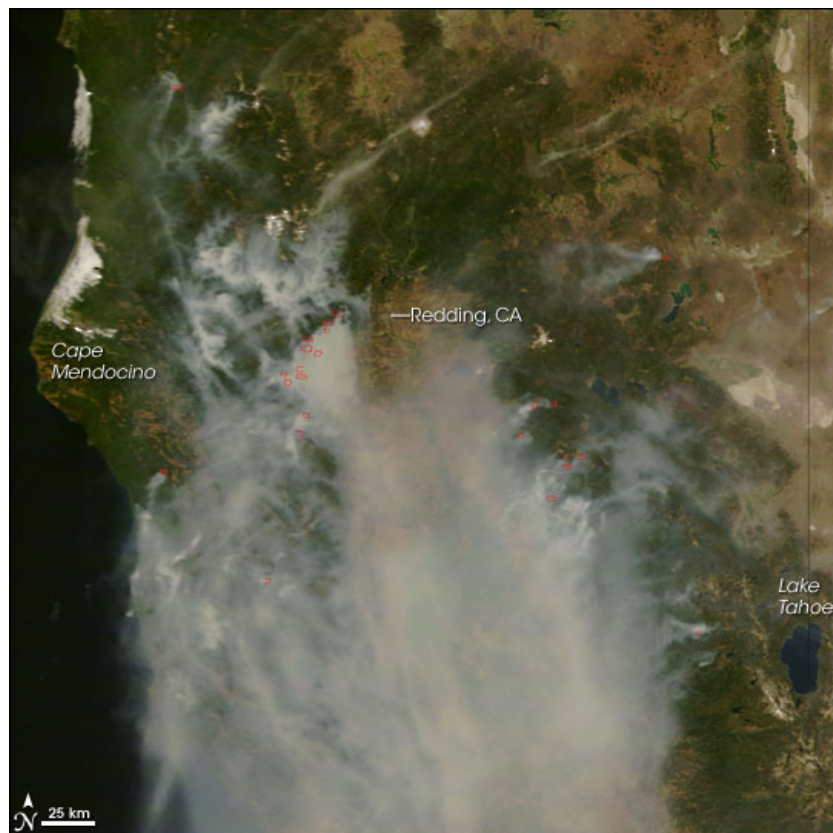


AFTER ACTION/CORRECTIVE ACTION (AA/CA) REPORT SURVEY

For response to

Butte Lightning Complex Fires

June 20, 2008 thru July 29, 2008



VOLUME I OES AFTER ACTION REPORT

DECEMBER 30, 2008

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General Information

Information Needed	
Name of Agency:	Butte County 3-A County Center Drive, Oroville, CA 95965
Type of Agency:	County/Operational Area with Town of Paradise
OES Admin Region:	Inland
Completed by:	William R. Sager, Fire Chief (Retired), Butte County Fire Department
Date report completed:	October 15, 2008
Position: (Use SEMS/NIMS positions)	Planning Section Chief
Phone number:	(530) 538-7373 Cell (530) 990-3493
Email address:	John Gulserian, Butte County Emergency Services Officer JGulserian@buttecounty.net Bill Sager, After Action Editorial Consultant, wrks@hotmail.com
Dates and Duration of event:	06/22/2008—08/01/08
Type of event, training, or exercise:	Actual Event—Series of Lightning caused fires that eventually destroyed over 200 dwellings and caused the evacuation of up to 15,000 people
Hazard or Exercise Scenario:	34 lightning caused fires, later rose to 36. Not all the fires were in Butte County; some fires did not threaten communities in Butte County. Some fires outside Butte County threatened communities in Butte County. The fires threatened the Town of Paradise and the areas in Butte County know as Magalia, Butte Meadows, Jonesville, Feather Falls, Concow and Berry Creek. The fires destroyed dwellings in the areas of Butte County known as Concow and Berry Creek. The fires also caused the evacuation of people and animals living in all these areas.

SEMS/NIMS Function Evaluation

Management (Public Information, Safety, Liaison, etc.)

Director, Public Information, Safety, Liaison

	Satisfactory	Needs Improvement
Overall Assessment of Function (check one)	✓	

The lessons learned from the “Windstorm Activation” of the EOC earlier in the year made a significant difference. Able to get the EOC activated but constantly needed more depth of trained personnel.

If “needs improvement” please briefly describe improvements needed:

<p>Planning</p>	<p>The Multi-Hazard Functional Plan needs updating to NIMS compliance, however it is SEMS compliant and adequate for current emergency operations. EOC leadership positions all need to be more cognizant of the contents of the plan and utilize it in managing the EOC. A copy of the plan contents pertinent to each position should be carried by each of the leadership personnel.</p> <p>The EOC had to multi-task well beyond what most EOC’s ever experience. It had to conduct simultaneous planning for the active response EOC of the Butte Lightning series as well as Disaster Recovery Operations for the Ophir/Humboldt Fires, which occurred the previous week. This created a strain on the depth of capable personnel in the County and a strain on EOC capabilities. To alleviate this strain the County created a Disaster Recovery Team thus separating the functions. While this caused a greater need for staff, it was the only way the County could handle the simultaneous challenges. As can be seen from this table at the height of the commitment to the Butte Lightning Series the Ophir and Humboldt Fires were also having a significant impact.</p> <p>Table 1—County Employee Commitment at Height of Evacuations</p> <table border="1"> <thead> <tr> <th>Date</th> <th>Ophir</th> <th>Humboldt</th> <th>Lightning</th> <th>County Total</th> <th>EMMA Resources</th> </tr> </thead> <tbody> <tr> <td>6/23/08</td> <td>18</td> <td>21</td> <td>183</td> <td>222</td> <td>14</td> </tr> <tr> <td>6/24/08</td> <td>15</td> <td>26</td> <td>216</td> <td>257</td> <td>14</td> </tr> <tr> <td>6/25/08</td> <td>3</td> <td>33</td> <td>208</td> <td>244</td> <td>14</td> </tr> <tr> <td>6/26/08</td> <td>2</td> <td>30</td> <td>246</td> <td>278</td> <td>14</td> </tr> <tr> <td>6/27/08</td> <td>0</td> <td>28</td> <td>228</td> <td>256</td> <td>14</td> </tr> </tbody> </table> <p>With so many fires located in the County and limited intelligence on their location planning was often reactionary, relatively stronger to the challenges the EOC faced, than in conjunction with the fire. In part this was due to limited staff that couldn’t keep up with the fire planning and in part to the lack of staff training. Planning at the management level did set objectives for the EOC and this helped and clarified the responsibilities of the command and general staff.</p> <p>The County needs a scalable pre-set plan for staffing the EOC. This plan should be grab able for the command and general staff.</p> <p>There should be pre-designated section chiefs for the Operations and Plans Sections who can be assigned to the EOC. The EOP states Law Enforcement (BCSO) or Fire should staff the Operations and Plans Section Chiefs’ positions. Due to the large scope</p>	Date	Ophir	Humboldt	Lightning	County Total	EMMA Resources	6/23/08	18	21	183	222	14	6/24/08	15	26	216	257	14	6/25/08	3	33	208	244	14	6/26/08	2	30	246	278	14	6/27/08	0	28	228	256	14
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	<p>of the event, staffing these positions by BCSO or Fire would have hampered field operations. The District Attorney and Probation Departments filled operations staffing. Child Services, DA and Probation supported the Plans Section. These people did as good a job as possible and should be looked to for the future staffing of those sections. Recommend updating EOP to include these departments as the resources for these sections.</p> <p>Each department or functional area needs to develop its own SOP to support EOC disaster response operations.</p> <p>Intelligence gathering function needs to be ramped up to provide real time information on the incident to the EOC so the EOC can react in a timely manner. To do this will require more trained personnel, most likely from mutual aid sources.</p>
Training	<p>Almost all command and general staff functions need specific function ICS/EOC position training. This should be the first priority. In addition, those persons playing subordinate Unit Leader level roles need specific position training or at least a job aide.</p> <p>The County needs to train deeper into the organization to create more depth for support of multiple or extended emergencies. This became quite apparent when the CAO's office was completely wiped out of staff except for support staff.</p> <p>All of the PIOs need to have the formal PIO training. In addition, all PIO's within the County, to include local jurisdictions or agencies, should meet periodically to ensure that they are all on the same message.</p> <p>The needs for training were manifest during the activation; this is a high priority. All command and general staff positions need a team training process like <u>R-317 Command and General Staff Functions in ICS</u></p>
Personnel	<p>There needs to be a staffing plan for long term staffing of the EOC; the personnel section did yeoman work in filling the staffing needs of the EOC, however long term staffing of the EOC is not an issue that the plan addresses. This was a fairly long activation, but a major earthquake would be much more stressful.</p> <p>Need to identify positions that will fill each role deeper into the organization, provide training, and have lists ready when the need arises to call in people. Need to decide if staff will be committed to an event and their <i>day job</i> picked up by someone else, in the case of a long-term event. This would require that only a portion of each office provide EOC support and the other portion continue with day-to-day operations of County business. If the County does not commit people to the event long term, then there are too many people in the mix and things get dropped (both in the EOC and in the <i>day jobs</i>).</p> <p>Staffing the PIO function was an issue and part of the problem with the effectiveness of the PIO function. Not enough personnel were assigned to the PIO function initially. Eventually the staffing rose thru Mutual Aid requests and tasking from County departments. The PIO function takes a lot of people to staff properly in a large disaster. After week 2 of the Butte Lightning Series, the Safety Officer established an Assistant Safety Officer to work with shelter safety. The Safety Officer also talked with the departmental safety representatives about safety.</p> <p>Some orders for help followed Human Resources channels and some followed individual department channels; this created a lot of confusion.</p> <p>The EOC Manager needs to be a 24/7 coverage position. This person interfaces with the mutual aid system; OES and makes certain the internal operation stays focused. There needs to be a three-person back up. (See State OES Emergency Responder</p>

