

A scenic view of a lake with a forest fire in the background. The foreground shows a rocky shoreline with several tall pine trees. The water is a vibrant turquoise color. In the distance, a dense forest of evergreen trees is visible, with a large, billowing plume of white and grey smoke rising from behind it against a clear blue sky. The smoke plume is thick and voluminous, partially obscuring the sky.

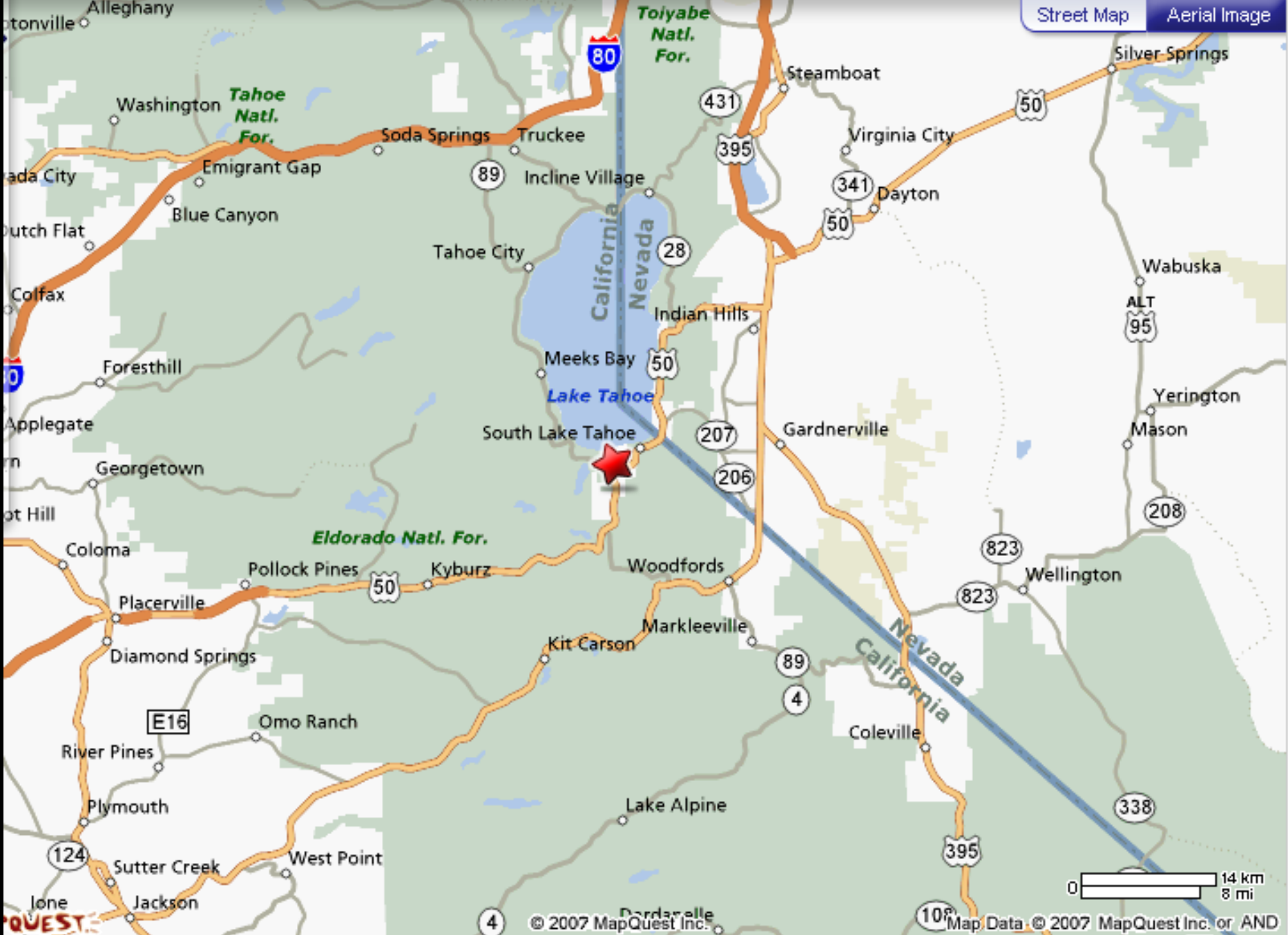
**USDA Forest Service  
Lake Tahoe Basin  
Management Unit**

