

# STATION FIRE



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Los Angeles County, California

Angeles National Forest

August 26<sup>th</sup> - October 16<sup>th</sup> 2009

4,874 Personnel

160,577 acres

# STATION FIRE

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Forest**

**Brad Weisshaupt – Los Angeles  
County Fire Department**



# Overview

- ▣ GIS Tools
- ▣ Incident Command Post – Fire Camp
  - Hansen Dam
  - Santa Fe Dam
- ▣ GIS Data
  - Base Data
  - Incident Data
- ▣ Work Flow
- ▣ Map Matrix
- ▣ Map Products
- ▣ Lessons Learned/AAR

# Agencies Represented

Federal Agency



County Agency



# Standard Operating Procedures

A Publication of the  
National Wildlife  
Coordinating Group



PMS 938  
NFES 2809

# GIS

## STANDARD OPERATING PROCEDURES ON INCIDENTS

June 2006

DATA



DIGITAL

Computer Technology

AERIAL PHOTOGRAPHY

Symbolology

Environmental

Remote Sensing

GIS

# Incident Command System



# GIS Tools











- ESRI GIS 9.3
- Fire Incident Mapping Tool (FIMT) 9.2.1.8
- CDF Incident Mapping Tools
- Minnesota Department Natural Resources  
Garmin 5.04.0001
- Adobe Professional
- X-Tools
- HP 1055 (36"), 5500 & Z6100 (42") Plotters



# Fire Incident Mapping Tool (FIMT)






## Group 1. Incident Tools



-  — Create Incident
-  — Open Existing Incident
-  — Switch Incidents
-  — Edit Incident
-  — Incident Information
-  — Copy Incident to History
-  — Copy Incident Layers to Data
-  — Export Incident to Shape Files
-  — Auto-Update Measures
-  — Update Fire Names and Numbers

## Group 2. Utility Functions



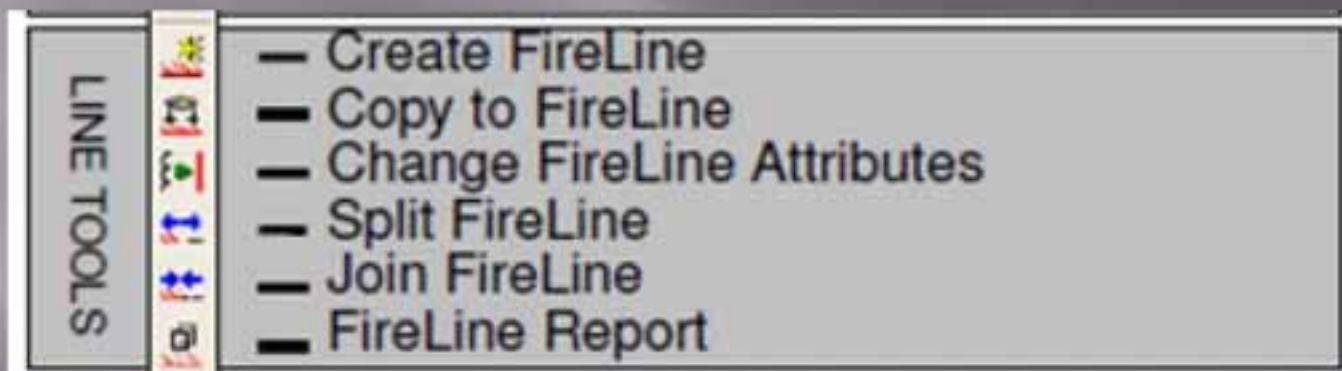
UTILITY		Feature Level Metadata
		Change Incident Symbols
		Label Multiple Fields
		Assign to Unit
		Get Latitude/Longitude

### Group 3. Perimeter Tools



POLYGON TOOLS	<ul style="list-style-type: none"><li>— Create FirePolygon</li><li>— Copy to FirePolygon Layer</li><li>— Change FirePolygon Attributes</li><li>— Split Assignment Line</li><li>— Update Perimeter Assignment</li><li>— Floating Assignment Break</li><li>— Create Island</li><li>— Remove Island</li><li>— Convert Perimeter to Line</li><li>— Perimeter Report</li><li>— Perimeter Change Report</li><li>— Draw History</li><li>— Export FirePolygon to Geodatabase</li></ul>
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## Group 4. Fire Line Tools



## Group 5. Fire Point Tools

Fire Incident Mapping Tool

FIMT



POINT TOOLS



- Create FirePoint
- Create FirePoint by Lat/Lon
- Copy to FirePoint
- Move FirePoint to Lat/Lon
- Change FirePoint Attributes
- Populate FirePoint Coordinate Table

