



Santiago Fire 10/21/07-10/28/07 After Action Report

Orange County Sheriff Department
Emergency Management



Preface

The intent of this After Action Report is to document the County of Orange's response efforts during the Santiago Fire from October 21 - 28, 2007. This report will discuss the Orange County Emergency Operations Center efforts to support field response activities, as well as those activities involving County Departments.



After Action Report Participating Agencies

American Red Cross, District Attorney, Health Care Agency, Orange County Fire Authority, Orange County Sheriff's Department, Radio Amateur Civil Emergency Services, Resources and Development Management Department, Social Services Agency, Superior Court, Auditor Controller, Assessor, County Executive Office, City of Costa Mesa, Integrated Waste Management Department, Probation, Board of Supervisors, Caltrans, Orange County Department of Education, Public Defender, Santa Ana Fire, Water Emergency Response Organization of Orange County, Federal Emergency Management Agency, Treasurer-Tax Collector, Orange County Transportation Authority, State of California Office of Emergency Services, Clerk of the Board, Child Support Services, Orange County Sanitation, Housing and Community Services, City of Dana Point, City of Irvine, City of Orange, and City of Lake Forest.



Background

- Santiago Fire began at 5:55pm Sunday, October 21, 2007.
- Fire Weather Watch in Effect.
- Hot, dry winds continued to fan the fire throughout the week of October 21-28.
- Burned 28,400 acres.
- Cause 16 minor injuries to fire personnel.
- Damaged/Destroyed:
 - 24 Outbuildings.
 - 23 Residential Structures.
 - 12 Vehicles.
- No lives were lost.



Scope of Report

- EOC purpose is centralized emergency management where:
 - Priorities are established.
 - Policy decisions are made.
 - Long term planning is carried out.
 - Information flow and resource requests are coordinated.
- This report is not intended to provide analysis for fire and law field response.



EOC Specifics

- First time EOC was activated for an incident of this scale and length in time. Previous activations were more limited in scope.
- EOC activations occur on a routine basis as part of scheduled drills and exercises.
- Many EOC responders have participated in these activities.



Significant Events Continued

- OCSD Watch Commander notifies Emergency Manager and OA EOC is declared activated by 6:52 pm, October 21, 2007.
- The EOC was staffed by representative from various County Departments and Operational Area agency liaisons.
- Proclamation of a Local Emergency.
- Gubernatorial and Presidential Declaration.
- Public Information through the dissemination of 51 news releases.



Significant Events

- Delivery of resources to field personnel including medical supplies, heavy equipment, food and water, communications equipment, and personal protective equipment.
- Supported field response for major issues including jail evacuations, shelters and animal rescue.
- Documentation of ongoing events through numerous Situation Reports and Action Planning.
- One week later, on Sunday, October 28, 2007, the OA EOC is deactivated.



EOC Activation & Responder Notifications

■ Activities

■ What worked well:

- Use of the telephone
- Emergency Contact List
- Quick Staff response

■ Areas for Improvement:

- New responders and long learning curve

■ Recommendations:

- *Request County Executives and Department head assign designated staff to the EOC.*
- *Complete the configuration of MIR3 (1st responder notification system) to allow for its use in notifying County staff.*
- *All County departments establish current call-back (notification) lists with a regular updating cycle.*



Facility Access



- The Emergency Operations Center is located at Loma Ridge. This complex is secured 24 hours a day, seven days a week.
- **What Worked Well:**
 - Personnel Access
 - Access Control
- **Areas for Improvement:**
 - Parking
 - EOC front desk staffing



Facility Access

■ *Recommendation:*

- *Request assistance from County departments in staffing the front desk to aid in site security and access control during activations.*
- *Improve parking provisions for the EOC.*





Personnel & Positions

- Once the Emergency Manager made the decision to activate the EOC, EM staff was immediately activated, followed shortly thereafter by additional staff.
- Reaching a higher level of staffing was delayed during the facility burn over.
- The EOC was organized in accordance with the Standardized Emergency Management System and the National Incident Management System.



