

Volusia County Fire Services Safety Gram

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LCES Checklist

In the wildland fire environment, lookouts, communications, escape routes and safety zones (LCES) are the keys to safe procedures for firefighters. The elements of LCES form a safety system used by firefighters to **PROTECT THEMSELVES AND TO HELP THEM WORK BETTER AS A TEAM**. The system is implemented before fighting the fire and includes: selecting a lookout or lookouts, setting up a communication system, choosing escape routes and selecting a safety zone or zones.

LCES is built on two basic guidelines:

1. Before their safety is threatened each firefighter must be informed how the LCES system will be used.
2. The LCES system must be continuously re-evaluated as conditions change.

LOOKOUTS

- Experience/competent/trusted.
- Enough lookouts at good vantage points.
- Knowledge of crew location.
- Knowledge of escape and safety locations.
- Maps/weather kit/watch/IAP.

COMMUNICATIONS

- Radio frequencies confirmed/know how to operate equipment.
- Backup and check-ins established.
- Updates on any situation changes.
- Sound alarm early, not late.

ESCAPE ROUTES

- Have more than one escape route.
- Avoid uphill escape routes.
- Scout: loose soils/rocks/vegetation.
- Time: consider slowest person/fatigue and temperature factors.
- Mark: flagged for day or night (NFES 0566).
- Evaluate: apparatus parked for escape.

SAFETY ZONES

- Survivable without a fire shelter.
- Back into clean burn.
- Natural features: rock areas/water/meadows.
- Constructed sites: clear cuts/roads/heli-spot.
- Scout for size and hazards.
- Upslope = more heat impact = large safety zone.
- Downwind = more heat impact = larger safety zones.
- Heavy fuels = more heat impact = larger safety zones.

Escape time and safety zone size requirements will change as fire behavior changes.
Fireline Handbook 2004

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Dispersion Level Chart

Dispersion Range 0-40 is stable air, low fire intensity, less long range spotting.

Dispersion Range 41-70 is moderate unstable air, increased fire intensity and long range spotting.

Dispersion Range 70+ is unstable air, high amount of upper lifting, intense fire activity, potential for long range spotting and plume dominated wildfires.

Fire-line Handbook Jan. '98

Fight fire aggressively, but provide for safety first.

Initiate all action based on current and expected fire behavior.

Recognize current weather conditions and obtain forecasts.

Ensure instructions are given and understood.

Obtain current information on status.

Remain in communication with crewmembers, your supervisor, and adjoining forces.

Determine safety zones and escape routes.

Establish lookouts in potentially hazardous situations.

Remain in control at all times.

Stay alert, keep calm, act decisively.

NWCG Handbook 3