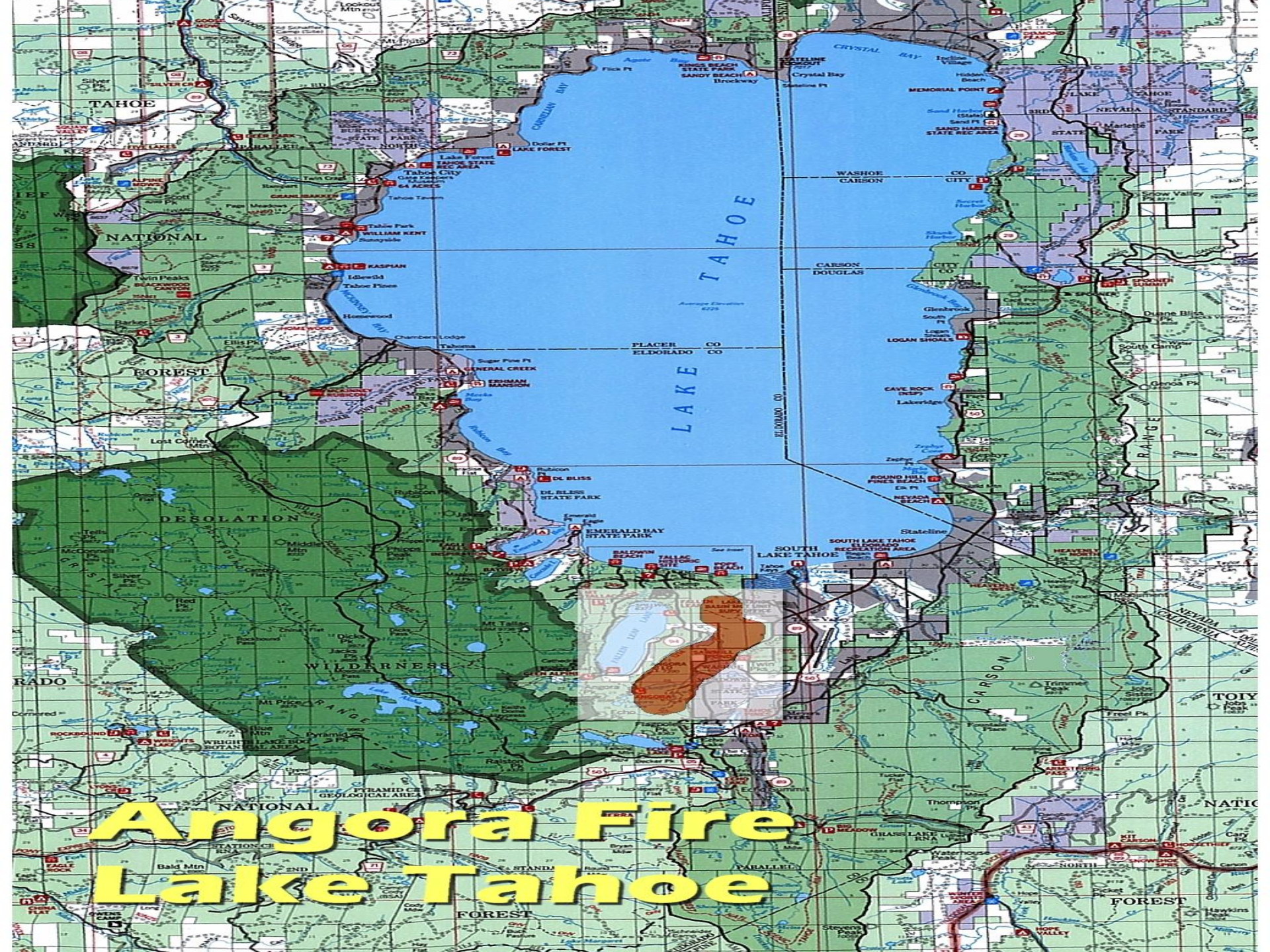
**Angora Fire June 24 2007  
Kit Bailey, Forest Fire Chief**