	Credentialing Program, OA EOC Position Task Book for recommended training/experience).
Equipment	<p>The EOC does not incorporate all the latest proven technology that would allow for more effective and faster response action.</p> <p>The EOC has two laptops and one desktop computer dedicated specially for EOC use. All other computers are acquired through IS surplus and departments; because of this many laptops and computers are outdated. All the computers need the same total EOC ready software; it needs to be consistent.</p> <p>There was no central place for electronic forms. Electronic and hard copy forms are located in the EOC storage closet. Most forms were electronically available on the backbone.</p> <p>Only Verizon and Nextel cell service worked in the EOC.</p> <p>Need to have cordless phones with flashers to keep the noise level down.</p>
Facilities	<p>The County EOC is in a substandard facility in location and size. It has no access for disabled people who may either need to work in the EOC or have business in the EOC. The space is also too small; it lacks adequate breakout spaces for sideboard discussions, section or team meetings, command and general staff planning meetings; and it has insufficient space for status boards and maps.</p> <p>The County will need a larger EOC facility if the event is any larger or longer than the Butte Lightning Series.</p>

Operations (Law enforcement, fire/rescue, medical/health, etc.)

Law Enforcement, Public Works, Shelter

	Satisfactory	Needs Improvement
Overall Assessment of Function (check one)	✓	

If “needs improvement” please briefly describe improvements needed:	
Planning	The plan needs to include a succession plan for each function. There is also a need to formalize written agreements with the shelters in Butte County and between the departments that have involvement in shelter management. The County also needs to revisit formal agreements with the volunteer groups (Red Cross, NVADG, RACES). More pre-designated evacuation plans for communities need to be developed.
Training	While they performed at a very high level, except for Fire, Operations Section Chiefs, Operations Branch Managers would benefit from position specific training. Training needs to focus more on the clear lines of authority/ responsibility within the EOC. Additionally, an EOC exercise schedule should be developed and exercises should include resource requesting. Field Law Enforcement personnel need further training in evacuation techniques; training for the fire environment. LE supervisors need training in mutual aid operations (suggest a field operations guide for this aspect).
Personnel	The frequent rotation of personnel, in order to attend to regular County business caused significant disconnect at shift change. The County needs to exercise greater care about who gets assigned to the EOC. People should be chosen for training, aptness, based on their current regular assignment, and emotional fit. Some people do not work well in this environment. The County should access the mutual aid system sooner particularly for operations section personnel. Law enforcement learned how to access and request mutual aid for shift work (The correct technique saved the County money).
Equipment	The County needs to have a computerized system in place in the EOC. Large screens instead of written status boards would be easier to read and could be recorded more easily to develop a very accurate record of the EOC’s activities. Noise canceling headsets for the telephones would make a large difference given the noise level. Law enforcement needs field fire equipment; they only have fire shelters.
Facilities	Fire operated from a DOC; that is their common method. The Sheriff operated from the EOC and the ICP; setting up an SO DOC was never considered, but might be of value in an incident with such a high law enforcement demand. Public works operated from the EOC. The EOC is inadequate in size and layout for a large-scale operation. This is not a good facility; there is no access for people with disabilities

Planning/Intelligence (Situation analysis, documentation, GIS, etc.)

	Satisfactory	Needs Improvement
Overall Assessment of Function (check one)		✓

If “needs improvement” please briefly describe improvements needed:	
Planning	It would be very helpful for the Planning Section to have examples of IAP’s used by other agencies early on so to have some templates to follow, issues and resolutions to consider.
Training	While they performed at a very high level, Planning Section Chiefs and Planning Section Units would benefit from position specific training, including drills on a regular basis. County staff could accept mutual aid assignments to other jurisdictions to bring back information and experience. Everyone needs IS -700 to understand the EOC environment. This is a recurring need in all sections.
Personnel	The frequent rotation of personnel, in order to attend to regular County business caused serious disconnect at shift change. The County needs to establish a system that coordinates with departments to get staff with appropriate skill sets, without limitations, for the EOC’s needs. Some departments stepped in and helped, and that made the difference. Need to have an IS technician on the EOC floor at all times.
Equipment	Status boards are only adequate for a small-scale event. This is a reflection on the inadequacy of the facility. This is another situation where large computer screens would be more helpful for status keeping. The EOC needs modern computers and printers along with dedicated plotters for paper maps
Facilities	EOC is inadequate in size and layout for a large-scale operation. Need a large, ADA compliant room with proper ventilation. GIS personnel need to be isolated from the rest of the EOC in an adjoining breakout room to get their work done.

Logistics (Services, support, facilities, etc.)

	Satisfactory	Needs Improvement
Overall Assessment of Function (check one)	✓	

If “needs improvement” please briefly describe improvements needed:	
Planning	The County should develop an EOC resource request policy and update resource request form. Prior to implementation the policy should have approval of County departments. Resource request flow needs to be mapped out. For example, Operations or Plans starts the requisition and is coordinated between them and forwarded to Logistics. Resource requests should be discussed as part of the Planning meeting. Personnel who are assigned to the EOC as part of Logistics Section need to meet on a regular basis to stay abreast of policy and procedure. These are all examples of how position training would help.
Training	While they performed at a very high level, Logistics Section Chiefs and Logistics Section Units would benefit from position specific training. Due to recent employee hires and the extended timeframe of the event many individuals were assigned to Logistic positions with little or no training. Staff needs to be identified for expanded depth to fill the positions and trained accordingly. Once trained they should be exercised with a Logistics drill.
Personnel	The frequent rotation of personnel, in order to attend to regular County business caused some disconnect at shift change. The County needs to make every employee aware that in an emergency, their first duty is to support the threatened community—not their regular County job. It is important to keep the business going. The County should consider hiring retired annuitants under contract since they provide invaluable knowledge in emergency response
Equipment	The EOC should be electronic and it should be flexible. The IS/Communications unit did a remarkable job—but spent an inordinate amount of time holding the technological capabilities of the EOC together with duct tape and baling wire per se. The county needs a system to provide secure computer system confidentiality and communications equipment that works—including radios (portables and a base station), handheld GPS, etc.
Facilities	EOC is inadequate in size and layout for a large-scale operation. The EOC is small, not at all modern or supportive of technology. It is unpleasant for almost anyone and especially anyone with a touch of claustrophobia or introversion. It is likely that a more efficiently arranged and scaled EOC would require less people to staff.

Finance/Administration (Purchasing, cost unit, etc.)

