 - 2. **LIGHT BRUSH (BRUSHL).** This alarm type is for small fires involving natural vegetation such as grass, brush, bushes and/or trees, with little potential for expansion and minor access issues; it may require more than a single unit response, but not a full BRUSH alarm.
 - 3. **BRUSH.** This alarm type will be generated for a situation in which there is a probability for the alarm to escalate. Examples include wildland fires in heavy fuels (brush, trees, etc.), grass fires covering large areas or spreading rapidly, any wildland fire with access issues that may contribute to fire expansion, and any wildland fire with significant potential to spread or threaten exposures.
 - 4. **BRUSH 2nd.** These alarm types will be requested by on scene Command in the event more resources are needed to mitigate the incident. Examples include large wildland fires with major mop-up, fast moving fires outrunning on scene resources, and extended incidents in which on scene crews need rehab.
- H. **Resource Groups.** Refer to MFR Policy G101 - Alarm Types, Resources and Response Plans, for specific resource assignments
 - 1. **Wildland/Urban Interface (WUI) Task Force.** This resource group will be requested by on scene Command in the event resources are needed to protect structures from a wildfire. When requesting a WUI Task Force, Command must also provide Dispatch with a location for the WUI Task Force to respond and indicate if additional radio channels are needed. For immediate exposure protection, the WUI Task Force may respond directly to the assigned location to begin defensive measures. For out of area responses, the WUI Task Force may be assigned to a rally point until the arrival of the Task Force Leader. The WUI Task Force will operate together under the direction of the Task Force Leader at all times (refer to MFR Best Practices A402 - WUI Firefighting Operations).
 - 2. **Strike Teams.** The Strike Team concept provides 'ready-made' work units that come with a Strike Team Leader ready to be assigned to a Section, Branch, Division, or Group during an active incident. When requesting a Strike Team, Command must also provide Dispatch with a location for the Strike Team to respond and indicate if additional radio channels are needed.

The Engine Strike Team will normally be assembled at a rally point until arrival of the Strike Team Leader. The Engine Strike Team will operate together under the direction of the Strike Team Leader at all times.

- a. **Engine Strike Team (Type 1 Engines).** This resource group will be requested in the event that 5 structural engine companies are needed to respond as a team to an incident.
- b. **Brush Truck Strike Team (Type 6 Engines).** This resource group will be requested in the event that 5 Brush Trucks are needed to respond as a team to a wildfire incident.

Note: The Strike Team or Task Force Leader shall maintain close coordination and communication with the Incident Commander, Operations Officer, or Division Supervisor to whom they are assigned. Accountability will be maintained by the Strike Team or Task Force Leader until demobilization.

- I. **NIMS terminology.** Wildland fires should be managed using standard NIMS terminology.
 1. **Divisions.** Divisions should be used to divide a wildland incident. The area immediately to the left of the heel should be designated as "Alpha Division." The fire area immediately to the right of the heel should be designated as "Zulu Division." Clear Division breaks should be established and Division Supervisors appointed as the Divisions are established.
 2. **WUI Task Force in NIMS.** When a WUI Task Force is initiated, it may be treated as a Branch, Division or Group depending on the potential for expansion. In the event that the WUI Task Force Leader becomes the Branch Director or Division/Group Supervisor, the Task Force Leader position must be filled.
- J. **Visibility.** Emergency lighting and headlights will be used at all times while working at a wildland incident.

IV. Best Practices

The following best practices should be followed at all firefighting and emergency scene operations, except where deviation can be justified by Fire Officers. Any significant deviation should be communicated to responding/on-scene units as soon as possible.

- A. **Assumption of Command.** The first arriving Officer shall assume Command and direct the operations of later arriving companies until relieved of Command by an equal or higher ranking Officer. Utilization of Officers and highly experienced and/or trained members in key incident management positions should be considered.

B. **Size-up.** When giving the initial size-up report, Command should:

1. Assume Command
2. Identify the primary fireground channel
3. Identify the approximate size of the fire
4. State what action is being taken by the company
5. Direct other responding companies' actions (this may include identifying a staging area)

C. **Additional information.** Additional size-up information may include:

1. Known exposures
2. Location of the head of the fire
3. Fuel loading (light, medium, or heavy fuels)
4. Pertinent access points
5. Current weather conditions

D. **Fireground orientation.** Orientation at a wildland fire is accomplished by giving directions in relation to the origin of the fire. An easy way to orient yourself on the scene is to imagine yourself standing in the burned area with the wind to your back. Directly in front will be the head of the fire, to the right is the right flank, etc. When communicating with other firefighters, the use of these directions will greatly aid Command, lookouts, and other responding units.

E. **Influence on fire behavior.** It is important that all personnel, especially personnel with Command responsibilities, consider all factors contributing to wildfire behavior. The three main influences on fire behavior are:

1. Weather
2. Fuels
3. Topography

F. **Extreme fire behavior.** Extreme fire behavior should be watched for and reported to on scene personnel if observed. Signs of extreme fire behavior include:

1. **Rapid rate of spread.** Rapid rate of spread due to high winds, fuel type changes, and/or increase in slope
2. **Intense burning.** Intense burning with high flame lengths
3. **Spotting.** Spotting is behavior of a fire producing sparks or embers that are carried by the wind and which start new fires beyond the zone of direct ignition by the main fire.