**1430 HRS**

**6/24/2007**





# Angora Fire Lake Tahoe

# Introduction

- Fire Environment
  - Winds - “Red Flag” conditions
  - 20 – 30 MPH, Gusts to 50+



# Introduction

- **Fire Environment**
  - **Dryness** – record-setting for this time of year
  - **1000-hr fuels at 11% (large logs)**

# Overview & Statistics

# Fire Progression

6/24/2007 - 6/26/2007

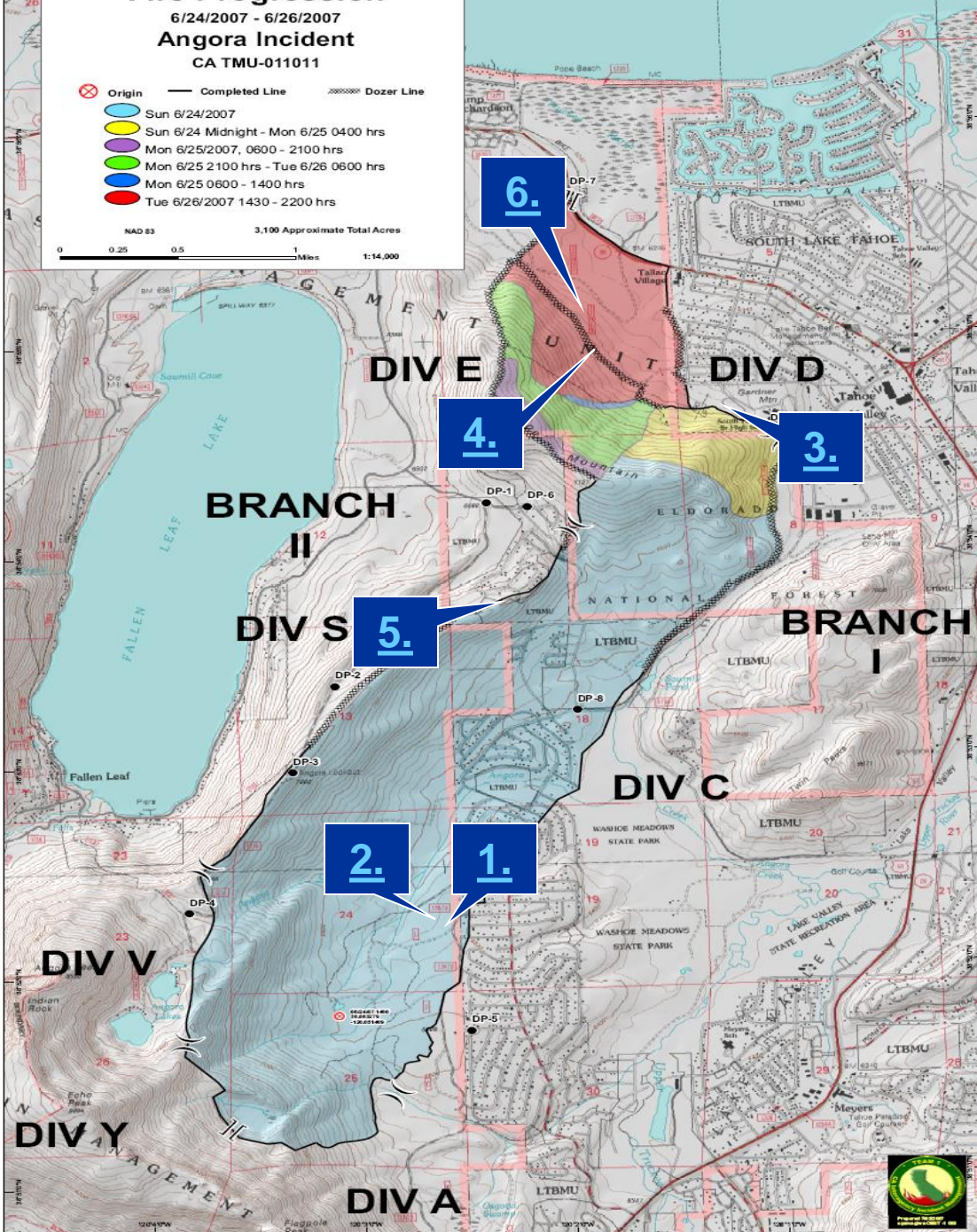
Angora Incident

CA TMU-011011

- ⊗ Origin
- Completed Line
- ⊞ Dozer Line
- Light Blue Sun 6/24/2007
- Yellow Sun 6/24 Midnight - Mon 6/25 0400 hrs
- Purple Mon 6/25/2007, 0600 - 2100 hrs
- Green Mon 6/25 2100 hrs - Tue 6/26 0600 hrs
- Blue Mon 6/25 0600 - 1400 hrs
- Red Tue 6/26/2007 1430 - 2200 hrs

NAD 83 3,100 Approximate Total Acres

0 0.25 0.5 1 Miles 1:14,000



## Fire Progression

- 3,100 Acres
- Fire Growth over 3 Days
- Containment Cost:
  - approx. \$13 mil.
- 3 Injuries, 0 Fatalities





First House Ignited  
(Saved By Suppression Efforts)

[Back](#)



[Back](#)



[Back](#)



[Back](#)



[Back](#)



[Back](#)

# Peak Resources

## 2,180 Personnel



# Participants

- Federal Fire Agencies
- Cal Fire
- Local Government Fire
- State OES
- Fed/ State/County/ City Law Enforcement
- Animal Control
- Search and Rescue
- Red Cross
- STAR Volunteers
- Humane Society
- Southwest Gas
- Sierra Pacific Power
- AT&T
- Charter Communications
- Barton Hospital
- Community Organizations
- Local Businesses





254 Homes Destroyed



26 Homes Damaged



3,000 Evacuations



Harrah's

PARKING →

THANK YOU  
FIREFIGHTERS!