# Hansen Dam

# Hansen Dam Fire Camp





210 Freeway

Overflow Parking

Foothill Blvd

Law Enforcement

Supply Unit

Medical

Kitchen

Lunches  
Water  
Ice

Soccer Fields  
Out of Bounds

Ground Support

Engine Parking

ICP

Briefing

General Sleeping Area

CDC  
Sleeping Area

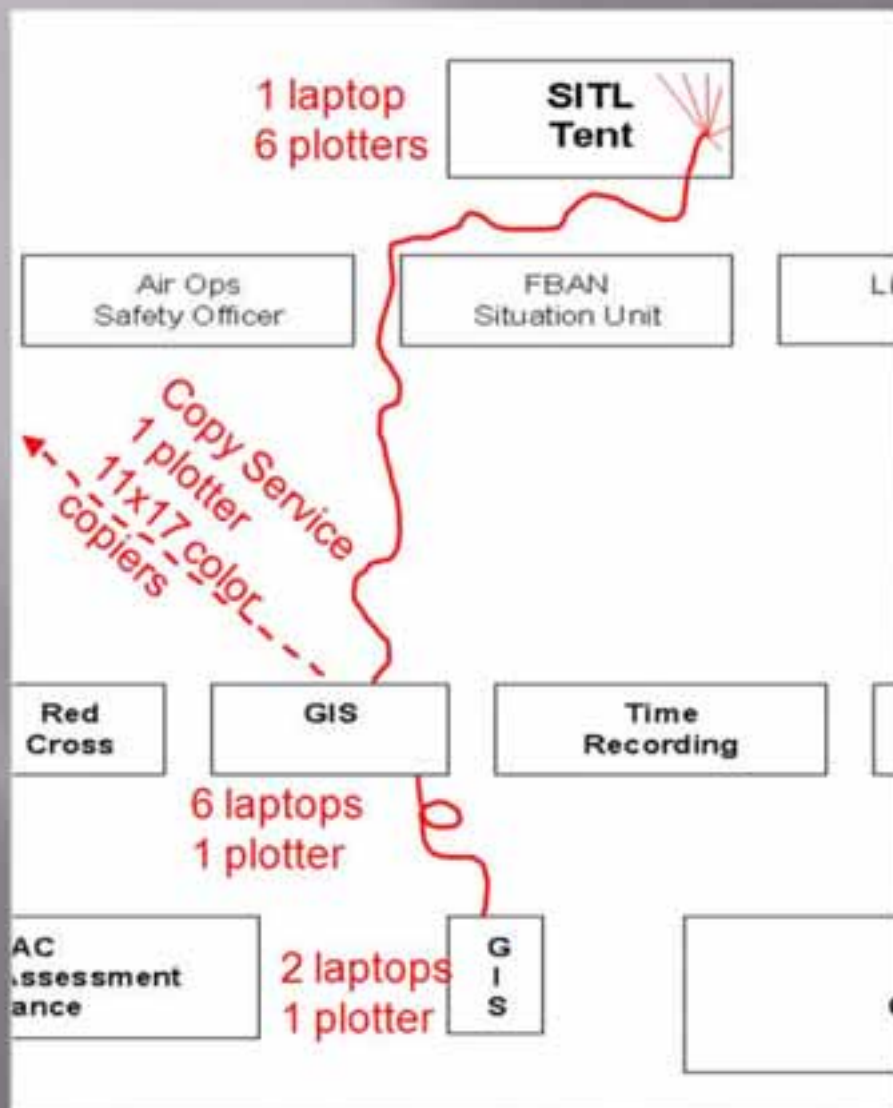
0 1,000 Feet

# Station Incident ICP





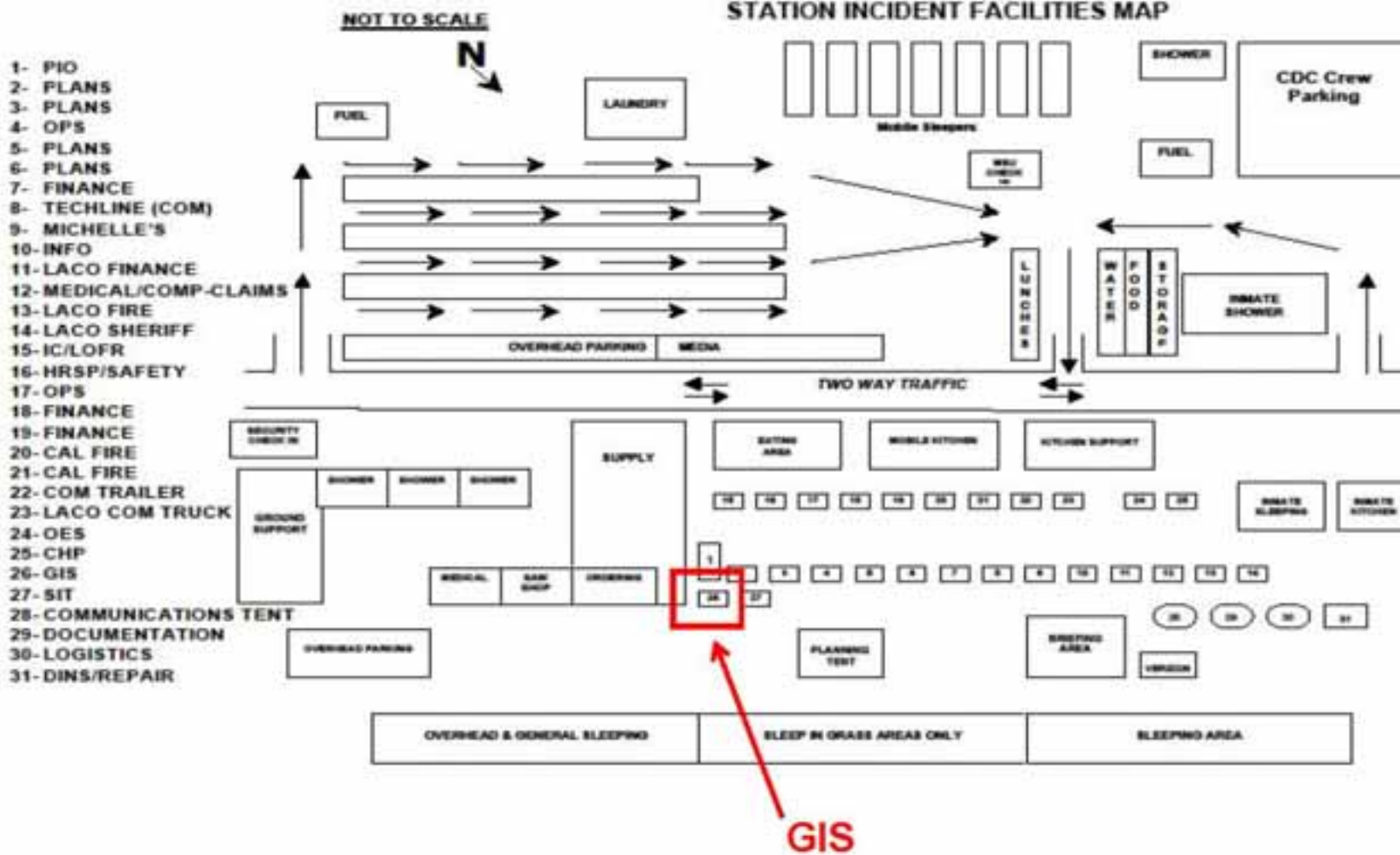