	Satisfactory	Needs Improvement
Overall Assessment of Function (check one)	✓	

If “needs improvement” please briefly describe improvements needed:	
Planning	Need to plan down time for the section to get together. Finance needs to understand that their role doesn’t cease when the EOC ceases to function.
Training	Need Finance Section Chief and Finance Unit training
Personnel	The frequent rotation of personnel, in order to attend to regular County business caused some disconnect at shift change. Because reimbursement dollars are so critical to the County, the County needs to ensure that every member of the section is trained technically for this assignment.
Equipment	
Facilities	

After Action Report Questionnaire

The responses to these questions can be used for additional SEMS/NIMS evaluation. Command and General Staff personnel plus some key Unit Leaders were interviewed for the comments in this section. The comments represent a blend of the consensus of those individual comments.

Response/Performance Assessment Questions	Yes	No	Comments
1. Were procedures established and in place for responding to the disaster?		✓	<p>Butte County has a complete Disaster Response Plan, titled the <u>Butte County Operational Area SEMS Multi-Hazard Functional Plan</u>, developed in accordance with SEMS guidelines. The manual was available to all participants in the EOC. However, many were not aware of its existence and did not ask the EOC Manager if there was some written guidance. FIRESCOPE Field Operations Guides (FOGs) were also available as were some specific position manuals.</p> <p>The Disaster Response Plan and checklists were available but many staff failed to review. Greater effort to remind staff to review plan and use checklist needs to be implemented. To enhance knowledge of the County Disaster Response Plan trainings should be scheduled with EOC staff.</p> <p>Some functions had procedures others functions had to develop procedures ad hoc. This is another example where position specific training would greatly enhance the capabilities of personnel assigned to the EOC. General procedures were in place for a short-term disaster. As the incident extended the need to have a current document with procedures became more evident. The procedures should be in the form of checklists for those aspects of the Butte County Emergency Operations that are unique to Butte County.</p>
2. Were procedures used to organize initial and ongoing response activities?	✓	✓	<p>Since the County had just gotten off EOC activation for the Humboldt and Ophir Fires seven days previously (in fact was in the recovery phase), reactivation was simply a matter of calling many of the same people back. During the second response, some sections referred to the manual for guidance concerning their specific functions.</p> <p>Some ICS forms work very well in an EOC environment; others, such as the ICS 209, do not lend themselves to an EOC. However, before individuals tackle this issue, it would be wise to wait until the details of the National Framework are completed. Many of the procedures were done on the fly; the EOC staff was not prepared for long-term disaster activation.</p> <p>The Health Department developed procedures ad hoc as the situation developed.</p>

Response/Performance Assessment Questions	Yes	No	Comments
3. Was the ICS used to manage field response?	✓	✓	Yes and no. All departments were intent on following ICS but deviated due to the lack of training, understanding of how all the parts work together and no procedures rather than general understanding of what was expected. In some cases County Disaster Workers did what worked at the time. Some of the volunteer groups Red Cross, and Animal Disaster tried to follow ICS, but here again a lack of training and understanding undermined that effort.
4. Was Unified Command considered or used?	✓		At one point Unified Command was considered between the fires managed by CAL FIRE and the fires managed by the Plumas National Forest. The concept was discarded as too cumbersome. The CAL FIRE Incident Command Team asked the Butte County Sheriff's Office to consider Unified Command, but they selected to be an assisting agency. In this case, they felt it would tie up limited staffing with no appreciable benefit. Unified Command was neither used nor considered in the EOC. Both the County EOC and the Town of Paradise EOC had representatives in each other's EOC for speedy liaison.
5. Was the EOC and/or DOC activated?	✓		The Butte County EOC and the Paradise Town EOC were both activated. The County also activated the Butte County Fire Department, Department of Employment and Social Services (DESS) and Butte County Health Department DOCs. Public Health and DESS DOCs were in remote operation. This had plusses and minuses. Public Health made resource requests and deployed assets independent of the EOC which is acceptable. However, resources must be tracked from cradle to grave by DOC's and information forwarded to the EOC Logistics and Finance Sections. Failure to forward this information created documentation slippage in terms of developing a reimbursement package.
6. Was the EOC and/or DOC organized according to SEMS?	✓		The EOC was organized according to SEMS. The DOC's in general were too small to have had a structured organization.
7. Were sub-functions in the EOC/DOC assigned around the five SEMS functions?	✓		The EOC used the five functions of Command, Planning, Operations, Logistics, and Finance/Administration. In addition the EOC had a Safety Officer, Liaison Officer and Public Information Officer. The Operations Section was organized primarily around Public Health and Shelter needs.

Response/Performance Assessment Questions	Yes	No	Comments
8. Were response personnel in the EOC/DOC trained for their assigned position?		✓	<p>Those who had training universally stated that the real thing was nothing like the training or the simulations or the mock events. Even some of the resources that came from adjacent Counties to help out said that being in a real event was an eye opener compared to the training.</p> <p>Only enough staff has been trained for a short-term event. Only one PIO had the complete PIO training. One other had extensive PIO experience. It wasn't until mutual aid PIOs that the bulk of the personnel were trained for the PIO function. The primary people assigned to the command and general staff were trained, the secondary (back-up) were not. Of the Command Staff only two people, one in Liaison and one in PIO were fully trained.</p>
9. Were action plans used in the EOC/DOC?	✓		<p>Incident Action Plans were prepared for each operational period. In some cases the objectives were difficult to measure. Many of the participants had never worked with IAPs before and found them to be foreign</p>
10. Were action-planning processes used at the field response level?	✓	✓	<p>There were some problems in the field, creating disconnect between the planning effort and the actions. This was primarily involving the animal rescue operation. Once Public Health got its arms around this it settled down, but it took a few days. Some sections operated in crisis mode throughout the disaster and did little planning and little participation in the plan. It depended on which field response – fire was totally planned, others to a lesser extent.</p>
11. Was there coordination with volunteer agencies such as the Red Cross?	✓		<p>However, not entirely satisfactory in outcome. The Red Cross seemed reluctant to cooperate and seemed very possessive— even when the possession was not of their assets. At least once, Red Cross made a unilateral decision to shut down a shelter. An attempt was made to coordinate with the Red Cross, but the RC fell down. This was a difficult process; the objectives were met with some pain.</p> <p>Communication was sometimes adversarial or convoluted—like having to call Washington DC, to get a trailer unlocked at Butte College. Working with the NVADG (animal rescue group) was constant crisis management, but it was done in a collaborative way such that the job got done.</p> <p>The communications reserves (RACES) need to be fully ready to work without relying on the County for logistical support for additional resources.</p> <p>Overall, coordination of volunteer agencies was challenging.</p>
12. Was an Operational Area EOC activated?	✓		<p>The Butte County EOC is the Operational Area EOC.</p>

Response/Performance Assessment Questions	Yes	No	Comments
13. Was Mutual Aid requested?	✓		Mutual Aid assistance for the PIO was satisfactory. Never ordered a Safety Officer to assist with the safety function. EMMA went well; medical animal related not so well. The need for an emergency volunteer center became quite apparent with this large scale event. See Table 2, Page 17.
14. Was Mutual Aid received?	✓		Standardized Statewide Mutual Aid Agreements/Assistance by Hire need to be developed for use with assisting agencies.
15. Was Mutual Aid coordinated from the EOC/DOC?	✓	✓	Yes and no. Used the Response Information Management System (RIMS) to coordinate. It seemed that during the latter activation, the County had difficulty in getting notified when the mission request was being fulfilled, by whom and what the mission number was. This caused headaches in tracking what had arrived and if they needed accommodations. Some of the mutual aid arrivals were told to get their own accommodations—but there are very few options in Butte County so it was more difficult to have them scrounging around for accommodations when the County was also scrounging for those who needed our help with this. The Public Health Mutual Aid channel is broken, that creates confusion about which system to use.
16. Was an inter-agency group established at the EOC/DOC level? Were they involved with the shift briefings?	✓		A regional representative from State OES was present, helpful and at the meetings and briefings—without them much would have been way more difficult.
17. Were communications established and maintained between agencies?	✓		Still needs work, the Federal Wildland Fire Protection Agencies did not appear to understand the need to coordinate with the EOC. Communications were maintained within the EOC; between the EOC and CAL FIRE; however there were gaps between the EOC and others.

