

Thomas Fire and 1/9 Debris Flow

AFTER-ACTION REPORT AND IMPROVEMENT PLAN



County of Santa Barbara Office of
Emergency Management

Incident Period:

December 4, 2017 through January 31, 2018

Final Draft:

October 3, 2018



Table of Contents

| | | |
|----------|---|-----------|
| 1 | HANDLING INSTRUCTIONS | 3 |
| 2 | EXECUTIVE SUMMARY | 4 |
| | EVENT SUMMARY | 5 |
| | PRIMARY STRENGTHS | 11 |
| | PRIMARY CONSIDERATIONS | 12 |
| 3 | DESCRIPTION OF DATA SOURCES | 14 |
| 4 | FUNCTION EVALUATION | 15 |
| | MANAGEMENT SECTION..... | 16 |
| | OPERATIONS SECTION | 18 |
| | PLANNING/INTELLIGENCE SECTION..... | 19 |
| | LOGISTICS SECTION | 20 |
| | FINANCE/ADMINISTRATION SECTION..... | 21 |
| 5 | AFTER-ACTION REPORT QUESTIONNAIRE | 22 |
| 6 | ADDITIONAL QUESTIONS | 25 |
| | WHAT RESPONSE ACTIONS WERE TAKEN BY YOUR AGENCY? INCLUDE SUCH THINGS AS MUTUAL AID, NUMBER OF PERSONNEL, EQUIPMENT AND OTHER RESOURCES..... | 25 |
| | 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? | 27 |
| | AS A RESULT OF YOUR RESPONSE, DID YOU IDENTIFY CHANGES NEEDED IN YOUR PLANS OR PROCEDURES? PLEASE PROVIDE A BRIEF EXPLANATION..... | 28 |
| | 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. | 29 |
| | WHAT RECOVERY ACTIVITIES HAVE YOU CONDUCTED TO DATE? INCLUDE SUCH THINGS AS DAMAGE ASSESSMENT SURVEYS, HAZARD MITIGATION EFFORTS, RECONSTRUCTION ACTIVITIES, AND CLAIMS FILED. | 29 |
| 7 | APPENDIX A: IMPROVEMENT PLAN | 30 |
| 8 | APPENDIX B: ACRONYMS AND ABBREVIATIONS | 36 |

1 Handling Instructions

Document Title: *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan*

Document Control: The *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* was developed to support the County of Santa Barbara (the County) to identify lessons learned and opportunities for improvement based on the response to the December 2017 Thomas Fire and subsequent Debris Flow on January 9, 2018 (1/9 Debris Flow).

The *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* was developed leveraging processes outlined under the Department of Homeland Security Exercise and Evaluation Program (HSEEP) and in alignment with the *California Code of Regulations Title 19. Public Safety Division, 2. Office of Emergency Services, Chapter 1. Standardized Emergency Management System (SEMS), Article 8. After-Action Reports*. The California Code of Regulations specifically states:

§ 2450. Reporting Requirements.

(a) Any city, city and county, or county declaring a local emergency for which the governor proclaims a state of emergency, and any state agency responding to that emergency shall complete and transmit an after-action report to OES within ninety (90) days of the close of the incident period as specified in California Code of Regulations, Title 19, s2900(q).

(b) The after-action report shall, at a minimum, be a review of response actions taken, application of SEMS, suggested modifications to SEMS, necessary modifications to plans and procedures, identified training needs, and recovery activities to date.

The information contained in this document is current as of the date of publication, **draft for Board of Supervisors approval, October 3, 2018**. As of the date of publication, the incident is still ongoing.

Contact Information: For additional information about the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan*, please use the following points of contact:

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2 Executive Summary

The purpose of the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* is to identify lessons learned, strengths, and opportunities for improvement associated with the Santa Barbara County (County) emergency operations center's (EOC's) response to the Thomas Fire, which began on December 4, 2017 and reached the border of Santa Barbara County on December 9, 2017, and the associated debris flow that occurred on January 9, 2018. This after-action report (AAR) acknowledges that the findings and recommendations for consideration presented in the document will require participation and engagement from local, State, and Federal partners, as well as non-governmental organizations (NGOs), in order to ensure the revised plans, policies, and procedures address the needs of stakeholders from across the County.

The information presented in this report is current as of **draft October 3, 2018**. While recovery operations associated with the 1/9 Debris Flow are still ongoing, the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* primarily focuses on response operations occurring from December 4, 2017 to approximately January 31, 2018 and activities occurring within the EOC. Additional findings, strengths, and considerations associated with field-based response operations and long-term recovery may be identified by the County and associated stakeholders. Those findings are outside of the scope of the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan*.

The primary strengths recognized in this report specific to the response operation within the EOC include:

- Robust information sharing through the County Joint Information Center (JIC);
- Provision of relevant and timely mapping products public and operational use;
- Use of a call center to support public safety and increase situational awareness;
- Timely planning executed to support contingency operations as the incident evolved;
- Use of volunteers to support response operations;
- Implementation of County-wide Behavioral Wellness Response; and
- Execution of a robust Public Health response.

The primary considerations offered to the County in this report specific to improving response and recovery are as follows:

- Formalize and socialize evacuation planning;
- Continue to refine and enhance emergency public information and warning;
- Increase collaboration with local government partners;

- Enhance the County's ability to respond to a sustained EOC activation; and
- Increase the County's capability to recover from a major disaster.

Event Summary

A small brushfire began on December 4, 2017, in the Santa Paula Canyon in Ventura County. Within 16 minutes, the fire grew to 100 acres and adopted the name of the Thomas Fire. At Approximately 10:00PM that night, the fire knocked out the power serving all Southern California Edison customers (83,000) in the County's south coast communities of Goleta, Santa Barbara, Montecito, Summerland, and Carpinteria for approximately six hours.



By 6:40AM on December 5, 2017, the Thomas Fire was over 40,000 acres with zero percent containment with fears of great expansion due to the Santa Ana winds. By 11:40AM Governor Jerry Brown declared a state of emergency within Ventura County.

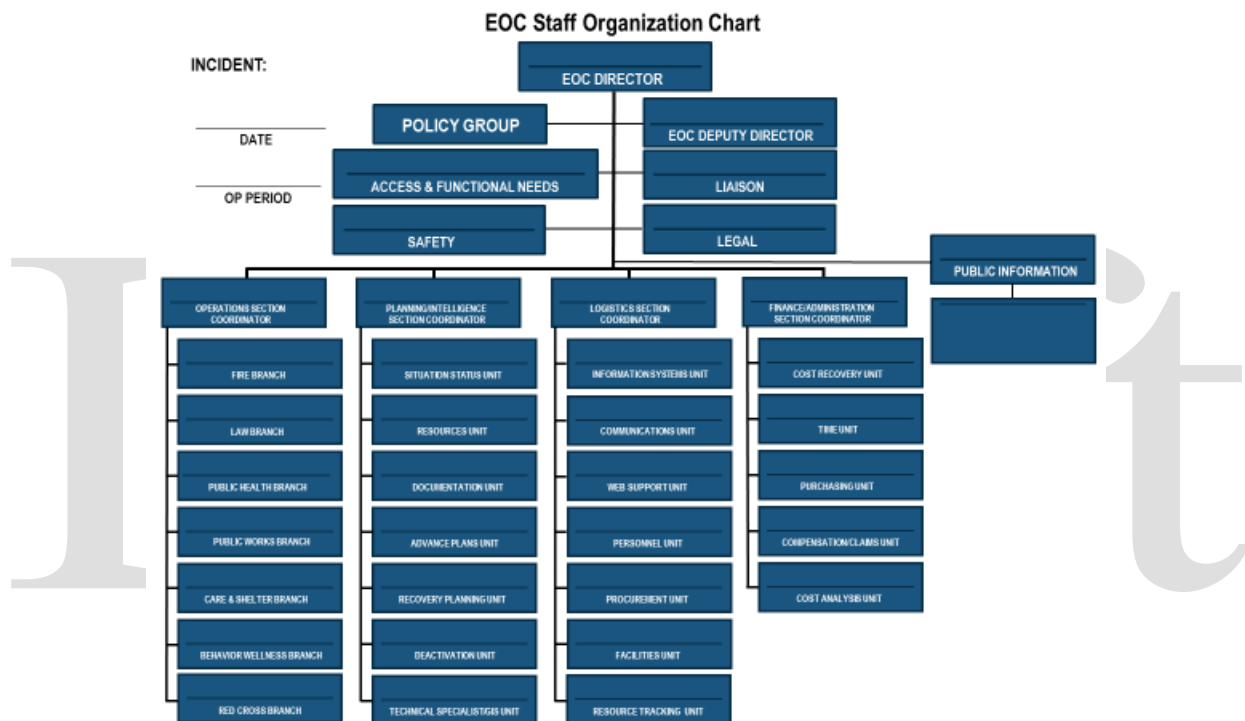
On December 6, 2017, the Thomas Fire was at least 90,000 acres and growing. The Santa Ana winds were expected throughout the evening with the fire expected to drastically increase. By 10:15PM on December 6, 2017, voluntary evacuations were announced for the City of Carpinteria in the County. On December 7, 2017, both voluntary and mandatory evacuation orders were in place in the County and Governor Brown added the County to the proclaimed State of Emergency. The County held their first town hall meeting on December 7, 2017 and began mask distribution throughout the County due to poor air quality.