4. **Torching.** Torching is the burning of the foliage of a single tree or a small group of trees, from the bottom up. This may be an initial indicator of a crown fire.
 5. **Crowning.** Crowning is where the fire is advancing from tree top to tree top, independent of the surface fire
- G. **LCES.** “LCES” will be considered prior to and during all wildland firefighting. Fire Officers are charged with the responsibility of ensuring LCES is addressed and communicated to all personnel under their Command when operating at a wildland fire.
1. **L** is for Lookout
 2. **C** is for Communications
 3. **E** is for Escape Routes
 4. **S** is for Safety Zones
- H. **Briefings.** A thorough briefing based on the Incident Response Pocket Guide (IRPG) briefing checklist should be performed, when possible, prior to accepting an assignment at an extended wildland fire incident. Subsequent briefings will be performed at all levels downward to ensure incident objectives and safety issues are clearly understood by all members on the incident. The relieving Officer, firefighter, or crew will receive a briefing prior to accepting an assignment.
- I. **RECEO.** The acronym RECEO (*Rescue, Exposures, Containment, Extinguishment, Overhaul*) is applicable to wildland fires *to address the tactical priorities of the incident.*
- J. **Methods of fire attack.** Wildland operations include direct, indirect, and parallel methods of attack. Incident Commanders should consider all three when attempting to extinguish or contain a wild fire.
1. **Direct attack.** When beginning a direct attack, an anchor point should be established. This is considered a road, terrain feature or waterway that would prevent the fire from wrapping back around on working crews. Wind, topography, fuel loading, and fuel type should be considered when selecting an anchor point, as these conditions will strongly influence method of attack and strength of the anchor point. While working from this anchor point and performing a direct attack, crews should strive to work from the back as much as possible. A direct attack on the head fire should only be undertaken when adequate resources have been assembled and a risk/benefit analysis indicates that direct attack on the head is advised. It is critical to continuously check for spot fires during direct attack.
 2. **Indirect attack.** Indirect attack involves “holding” the fire at a feature that will contain it (usually firelines, roadways, rivers, etc.). Firelines can be constructed by many methods including

bulldozers, handlines, retardant drops, etc. Roadways, rivers, lakes, and many other man-made and/or natural existing features can be used as all or part of a fireline. Indirect attack should be considered when no exposures are threatened or for fires that have access problems. Ignition operations can be used to expand firelines. Ignition operations can only be performed by specially trained firefighters. It is critical to ensure that firelines are, at a minimum, twice as wide as the height of the predominant fuels. A major concern during “holding” operations is spot fires. It is critical that firefighters performing holding operations observe downwind for spot fires. Spot fires have a tendency to occur sooner than expected and further down range than expected.

3. **Parallel attack.** Constructing a fireline by working along the flanks from an anchor point. The distance from the control line is dependent on fire intensity.
- K. **Tandem use of brush trucks.** While working with Brush Trucks, an effort should be made by Command to work the Brush Trucks in tandem (refer to MFR Best Practices A403 Brush Truck Operations).
- L. **Wildland packs.** The wildland pack is a progressive hose lay system allowing additional packs to be connected to the end of the preceding wildland pack. Consider utilizing wildland packs at wildland incidents.
- M. **PPE and fire shelters.** All personnel involved in fighting a wildland fire will wear appropriate protective equipment. *This includes wearing fire shelters or having the shelter immediately available in situations where wearing the shelter interferes with job duties (driving).*
- N. **WUI task force.** If structures are in immediate danger of fire exposure, a WUI Task Force should be requested. When requesting a WUI Task Force, Command must also provide Dispatch with a location for the WUI Task Force to respond and indicate if additional radio channels are needed.
- O. **Aerial use.** The use of aerial ladders and platforms as highpoints for lookouts is strongly encouraged.
- P. **Early requests for additional resources.** Command should evaluate the possible need for additional resources as early as possible. These assets may be requested from Fire Dispatch. Anticipate the time delay on outside agency arrival.
- Q. **Requests for TFS resources.** For aircraft and firefighting bulldozers, the Texas Forest Service (TFS) shall be contacted via Fire Dispatch. The officer requesting assistance needs to provide Fire Dispatch with a contact phone number. The TFS representative will contact the officer, determine the incident needs and advise them of equipment availability.

1. **Aircraft use.** The use of aircraft should be considered (follow procedures outlined in the IRPG blue section). Aircraft can be fixed or rotary winged of different types and sizes. Aircraft have three purposes: observation, crew transport, and water/retardant delivery. Air operations will commonly be on a separate frequency. Aircraft suppression operations should be followed with ground force actions.
2. **Dozer use.** Another specialized resource that may be requested is a firefighting bulldozer (dozer). The dozer crew is made up of a Dozer Operator and a Dozer Boss. If used, they should be in constant contact with fire personnel. Assigning fire personnel to each piece of equipment is strongly suggested. Firefighters assigned to a TFS dozer crew should make contact with the Dozer Boss and maintain radio contact with the Division Supervisor at all times. TFS radios operate on VHF frequencies and may not be able to establish radio contact with Command.
3. **Other equipment.** Other equipment may also be available through the city or local contractors. However, the use of untrained persons in firefighting operations could be extremely dangerous.