Response/Performance Assessment Questions	Yes	No	Comments
18. Was the public alerted and warnings conducted according to procedure?	✓		Public was provided information, not sure if there was a procedure pre-established. Outside law enforcement agencies did not understand or know Butte County procedures.
19. Was public safety and disaster information coordinated with the media through the JIC?		✓	Once a JIC was established, very late in the incident, it was very helpful. The JIC concept is counterintuitive to both the media and the agencies. The media likes the idea of being able to get different sources and “play up” a story that might not otherwise exist if all agencies agreed on the message. Likewise, agencies continually pursue what appears to be in the short term to their advantage, even when it may not be in the public’s best interest. Agencies will say that they need to ensure that “their” constituents get the information they need and that a JIC will slow it down. Earlier in the activation there was not JIC; eventually one was established but that was after the height of the activation and response activities. Public safety information got out to the public, despite the lack of a JIC. Initially evacuation information went out through the Public Information Officers and later it went out through the JIC.
20. Were risk and safety concerns addressed?	✓		Air quality for staff was a major consideration particularly for those working in the field. There were fatigue issues and animal issues that made it more difficult and affected safety. The County needs more trained safety officers.
21. Did event use Emergency Support Function (ESF) effectively and did ESF have clear understanding of local capability?		✓	From a National Response Framework to some extent used.

Response/Performance Assessment Questions	Yes	No	<i>Comments</i>
22. Was communications inter-operability an issue?	✓		<p>Systems were the issue; there needs to be a generic login capability for the EOC on the computers. One person stated, “electronic bubble gum was needed.”</p> <p>Clearly the County needs to have a cache of portable radios to support activations like this one. The volunteers need logistical support (they volunteer their time but do not have much in the way of logistical support). This was most problematic working with the shelters and with the animal shelters.</p> <p>Used Radio Control Over Internet Protocol; working on regional interoperability.</p> <p>Law Enforcement used cache radios, they worked well. There was a technical adjustment.</p> <p>There were FAX machine and email reliability issues at times.</p>

Additional Questions

23. What response actions were taken by your agency? Include such things as mutual aid, number of personnel, equipment and other resources.

Table 2 EMMA Resources

Type	Quantity	Sending Jurisdiction	Dates
PIO	2	Placer County	6/23-27/08, 7/9-11/08
PIO	1	Stanislaus County	6/28-30/08
PIO	1	Sacramento County	6/28-30/08
Public Works	18	City of Chico	7/9-12/08
Public Works	15	City of Oroville	7/11-12/08
EOC Manager	1	Yuba County	7/12-15/08
Env Management	3	El Dorado County	7/13-17/08
Safety Officer	4	Cal OSHA	6/23-27/08
Animal Control	8 officers	Contra Costa County	6/28-29/08
Nurses	4	Modoc County Public Health	7/8-13/08
Animal Control	2	City of Modesto	7/9-14/08
Animal Control	1	Stanislaus County	7/9-14/08
Mobile Vet Clinic & Staff	1	PAWED	7/9-15/08
California Conservation Crews	2	State of California	6/23-7/17/08

Table 3 Other Staged or Deployed Resources

Type	Quantity	Agency/Department	Use	Dates
Message Board	1	Guy Rents	Traffic control	6/22/08 – 7/7/08
Transportation/van	1	Public works	Evacuation	6/22/08
Para Transit Bus	2	Veolia Transportation	Evacuation	6/23/08, 6/29-30/08
Transportation	1	Butte County Public Works	Non-emergency transport	6/24-25/08
Buses	2	Veolia Transportation	Staged for evacuation	6/24/08
Fuel Truck w/op	1	Northgate Petroleum	Fuel for evacuees	6/24/08
Rental Truck & dollies	1 truck, 2 dollies	AGS U-Haul	Move belongings of evacuees	6/24-25/08
Porta Potties & sinks	2 each	Acme Portable Toilet Rental	Shelter use	6/26/08-7/25/08
Portable showers	2	United Site Services	Shelter use	6/24/08 – 7/21/08
40' Buses	2	Veolia Transportation	Evacuation	6/24/08
Restroom/shower	1 building	Pacific Mobile Structures	For shelter	6/27/08 – 7/22/08
Portable toilets w/sinks	8	Acme Toilet Rentals	For shelters	6/26/08 – 7/25/08
Tow Trucks	2	Skyway Towing	Magalia Dam	6/26/08
Tow Trucks	2	Brower's Towing	West Branch Bridge	6/26/08
Ambulances	3	1 st Responder	Staged in Magalia	6/26/08
Mobile Vet Clinic	1	North Valley Emergency Vet Clinic	Treat burned animals	7/12-16/08

Type	Quantity	Agency/Department	Use	Dates
Semi Trucks w/trailers	4	MGM Trucking/Kemer & Sons Engineering	Haul cots to shelters	6/27/08
Water Tanker	1	Quick Response Septic Service	Potable Water for shelter	6/27-30/08
Bus & Fuel Truck	1 each	Butte County Public Works	Animal transport	6/29/08
Trash/Dumpster pick up	1	Butte County Public Works	Spring Valley Shelter	6/30/08
30 yd debris box delivery & removal	1	Northern Recycling	Spring Valley Shelter	7/1/08
26' Trailer	2	AGS	Shelter supply transport	7/2/08
Ambulance	1	1 st Responder	Transport back to nursing facility	7/8/08
Buses	8 total	Veolia Transportation	Transport evacuees to and from shelters	7/8/08, 7/13/08, 7/15/08
Para-Transit	13	Merit Medi Trans	Handicap transportation to & from shelters	7/8-9/08
Tow Trucks	2	King Towing	Magalia Dam Staging	7/8/08
Ambulance	7 ALS, 5 medi-vans	1 st Responder	Paradise Staging	7/8-11/08
Portable Toilets	6	Acme Toilet Rentals	Shelters	7/9/08-8/8/08
Fuel Trailer	1	Brower's Towing	Transport jet fuel	7/9/08
Portable Coolers	2	United Rentals	Cat Room at Shelter	7/10-15/08
Flat Bed Truck	2	U-Haul	Kennel Transport	7/10/08
Portable Toilets & wash basins	3 each	Acme Toilet Rentals	Shelter @ LP	7/11/08-8/10/08

Type	Quantity	Agency/Department	Use	Dates
Message Boards	3	Del Mar Equipment	Paradise Roads	7/11-16/08
Para-Transit	8	Merit Medi-Trans	Evacuees moved from Shelters	7/14/08
Ambulance	1	Enloe Hospital	Evacuees back to FR Hosp	7/16/08
A/C Unit	1	State GSA	Acker Gym	7/10/08
Ambulance for Strike Team	1	Westside Ambulance	Fthr Rvr Hosp Evacuation	7/8-12/08
Ambulance for Strike Team	1	St. Elizabeth Community Hospital	Fthr Rvr Hosp Evacuation	7/8-9/08
Ambulance for Strike Team	1	Plumas District Hospital	Fthr Rvr Hosp Evacuation	7/8-10/08
Ambulance for Strike Team	1	American Medical Response	Fthr Rvr Hosp Evacuation	7/8-9/08
Ambulances for Strike Team	4	Bi-County Ambulance	Fthr Rvr Hosp Evacuation	7/8-13/08

24. As you responded, was there any part of SEMS/NIMS that did not work for your agency? If so, how would (did) you change the system to meet your needs?

It worked fine the way it was. There was discussion about the proper place for the Resources Unit, ultimately we stayed with SEMS and kept it in Logistics Section; this was the appropriate decision.

25. As a result of your response, did you identify changes needed in your plans or procedures? Please provide a brief explanation.

While the current Operational Area SEMS Multi-Hazard Functional Plan is SEMS compliant, it was written in 1999. Other than the fact that it was converted from *Word Perfect* to *Word* and the section on Hazards has received work, the Plan has not been updated to reflect NIMS requirements. One of the issues brought up in almost all the interviews, was the lack of specificity of the document, particularly procedural checklists for the different functions.

26. As a result of your response, please identify any specific areas needing training and guidance that are not covered in the current SEMS Approved Course of Instruction or SEMS Guidelines.

The current training courses appear adequate to meet the needs of Butte County. Virtually every EOC participant interviewed brought up this issue. However, in no case was there a need for a training course

that doesn't already exist, the need is to have a program that mandates attendance at training. In the section on Recommendations, are a number of recommendations on training.