To support the evacuations within the County and for those evacuated from Ventura County, both evacuation shelters and animal shelters were established. American Red Cross evacuation shelters were hosted by the University of California, Santa Barbara with support from the County; County Animal Services coordinated animal evacuation and sheltering with the support of the Equine Evacuation Team and Santa Barbara Humane Society at the Earl Warren Showgrounds.



On December 8, 2017, the County proclaimed a Local Emergency¹, with the State of California emergency declaration expanded to include the County on December 7, 2017 and a Presidential Emergency Declaration enacted to cover the County and other affected California counties on December 8, 2017. The County EOC began using interactive maps to notify the community of evacuation areas. Between December 8, 2017 and December 19, 2017, the County held four additional community meetings providing status updates on the Thomas Fire response, which included providing information on voluntary and mandatory evacuation orders. All evacuation orders were lifted on December 21, 2017.

Figure 1: EOC Organizational Chart Used for Thomas Fire and 1/9 Debris Flow



Between December 4 and December 21, the County engaged 147 personnel for 6,635 hours to support the EOC. This does not include support provided by local and non-governmental partners within the EOC environment, nor does it account for the numerous personnel hours expended by jurisdictions, first responders, and non-governmental partners supporting field-based life safety and life sustaining operations. The following graphic provides an overview of additional facts and figures associated with the response to the Thomas Fire.

¹ The County Board of Supervisors ratified the emergency proclamation on December 12, 2018 as the Board was not in session when the initial emergency proclamation was made.

Figure 2: Statistics Associated with the Response to the Thomas Fire

Following the containment of the Thomas Fire, stakeholders across the County transitioned into recovery operations specific to the fire while simultaneously initiating preparedness for a potential debris flow. On December 18, 2017 through January 5, 2018, Public Works continued its regular maintenance activities, ensuring that all 11 debris basins and creeks were completely cleared in anticipation of potential rain events. The first debris flow contingency planning meeting occurred on December 21, 2017, with collaboration from federal, state, and local agencies, including the United States Forest Service Burned Area Emergency Response (BAER) Team and California Watershed Emergency Response Team (WERT). The first formal meeting focused on contingency planning for a rain event was held on December 21, 2017. During the final weeks of December in 2017 and first week of January in 2018, County Office of Emergency Management (OEM) staff worked continuously in coordinating preparation for a potential debris flow.

By January 5, 2018, a significant storm was forecast to affect the County and the Thomas Fire burn area. Stakeholders collaborated to develop maps predicting water course areas based on projected rainfall totals. A press conference specific to the potential for a debris flow was held on January 5, stressing the significant risk to the community posed by the upcoming storm. On January 6, 2018, a letter was sent by Aware & Prepare² to Montecito and Carpinteria residents regarding the potential event and the water course areas. On January 7, 2018, mandatory evacuation orders and voluntary evacuation warnings were issued for residents to leave by noon on January 8, with accompanying press releases, updated social media, and alert via Aware & Prepare to all registered subscribers in the Montecito and Carpinteria areas. On January 8, 2018, the National Weather Service (NWS) issued a flash flood watch, and both an Aware & Prepare and Wireless Emergency Alert (WEA) were issued specific to the flash flood warning. The County Incident Management Team (IMT) Team 3 was activated on January 8, and law enforcement went door-to-door to notify residents. Numerous emergency notifications and alerts by OEM and NWS were sent to the public in the days leading up to the storm. These include a press conference on January 5, and multiple alerts and media contacts on January 6, 7, and 8 and before the debris flow began on January 9.

By January 8, 2018, evacuation centers and the EOC call center activated and a local emergency was declared. The County EOC was also activated to a Level 3, the highest level. At 02:32AM the NWS issued a WEA for a flash flood warning and at 03:52AM the OEM issued another WEA. By 4:00AM on January 9, 2018, the flash flood and debris flow occurred with apparent immediate impact. By 6:15AM, the Type 3 IMT declared a mass casualty incident.

The debris flow, now referred to as the 1/9 Debris Flow, heavily impacted Montecito and Carpinteria. Millions of tons of mud and rocks flowed out of the mountains towards the ocean creating destruction along the way. Multiple trees and gas and power lines down across roads, major flooding, and major road closures. There were multiple significant incidents including: natural gas pipeline explosions; structure fires in Montecito; flooded structures; and persons trapped in structures, attics, and roofs that required rescuing. Helicopters transported multiple burn victims, individuals stranded, and people with traumatic injuries. Local assets were joined by Coastguard and National Guard helicopters to conduct rescues, including for people who were isolated by impassible or destroyed roads. The 1/9 Debris Flow led to 23 deaths, including two missing persons and numerous injuries.



² Aware & Prepare is an Operational Area initiative within the County to “enhance the capabilities of non-profit organizations and government agencies to mitigate, prepare for, respond to, and recover from emergencies and disasters.” Aware & Prepare is an umbrella brand under which emergency notification systems operate within the County. The technology system leveraged to support communications, including communications to the general public, is called Everbridge.

On January 9, 2018, natural gas service to over 3,500 customers in Montecito was shut off for safety reasons. After major breaks in the Montecito Water District pipelines occurred, a boil order was put into effect for those that were still residing in the affected areas in Montecito. The Montecito Sanitary District system also suffered major disruptions and breaks in its system. To support the community, on January 9 a family assistance center (FAC), with staffing to include, Red Cross, behavioral wellness, clergy, and public information officers (PIOs), was opened at the Frist Presbyterian Church on Constance Avenue.

Between January 9 and January 22, 2018, field-based personnel conducted search and rescue operations, provided life safety and life sustaining support to individuals and households in the impacted area, and ongoing mass care operations were provided in evacuation shelters. Approximately 1,300 were evacuated, 700 sheltered-in-place, and 60 individuals were cared for in shelters. Health care providers across the County, Cottage Hospital, were critical in providing life-saving medical care to individuals injured. During this period of time, additional notices were provided to protect public health, including notices associated with water safety and use of personal protective equipment (PPE) while operating in mud/debris. By January 24, 2018 water, sewer, electricity, and natural gas services were made safe and restored and repopulation of the community was possible.

The FAC remained open until remained open until January 16, 2018. On January 17, 2018, a local assistance center (LAC) opened to support those impacted by the incidents. It remained open until February 3, 2018 at which point a disaster recovery center (DRC) was opened – the Montecito Center for Preparedness, Recovery, and Rebuilding. By January 27, 2018, all areas that were able, were opened for repopulation. The long-term recovery group held the first meeting on January 31, 2018.



Between January 5, 2018 and January 31, 2018, the County engaged 162 personnel for 12,305 hours to support the EOC. This does not include support provided by local and non-governmental partners within the EOC environment, nor does it account for the numerous personnel hours expended by jurisdictions, first responders, and non-governmental partners supporting field-based life safety and life sustaining operations. The following graphic provides an overview of additional facts and figures associated with the response to the 1/9 Debris Flow.