# GIS at Hansen Dam



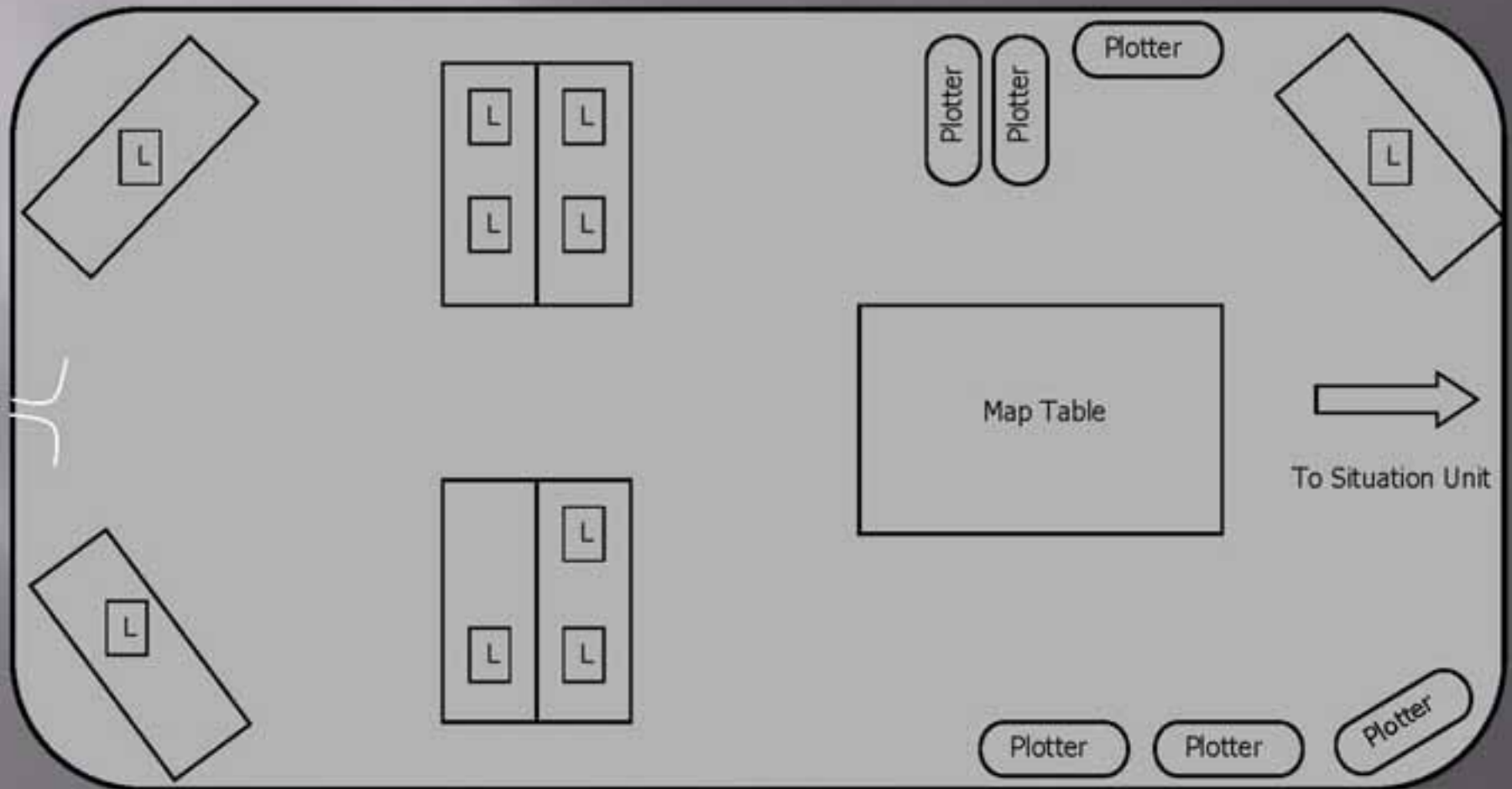


# Santa Fe Dam

# Santa Fe Camp Map



# GIS at Santa Fe Dam





# Data

- ▣ Base Data
  - ▣ Angeles National Forest
  - ▣ Personal Hard drives
  
- ▣ Incident Data
  - ▣ Field Observers-GPS (FOBS)
  - ▣ Dozer Data Cards-GPS
  - ▣ Situation Unit Leader
  - ▣ Infrared-(IR)