27. If applicable, what recovery activities have you conducted to date? Include such things as damage assessment surveys, hazard mitigation efforts, reconstruction activities, and claims filed.

- ◆ A number of recovery activities are underway.
- ◆ Teams have completed damage assessments of all of the fires that burned in Butte County. The damage assessments revealed two procedural issues that the County was unable to resolve. [1] Due to the extensive damage to the area, it was difficult for the damage assessment people to get into areas and complete damage assessment in as timely a manner as desired by OES and FEMA. [2] Determining the criteria to classify damages posed another problem. For example, in one area a number of people live in sub-standard housing such as tents, shipping containers, campers and travel trailers. After the fire the occupants are rendered homeless and their classification of 'home' meets the Red Cross, but not FEMA definition. FEMA has a much stricter definition.
- ◆ As part of the damage assessment process, Butte County developed a database system to track and classify virtually all the damage that the fires caused. This database is GPS based, so map overlays can be developed that indicate where damages occurred and can be sorted to meet the criteria of the interested party.
- ◆ The County conducted a number of outreach activities, including posters and flyers distributed in the damage areas, community meetings, a *Fire Assistance Center* staff during business hours to assist residents with their needs for rebuilding, and *Local Assistance Centers* staffed with representatives from local, state, federal and volunteer agencies.
- ◆ The County also conducted Bin Programs, Right of Entry, Hazardous Waste Assessments and Clean-up Certification programs. The County worked with CAL FIRE to develop a hazardous tree removal program.
- ◆ Pacific Gas And Electric Company (PG and E) used the opportunity to remove hazardous trees from the electrical rights of way to prevent fires from that source. This caused consternation among the residents of the damaged areas as PG and E did not remove the logs. Eventually some logging companies came to the rescue and removed and in some cases purchased the logs.

Narrative

On June 20, 2008, dry lightning struck northern California. This lightning storm was unusual in that it covered almost every County north of the San Francisco Bay Area; it was much earlier in the year than is typical; and wildland fuel moisture levels were at an extreme low for June. In addition, Butte County had just suffered two major fires, the Ophir Fire and the Humboldt Fire, which combined destroyed almost 100 residences. The lightning storm ignited numerous fires. In Butte County alone the storm ignited 41 fires of consequence. In all probability the storm ignited other fires, but they were soon merged into larger fires. In fact, that was ultimately to be the fate of many of the original ignitions.

At the height of the fire activity major east west highways would be closed for days on end, over 15,000 people would be evacuated and over 57,000 acres, much of it valuable timber land, would burn. The fire would also destroy over 200 residences of various descriptions, numerous outbuildings, vehicles and other valuable property. One person was killed in the fires.

Each day of activation resulted in one or more Operational Periods. Within each operational period, employees in the EOC worked shifts that varied in length from six to twelve hours in length. The most frequent shift length was twelve hours, although some sections worked eight hours. A shift length of six hours was attempted, trying to give workers time to work at their *regular* jobs. It didn't work very well; the constant changing of shifts caused loss of continuity between the shifts and greater use of County staff many of which were untrained.

At the start of the EOC activation for the Butte Lightning Series of fires, CAL FIRE was continuing to mop-up the Humboldt Fire and the County was gearing up for the recovery phase of both the Humboldt and Ophir Fires. The Humboldt Fire at this point had consumed virtually all the fuel on 23,344 acres and destroyed 87 dwellings and 167 outbuildings. This fire, being on the western flank of Paradise would later play a significant role in the decisions made on the eastern flank of Paradise when the Lightning fires all cumulated and threatened the town once again.

Initially the Butte Lightning Series of fires, part of which was identified later on as the Butte Lightning Complex, began from a lightning storm that pummeled all of Northern California on the afternoon of June 20, 2008. Lightning started in the CAL FIRE Butte Unit at approximately 1400 and lasted in some areas until approximately 1600. Rain was insignificant. In the Incident Command System the form ICS 209, Incident Status Summary is the document used to report conditions likely to develop into major incidents. The first ICS 209 prepared by the Butte Unit to report on the fires caused by the lightning storm, estimated 12 to 17 fires for a total acreage of 50 acres, over the next three weeks this would grow to acreage of 59,440.

The initial report identified a fire called at that point the Butte Creek Canyon Fire. The report stated that it could threaten Communities of Desabla and Magalia, population 18,000 and established it as the number one priority of all Butte Unit Fires. At that time, little did they know how prescient that report would turn out to be. The report also stated that accessibility was a problem for all the fires.

The County activated the EOC at Level 1 Decentralized Coordination and Direction on the night of June 21. Information Services, anticipating the need for Level 2 or Level 3 EOC activation, readied the communications and computer systems so that the EOC would be ready.

At 1000 on June 22 the EOC was activated at Level 3, Centralized Coordination and Direction with all Command and General Staff positions plus a number of Unit Leader positions filled. At 0600 on June 23, CAL FIRE Incident Command Team #9 (Lewin/Morris) assumed Incident Command of the fires burning in Butte County. While each of the 41 fires would eventually receive an identifier name, this group of fires was collectively known as the Butte Lightning Complex. (It should be noted that numerous other

fires were burning in northern California and for the sake of management purposes each geographical group was identified as a complex the title commonly used to describe a collection of incidents under one command).

From the very beginning of the emergency the Incident Command (IC) and the Emergency Operations Center (EOC) established liaison. Despite the energy put into making this happen early on in the incident, the magnitude of the incident and the incredible drawdown on CAL FIRE resources, this was not enough and a stronger presence from the EOC at the ICP would have smoothed out many of the rough spots. Unfortunately, the County was also drawn down due to the multiple fire incidents as well as the regular County business that had to occur including approval of the budget and closing of the year's end books.

Table 4—County Employee Commitment from Start of Ophir Fire Until Conclusion of Butte Lightning Series

Date	Fire			Total	EMMA
	Ophir	Humboldt	Lightning	County Employees	Resources
6/10/08	76	86	0	162	
6/11/08	22	185	0	207	
6/12/08	11	260	0	271	
6/13/08	11	170	0	181	
6/14/08	7	87	0	94	
6/15/08	6	62	0	68	
6/16/08	8	44	0	52	
6/17/08	11	36	0	47	
6/18/08	15	42	0	57	
6/19/08	6	35	0	41	
6/20/08	4	4	0	8	
6/21/08	1	1	9	11	
6/22/08	1	1	110	112	
6/23/08	18	21	183	222	14
6/24/08	15	26	216	257	14
6/25/08	3	33	208	244	14
6/26/08	2	30	246	278	14
6/27/08	0	28	228	256	14
6/28/08	0	0	173	173	
6/29/08	0	8	145	153	
6/30/08	0	11	142	153	
7/1/08	2	5	115	122	
7/2/08	0	7	88	95	
7/3/08	1	1	75	77	
7/4/08	0	1	48	49	
7/5/08	0	0	42	42	
7/6/08	0	0	33	33	
7/7/08	1	5	68	74	
7/8/08	0	5	237	242	4
7/9/08	2	9	281	292	22
7/10/08	4	7	271	282	22
7/11/08	3	5	261	269	37

Date	Ophir	Humboldt	Lightning	Total County Employees	EMMA Resources
7/12/08	0	0	183	183	68
7/13/08	0	0	140	140	12
7/14/08	0	14	146	160	7
7/15/08	1	9	139	149	5
7/16/08	1	10	110	121	3
7/17/08	0	11	52	63	3
7/18/08	0	9	45	54	
7/19/08	0	0	1	1	
7/20/08	0	0	0	0	
7/21/08	1	5	44	50	
7/22/08	0	2	35	37	
7/23/08	0	3	40	43	
7/24/08	0	1	42	43	
7/25/08	0	2	39	41	
7/26/08	0	0	0	0	
7/27/08	0	0	0	0	
7/28/08	0	2	20	22	
7/29/08	0	4	28	32	
7/30/08	0	4	22	26	
7/31/08	0	3	28	31	
8/1/08	0	0	7	7	
8/2/08	0	0	1	1	
8/3/08	0	0	0	0	

One other factor to remember in analyzing the relationship between the ICP and EOC is that the fire was a state responsibility managed by a state agency, CAL FIRE. Meanwhile, the EOC is a County agency. CAL FIRE accesses resources through a series of state operated Department Operations Centers (DOC's) and Multi-Agency Coordination Centers (MAC's). It accesses local government fire mutual aid fighting resources through the Office of Emergency Services (OES) Fire and Rescue Mutual Aid System. Butte County accesses mutual aid resources through the OES Inland Regional Operations Center. What this means to the system is that the EOC does not exercise the same operational coordination over Incident Command as might be anticipated in incidents where the County Fire Department has jurisdictional responsibility.