Figure 3: Statistics Associated with the Response to the 1/9 Debris Flow

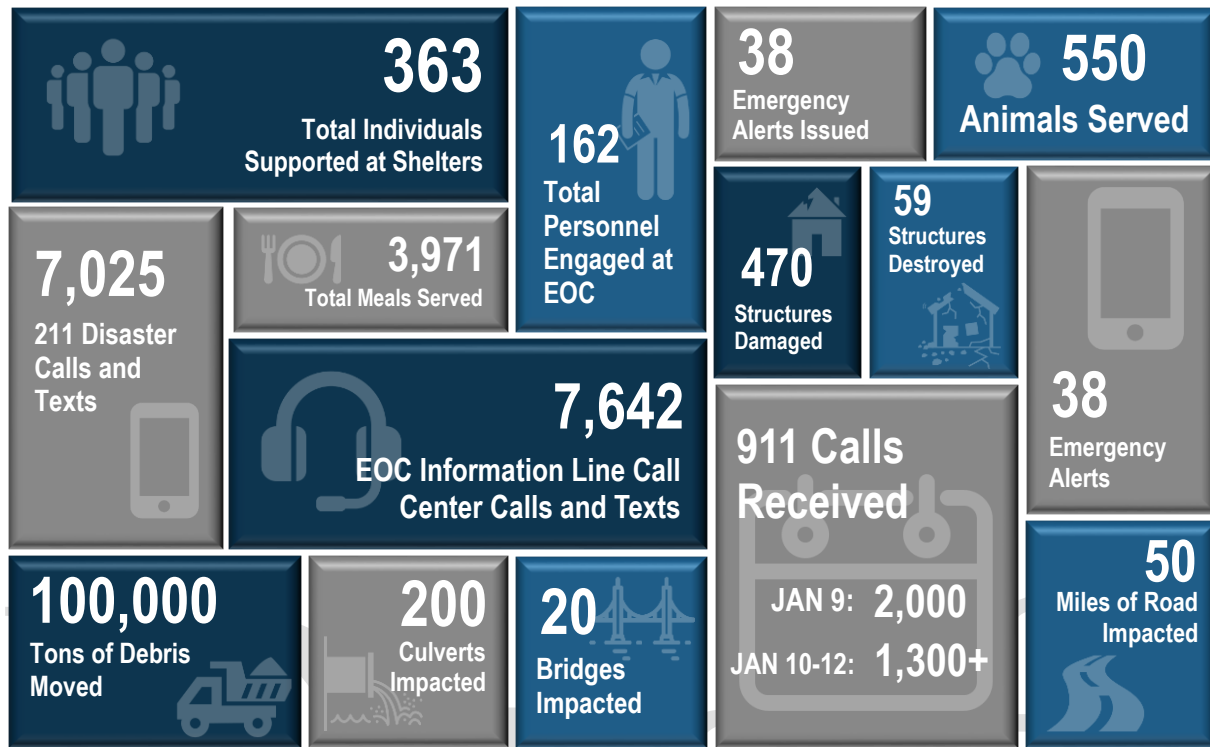


Figure 4: Statistics Associated with the Response to both the Thomas Fire and 1/9 Debris Flow



Primary Strengths

Section 6 Additional Questions in this report details response actions and associated strengths taken by the County and partner agencies. These areas include, but are not limited to:

- Robust information sharing through the County JIC.** The County worked to ensure timely dissemination of information through the JIC across multiple communication channels, including comprehensive translation into Spanish. For the Thomas Fire alone, the JIC issued 440 informational updates via the County website in both English and Spanish and provided content to local news for them to provide 24-hour coverage. From December 6 to December 26, 2017, approximately 575,000 users viewed the website 2.2 million times, resulting in the County's website being continually ranked in the top five worldwide information sources on the Thomas Fire by Google.
- Provision of relevant and timely mapping products public and operational use.** The County was able to develop mapping products early in the Thomas Fire to support communication to the general public regarding the evacuation areas. Through use of internal, mutual aid, and contract support, the County was able to evolve use of mapping products over time to support emergency public information and operational decision-making within the EOC. The evacuation map developed to communicate with the general public for the Thomas Fire has received 5,539,539 views since it was launched; views on the ArcGIS evacuation map currently used by the County currently total 279,044.
- Use of a call center to support public safety and increase situational awareness.** The call center was originally set up to provide contact for people who were being evacuated and needed immediate assistance, usually because they did not have transportation. Over time, the call center became a valuable source of information for community members, with more than 8,500 calls and texts to the call center occurring in December 2017 and more than 7,600 in January 2018. Co-locating the call center in the EOC facilitated the dissemination of information from the community to stakeholders while also increasing situational awareness within the overall EOC.
- Timely planning executed to support contingency operations as the incident evolved.** As the disaster evolved from recovery from the Thomas Fire to potential response associated with a debris flow, the County executed timely planning and preparedness activities to support response. This includes both clearance of debris basins and development of a 72-hour plan associated with a potential debris flow. Additional planning included plans and procedures to support internal EOC operations (e.g. "JIC Dissemination List") and field-based response operations (e.g. *Critical Personnel Transportation Plan*).

- **Use of volunteers to support response operations.** Volunteer and mutual aid assets were used to great effect during response and recovery. The CERT, Listos, Medical Reserve Corps (MRC), and VOADs staff a valuable resource, supporting evacuation shelters, local assistance centers, the call center, and DRCs (among others).
- **Implementation of County-wide Behavioral Wellness Response.** Behavioral Wellness support was provided at multiple locations across the County, including at evacuation centers; the LAC/DRC; and within the EOC. To support the overall need for support, Behavioral Wellness developed the Community Wellness Team to guide mental health, spiritual, and emotional wellness resources in response to both the Thomas Fire and 1/9 Debris Flow. The Community Wellness Team is comprised of 13 organizational providers and offers a full continuum of care, including immediate crisis response, short term counseling, and long-term counseling. As reported through April 9, 2018, 5,800 mental health contacts were made related to both the Thomas Fire and 1/9 Debris Flow.
- **Execution of a robust Public Health response.** Public Health Emergency Declarations were appropriately made along with Air Quality Warnings, in coordination with APCD, during response operations. Public Health was also engaged in the EOC; supporting animal evacuation and care; executing ocean water testing; hazardous materials removal; distribution of masks; provision of triage at evacuation sites; medical staff and equipment in shelters, and within LAC/DRC; supporting transportation for and sheltering for individuals in licensed care facilities; and supporting transportation for individuals unable to evacuate independently and for essential medical personnel.

The County will greatly benefit from continuing ongoing activities to enhance operational coordination, operational communication, emergency public information and warning, and decision-making. As it applies to planning, the County will also benefit greatly from capturing lessons learned and developing plans, processes, and procedures to support future response.

Primary Considerations

As the County continues readiness for future fires and advances preparation for winter storms in the coming months, the following offers priority considerations for implementation by the County:

- **Formalize and socialize evacuation planning.** To support execution of this consideration, recommendations include assembling the decision-making process for debris flow evacuations into one document; continuing efforts to standardize evacuation terminology across the Operational Area and with adjoining counties; and providing annual training on evacuation terminology so it is understood by first responders and the general public.

- **Continue to refine and enhance emergency public information and warning.** To support execution of this consideration, recommendations include establishing ReadySBC as an authoritative source of public information for emergency public information; streamlining public information procedures to ensure rapid and timely release of information from the JIC; and continuing planning efforts to support information dissemination across multiple communications platforms with considerations for accessibility for non-English speaking populations and individuals with disabilities or others with access and functional needs.
- **Increase collaboration with local government partners.** To support execution of this consideration, recommendations include pre-disaster collaboration with local emergency managers to develop a mutual understanding of needs and ensuring local personnel are embedded as a Liaison position within the EOC.
- **Enhance the County's ability to respond to a sustained EOC activation.** To support execution of this consideration, recommendations include continuing to promote the Standardized Emergency Management System (SEMS) and National Incident Management System (NIMS) training for all disaster service workers in alignment with County-developed guidance; consideration methods to provide just-in-time training and orientation to personnel supporting the EOC and JIC; and equipping the EOC so it is prepared to provide care and sheltering to disaster service workers during sustained EOC activations.
- **Increase the County's capability to recover from a major disaster.** To support execution of this consideration, recommendations include appointing a Recovery Unit Leader early in the incident; developing pre-disaster recovery plans, including consideration for cost recovery and debris management; and pre-identifying and assessing sites across the County which can be used to support both evacuation shelters and LAC/DRC.

A detailed discussion of considerations for the County is presented in Section 4 Function Evaluation. Considerations contained in this document include those associated with planning, training, personnel, equipment, and facilities, with specific modifications, lead agencies, and timelines presented in Section 7 Appendix A: Improvement Plan.

