

Tuolumne Calaveras Unit - Lightning Plan



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⁸ 2011 Revision in final development stage: individual Battalion specific plans. Final adoption target is August 2011

Introduction

Within the boundaries of the Tuolumne Calaveras Unit are located three primary river drainages (Mokelumne, Stanislaus, and Tuolumne) originating from the west slope of the Sierra Nevada Mountain Range. Periodically, monsoonal moisture originating from the desert southwest or Southern California will produce thunderstorm and lightning activity. While lightning caused fire occurrence is limited in this unit, there is a history of multiple lightning fire events that resulted in major fire activity such as the “Siege of ‘87” and lightning series of 1996. The same history has shown that suppression action must take place within the first burning period to prevent them from becoming major fires. This Lightning Plan has been developed to allow for the quick and effective reporting, tracking, staffing, and suppression of multiple lightning fires utilizing the Incident Command System. Utilization of this plan will also improve span of control in the San Andreas ECC when multiple fires occur. This plan can also be adapted for use during non-fire events such as snow, flood, or earthquake, where units are isolated.

Activation of the Plan

The Plan consists of three phases. The complexity of the situation dictates when each successive phase is implemented. Phases are not intended as hard fast rules of operation, but as guidelines for a smooth and orderly transition into an expanding organization required by the increasing incident work load.

Phase I – Prediction

Will be entered due to several reasons.

A predicted LAL of 3 or higher by the NWS Sacramento (Fire Weather Forecast, Fire Weather watch or warning)

Information gathered by Unit personnel of thunder cells moving towards the Unit.

Example: monitoring other Units frequencies, Command Nets and Intercom. Patterns detected on the BLM Lightning Page indicating approaching cells.

Actions

Notify Unit Duty Chief and Notify DC's and BC's via page

Initiate authorization of staffing pattern, Consider:

- Lookouts
- ECC expanded or extra staffing
- Personnel to staff Lightning Coordination Areas (LCA)
- Hard covering Local Government Equipment
- Ordering OOU resources for pre-position.
- Logistics Chief and PIO for the ECC to coordinate between the LCA's (attached to the area command)
- Check with CAAB on the availability of CWN aircraft for detection

Depending on certainty and confidence in the forecast, consider implementing Phase III immediately.

Phase II – Cell Activity (Down Strikes)

Will go into effect when either of the following conditions exists:

- Visual observation of build-up or other indication of active cells or down strikes on CAL FIRE direct protection areas or adjacent DPA's and expected to move onto CAL FIRE DPA shortly
- The ECC is getting reports of fires.

Actions

- The ECC may notify the Unit that the Unit Lightning Plan is in affect.
- Modify the IA Dispatch from full response to a level that considers incident complexity. (Recommended: 1 Overhead, 2 CAL FIRE Engines, 1 Hand Crew or Dozer, and nearest local government fire agency)
- Unit Duty Chief, Unit Duty Officer and the responsible Battalion Chief(s) will continually evaluate the need to move into Phase III (LCA and Area Command Activation)

Phase III – LCA and Area Command Activation

Phase III will go into affect when the potential of overextending the ECC's capabilities is approached. This decision will be made by the Unit Duty Chief, Unit Duty Officer and affected Battalion Chief(s).

- Area Command will be formed and include:
 - AC (Unit Duty Chief)
 - Plans (ECC Chief or ECCO), or Plans Section Chief
 - Logistics Chief
 - PIO
- LCA logistics should be coordinated through the Area Command Logistics Chief in order to allow effective use of Unit support resources.
- LCA public information releases should be coordinated or routed through the Area Command PIO.

LCA Definition and Reporting Responsibility

- The Area Command and the responsible Battalion Chief(s) "IC" will develop specific geographical boundaries for any area of the Unit impacted by lightning, referred to as a Lightning Coordination Area (LCA). The coordination area may be limited to a battalion, division or any other geographical sub-division of the Unit.

- A transition time will be established for the LCA to take over dispatching for the area.
- Each LCA will have a geographic name and operate as an “incident”. The IC for each LCA will report to the Area Command. Each IC will establish an appropriate ICS organization for the LCA.
- IC’s will give incident updates to the ECC at 0700 hrs each morning and 1900 hrs each afternoon at a minimum for ICS 209 information.
- IC’s are responsible for providing all command functions within their respective LCA’s
 - Minimum recommended organizational Staffing:
 - Incident Commander
 - Incident dispatcher
 - Plans
 - Logistics
 - Safety Officer
 - Operational overhead to staff incidents

Naming convention

- The IC will be responsible for naming incidents within the LCA and will work with the ECC to insure that incident numbers are assigned, and determine who will be responsible for the fire report.
- Each fire will be given a geographic name.

Detection

- Lookouts will report all smokes to the ECC.
- Air recons will be ordered by the ECC and coordinated with adjoining Units or the Forest if possible.
- Air recons will report new smokes to the ECC, Unless directed by the ECC to report to the LCA’s

Dispatch

- New incidents that are reported to the ECC will be relayed to the appropriate LCA IC or communications. The IC will assign resources as appropriate.
- The IC will be responsible for informing the ECC of any new incidents that are discovered within the LCA and will assign resources as appropriate.
- The IC will make requests to the ECC for additional resources and maintain a sufficient number of resources in reserve for new incidents.

- Dispatch functions for non-wildland fire incidents will occur as normal. IC's may need to support these incidents with LCA resources (i.e. medical aids, structure fires etc.)
- The ECC will retain all dispatching responsibilities for areas of the Unit not designated as an LCA

Escaped fires

- If a fire grows into the extended attack phase and exceeds the capability of the LCA resources the IC will request the Area Command take the incident back over
- Once the Area Command has a command organization in place a transition time will be agreed upon.
- As unit overhead resources will be severely taxed, Incident Command Team activation should be considered

Deactivation

The deactivation of an LCA will be a joint decision by the Area Command and the IC. The following should be used as guidelines:

- Most fires should be contained or in patrol status
- Sufficient IA resources will be available to the ECC
- All information pertaining to any incident in the mop-up stage will be given to the ECC
- Activity in adjoining LCA's and Unit activity will be taken into consideration
- Employee responsible for CAIRS and Preliminary reports will be reconciled

Attachment I

Lightning Activity Level

LAL 1 – No thunderstorms.

LAL 2 – Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1-5 cloud to ground strikes in a 5 minute period.

LAL 3 – Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6-10 cloud to ground strikes in a 5 minute period.

LAL 4 – Scattered thunderstorms. Moderate rain is commonly produced. Lightning is frequent, 11-15 cloud to ground strikes in a 5 minute period.

LAL 5 – Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud to ground strikes in a 5 minute period.

LAL 6 – Same as LAL 3 except thunderstorms are dry (no rain reaches the ground). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.