On June 22, Butte County Fire Chief Henri Brachais gave an update report on the fire situation. He stated that at that time they had identified 24 fires currently burning in Butte County and that two were of serious concern:

1. The 150 acre Rim Road Fire near Concow (holding with two OES engine strike teams) if it jumps then in the next 4-6 hours there will be an evacuation in Camelot area.
2. The 150 acre West Branch Fire near the Feather River area east of Coutelenc is also a major concern, if it spots across the canyon there will be an immediate threat to Magalia with no way out. Requesting a meeting with Sheriff's Office to discuss evacuation plans. This fire is not currently staffed (in inaccessible terrain) the fire department requested OES strike teams and National Guard helicopters, but no ETA on when resources might arrive.

By the morning of June 22, the CAL FIRE Butte Unit had organized the fire operations into branches identified as Branches 1 through 5. The report as follows is from that morning's Incident Status Report:

- ◆ Branch 1 (Stirling City/Magalia/Paradise): 2 fires, both staffed, 1 contained, several days until there will be a structure threat. 14 acres. Possibility for 5000 acres on the 2nd fire.
- ◆ Branch 2 (Cohasset/Forest Ranch/ Butte Meadows): 6 fires, 2 staffed, 4 unstaffed, 1 contained, unknown structure threat. 5 acres. Possibility for 5000+ acres.
- ◆ Branch 3 (Jarbo Gap): 9 Fires, 3 staffed, 5 unstaffed, 1 contained, possible structure threat within the next couple of hours. Fire has spotted south of Rim Rd and will threaten Concow Lake. 155 acres. Possibility for 5000 acres. 2 of the fires in this branch have the possibility to directly threaten the Town of Paradise.
- ◆ Branch 4 (Butte Creek Canyon): 2 Fires both contained at 5 acres. No likely threat of growth.
- ◆ Branch 5 (Feather Falls/Robinson Mill/Harts Mill/Bangor): 5 fires, all unstaffed, 60+ acres. No immediate structure threat.

At 1000 that day the Butte County EOC was fully activated for the Butte Lightning Fires by Shari McCracken. Because of the perceived threat to Paradise, Town of Paradise activated their EOC at 1255. Critical firefighting resources were at a premium and many would have to travel from Southern California or further. As it turned out many resources came from as far away as New Zealand and Australia. Of particular interest that day was the 30 plus acre fire in Branch 3 burning on the east side of the West Branch of the Feather River. This fire was known as the C-10 Fire; later it would be called the West Fire. Along with the Empire Fire and Rim Fire these fires not only threatened Magalia and Paradise, they also were along two flanks of Concow, an area that had experienced many fires in the past. The C-10 Fire posed an imminent threat to the residences in the community of Magalia and a likely threat to the north and east areas of the Town of Paradise. This became the highest priority fire. The 125 plus acre Empire Fire north of Lake Concow posed a similar imminent threat to the community of Concow and potential threat to the east side of the Town of Paradise as it did during the Concow Fire in 2000.

At this point the information concerning the status of the C-10 Fire was confused. Varying reports had it across the West Branch of the North Fork of the Feather River, or not across. The agreed upon trigger point for evacuation would be if the fire crossed the West Branch. The plan at that point was to issue a precautionary evacuation order for Magalia for the area west of Coutelenc Road. There was also concern that the fire might affect Lovelock and Stirling City, either instead or as well. At 1600 the County declared an emergency. At 1800 the County established a shelter at Spring Valley School. Included at Spring Valley School was capacity to shelter small animals. Butte County Animal Control and North Valley Animal Disaster Group assisted.

At 1400 the Butte County Sheriff's Office (BCSO) put all deputies on 12-hour shifts to prepare for possible evacuations. Later, as the situation demanded, outside law enforcement personnel responded by way of mutual aid to assist BCSO with evacuations and evacuation area security.

During the subsequent evacuations the County's evacuation terminology would be a source of confusion. Its meanings are unclear to the news media, the public and to outside law enforcement. In addition, the cities inside Butte County use their own terminology. The terminology was adopted in 1999 due to concerns expressed by the Sheriff over potential liability if evacuation was made mandatory. Since then the terminology has been reiterated and used with varying results.

The EOC began the planning work for an evacuation of the Camelot area of Concow and the east side of Magalia. By 1730 that day the number of fires had increased to 27 fires for 550 acres. During the heat of

the day lightning strikes from the day before started actively burning. More fires would be found later and this would have a profound effect on the operations.

Meanwhile throughout Northern California other areas of CAL FIRE's responsibility reported 394 active fires, all competing for the same limited firefighting resources. On the federal land management side, the US Forest Service and the Bureau of Land Management were also struggling with 327 fires. These fires also threatened communities up and down the state.

On June 23, CAL FIRE incident Command Team #9 (Lewin) from Southern California arrived to assume command responsibilities for the fires in Butte County. Meanwhile, the fires in Butte County had grown to 1,397 acres.¹

The County established three more Community Information Centers in addition to the Spring Valley Elementary School: Holiday Market in Magalia; Hardware Store in Concow; and the Town of Paradise at the Town Hall. The County also attempted to form a modified Joint Information Center (JIC) to improve the consistency of information between the call center, fire and the EOC.

There are 40 people currently at the Spring Valley Elementary School evacuation center with a capacity of 100. The trigger point for opening the Las Plumas High School evacuation center will be when there are 70 people at the Spring Valley location. The Neighborhood Church in Chico is on stand-by to serve the needs if the Magalia/Paradise area is to be evacuated. The Sheriff's Office has increased personnel to meet the needs due to active and potential evacuations.

By June 25, some firefighting resources had found their way to Butte County and more were on the way. The fires threatening Magalia, Paradise, and Concow were considered the top priority for aggressive firefighting action. However these actions were limited. Many of the firefighting resources were structural type engine companies from urban areas of the state, however they rose to the occasion and formed into hand crews or did wildland Engine Company work with hose lays.

On June 26 the Butte County Sheriff's Office has issued a "Precautionary Evacuation Advisory" for the North and South Coutolenc zones, which encompass Coutolenc Rd. from Skyway to Hupp-Coutolenc Rd. and all cross streets. The West Fire had moved south of Bean Soup Bar but was still on the east side of the West Branch of the Feather River drainage and posed a threat to the Coutolenc road area. Fire behavior on the Rim, Empire and Smokey Fires increased, resulting in the Immediate Evacuations of Concow Lake Area, and precautionary evacuations for the Boy Scout Camp in Butte Meadows and Jonesville. The evacuation of the Boy Scout Camp caused a great deal of consternation as boys had come to the camp from all over the country; parents had to be notified and transportation arranged. The Boy Scouts did a commendable job handling that situation.

By June 29 enough progress was made on the fires in Concow that the evacuation of the Concow area was downgraded to a Precautionary Evacuation allowing 1200 residents to return. A meeting was held with California IMT 3, Plumas National Forest, and the CAL FIRE Butte Unit, on dividing up the fires based on who could provide the best logistical support. The Pit, Granite, and Murphy Fires on the northwest side of Highway 70 too were turned over to Team 9. The Frey fire on the southern end of Butte County was turned over to IMT 3. This actually occurred on July 1st at 0600. The Butte County EOC was not part of that conversation and the transition failed to include the need for a regular contact between IMT 3 and the EOC.

¹ Typically some moisture accompanies lightning fires and even if that doesn't occur, the high relative humidity brought by the cloud cover keeps them from getting really large. In drought years like 2008, this is not the case and lightning fires spread much more rapidly. In addition, lightning doesn't strike near roadsides. Often they are isolated and difficult to reach for suppression.

The West Fire moved south of Bean Soup Bar but was still on the east side of the West Branch of the Feather River drainage and posed a threat to the Coutolenc road area. If the fire crossed the drainage, the Precautionary Evacuation Advisory would have been upgraded to an “Immediate Threat Evacuation Advisory”.