3 Description of Data Sources

The *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* was developed through review of relevant documentation and discussions with stakeholders involved in both the Thomas Fire and 1/9 Debris Flow. Materials reviewed include, but are not limited to situation reports; plans, policies, and procedures developed to support operations in the EOC; meeting minutes; emergency proclamations; and emergency public information materials.

To support development of a report that captures input from stakeholders across the County, a series of feedback sessions were held with stakeholders directly engaged in EOC response. These feedback sessions were generally grouped into the following focus groups:

- Management Section
- Logistics, Operations, and Finance Sections
- Planning Section and Geographic Information Systems (GIS) Unit
- Law Enforcement and Fire Stakeholders (Operations)
- Public Health, Behavior Wellness, and Mass Care Stakeholders (Operations)
- Public Information and the JIC (Management)
- Partner Agencies (All Sections)

In addition to feedback sessions, individual discussions were held with various local, County, and State officials and NGO partners. All participants in the AAR development process were offered an opportunity to conduct an individual feedback session to collect direct feedback and input. Further, electronic and paper forms were provided to solicit input from stakeholders and consultant contact information was distributed.

4 Function Evaluation

The following presents the assessment of each SEMS/NIMS Function, in alignment with the AAR templates provided by the State of California Governor's Office of Emergency Services. This section is organized by the primary sections in the EOC:




- Management Section
- Operations Section
- Planning/Intelligence Section
- Logistics Section
- Finance/Administration Section

In some cases, observations may apply to more than one of the primary sections; to the greatest extent possible, this document seeks to offer alignment of observations to the sections where they are most relevant. Observations are aligned with the following areas:

- Planning
- Training
- Personnel
- Equipment
- Facilities

Draft

Management Section




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|  <p>Overall Assessment of Function</p> |  <p>Satisfactory Without Changes</p> |  <p>Satisfactory with Opportunities for Improvement</p> |
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The following provides an overview of considerations for the County associated with identified opportunities for improvement:

| Planning |
|--|
| <ol style="list-style-type: none"> 1. Assemble the decision-making process for debris flow evacuation into one document. 2. Continue efforts to participate in local and regional planning to standardize evacuation terminology and provide local education to the general public. Specifically work toward the goal of having an agreed terminology with Operational Area partners and adjoining counties. 3. Streamline emergency public information communications procedures to ensure rapid and timely release of information from the JIC. Continue planning efforts to support information dissemination across multiple communication platforms and through channels not tied to web-based communication, with considerations for accessibility for non-English speaking populations and individuals with disabilities or others with access and functional needs. Establish an Alert and Warning Desk in the Planning Section or JIC to streamline alert and warning functions. 4. Continue efforts to engage media in incident specific emergency public information sharing, including local and regional radio. 5. Consider establishing ReadySBC as the authoritative source of public information and, as appropriate, leverage the website in future incidents to share emergency public information along with social media and other resources. 6. Execute a staffing analysis to determine requirements for support at each level of EOC activation and, where possible, pre-identify personnel to support staffing plans based on activation levels. Implement a formalized process for staff briefings at the EOC both for staff coming on to shifts as well as for all personnel following Management Section meetings. 7. Develop a standard operating procedure or guide book, based on resources used or created during the incident, to support establishment of future call centers. Include thresholds, in alignment with EOC activation levels, for establishment of a call center to support response and recovery activities. 8. Review and determine whether there are changes necessary to Chapter 12 – Emergency Management of the Santa Barbara County Code of Ordinances, and if so, complete for approval by the Board of Supervisors. 9. Ensure pre-coordination of legal review as outlined in plans, policies, and procedures to ensure proper contracting for response and recovery support. 10. Develop a pre-disaster recovery plan and a cost recovery plan. Include a revised debris management plan. Collaborate with stakeholders across the Operational Area to revise debris management plans and pre-identify debris management sites. |
| Training |
| <ol style="list-style-type: none"> 11. Continue to promote NIMS training for all disaster service workers in alignment with the County-developed <i>NIMS Based Training Guidance Matrix for Santa Barbara County Employees, EOC Team Members, and Board of Supervisors</i>. Identify and implement a centralized tracking system for completed NIMS training certificates for disaster service workers. 12. Continue to provide quarterly EOC training to personnel identified to support staffing plans, including County personnel, local partners, and voluntary agency partners. Consider offering advanced training to pre-identified disaster service workers for leadership positions within the EOC. Identify whether training on Advance Planning is available and, if so, provide this training to designated individuals. Consider methods to provide just-in-time training and orientation to personnel supporting EOC and the JIC. 13. Provide training to relevant personnel (County, local, voluntary agency) focused on call center operations. |

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| 14. Provide training to County personnel supporting the JIC on guidelines for written communication, including personnel supporting Spanish translation. |
| 15. Provide annual training on evacuation processes and terminology so that it is understood by all first responders. Incorporate training on alert and notification policies and procedures. |
| Personnel |
| 16. Consider developing an inventory of County personnel knowledge, skills, and capabilities to better support staffing within the EOC and other functions (e.g. call center, LAC, DRC) during response and recovery. Develop staffing plans to ensure appropriate language translation support is provided within the JIC and within the call center. |
| 17. Include a Call Center Manager position the EOC organizational chart under the PIO. |
| 18. Improve relationships between local emergency managers within the Operational Area and the County OEM to develop mutual understanding of each other's needs and how to offer support during response and recovery operations. Collaborate with local governments across the Operational Area to embed local personnel in a Liaison position within the EOC. |
| Equipment |
| 19. Determine what tool (Google Maps, ArcGIS, Others) will be used to support incident-specific public information for hazards and associated evacuation zones. |
| 20. Consider incident management software solutions to support information sharing within the EOC. |
| 21. Ensure information technology system continuity and redundancy for County-wide websites with a specific focus on redundancy for authoritative information sources (e.g. ReadySBC). |
| 22. Ensure the call center equipment and standard operating procedures outline that the phones should be setup to "popcorn" from one person to another in order to evenly distribute incoming calls. |
| Facilities |
| 23. Consider the placement of local government representatives within the EOC to better support collaboration with the County OEM. |




Operations Section

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|  <p>Overall Assessment of Function</p> |  <p>Satisfactory Without Changes</p> |  <p>Satisfactory with Opportunities for Improvement</p> |
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The following provides an overview of considerations for the County associated with identified opportunities for improvement:

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| Planning |
| <ul style="list-style-type: none"> 24. Collaborate with state and federal partners to formalize plans associated with LAC/DRC. Enumerate LAC procedures in a formal LAC plan or standard operating procedure. 25. Review and revise mass care plans and strategies with the American Red Cross to ensure coordination between each shelter location and the EOC. Assign a County liaison to the shelter when opened. 26. Formalize emergency transportation plans, policies, and procedures to support both movement of County personnel and movement of the affected population, with specific consideration for transportation support for individuals with disabilities and others with access and functional needs. 27. Establish a local authoritative source for data specific to home damage and classifications to address differences in the damage assessment processes and classifications between the County, Cal Fire, and the Federal Emergency Management Agency. |
| Training |
| <ul style="list-style-type: none"> 28. Continue to provide Agency Representative training to supporting agencies. Incorporate and provide mental health training, including Self Care for Disasters training. Provide additional training to voluntary agency personnel who will be assigned to the EOC and recovery leadership. |
| Personnel |
| <ul style="list-style-type: none"> 29. Engage volunteer agencies to support staffing at LAC/DRC. 30. Assess mental health and medical resources available within the County to support the EOC, evacuation shelters, and LAC/DRC. Determine what crisis counseling and spiritual care services will be offered at the LAC/DRC. Determine what EOC activation level will require a separately designated County Behavioral Wellness lead in the EOC. Develop a plan to support overall health in the EOC, with considerations for mental health and overall wellness. 31. Implement a formal program for debriefing EOC personnel at shift change, including provision of mental health support for staff when the incident resulted in fatalities. |
| Equipment |
| Not applicable. |
| Facilities |
| <ul style="list-style-type: none"> 32. Leveraging a pre-established criterion, collaborate with logistics personnel to pre-identify facilities to be used as evacuation shelters and LAC/DRC that meet minimum standards. |