# Work Flow





# Types of Fire Maps

## Most Common

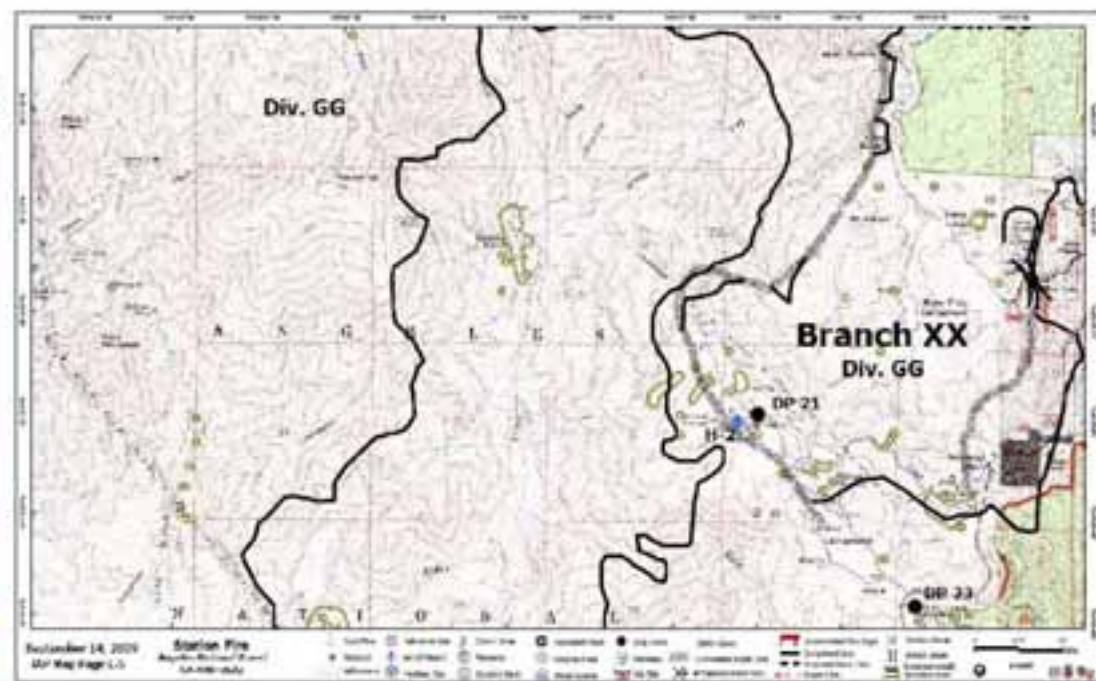
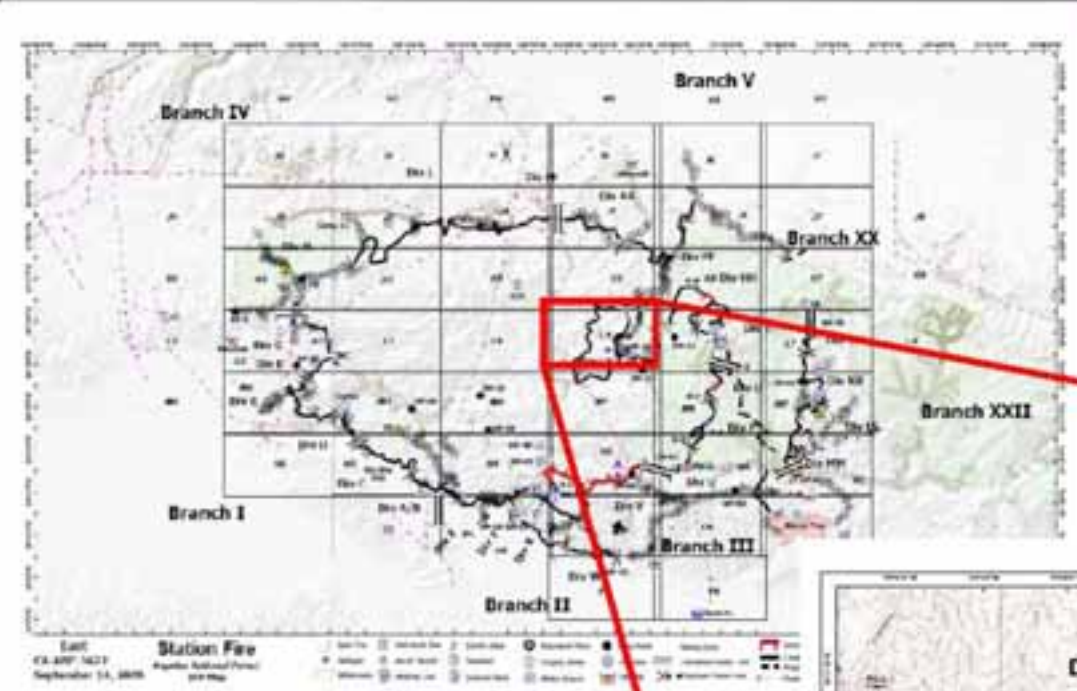
- ▣ IAP (tiles)
- ▣ Operations
- ▣ Briefing Area Maps (BAM)
- ▣ Air Operations
- ▣ Public Information Officer
- ▣ Structure Protection
- ▣ Progression
- ▣ Ownership

## Large Incident Maps

- ▣ Transportation
- ▣ Vicinity
- ▣ Contingency/Evacuation
- ▣ Damage Assessment
- ▣ Public Information
- ▣ Infrared Data
- ▣ Rehab
- ▣ Facilities
- ▣ Fire History