HOTEL ENTRANCE

~ \$1 Billion Lost Tourist Revenue

# Initial Attack



1229



NZF

C10







# Structure-to-Structure Ignition





MTN PASS  
KIMBLE

# Ember Intrusion





# Before & After







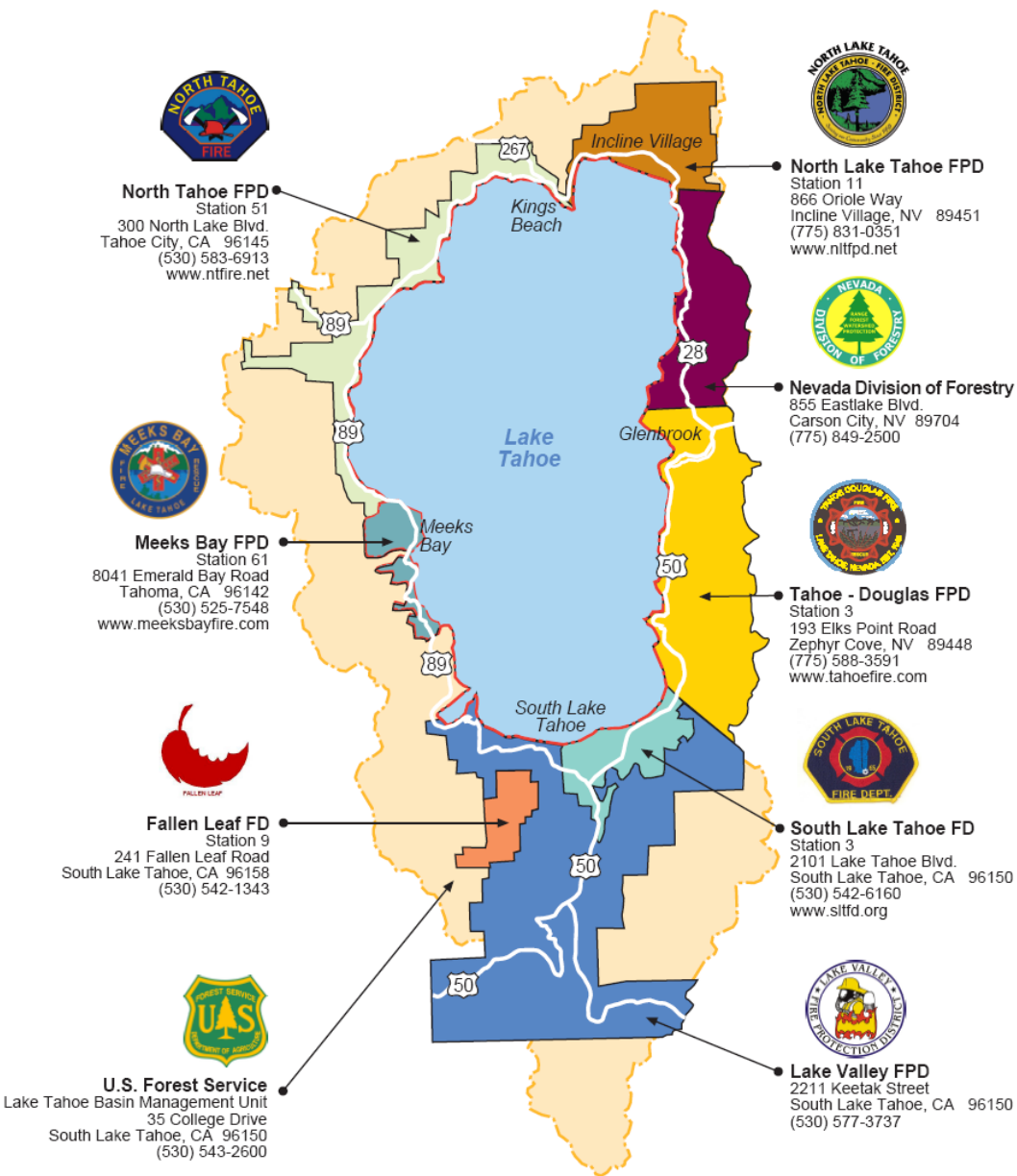