Planning/Intelligence Section

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|  <p>Overall Assessment of Function</p> |  <p>Satisfactory Without Changes</p> |  <p>Satisfactory with Opportunities for Improvement</p> |
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The following provides an overview of considerations for the County associated with identified opportunities for improvement:

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| Planning |
| <p>33. Continue efforts of the County-wide GIS working group to coordinate databases and improve the overall quality of GIS maps. Ensure procedures within the EOC are streamlined and enforced to support requests for GIS maps, including use of ICS forms to process requests (e.g. ICS Form 213). Continue efforts to pre-identify and prepare commonly requested GIS maps for use within the EOC.</p> <p>34. Consider developing an inventory and associated GIS map of County-wide cultural assets in order to ensure protection of those assets during response and recovery operations.</p> <p>35. Coordinate with the PIO to confirm workflows for review, approval, and release of GIS products to support emergency public information and warning.</p> <p>36. Develop a tiered re-entry protocol which accounts for response personnel, essential functions, major companies and employers, and other organizations vital to the return of the evacuated population while balancing the need to execute life safety and debris management operations.</p> |
| Training |
| 37. Continue to provide GIS emergency map training to relevant personnel and teams. |
| Personnel |
| 38. Consider hiring a resource to provide dedicated GIS mapping support to the County OEM. |
| Equipment |
| 39. Add a reliable and secure GIS data storage device capable of being accessed from both the field, at department operations centers (DOCs), and at all Operational Area EOCs. |
| Facilities |
| Not applicable. |




Logistics Section

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|  <p>Overall Assessment of Function</p> |  <p>Satisfactory Without Changes</p> |  <p>Satisfactory with Opportunities for Improvement</p> |
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The following provides an overview of considerations for the County associated with identified opportunities for improvement:

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|---|
| Planning |
| 40. Develop guidelines for activation and operation of all County-owned generators and ensure guidelines are stored both within the EOC and directly with generators. |
| Training |
| 41. Provide training to EOC personnel on the resource request process, including use of ICS Form 213 RR. Provide training to support the EMMA request process, with emphasis on how the process is supposed to work and how to submit a complete request. |
| Personnel |
| 42. Establish a standard emergency worker lodging procedure to include standard agreements, rates, sign-in processes, and payment. Consider identifying and staffing a Lodging Unit Coordinator within the Supply/Procurement Unit. |
| Equipment |
| 43. Develop pre-event contracts, in alignment federal procurement requirements, to support efficient resource requests and procurement during and following disasters. Develop standby contracts with transportation providers for use in future emergencies. |
| 44. Determine and implement an online document repository for resource request forms in the absence of a web-based incident management system. |
| 45. Equip the EOC so it is prepared to provide care and sheltering for disaster service workers on-site during emergency activations with specific considerations for sustained activation for more than a two-week period. Assess and procure equipment for use in the EOC as sleeping quarters (e.g. murphy beds, reclining chairs, sleeping trailer). Designate a separate space for mental health services within the EOC or in a trailer onsite. |
| 46. Assess and procure additional equipment to support information sharing within the JIC, such as smart boards and/or writable paint for wall surfaces. |
| Facilities |
| 47. Determine if expansions/modifications to the EOC are required to support activation and operations for a sustained period of time. Consider whether additional dedicated space is provided within the EOC for GIS personnel. Determine if additional improvements need to be made to the County EOC to accommodate a call center. |
| 48. Ensure space provided for personnel within the EOC is sufficient for individuals using wheelchairs or other assistive devices. |

Finance/Administration Section

| | | |
|--|---|---|
|  <p>Overall Assessment of Function</p> |  <p>Satisfactory Without Changes</p> |  <p>Satisfactory with Opportunities for Improvement</p> |
|--|---|---|








The following provides an overview of considerations for the County associated with identified opportunities for improvement:










| |
|---|
| Planning |
| <p>49. Create and streamline processes to support purchasing for mutual aid assets.</p> <p>50. Review and revise local purchasing regulations to ensure appropriate application of rules associated with use of County purchasing cards.</p> |
| Training |
| <p>51. Provide training to EOC personnel on guidelines associated with cost recovery to maximize reimbursement under state and federal regulations. Provide specific training to Finance Section personnel on completion of personnel and equipment record keeping supporting cost capture and audit.</p> <p>52. Hold a joint workshop with Finance and Logistics personnel on emergency procurement, purchasing, resource ordering and tracking, and personnel and equipment time keeping. Provide advanced training to personnel identified to serve as a Recovery Unit Leader.</p> |
| Personnel |
| <p>53. Appoint a Recovery Unit Leader early in the incident. Identify and staff additional dedicated personnel to support recovery operations, ensuring there is adequate staffing in the EOC for financial document processing and collection.</p> |
| Equipment |
| <p>54. Determine and implement a document repository for financial documents in the absence of a web-based incident management system. Continue to explore and/or develop web-based ICS forms to ensure appropriate documentation of personnel hours and resource use for cost recovery.</p> |
| Facilities |
| <p>Not applicable.</p> |




5 After-Action Report Questionnaire

The following presents additional information in alignment with the AAR questionnaire templates provided by the State of California Governor’s Office of Emergency Services. It is important to note that questions presented focused on field operations are outside of the scope of the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan* and therefore are identified as “Not applicable.”

Table 1: After-Action Report Questionnaire for Emergency Operations Center Activities

| Response / Performance | | Yes | No | Comments |
|------------------------|---|---|---|--|
| Assessment Questions | | | | |
| 1. | Were procedures established and in place for responding to the disaster? |  | | The County has a robust suite of plans in place for responding to both fires and debris flows. Primary areas where the County did not have pre-established plans include recovery-related functions (debris management, cost recovery, LAC/DRC operations) and transportation. In the absence of these plans, County personnel, local partners, and voluntary agency personnel were able to effectively develop policies and procedures to support operations. |
| 2. | Were procedures used to organize initial and ongoing response activities? |  | | |
| 3. | Was the ICS used to manage field response? | | | Not applicable. |
| 4. | Was Unified Command considered or used? | | | Not applicable. |
| 5. | Was the EOC and/or DOC activated? |  | | |
| 6. | Was the EOC and/or DOC organized according to SEMS? |  | | |
| 7. | Were sub-functions in the EOC/DOC assigned around the five SEMS functions? |  | | |
| 8. | Were response personnel in the EOC/DOC trained for their assigned position? | |  | The duration of the incident required engagement of many County personnel, local partners, and volunteers who had not previously received training within the EOC environment and/or specific to their position. |
| 9. | Were action plans used in the EOC/DOC? |  | | Action plans were consistently developed and used in the EOC. |
| 10. | Were action planning processes used at the field response level? | | | Not applicable. |

| Response / Performance | | | |
|--|---|----|---|
| Assessment Questions | Yes | No | Comments |
| 11. Was there coordination with volunteer agencies such as the Red Cross? |  | | There was significant coordination with volunteer agencies and NGOs, including local Voluntary Organizations Active in Disasters (VOAD), the American Red Cross, local Community Emergency Response Teams (CERT), local equine and animal care groups, and local community-based / faith-based organizations. There was also strong coordination with local quasi-governmental partners, such as the University of California, Santa Barbara, to provide support to response operations for resource distribution and mass care. |
| 12. Was an Operational Area EOC activated? |  | | |
| 13. Was Mutual Aid requested? |  | | |
| 14. Was Mutual Aid received? |  | | |
| 15. Was Mutual Aid coordinated from the EOC/DOC? |  | | |
| 16. Was an inter-agency group established at the EOC/DOC level? Were they involved with the shift briefings? |  | | The County developed an operational rhythm in the EOC to support internal briefings and external briefings, such as briefings to elected officials. The incident duration and staffing challenges resulted in a modification from the County where formal EOC shifts were not always adhered to and, as a result, formal briefings associated with shift change were not established. Other than a limited staffing model for the night shift, most personnel were assigned to the day shift. The action plan developed was for a 24-hour operational period. |
| 17. Were communications established and maintained between agencies? |  | | |
| 18. Was the public alerted and warnings conducted according to procedure? |  | | |
| 19. Was public safety and disaster information coordinated with the media through the JIC? |  | | Throughout the incident, inclusive of both the Thomas Fire and 1/9 Debris Flow, local media was an excellent partner in information dissemination focused on emergency public information and warning. The County is currently making efforts to deepen relationships with local and regional radio to further support information dissemination, particularly during a power outage when other communication methods are compromised. This will include Spanish speaking populations. |

| Response / Performance | | | |
|--|---|---|----------|
| Assessment Questions | Yes | No | Comments |
| 20. Were risk and safety concerns addressed? |  | | |
| 21. Did event use Emergency Support Function (ESF) effectively and did ESF have clear understanding of local capability? |  | | |
| 22. Was communications inter-operability an issue? | |  | |

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6 Additional Questions

The following presents additional information in alignment with the AAR templates provided by the State of California Governor's Office of Emergency Services. It is important to note that questions presented focused on field operations are outside of the scope of the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan*.