By the morning of July 1, firing operations were successful on the Breakneck Fire. The Camp Fire, discovered under the inversion on June 25 at 2,500 acres, joined with other fires and grew to 5,900 acres. The Camp Fire would eventually become the firestorm that moved through Concow and threatened a good portion of Paradise. Another complication in the fire situation was the Cub Complex managed by an Incident Management Team working for the Lassen National Forest. While the Cub Complex fires were actually in Tehama County they were only a few miles from Jonesville and Butte Meadows. In combination with the Smokey and Little Smokey fires they posed serious threats to those communities. The Rim fire and the Breakneck fire were 85% contained.

On July 2 the Smokey Fire west of Butte Meadows continued to spot and flare up on the northwest side. During the night, 7 miles of firing operations were successful on the Camp Fire; it is now at 9,600 acres. The West Fire still had numerous hotspots along the west branch of the Feather River. The Breakneck Fire, east of Stirling City, was 90% contained, however on July 1, there was a 2 acre spot fire, which posed a threat to the fire significantly growing. The Rim fire was lined and declared contained. The “Precautionary Evacuation Advisory” for the North and South Coutolenc zones, which encompass Coutolenc Rd. from Skyway to Hupp-Coutolenc Rd. and all cross streets, still exists. The Sheriff’s Office designated the primary evacuation route as south on Coutolenc Road to the Skyway. The inversion lifted allowing aircraft to fly most fires, however unable to fly the fires along Highway 70 due to the smoke. Highway 70 remained closed.

By July 4, fire crews had made significant progress and evacuation levels were reduced. A “Precautionary Evacuation Advisory” for the North and South Coutolenc zones, which encompass Coutolenc Rd. from Skyway to Hupp-Coutolenc Rd. and all cross streets, still is in place. Rolling debris continued to fall onto Highway 70 and Highway 70 has a hard closure. Some moisture recovery occurred during the night for higher elevations. The inversion lifted yesterday over all fires.

On July 5, the Butte Lightning Complex assumed the A2, Saddle and the Belden fires, all in Plumas County. The fires burning in the Feather River Canyon continued to threaten some structures, a hydroelectric plant, transmission lines, Highway 70, and the Union Pacific Railroad. Mop-up continued on the West fire, and it appeared that the crews were gaining the upper hand in controlling the fires. Resources continued to pour into Butte County from elsewhere in California as well as the rest of the country, Australia and New Zealand.

Falling Crews worked with CAL TRANS to fall hazard trees along Highway 70. Rolling debris continued to fall on Highway 70. The hard closure of Highway 70 continued. Some moisture recovery occurred during the night at higher elevations, improving the prospects for fire containment. Also the inversion lifted yesterday over all fires improving visibility and allowing the use of aircraft.

Evacuation centers were available if needed at Neighborhood Church in Chico and the Las Plumas High School in Oroville. Butte County EOC was operational and coordinating activities with the incident.

On July 7, weather conditions started changing. Strong down canyon winds would occur in the early morning hours with gusts to 30 mph. And while mop-up continued on the West, Rim, Smokey, and Breakneck fires, increased fire activity on the Pit Branch, due to early morning wind gusts to 30 MPH, was anticipated. Approximately 70% of the firing necessary to complete line at the south end of the Camp Fire was also completed. Fires were holding within the established control lines.

By July 8, conditions had changed for the worse. This began the second phase of the Butte Lightning Complex. From July 3 through July 7, the EOC was on limited staffing, however as fire conditions changed markedly on the night of July 7-8, the EOC staffing was quickly increased.

The Red Flag Warning went into effect as of 0300 hours, July 8. Under strong east winds, with gusts to 30 mph, and very low humidity, at approximately 0030 hours the Camp Fire breached containment lines and pushed into the Concow area, approximately 300 homes were affected. The other fires burning in the Feather River Canyon continued to threaten some structures, a hydroelectric plant, transmission lines, Highway 70 and the railroad. Evacuation of Concow, north of HWY 70 and Lunt Road was in place. Evacuation centers were opened at Las Plumas High School and staffed with cots and supplies at the Neighborhood Church. Back up plans were made with Chico State, Acker Gym, and Butte College. Butte College became the site for the special needs evacuees. Ambulances came from Sacramento in case Feather River Hospital had to evacuate. Animal shelters were also established at CSU Farm for large animals and Las Plumas High School, for small animals. The capability to have small animals at Las Plumas made it so that evacuees could visit and care for their animals.

July 9 found the fire crews and EOC staff working at a very fast pace trying to deal with the myriad of issues caused by the change in fire behavior. East winds surfaced again in the early morning hours. Camp Fire was underneath transmission lines, which were seen arcing due to smoke. Camp Fire exhibited sustained runs, spotting, torching and crowning along both flanks. The fire had not crossed the West Branch of the Feather River but that was a major concern.

Butte County continued to be the number one priority in the state for receiving critical resources. Within that the management teams established priorities for the fires in the County. The priority for the fires was: #1 Camp, #2 Belden fire, #3 Pit/Saddle, #4 Breakneck, #5 support to the Canyon Complex, #6 West. All fires were prioritized based on threat to communities and/or infrastructure. There were 41 fires, 14 known to be active, 14 fires contained, and 13 fires absorbed into other fires. Structures destroyed were estimated at 50 residences and 10 outbuildings.

The predicted down canyon winds came down the North Fork of the Feather River Canyon three hours earlier than anticipated and the Camp Fire broke through the established fire lines. This fire joined with the Rim, Empire, West and other fires in its path and went through the community of Concow. Despite the efforts of firefighters the fire took out over 200 residences including standard "stick-built" and mobile homes, travel trailers, campers, busses, sheds and other facilities used as dwellings. The fire also killed one resident.

The fire spread threatened the Town of Paradise and forced a massive evacuation of the Town and the County area known as Magalia.

Even though the situation remained tenuous, it was apparent that the evacuations would be lifted and people would be returning to their homes. In an effort to get ahead of the information curve, crews were dispatched by the EOC to try to map and identify the destroyed homes so that people could be informed in a sensitive manner. The Butte County Sheriff's Chaplain's were enlisted to help with this as well. As it turned out, the undertaking was enormous and never completed satisfactorily.

By July 10, progress was starting to be made on some of the fires, but conditions were still ripe for a breach of the West Branch of the Feather River and a run into Paradise and Magalia. East winds surfaced again in the early morning hours causing sustained runs with spotting, torching and crowning. Most of the firefighting resources were committed to structure protection and contingency in Paradise and Magalia. Fires in the Feather River Canyon continued to threaten critical infrastructure, but the threat was diminishing. Wind, heat and low humidity continued to be problems. The Camp Fire exhibited sustained runs, spotting, torching and crowning along both flanks, but had not crossed the West Branch of the Feather River.

The evacuation statuses remained status quo. There were citizens from Concow that refused to evacuate. The sheriff's office kept a list of those persons on file. As of July 10, twenty different law enforcement agencies were activated through the mutual aid agreement.

The EOC was working on a Major Population Evacuation Plan for displaced people that have lost their homes and in anticipation of the potential to evacuate more than the 15,000 already evacuated. One of the problems is that some of the otherwise suitable sites for evacuation do not have air conditioning. Through the OES system, assistance from the state was requested.

On July 11, torching and short range spotting of the fire was observed plus some sustained runs when topography and wind were in alignment. The area of major concern was the south flank of the Camp Fire as it continued to be active east of Jarbo Gap CAL FIRE Station.

Pockets of fuel that continued to burn in several areas were still threatening structures in the Concow area. Open line remained in the Flea Valley area and near the West Branch in the northwest corner of the Camp Fire.

Butte Lightning Storm Statistics: 48,800 acres burned (down from 49,000 acres in previous reports due to better mapping), 50% containment, 3225 Firefighter personnel activated, cost to date \$42.2 million dollars.

The fire status as of July 11:

- Smokey and Breakneck – work progressing well.
- Saddle Fire – Used smoke jumpers. Contained.
- Belden Fire – holding between two drainages; burning to north.
- Camp Fire – Moving to the northwest. Possible re-burns in previously burned areas, threat to Magalia and south Paradise areas.
- Jarbo Gap is the area of concern at this time due to the winds forecasted and current fuel conditions. Running strong towards SR 70, crews are engaged in keeping it from jumping SR70.