Personnel & Positions

■ **Operations Section:**

- Operations Section Chief
- Law Enforcement
- Animal Control
- Health Care
- Environmental Health
- Care & Shelter

Sheriff

Sheriff

Animal Care Services

Public Health and EMS

Department of Environmental Health

SSA, Red Cross, Department of Education,
HCA Behavioral Health

- Construction & Engineering

RDMD

- Utilities

WEROC

■ **Planning and Intelligence Section:**

- Planning Section Chief
- Situation Status
- Documentation
- Advanced Plans
- Technical Support/GIS

Sheriff

Sheriff

County Support Pool

Sheriff

RDMD



Personnel & Positions

■ Logistics Section:

- Logistics Section Chief
- Purchasing
- Facilities
- EOC Support

CEO & Sheriff's Purchasing
CEO & Sheriff's Purchasing
CEO & Sheriff's Department
County Support Pool



■ Finance Section:

- Finance Section Chief
- Cost Accounting Unit

CEO, Auditor-Controller, Sheriff Financial
CEO, Auditor-Controller, Sheriff Financial

- The EOC is organized along departmental lines with certain agencies serving in lead roles for EOC positions.



Personnel & Positions

■ What Worked Well:

- Excellent cooperation by EOC responders
- Use of Operational Area representatives to augment County Staff
- GIS Support from RDMD Geomatics, ESRI, Microsoft, and TetraTech

■ Areas for Improvement:

- EOC Responder training and experience

■ *Recommendations:*

- *Request County departments to assign staff to the EOC in designated roles.*
- *Provide training to County staff assigned a role in the EOC and as a Disaster Service Worker.*



Facilities and Infrastructure

■ What Worked Well:

- EOC organization reflected SEMS & NIMS
- WebEOC software facilitated data collection
- Layout of EOC allowed informal discussions among EOC staff facilitating problem resolution and response support
- Internal EOC communications

■ Areas for Improvement:

- Back up data lines
- IT Support and firewall issues
- Cell phone coverage and other telephone issues
- Responder training with new technology
- Facility HVAC
- Power poles



Facilities and Infrastructure Continued

■ *Recommendations:*

- *Incorporate backup T-1 data lines using existing microwave system at Loma or establish a Satellite Internet connection only to be used in the event of an emergency.*
- *Provide training on Web EOC to any staff that could be assigned to the Emergency Operations Center.*
- *Add a staff position to the Emergency Management Bureau dedicated to IT support, including the maintenance of Web EOC and MIR 3 systems.*
- *Develop Web EOC policies and procedures to streamline how the system is used.*
- *Provide positions with computers their function title, e-mail address and log-on. Password will be provided at the time of activation.*



Facilities and Infrastructure Continued

■ **Recommendations:**

- *Upgrade/modify the Emergency Operations Center telephone system to provide for a messaging capability.*
- *Provide a Heating, Ventilation and Air-Conditioning system for the Emergency Operations Center which has to be switched to 100% recycled air from outside air.*
- *Establish private/quiet areas for conference calls.*
- *Investigate options for improved cell phone coverage for the facility.*
- *Replace wood power poles with steel power poles.*



EOC Operations

■ Management/Policy Group

- Roles and Responsibilities

■ ACTIVITIES:

- County Emergency Proclamation Sunday, October 21, 2007
- State Proclamation on Sunday, October 21, 2007
- Federal Declaration was issued on Tuesday, October 23, 2007
- Several decisions the EOC activation including: health issues related to air quality, evacuation of residents and closure of major roadways
- Incident action plan and the overall EOC objectives



EOC Operations – Policy Group Continued

■ VIP Visits

■ What Worked Well:

- Policy group familiarization and experience with EOC
- Executive Management Support

■ Areas for Improvement:

- Overcrowding
- Information on Fire
- Computer capability
- Interface with OC 211



EOC Operations – Policy Group Continued

■ *Recommendations:*

- *Review designated Policy Group outlined in County Emergency Operations Plan to determine if revision is necessary.*
- *Provide laptop computers with full access for all Policy Group members.*
- *Interface with the County Executive Office to work out information technology solutions for County agency responders in order for them to access their information at the Loma Ridge facility.*
- *Establish Memorandum of Understanding and liaison position in Emergency Operations Center with Orange County 211 to ensure accurate information is being released.*