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

Earlier sections of this document provide specific information on quantitative response actions and considerations for the County associated with identified opportunities for improvement. In addition to this information, it is important to note that there are many activities executed by the County in support of both response and recovery that went well and/or enhanced the overall response operation. These items include, but are not limited to:

- Quickly issuing Local Emergency proclamations, allowing the County to take necessary actions and facilitating the State and Federal disaster declaration processes.
- Developing mapping products early in the Thomas Fire to support communication to the general public regarding the evacuation areas and evolving the use of mapping products to support emergency public information over time.
- Ensuring timely dissemination of information through the JIC across multiple communication channels, including comprehensive translation into Spanish. Specific to the Thomas Fire, the JIC sent more than 440 informational updates via the County website in both English and Spanish, provided content to local news for them to provide 24-hour coverage, and from December 6 to December 26, 2018, approximately 575,000 users viewed the website 2.2 million times. These efforts resulted in the County's website being continually ranked in the top five worldwide information sources on the Thomas Fire by Google (often as the number one source), outranking global news organizations and other much larger entities.

- Establishing a call center at the EOC. This was originally set up to provide a contact for people who were being evacuated and needed immediate assistance, usually because they did not have transportation. The call center received information, which was then quickly forwarded to a Transportation Group who provided immediate transportation to evacuation centers. The call center provided timely information to the community in support of 211 and was supported by non-governmental and volunteer partners. The call center became a valuable source of information for community members, with more than 8,500 calls and texts to the call center occurring in December 2017 and more than 7,600 in January 2018. Particularly after the 1/9 Debris Flow, the call center allowed individuals in the Montecito and Carpinteria area to receive direct service from the County. In addition to the ability to assist the public, the call center provided information from the community to stakeholders within the EOC which increased situational awareness within the overall EOC.
- Leveraging strong relationships with external partners to support response and recovery. In just one example, as the Thomas Fire grew in size, smoke became increasingly concerning. The County worked closely with National Oceanic and Atmospheric Administration (NOAA) and the Air Pollution Control District to gain insight on the likely path of smoke and the populations that would be affected, allowing the County to both disseminate information and distribute protective masks.
- Understanding the situation and developing contingency plans to support response. During the Thomas Fire, it was acknowledged that there was potential for a debris flow to occur when rain arrived due to the large acreage of burn scars. Because of this, the County began preparation for a debris flow on December 18, 2017 by clearing debris basins and planning for a potential debris flow on December 21, 2017; these activities continued up until the debris flow occurred. By pre-planning for this event, the County was able to review established plans, policies, past documents and procedures; coordinate with NOAA on weather monitoring; and establish an execute a plan for evacuations. In coordination with NOAA, the County received daily updates on the chances of rain and the projected amounts. The County continued to improve on these plans after each predicted storm that caused evacuations, creating a 72-hour plan for evacuation that included points of assessment for whether an evacuation was needed.
- Volunteer and mutual aid assets were used to great effect during response and recovery. The CERT, Listos, and VOADs staff a valuable resource, supporting evacuation shelters, LACs, the call center, and DRCs (among others). These personnel were able to integrate with local, County, and State personnel to execute a coordinated response.

- The County effectively developed a frequent briefing schedule incorporating elected officials and senior agency executives. This includes establishing a regular schedule for calls, following a standardized agenda, allowing senior officials to appropriately schedule and know what information would be shared. This allowed the representatives to gain insight into the response without having to physically be in the EOC and thus provide critical inputs and support to the process.
- The public health response was robust. In addition to emergency declarations, Public Health Emergency Declarations were appropriately made along with Air Quality Warnings during response operations. Public Health was also engaged in the EOC; supporting animal care; executing sediment and ocean water testing; distribution of masks; provision of nurses at evacuation sites, in shelters, and within LAC/DRC; supporting transportation for individuals in assisted living facilities; supporting transportation for individuals unable to evacuate independently; and providing support for behavioral health as an integrated team.
- EOC training offered by the County is extremely beneficial. On a quarterly basis, the County offers EOC training to County employees. This training was attended in the fall of 2017 by some who supported response to the Thomas Fire and 1/9 Debris Flow. It was widely cited by those who attended as a great educational opportunity which both oriented the participant to the EOC environment and their potential positions within the EOC sections.

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?

In order to accommodate the needs of the incident and because of the incident duration, a significant number of individuals were engaged at the EOC to support both the Thomas Fire and 1/9 Debris Flow response. In some cases, SEMS/NIMS was not followed because personnel were new to the EOC environment and were not previously trained or were unfamiliar with the systems. In other cases, SEMS/NIMS was not followed to offer flexibility in overall coordination and reduce demands on personnel. Some modifications included:

- Conducting daily briefings with EOC general staff based on an established schedule but not on a formal schedule associated with shift changes.
- Combining multiple functions within one position at a level three EOC activation (the highest).
- Expanding span of control to more than seven sub functions for one supervisor.
- In order to ensure that SEMS/NIMS processes were followed, OEM staff were always assigned to the Planning Coordinator position to ensure the action planning process was abided by.

While these accommodations were in some cases necessary in order to support ongoing response, considerations presented earlier in this document associated with personnel capabilities and training will support the County in adhering closer to the concepts associated with SEMS and NIMS.

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

As earlier noted, the County has identified several areas where plans and procedures need to be formalized or enhanced. Largely, these areas focus on recovery operations and transportation.

It is important to note that the County was able to effectively develop plans, policies, and procedures to address specific issues as they arose either as a result of the Thomas Fire or 1/9 Debris Flow.

- In one example, the County recognized there were some issues in emergency public information dissemination, specifically as it applied to ensuring both review and approval of messaging and coordinating that messaging across multiple information pathways (e.g. the County website/ReadySBC, social media, traditional media, alerting systems). This issue was extremely important as it applies to disseminating GIS maps capturing evacuation areas. In some cases, public messaging was developed prior to updated maps, resulting in a delay in communication. In other cases, GIS maps with updated evacuation areas were posted to websites without supportive messaging across multiple platforms. To streamline information dissemination, the JIC crafted the “JIC Dissemination List” which accounts for critical issues associated with mapping, translation, and communication pathways. Once developed, this tool was consistently implemented, which enhanced the timeliness and quality of emergency public information.
- In another example, the 1/9 Debris Flow resulted in closures of both Highway 101 and Highway 192, posing significant transportation issues for critical personnel in certain areas of the County and/or critical personnel who live in neighboring counties. To address this issue and support continuity of operations of critical personnel required to ensure health and safety across the County, the *Critical Personnel Transportation Plan* was developed. This plan accounted for personnel assigned to response activities; school district personnel; health-care system personnel; the Public Health Department; critical employees from federal, State, County, and municipal partners; and the Santa Barbara City and Airport Harbor. It also accounted for multiple transportation sources, including ferry systems, trains, busses, and law enforcement support for vehicles. After identifying these critical personnel, a transportation plan was developed using 17 buses to bring people from Ventura County to Santa Barbara County each morning and then returning them each evening. The most important result of this plan was it allowed the opening of schools in several districts so students could return to classes and achieve some measure of normalcy.

- Other plans created include an ash management plan, debris management procedures, multi-day power outage plan, and the debris flow contingency plan. All of the plans created should be used or incorporated in the next update of the Emergency Operations Plan (EOP).

The County will benefit greatly from capturing lessons learned through the development of these and other plans, processes, and procedures to support future response activities.