The Sheriff's Office reported that there were 72 officers performing evacuations and patrolling the evacuated areas. There was also a concern for the fuel level for the radio tower vault emergency generator at Flea Mountain; if the tower went down then all communications for Plumas County could be lost – which included the 9-1-1 systems.

By July 12 the fire situation was finally turning the corner. Serious progress was being made on containing the fires that were threatening Paradise and Magalia and had wreaked so much havoc in Concow. Fire crews were doing mop up and securing indirect control lines on the Camp Fire and continuing to establish lines north of the Pit and Belden Fires. Evacuation reassessment was ongoing and they reopened all of the closed areas. Likewise, mop up and patrol of all other fires in the complex continued.

One confirmed civilian fatality occurred on the Camp Fire during the early morning of July 8. The Smokey Fire was turned over to the Butte Unit at 0700.

On July 13 the fire situation was improving immensely and the EOC staffing level was starting to taper off a little. By the 19th no one would be assigned to response in the EOC and all functions would be shifted to recovery. Mop up continued along control lines on the Camp Fire and crews continued to establish lines north of the Long and Pit branches. The Belden fire held with no movement. Evacuation had been lifted in the Concow area of the Camp Fire. There was smoldering and burnout of slash and other fuels. The Union Pacific Railroad handled the fire that started in tunnel 15 (in Plumas County) with some success.

The containment status of the major fires was as follows: Camp 70%, Belden 70%, Pit 65%, A-2 10%, Breakneck 100%, Saddle Fire 100%. The Breakneck Fire was turned over to the Butte Unit on July 14.

The July 14th situation found the EOC working in almost reverse order from the previous three weeks: The EOC continued participation in the JIC for information purposes; the County and Red Cross planned to fully deploy damage assessment teams with personnel from the fire. (CAL FIRE eventually bowed out of this activity and asked the County to conduct the damage assessment). The EOC continued to provide support to evacuees as needed as they returned to their homes by coordinating with Red Cross. Red Cross also arranged extended sheltering for those who lost their homes and had nowhere to go. Finally the EOC worked closely with animal control and NVADG for release of animals to owners.

On July 15, the fire situation was well in hand and the County was contemplating entering the recovery phase. The EOC staffing was reduced to two people for nighttime coverage. Planning for the Disaster Recovery Operations Center (DROC) commenced. Highway 70 was still impacted by the fires but opened to controlled traffic.

July 17 mop up and patrol continued on the Camp Fire. Other firefighting resources continued to concentrate on the north side of the Complex away from the populated areas. The weather warmed up and turned drier along with an increase of winds, hot spots burned the unconsumed fuels. A large potential for re-burn in the timber still existed. This very real threat kept everyone alert and reluctant to down staff the EOC too precipitously. Unburned islands of the Complex continued to burn across the northwest areas from Flea Mountain to the Long Branch. This was not a continuous fire front. State Highway 70 was still impacted by hazard trees, but open to controlled traffic.

By July 18 the fire situation had alleviated so much that the EOC went from Level Three—Centralized Coordination and Direction to Level One—Decentralized Coordination and Direction (Virtual).

Potential Corrective Actions

Identify issues, recommended solutions to those issues, and agencies that might be involved in implementing these recommendations. Address any problems noted in the SEMS/NIMS Function Evaluation.

Indicate whether issues are an internal agency specific or have broader implications for emergency management.

(Code: I= Internal; R =Regional, for example, OES Mutual Aid Region, Administrative Regions, geographic regions, S=Statewide implications)

Code	Issue or Problem Statement	Corrective Action / Improvement Plan	Agency(s)/ Depts. To Be Involved	Point of Contact Name / Phone	Estimated Date of Completion
I	Recommendation #1	Rewrite SEMS Multi-hazard Functional Plan	Emergency Services	John Gulserian	June 2010
I	Recommendation #2	Position specific procedural Handbooks	Emergency Services	John Gulserian	June 2010
I	Recommendation #3	Add one staff to ESO ASAP	Admin, HR, ESO	Administrative Office	Unknown. Based on funding availability
I	Recommendation #4	Add staff to fulfill best practices levels	Admin	Administrative Office	Unknown. Based on funding availability
I	Recommendation #5	Enhance coordination between departments	Admin, ESO	Administrative Office	March 2009
S	Recommendation #6	Adopt FIRESCOPE evacuation advisories	Emergency Services Council, Sheriff	John Gulserian, Al Smith	March 2009
I	Recommendation #7	County employees complete required NIMS training	Admin, HR, ESO	Administrative Office	March 2009

Code	Issue or Problem Statement	Corrective Action / Improvement Plan	Agency(s)/ Depts. To Be Involved	Point of Contact Name / Phone	Estimated Date of Completion
I	Recommendation #8	Advanced EOC training for C & G Staff	ESO, all Departments, HR	John Gulserian	Training Availability
I	Recommendation #9	Depth of 4 EOC Director and EOC Manager qualification	ESO, Admin	Administrative Office	December 2009
I	Recommendation #10	Fully train 4 @ C & G staff positions	ESO, all Departments, HR	John Gulserian	Training Availability
I	Recommendation #11	All C & G staff complete <i>IS 700, IS 800.B & IS 775</i>	ESO, all Departments, HR	John Gulserian	March 2009
S	Recommendation #12	All C & G staff complete <i>R337</i>	ESO, all Departments, HR	John Gulserian	Training Availability
I	Recommendation #13	Complete ESO training plan	ESO, all Departments, HR	John Gulserian	June 2009
R	Recommendation #14	Complete multi-year training plan	ESO, Emergency Services Council, OES	John Gulserian	June 2009
I	Recommendation #15	Utilize HSEEP template for multi-year training plan	ESO	John Gulserian	June 2009
I	Recommendation #16	Commit to conducting drills	Admin, BOS policy	Administrative Office	June 2009
I	Recommendation #17	Develop EOC Director policy	Admin, BOS policy	Administrative Office	March 2009

Code	Issue or Problem Statement	Corrective Action / Improvement Plan	Agency(s)/ Depts. To Be Involved	Point of Contact Name / Phone	Estimated Date of Completion
I	Recommendation #18	Additional EOC Manager	Admin, ESO	Administrative Office	December 2009
I	Recommendation #19	Maintain four fully trained EOC Mangers	Admin, ESO	Administrative Office	December 2009
I	Recommendation #20	Develop EOC Delegation of authority interim policy	Admin, BOS policy	Administrative Office	March 2009
I	Recommendation #21	Develop Liaison Officer capabilities	ESO, Admin, Fire	John Gulserian	May 2009
I	Recommendation #22	Call Center title and staffing	ESO, Admin, Fire	Sang Kim	March 2009
I	Recommendation #23	Develop pre-scripted bulletins	ESO, Admin	Sang Kim	March 2009
I	Recommendation #24	EOC Director Authority	Admin	Administrative Office, ESO	December 2009
I	Recommendation #25	Training database	HR, IS, ESO	John Gulserian, IS	April 2009
I	Recommendation #26	EOC work schedules	Admin, HR	CAO HR	December 2009
I	Recommendation #27	Annual EOC activation policy review	Emergency Services Council, ESO, BOS	John Gulserian	April 2009
I	Recommendation #28	Employee EOC activation policy	Admin HR	Administrative Office, ESO	December 2009
I	Recommendation #29	Large screen monitors for EOC	ESO, IS	Administrative Office, ESO	Unknown. Based on funding availability

Code	Issue or Problem Statement	Corrective Action / Improvement Plan	Agency(s)/ Depts. To Be Involved	Point of Contact Name / Phone	Estimated Date of Completion
I	Recommendation #30	Radio communications survey	IS, ESO	Bob Barnes	June 2009
I	Recommendation #31	Bring your own laptop procedure	IS, all Departments, Admin	Administrative Office	March 2009
I	Recommendation #32	Web based EOC Management system	ESO, IS	John Gulserian	Unknown. Based on funding availability
S	Recommendation #33	New EOC capital funding	Admin, ESO	Administrative Office, ESO	Unknown. Currently working on funding options
S	Recommendation #34	ESO Office space in EOC	Admin, ESO	Administrative Office, ESO	Unknown. Currently working on funding options
S	Recommendation #35	EOC design	Admin, ESO	Administrative Office, ESO	Unknown. Currently working on funding options