# Building Construction



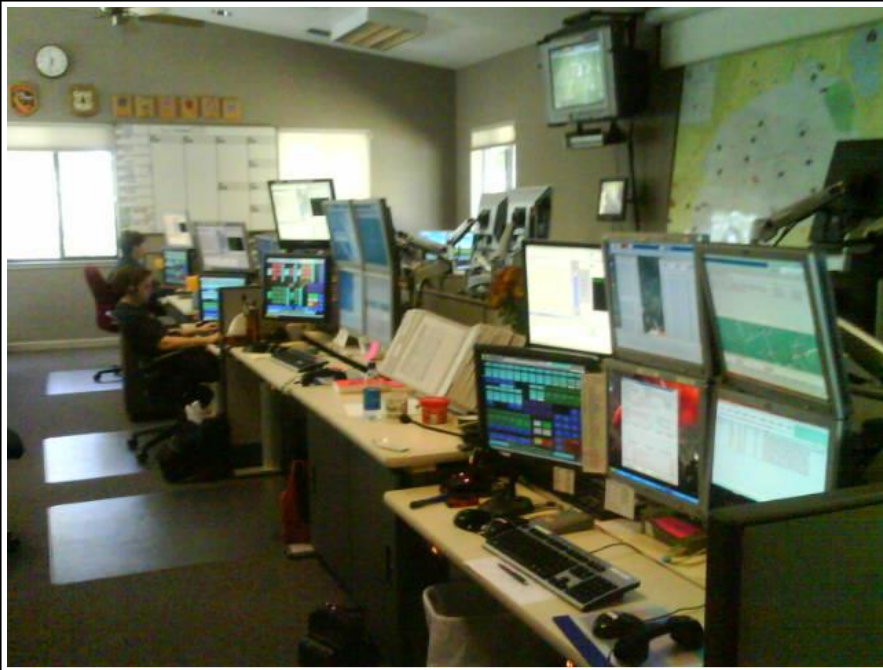
# Preparedness

# Lake Tahoe Basin Fire Protection Agencies



- Tahoe Regional Fire Chief's Association
- Co-op Agreements
- Mutual Aid Agreements