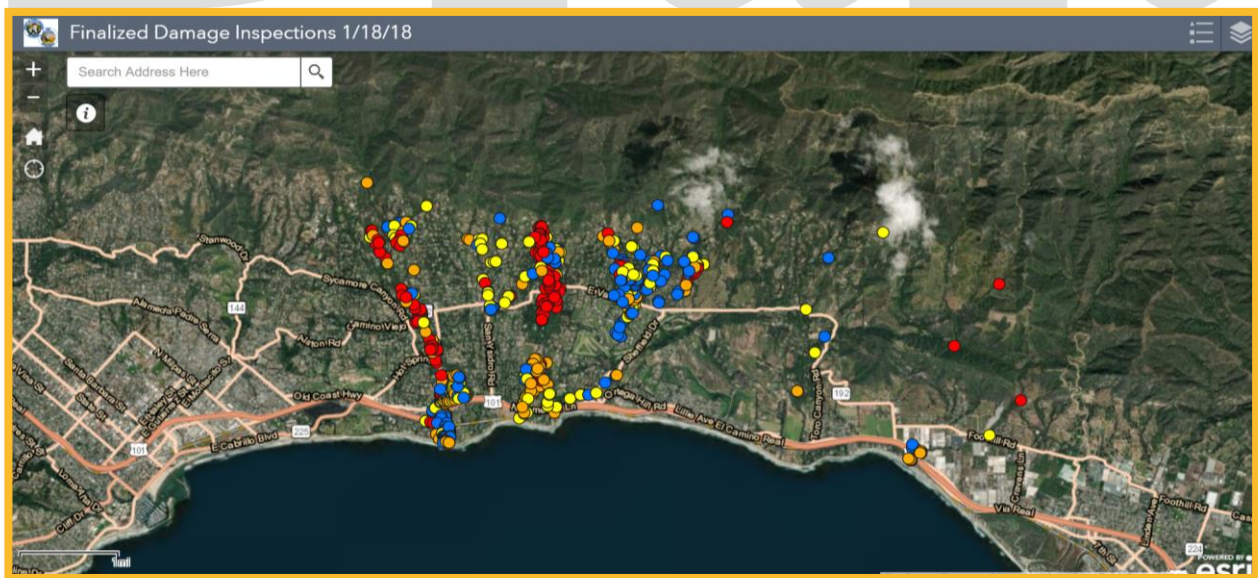
As a result of your response, please identify any specific areas needing training and guidance that are not covered in the current SEMS Approved Course of Instruction or SEMS Guidelines.

Not applicable.

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

To date, the County has engaged in significant recovery activities. This includes opening, operation, and closure of a both a LAC and DRC. Estimated total claims filed to date include:

- Public Assistance: \$44,250,956.49
- Hazard Mitigation (Section 406): \$1,200,000
- Hazard Mitigation (Section 404): \$41,750,000



The majority of recovery activities conducted to date are outside of the scope of the *Thomas Fire and 1/9 Debris Flow After-Action Report and Improvement Plan*.

7 Appendix A: Improvement Plan

The following Improvement Plan matrix summarizes the findings and potential modifications identified in this document, with a recommended timeline for execution by the County.

Table 2: Improvement Plan Matrix

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|------------|---|---|---|
| Planning | Assemble the decision-making process for debris flow evacuation into one document. | OEM, Public Safety Partners | Immediate (Prior to Winter Storm Season of 2018-19) |
| Planning | Streamline emergency public information communications procedures to ensure rapid and timely release of information from the JIC. Continue planning efforts to support information dissemination across multiple communication platforms and through channels not tied to web-based communication, with considerations for accessibility for non-English speaking populations and individuals with disabilities or others with access and functional needs. Establish an Alert and Warning Desk in the Planning Section or JIC to streamline alert and warning functions. | County Communication, City Partners | Immediate (Prior to Winter Storm Season of 2018-19) |
| Training | Provide training to relevant personnel (County, local, voluntary agency) focused on call center operations. | OEM, Behavioral Wellness, GS/ITC, Sheriff | Immediate (Prior to Winter Storm Season of 2018-19) |
| Training | Provide training to County personnel supporting the JIC on guidelines for written communication, including personnel supporting Spanish translation. | County Communication | Immediate (Prior to Winter Storm Season of 2018-19) |
| Equipment | Determine and implement an online document repository for resource request forms in the absence of a web-based incident management system. | OEM | Immediate (Prior to Winter Storm Season of 2018-19) |
| Facilities | Ensure space provided for personnel within the EOC is sufficient for individuals using wheelchairs or other assistive devices. | GS, OEM | Immediate (Prior to Winter Storm Season of 2018-19) |
| Personnel | Engage volunteer agencies to support staffing at LAC/DRC. | OEM, VOAD | 2018-19 |
| Personnel | Assess mental health and medical resources available within the County to support the EOC, evacuation shelters, and LAC/DRC. Determine what crisis counseling and spiritual care services will be offered at the LAC/DRC. Determine what EOC activation level will require a separately designated County Behavioral Wellness lead in the EOC. Develop a plan to support overall health in the EOC, with considerations for mental health and overall wellness. | Behavioral Wellness, VOAD | 2018-19 |

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|-----------|--|--|-----------------------------------|
| Personnel | Implement a formal program for debriefing EOC personnel at shift change, including provision of mental health support for staff when the incident resulted in fatalities. | Behavioral Wellness | 2018-19 |
| Planning | Develop a standard operating procedure or guide book, based on resources used or created during the incident, to support establishment of future call centers. Include thresholds, in alignment with EOC activation levels, for establishment of a call center to support response and recovery activities. | OEM, County Communication, Sheriff, Behavioral Wellness | 2019 |
| Planning | Review and determine whether there are changes necessary to Chapter 12 – Emergency Management of the Santa Barbara County Code of Ordinances, and if so, complete for approval by the Board of Supervisors. | OEM, County Counsel | 2019 |
| Planning | Ensure pre-coordination of legal review as outlined in plans, policies, and procedures to ensure proper contracting for response and recovery support. | OEM, County Counsel | 2019 |
| Personnel | Consider developing an inventory of County personnel knowledge, skills, and capabilities to better support staffing within the EOC and other functions (e.g. call center, LAC, DRC) during response and recovery. Develop staffing plans to ensure appropriate language translation support is provided within the JIC and within the call center. | Human Resources; County Communication; Behavioral Wellness | 2019 |
| Equipment | Add a reliable and secure GIS data storage device capable of being accessed from both the field, at department operations centers (DOCs), and at all Operational Area EOCs. | OEM GIS, County GIS Team | 2019 |
| Planning | Develop guidelines for activation and operation of all County-owned generators and ensure guidelines are stored both within the EOC and directly with generators. | GS | 2019 |
| Personnel | Establish a standard emergency worker lodging procedure to include standard agreements, rates, sign-in processes, and payment. Consider identifying and staffing a Lodging Unit Coordinator within the Supply/Procurement Unit. | GS, OEM | 2019 |
| Equipment | Develop pre-event contracts, in alignment federal procurement requirements, to support efficient resource requests and procurement during and following disasters. Develop standby contracts with transportation providers for use in future emergencies. | GS | 2019 |
| Planning | Review and revise local purchasing regulations to ensure appropriate application of rules associated with use of County purchasing cards. | OEM, General Services, Auditor-Controller | 2019 |
| Equipment | Determine and implement a document repository for financial documents in the absence of a web-based incident management system. Continue to explore and/or develop web-based ICS forms to ensure appropriate documentation of personnel hours and resource use for cost recovery. | GS/ICT, Auditor, CEO | 2019 |
| Equipment | Ensure the call center equipment and standard operating procedures outline that the phones should be setup to “popcorn” from one person to another in order to evenly distribute incoming calls. | GS/ITC, OEM | 2019 (First Phase Complete) |