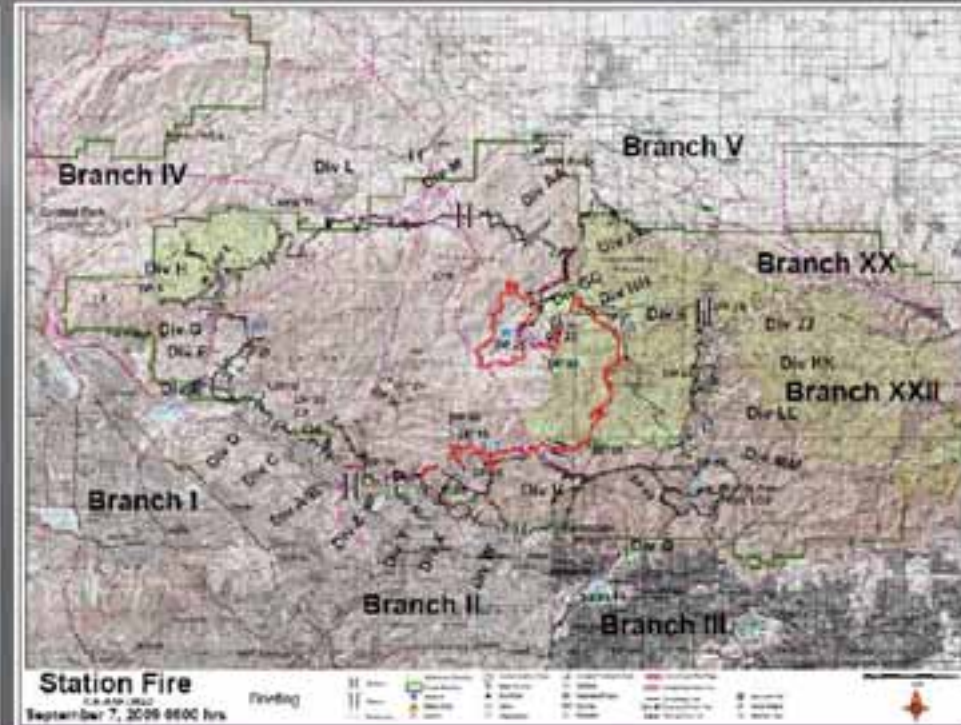
# Incident Action Plan Maps



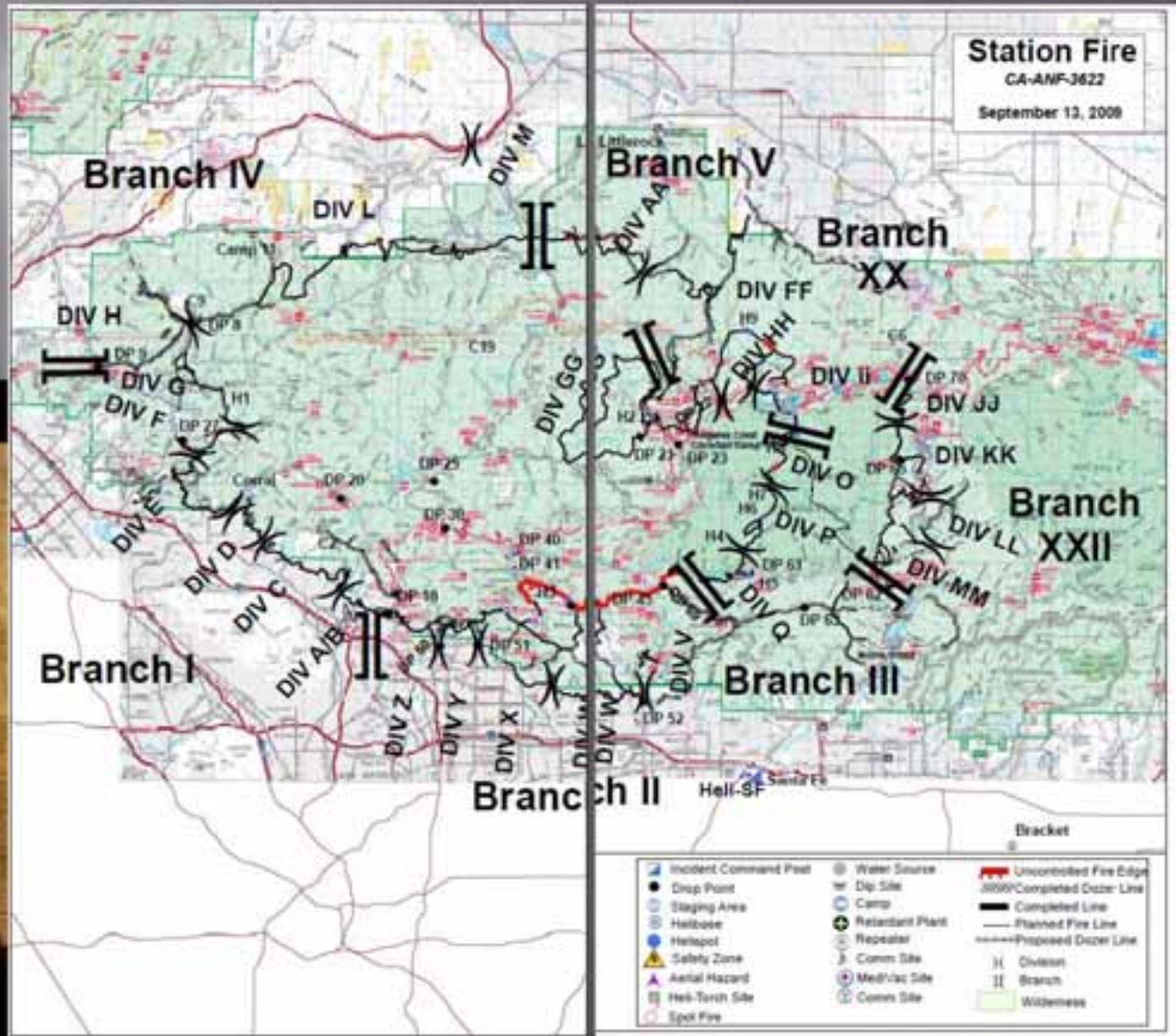
# Operational Briefing Map

Day # 11

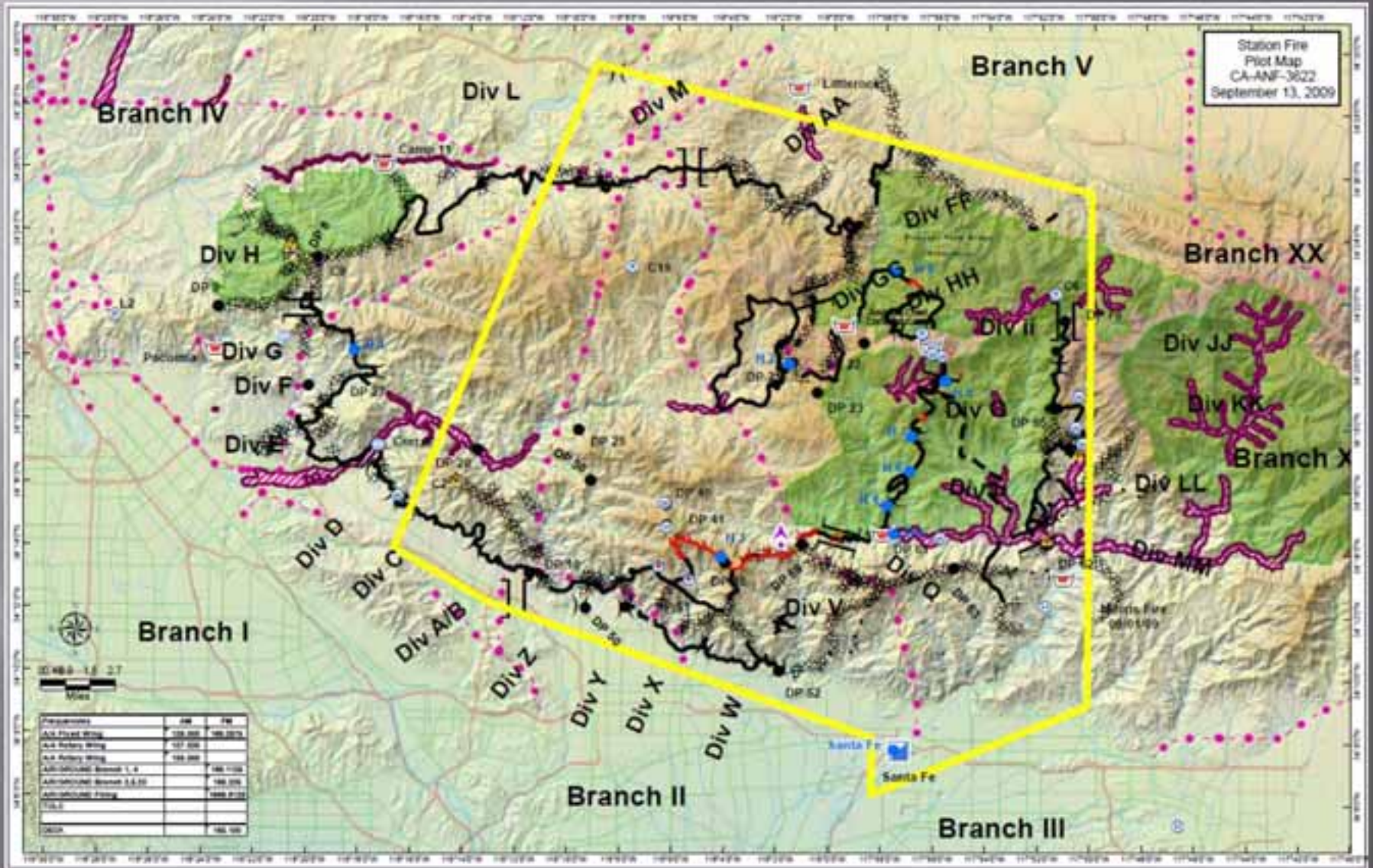
Day # 12



# BAM



# AIR Operations Map

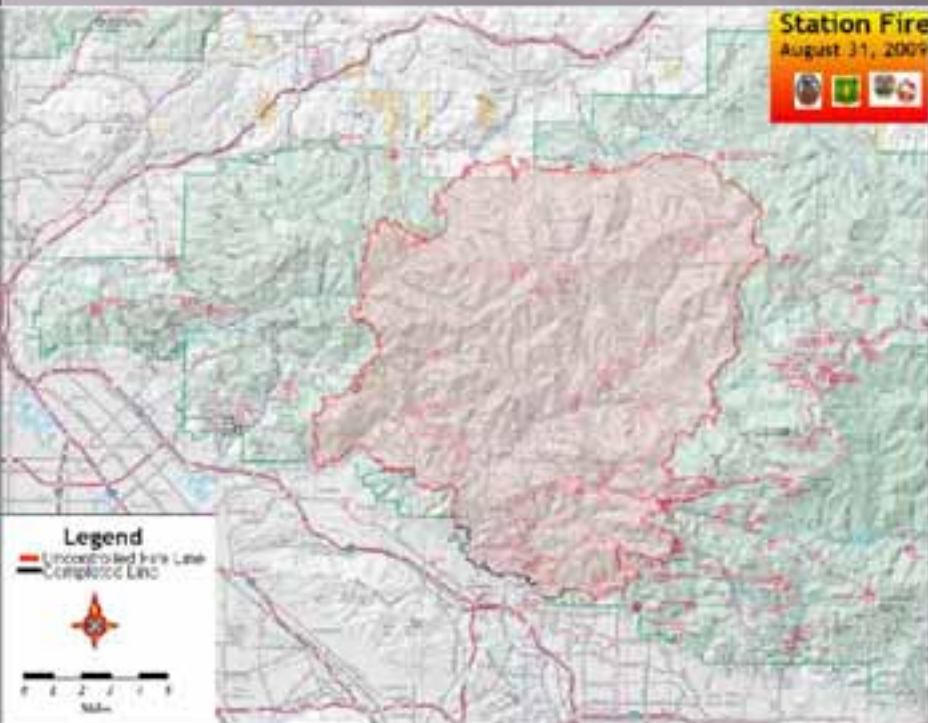