EOC Operations – Public Information

■ The Public Information Manager Role

■ What Worked Well:

- Interface with OCFA Media Center
- Information flow
- Situation Reports and EOC Briefings
- Interagency communication and coordination
- Public Information Hotline answered 12,466 calls

■ Areas for Improvement:

- Insufficient workspace, supplies and resources
- Operational Area website
- Email and fax communications
- EOC Phones
- Status boards



EOC Operations – Public Information

■ **Recommendations:**

- *Have the County Executive Office IT assign a full time Webmaster to Emergency Operations Center for incidents. That person should bring a laptop computer with the software needed for web programming and should report to the Public Information Manager.*
- *Upgrade Public Information Hotline phone system.*
- *Integrate Web EOC to display information in the Public Information Hotline area.*
- *Include the Public Information Hotline Supervisor in all Emergency Operations Center briefings.*



Notification to the Public

■ What worked Well

- Press releases (51 were released) and media interviews
- Evacuation notification

■ EAS - Why the system was not used

■ ***Recommendations:***

- *Review EAS notification process, procedures and systems available for improvements needed.*



Safety Officer

- Areas for Improvement
 - Position not activated
 - Importance
- *Future activations will involve an assigned position for a Safety Officer.*



State OES Liaison



- Conduit to the Regional EOC
- Redeployment
- Late replacement
- Consequences



Operations – Fire Operations

■ Activities

■ What Worked Well:

- OCFA Battalion Chief assigned as Director of Emergency Services.
- Damage assessments

■ Areas for Improvement:

- Staffing issues

■ *Recommendations:*

- *Work with OCFA to develop protocols to ensure there is a fire service representative in the EOC.*
- *Provide a trained County employee to be the EOC representative at the Incident Command Post.*



Law Enforcement Operations

■ Roles & Responsibilities and Activities

■ What Worked Well:

- Coordination in EOC
- Coordination with CHP and local law enforcement agencies
- Information sharing

■ Areas for Improvement:

- Lack communications between LAW and FIRE on the 1st day



Operations – Public Health and Emergency Medical Services

■ Staffing at EOC and DOC

■ What Worked Well:

- Support to shelters
- Continuity of operations
- Excellent collaboration with internal and external partners



■ Areas for Improvement:

- Guidance for air quality
- Communications with adjacent counties Health Care

■ Recommendations:

- *Establish earlier communications with State Emergency Medical Services and Regional EOC for coordination with surrounding Operational Areas.*

Orange County Sheriff Department
Emergency Management



HCA - Animal Care Services

■ Roles & Responsibilities and Activities

■ What Worked Well:

- Donations from PETCO and other companies
- Coordination with Sheriff's Mounted Unit

■ Areas for Improvement:

- Public education of animal owners
- Animal reunification.

■ **Recommendations:**

- *Educate animal owners on crates and trailers necessary to move their animals in an emergency.*
- *Encourage animal owners to microchip their animals for identification purposes.*
- *Include animal reunification procedures in training for EOC support staff.*



Construction and Engineering – RDMD Operations

■ Roles & Responsibilities and Activities

■ What Worked Well

- Collaboration
- RDMD 1st responder notification system
- Debris Flow pre-planning

■ Areas for Improvement:

- Communications.
- Geographic Information Systems

■ Recommendations

- *Provide dedicated GIS workstation with appropriate hardware and software in the EOC.*
- *Issue 800 MHz handheld radios to RDMD crews (most of their existing units are mounted in vehicles).*





Damage Assessment

■ What Worked Well:

- Damage assessment information was swift and reliable

■ Areas for Improvement:

- Release of addresses
- Information flow

■ Recommendations:

- *Keep specific damage assessment information confidential.*
- *The information contained in the Damage Assessment Report should be evaluated for potential common factors leading to destruction based on fuels management, defensible space, access, water supply and construction elements.*
- *Homeowners need to take a more proactive role and assume primary responsibility to protect their property through proper fuels management by providing good defensible space that leads to survivable space.*
- *Provide network access and training on any software used in the Emergency Operations Center to support response activities.*



Shelter Operations

■ Activities

■ What Worked Well:

- Coordination between Care & Shelter disciplines

■ Area for Improvement:

- Lack of understanding about ARC's roles & responsibilities

■ *Recommendations:*

- *Training needs to be provided to Operational Area partners about ARC's role and responsibilities.*



Utilities



■ WEROC's Activities

■ What Worked Well

- EOC operated in clear phases (emergency/restoration/recovery)
- Coordination with Sheriff/CHP to facilitate ingress of repair crews into the evacuated areas
- Coordination with the ICP about water issues for firefighting

■ *Recommendations*

- *Develop a list of current contacts for other area EOCs and utilities.*



Planning & Intelligence

- Responsibilities
- Situation Status
- Documentation
- Advanced Plans



Planning & Intelligence Continued



■ What Went Well:

- Assistance from Operational Area members
- EOC Briefings
- Situation Status staff
- GIS Technical Support provided

■ Areas for Improvement:

- State's Response Information Management System (RIMS)
- Situation Reports
- IT support
- Information sharing with jurisdictions



Planning & Intelligence Continued

■ **Recommendations:**

- *Develop Emergency Operations Center briefing guidelines and provide training to Emergency Operations Center Section Chiefs.*
- *Work with the State and Federal government to streamline the process for accessing satellite image data.*
- *Ensure that Demobilization checklists are provided to Emergency Operations Center staff that are leaving the Emergency Operations Center and are not returning for another shift.*
- *Establish provisions for permanent staffing of GIS and IT support positions in the Technical Support Unit. This will require staff from the Sheriff's Department, who maintains the Emergency Operations Center network.*
- *Training in all sections regarding damage assessment, estimates, and documentation.*



Logistics

■ Responsibilities and Activities

■ What Worked Well :

- Coordination of donated resources
- Provision of safety equipment to law personnel
- Support to the shelters



Logistics Continued

■ Areas for Improvement:

- Link between the Incident Command and EOC Logistics
- FEMA reimbursement process
- Coordination with the Finance Section
- Local Assistance Centers
- Difficulty obtaining vehicles and qualified drivers on short notice and on weekends to transport equipment and materials to users in the field
- Lack of vendor information
- Improved stockpiles of equipment and supplies needed in an emergency
- Clearer tracking of assets
- Need for up-to-date callback rosters
- WebEOC was not used to track resources



Logistics Continued

■ **Recommendations:**

- *Develop procedures to track the procurement and allocation of resources requested.*
- *Recommend all Emergency Responders in the Finance area attend the Federal Emergency Management Agency class on accounting and reimbursement procedures for purchasing of goods and services in an emergency.*
- *Develop form with an equivalent format for e-mail to capture necessary information regarding needed requisitions, justifications, who, when and where equipment or materials used.*
- *Field staff communicates their requirements through chain of command to the Emergency Operations Center Logistics Section unless directed to do otherwise.*
- *Designate a County Donations Manager with authority to respond to suppliers and vendors wishing to donate supplies and materials.*
- *Identify fleet resources and a list of County emergency drivers placed on standby during emergencies.*



Logistics Continued

■ **Recommendations Continued:**

- *Obtain the California Department of Forestry Blue Book of contracts and Office of Emergency Services listings to facilitate procurement of needed emergency materials, facilities and services.*
- *The process for utilizing the Department of Human Resources to provide personnel/staffing from any County department needs to be formalized and documented and training on this process needs to be provided.*
- *Coordination and communication the potential Local Assistance Center location with the Policy Group, elected officials, and participating agencies, and receive approval of elected officials on final location.*
- *Establish one Local Assistance Center per emergency.*
- *Update vendor and contract list.*
- *Inventory equipment and supplies stockpiles for an emergency.*
- *Identify method to contact vendors after hours.*
- *Use WebEOC to track personnel and resources.*



Vendors Commended

The following companies and individuals supported the Santiago Fire Response with donated resources:

- Albertsons
- Anaheim Feed & Pet
- AT&T
- BJ's Restaurants
- Brian Barr
- California Pizza Kitchen
- Chick-Fil-A
- Chipotle
- Corner Bakery
- CVS Pharmacy
- Department of Insurance Fraud
- Dr. Glen Perryman, Doctor of Chiropractic Services
- Operation USA
- Orange Coast College
- Outback Steak House
- Panda Express
- Pat & Oscars
- Pepino's
- Petco
- Philly's Best Lake Forrest
- Phos Chek
- Dr. Louis Rice, Doctor of Chiropractic Services
- El Pollo Loco
- Fairfield Inn / Marriot
- Grainger
- Home Depot
- In-n-Out
- Johnny Reb's Restaurant
- Lamppost Pizza
- Lennar Homes Home Builders
- Marie Calendar's
- McDonald's
- OC Telephone Services
- Ralphs
- State of California SURPLUS (Santa Ana)
- Stropo Fieldstone Foundation
- Target
- Texas Barbeque
- Wal-Mart-Laguna Niguel
- Wiener Schnitzel
- Yard House

Orange County Sheriff Department
Emergency Management



Finance & Administration

- Responsibilities and Activities
- **What Worked Well:**
 - Emergency Purchase Order after Monday
- **Areas for improvement:**
 - Establishment Emergency Purchase Order
 - Recovery Planning during activation
 - Tracking of costs
 - Communication with other EOC sections
 - Damage estimates
 - Paying of invoices



Finance Continued

■ What Worked Well:

- Emergency Purchase Order coordination between Finance and Logistics

■ Areas for improvement:

- Delayed establishment of the correct Emergency Purchase Order.
- Delayed Recovery Planning
- No tracking of actual personnel costs during the EOC activation
- No coordination with other Sections for demobilization or recovery plan
- Lack of damage estimates
- Confusion on which agency would process the invoices associated with the fire for payment



Finance Continued

■ **Recommendations:**

- *A group of County Executive Office Finance representatives should be trained in Emergency Operations Center procedures and operations.*
- *In future disasters, the ability to pay invoices and where they should be sent for payment should be decided early on and staff should be dedicated to this function.*
- *Establish Activity Codes and Time Codes to be used in the event of a disaster.*
- *Develop similar activity and time codes for use during drills and exercises.*
- *Finance Section should have accountants assigned for the payment of invoices.*
- *County Executive Office representatives should be trained in Recovery Operations.*
- *County Executive Office manages disaster claims and the overall cost recovery related to state and federally declared disasters when allowed for reimbursement and should name a Disaster Recovery Manager as soon as State or Federal Emergency Declarations are approved during a response phase of the emergency or disaster.*



Lessons Learned

- EOC HVAC system
- Back-up system to the T-1 data line.
- Wood power poles
- Public Information
- Drills and Exercises
- Interdepartmental coordination
- Staff representative at Incident Command Posts
- Dedicated IT staff position



Lessons Learned Continued

- Volunteer Management
- Alternate Emergency Operations Center
- Access external agency network information
- Additional communications capabilities
- Local Assistance Centers
- Personal Protective Equipment
- County Recovery Manager
- Public Education



Fire Recap

- 28,400 acres burned.
- 16 minor injuries to fire personnel.
- No lives lost.
- The American Red Cross opened 3 shelters with approximately 372 evacuees sheltered.
- Animal Care Services sheltered-in-place approximately 150 animals in the field, impounded 212 animals, helped owners care for approximately 186.



COST

- Individual claims for damage or destroyed property included 24 outbuildings, 23 residential structures (8 damaged/15 destroyed), and 12 vehicles is currently estimated at **\$ 7,358,810.**
- *The County Cost for response to the Santiago Fire for the Emergency Operations Center (County Departments), Orange County Sheriff's Department field response and Resources and Development Management Department activities is currently estimated at \$ 14,668.871.*
- *The fire discipline response and costs will be provided in the Orange County Fire Authority's After Action Report at a later date.*



Conclusions

- This After Action Report discusses the activities that occurred throughout the activation of the County's Emergency Operations Center. The document identifies problems and recommended solutions. This report will serve as a blueprint for future planning and coordination activities.
- The Santiago Fire event has underscored the extreme necessity for the public to be self-sufficient in disasters of this magnitude. These lessons learned will be integrated into County processes, public forums and educational materials. The Emergency Management Bureau will need to be prepared to respond and will need to provide a higher level of community public education. Additional staff resources will enhance Emergency Management in the County.
- There are over 200,000 acres of wildland that have not burnt.