**In an Emergency Dial 9-1-1**



**Dispatch System**



**LE Coordination**

# Volunteers

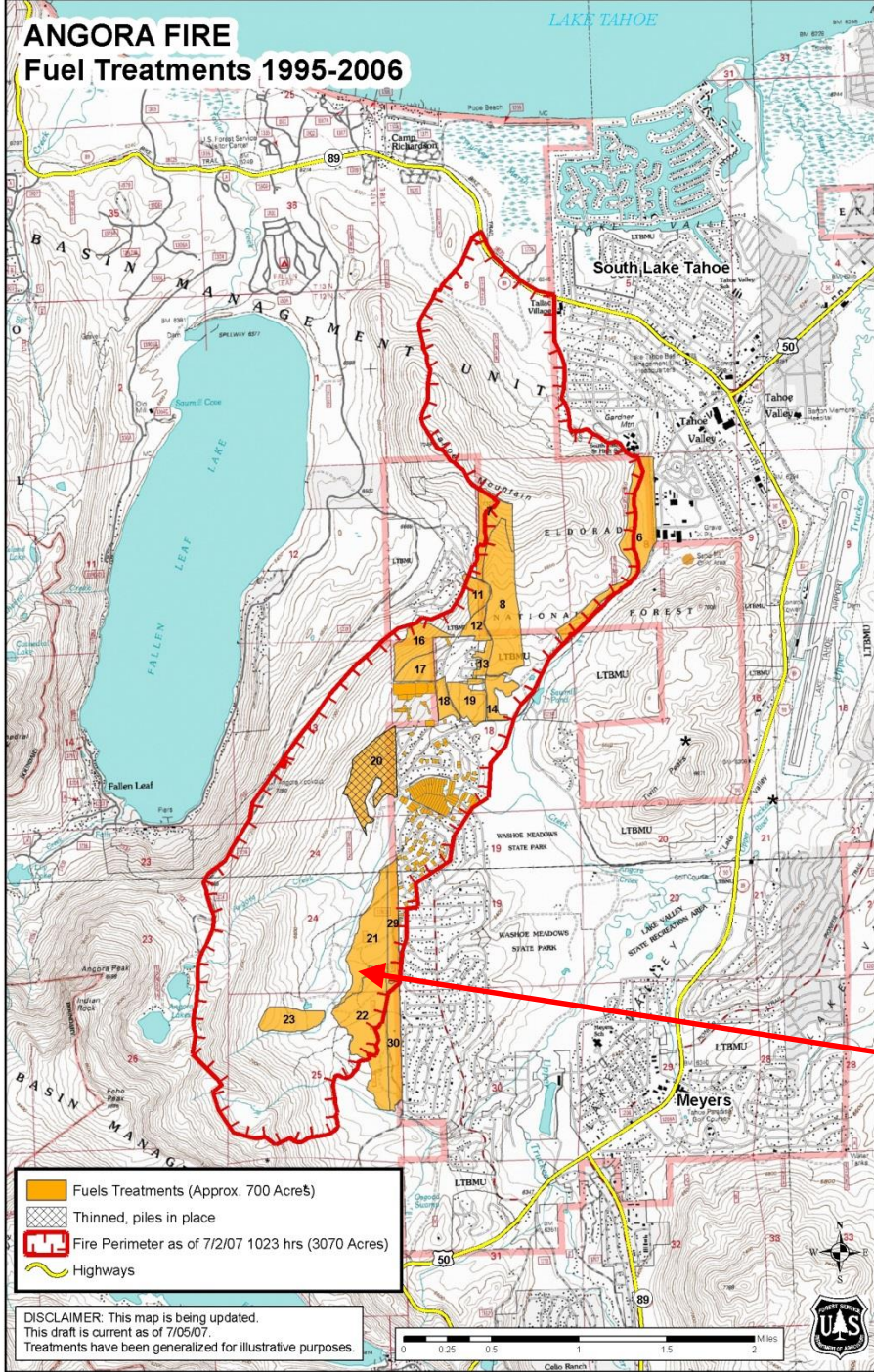


# Incident Command System (ICS)



# Fuels Treatment

# ANGORA FIRE Fuel Treatments 1995-2006



Lake Tahoe Basin Management Unit fuel treatments completed between 1995 and 2006





# Treatment Effects on Fire Behavior



Unit 17

Fire Spread

- Fire behavior changed from crown fire to surface upon entering treatment units

# Effects of Treatments on Fire Behavior

- Treatment units on SE Fire Perimeter
  - Crown fire dropped to surface fire





# Fire Edge in Treatment Area



# USFS Urban Lots

- Fuels in 70 USFS urban lots were evaluated for effects on fire behavior
- 68 of these lots exhibited surface fire (low intensity)



# Treatment Effects on Structure Ignition



**Reduced ember shower due to lack of crowning in adjacent fuels reduced the structure ignition zone**



# Treatment Effects on Fire Suppression

- Reduced intensity at forest boundary allowed direct attack
- Enabled aggressive “house-to-house” suppression action
  - Engines and crews were able to engage, withdraw, and move on to other structures safely
  - General forest treatment units served as “black” safety zones







Defensible Space ?



Defensible Space ?



Defensible Space ?

# Community Outreach

# Living With Fire

What can homeowners do to reduce the wildfire threat?

The Living With Fire wildfire threat reduction recommendations are presented according to four zones...

## Access Zone

This zone provides suggestions that help emergency responders locate your home in a timely manner.