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|------------|---|--|-----------------------------------|
| Planning | Execute a staffing analysis to determine requirements for support at each level of EOC activation and, where possible, pre-identify personnel to support staffing plans based on activation levels. Implement a formalized process for staff briefings at the EOC both for staff coming on to shifts as well as for all personnel following Management Section meetings. | OEM | 2019 (Part of EOP Update) |
| Training | Provide annual training on evacuation processes and terminology so that it is understood by all first responders. Incorporate training on alert and notification policies and procedures. | OEM | 2019 (Part of EOC Team Training) |
| Planning | Formalize emergency transportation plans, policies, and procedures to support both movement of County personnel and movement of the affected population, with specific consideration for transportation support for individuals with disabilities and others with access and functional needs. | OEM, SBCAG, PW, CHP, PH, Social Services, VOAD | 2019 (Part of EOP Update) |
| Planning | Develop a tiered re-entry protocol which accounts for response personnel, essential functions, major companies and employers, and other organizations vital to the return of the evacuated population while balancing the need to execute life safety and debris management operations. | Sheriff, OEM | 2019 (Part of EOP Update) |
| Equipment | Consider incident management software solutions to support information sharing within the EOC. | OEM | 2019-20 |
| Equipment | Equip the EOC so it is prepared to provide care and sheltering for disaster service workers on-site during emergency activations with specific considerations for sustained activation for more than a two-week period. Assess and procure equipment for use in the EOC as sleeping quarters (e.g. murphy beds, reclining chairs, sleeping trailer). Designate a separate space for mental health services within the EOC or in a trailer onsite. | OEM, GS, CEO | 2019-20 |
| Equipment | Assess and procure additional equipment to support information sharing within the JIC, such as smart boards and/or writable paint for wall surfaces. | OEM, GS/ITC, GS | 2019-20 |
| Facilities | Determine if expansions/modifications to the EOC are required to support activation and operations for a sustained period of time. Consider whether additional dedicated space is provided within the EOC for GIS personnel. Determine if additional improvements need to be made to the County EOC to accommodate a call center. | GS, GS/ITC, OEM, CEO | 2019-20 |
| Planning | Establish a local authoritative source for data specific to home damage and classifications to address differences in the damage assessment processes and classifications between the County, Cal Fire, and the Federal Emergency Management Agency. | OEM, Fire, Cal OES, FEMA | 2019-2020 |
| Planning | Create and streamline processes to support purchasing for mutual aid assets. | OEM | 2019-2020 |

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|-----------|---|--|-----------------------------------|
| Planning | Develop a pre-disaster recovery plan and a cost recovery plan. Include a revised debris management plan. Collaborate with stakeholders across the Operational Area to revise debris management plans and pre-identify debris management sites. | OEM, PW, Flood, Planning, RR&WM, OEM, City Partners, Jurisdictional Waste Agencies; VOAD | 2020 |
| Training | Continue to promote NIMS training for all disaster service workers in alignment with the County-developed <i>NIMS Based Training Guidance Matrix for Santa Barbara County Employees, EOC Team Members, and Board of Supervisors</i> . Identify and implement a centralized tracking system for completed NIMS training certificates for disaster service workers. | OEM, PW, Flood, Planning | 2020 |
| Planning | Collaborate with state and federal partners to formalize plans associated with LAC/DRC centers. Enumerate LAC procedures in a formal LAC or standard operating procedure. | OEM, VOAD, State OES, FEMA | 2020 |
| Training | Continue to provide quarterly EOC training to personnel identified to support staffing plans, including County personnel, local partners, and voluntary agency partners. Consider offering advanced training to pre-identified disaster service workers for leadership positions within the EOC. Identify whether training on Advance Planning is available and, if so, provide this training to designated individuals. Consider methods to provide just-in-time training and orientation to personnel supporting EOC and the JIC. | OEM | Ongoing |
| Training | Provide training to EOC personnel on guidelines associated with cost recovery to maximize reimbursement under state and federal regulations. Provide specific training to Finance Section personnel on completion of personnel and equipment record keeping supporting cost capture and audit. | OEM | Ongoing |
| Training | Hold a joint workshop with Finance and Logistics personnel on emergency procurement, purchasing, resource ordering and tracking, and personnel and equipment time keeping. Provide advanced training to personnel identified to serve as a Recovery Unit Leader. | OEM | Ongoing |
| Planning | Continue efforts to engage media in incident specific emergency public information sharing, including local and regional radio. | OEM, Sheriff PIO, Fire PIO | Ongoing |
| Personnel | Improve relationships between local emergency managers within the Operational Area and the County OEM to develop mutual understanding of each other's needs and how to offer support during response and recovery operations. Collaborate with local governments across the Operational Area to embed local personnel in a Liaison position within the EOC. | OEM, City Partners, Districts | Ongoing |

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|------------|---|--|-----------------------------------|
| Training | Continue to provide Agency Representative training to supporting agencies. Incorporate and provide mental health training, including Self Care for Disasters training. Provide additional training to voluntary agency personnel who will be assigned to the EOC and recovery leadership. | OEM, VOAD, Behavioral Wellness | Ongoing |
| Facilities | Leveraging a pre-established criterion, collaborate with logistics personnel to pre-identify facilities to be used as evacuation shelters and LAC/DRC that meet minimum standards. | OEM, Communication, GS, Social Services, Red Cross | Ongoing |
| Training | Continue to provide GIS emergency map training to relevant personnel and teams. | OEM GIS | Ongoing |
| Training | Provide training to EOC personnel on the resource request process, including use of ICS Form 213 RR. Provide training to support the EMMA request process, with emphasis on how the process is supposed to work and how to submit a complete request. | GS/OEM | Ongoing |
| Planning | Continue efforts to participate in local and regional planning to standardize evacuation terminology and provide local education to the general public. Specifically work toward the goal of having an agreed terminology with Operational Area partners and adjoining counties. | Sheriff, Fire, OEM | Completed |
| Planning | Consider establishing ReadySBC as the authoritative source of public information and, as appropriate, leverage the website in future incidents to share emergency public information along with social media and other resources. | County Communication | Completed |
| Personnel | Include a Call Center Manager position the EOC organizational chart under the PIO. | OEM | Completed |
| Equipment | Determine what tool (Google Maps, ArcGIS, Others) will be used to support incident-specific public information for hazards and associated evacuation zones. | OEM | Completed |
| Equipment | Ensure information technology system continuity and redundancy for County-wide websites with a specific focus on redundancy for authoritative information sources (e.g. ReadySBC). | GS/ITC | Completed |
| Facilities | Consider the placement of local government representatives within the EOC to better support collaboration with the County OEM. | OEM, City Partners, Districts | Completed |
| Planning | Review and revise mass care plans and strategies with the American Red Cross to ensure coordination between each shelter location and the EOC. Assign a County liaison to the shelter when opened. | Social Services, OEM | Completed |
| Planning | Continue efforts of the County-wide GIS working group to coordinate databases and improve the overall quality of GIS maps. Ensure procedures within the EOC are streamlined and enforced to support requests for GIS maps, including use of ICS forms to process requests (e.g. ICS Form 213). Continue efforts to pre-identify and prepare commonly requested GIS maps for use within the EOC. | OEM GIS | Completed |

| Area | Potential Modification | Lead Agencies | Estimated Timeline for Completion |
|-----------|--|---------------------------|-----------------------------------|
| Planning | Consider developing an inventory and associated GIS map of County-wide cultural assets in order to ensure protection of those assets during response and recovery operations. | OEM GIS | Completed |
| Planning | Coordinate with the PIO to confirm workflows for review, approval, and release of GIS products to support emergency public information and warning. | County Communication, OEM | Completed |
| Personnel | Appoint a Recovery Unit Leader early in the incident. Identify and staff additional dedicated personnel to support recovery operations, ensuring there is adequate staffing in the EOC for financial document processing and collection. | CEO | Completed |
| Personnel | Consider hiring a resource to provide dedicated GIS mapping support to the County OEM. | OEM | Completed |

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8 Appendix B: Acronyms and Abbreviations

Table 3: Acronym and Abbreviation Descriptions

| Acronym/Abbreviation | Meaning |
|----------------------|---|
| AAR | After-Action Report |
| BAER | United States Forest Service Burned Area Emergency Response |
| CERT | Community Emergency Response Team |
| DOC | Department Operations Center |
| DRC | Disaster Recovery Center |
| EOC | Emergency Operations Center |
| FAC | Family Assistance Center |
| GIS | Geographic Information Systems |
| HSEEP | Department of Homeland Security Exercise and Evaluation Program |
| ICS | Incident Command System |
| IMT | Incident Management Team |
| JIC | Joint Information Center |
| LAC | Local Assistance Center |
| NGO | Non-Governmental Organization |
| NIMS | National Incident Management System |
| NOAA | National Oceanic and Atmospheric Administration |
| NWS | National Weather Service |
| PIO | Public Information Officer |
| SEMS | Standardized Emergency Management System |
| VOAD | Voluntary Organizations Active in Disasters |
| WEA | Wireless Emergency Alert |
| WERT | California Watershed Emergency Response Team |