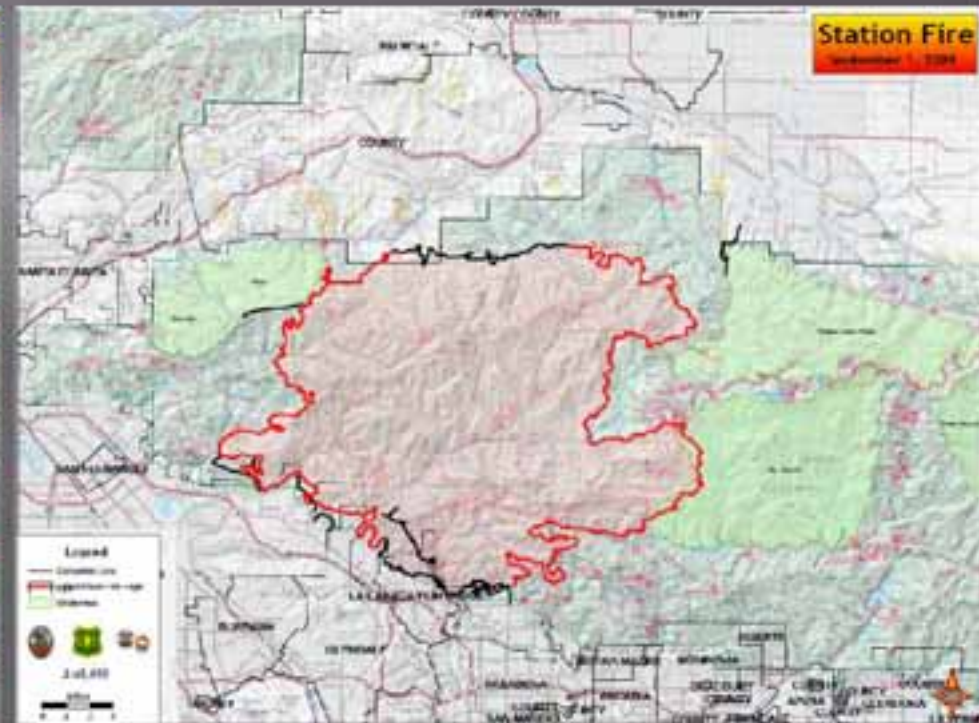
# PIO

## Public Information Officer

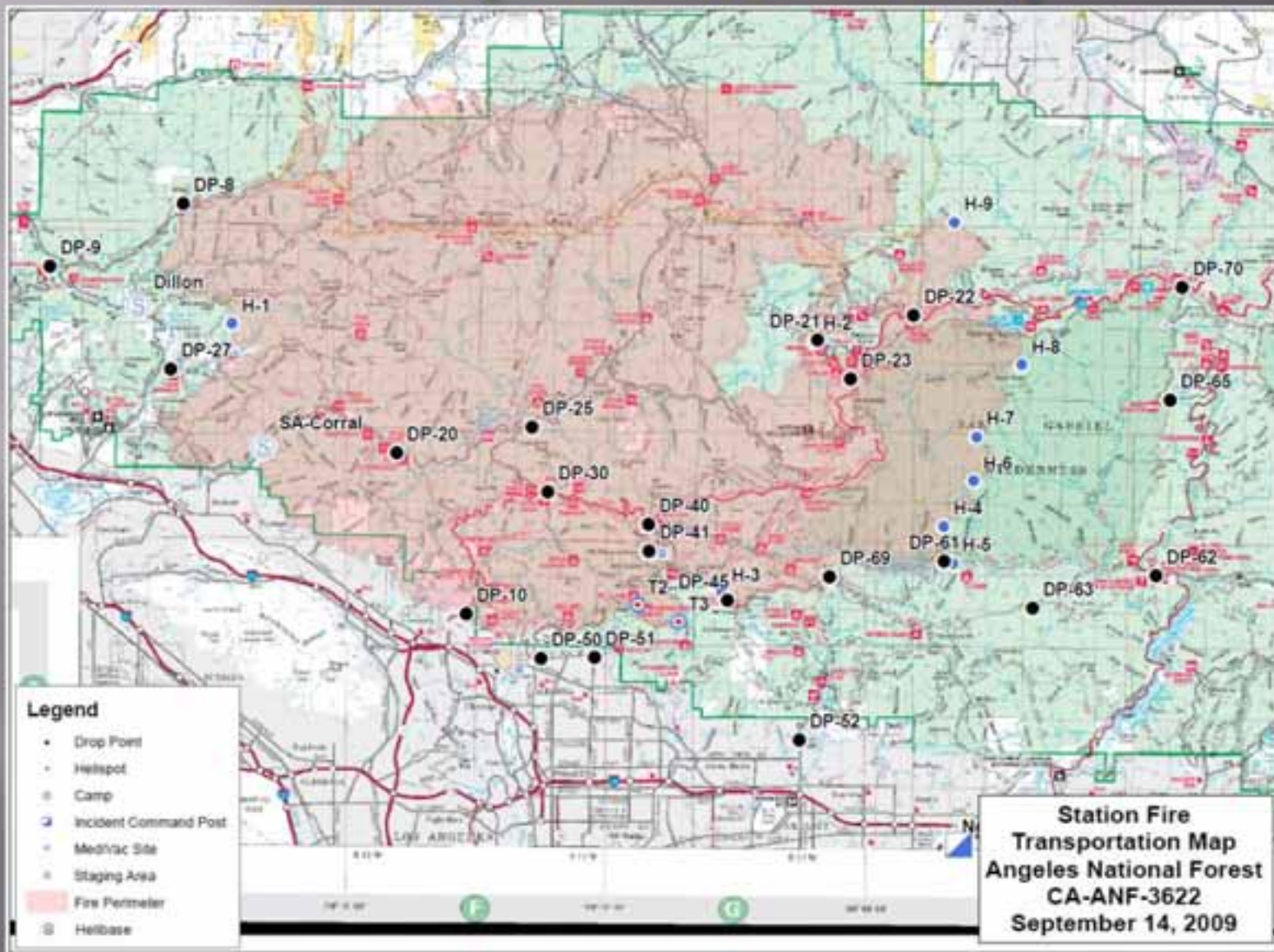
Day # 5



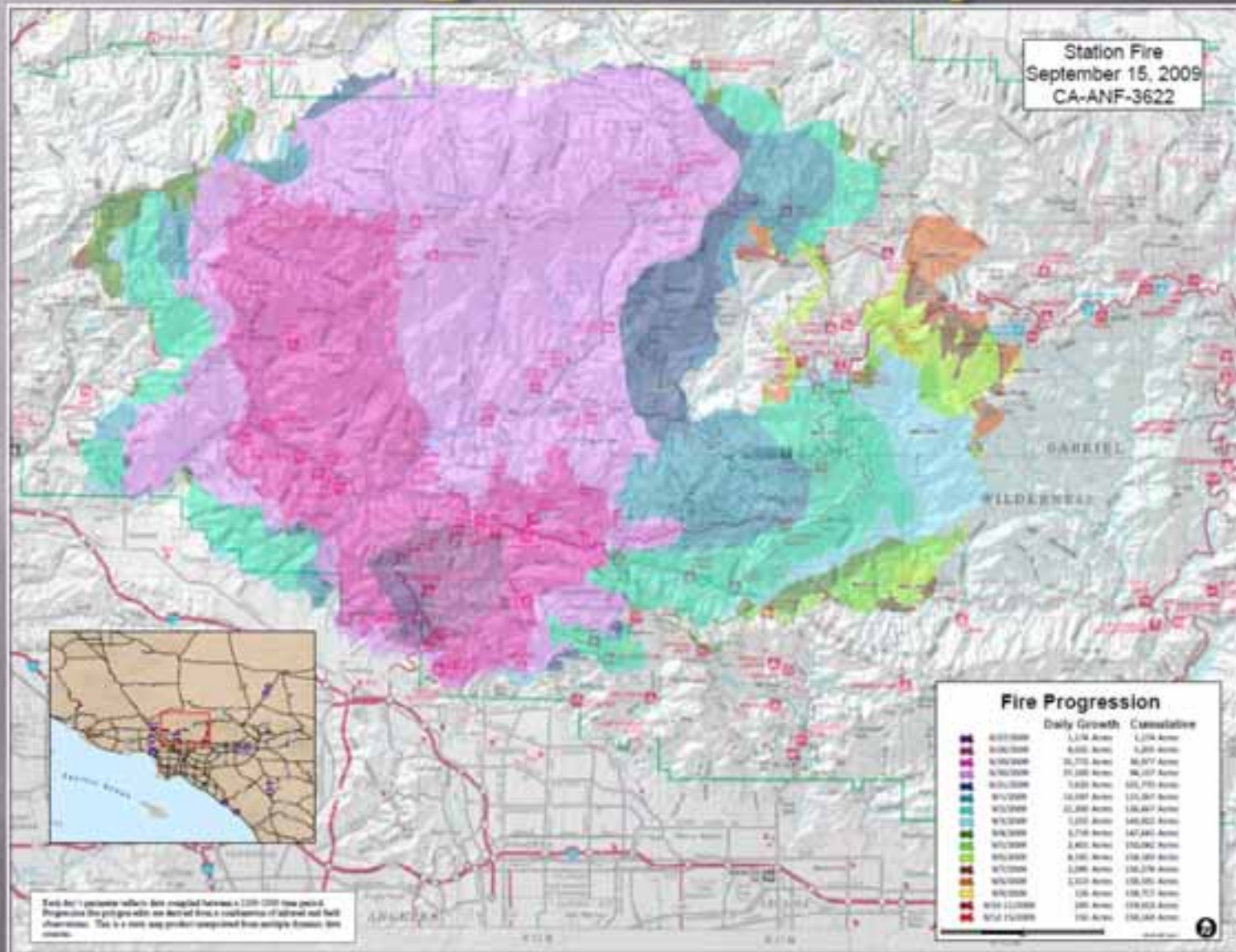
Day # 6



# Transportation Map



# Progression Map



# Progression Map

- ▣ [Progression20090912.kml](#)

# Lessons Learned / AAR

- ▣ Funneling requests through Situation
- ▣ Shadow editor / recorder-edit matrix
- ▣ Nightly Map
- ▣ Project Specific Annotation
- ▣ Print que Management
- ▣ Relative paths and backing up to the server
- ▣ Central location for GIS personnel and equipment
- ▣ Need 8/11 – 11/17 printer
- ▣ Large Incident IAP map mail box
- ▣ Job enjoyment

# Conclusion

- ▣ GIS Tools
- ▣ Incident Command Post – Fire Camp
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# The Magic Wand!