## Defensible Space Zone

This zone pertains to the vegetation surrounding your home, both landscape plants and native plants.

## Built Zone

This zone includes recommendations for home construction.

Learn more at [www.livingwithfire.info/tahoe](http://www.livingwithfire.info/tahoe)



This display was created with funding from the Nevada Division of Forestry through the USDA Forest Service and the National Fire Plan.

This information provides information based on fire, smoke, and other conditions. It is not intended to be used as a substitute for professional advice or other information. Consult your local fire department for more information.





This site is still in progress, please check back for updates.

- ABOUT LWF
- FIRE ECOLOGY
- WATER QUALITY
- PUBLICATIONS
- RESOURCES
- CALENDAR
- BEFORE THE FIRE
- DURING THE FIRE
- AFTER THE FIRE

**WELCOME**



**North Lake Tahoe FPD**  
(775) 831-0351  
www.nltfpd.net



**Living With Fire**  
...helping Lake Tahoe homeowners live more safely with the threat of wildfire.

Research shows that how the house is built, the characteristics of the adjacent vegetation, and routine maintenance often determine which homes burn and which survive. The purpose of Living With Fire is to provide homeowners with wildfire threat reduction recommendations developed by Nevada and Lake Tahoe's firefighting experts. This program also provides suggestions about what to do during and after a fire.

- BEFORE THE FIRE ...
- DURING THE FIRE ...
- AFTER THE FIRE ...
- The Living With Fire program is funded by:













# Post Fire Review







**QUESTIONS?**