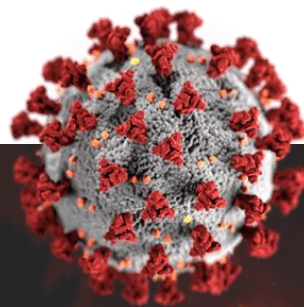# Monterey County
COVID 19 / EOC Activation
Assessment Report
July 13, 2021

TETRA TECH

Monterey County COVID-19 / EOC Activation Assessment Report

Prepared for:
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INTRODUCTION

The year 2020 started like so many others. Within a few months that normal changed in ways no one could have predicted. The COVID-19 crisis erupted in ways no one could have anticipated or expected. What ensued was a global pandemic that continues to the present. Monterey County, as with many other California counties, activated it Emergency Operations Center (EOC) to manage the situation.

As the year progressed, California saw its worst year for wildfires in area burned at nearly 4.2 million acres.[1] During the year Monterey County deployed resources in response to the River, Dolan, Carmel, and Coleman Fires in various parts of the county.

In addition to these significant incidents, unseasonably high temperatures coupled with possible Public Safety Power Shutdowns (PSPS) added to the mixture of situations facing Monterey County leaders and officials to manage.

This Assessment Report attempted to capture feedback from participants, review data, and deliver appropriate findings and recommendations.

ACKNOWLEDGEMENT

Tetra Tech would like to acknowledge all the individuals who participated in the process of providing feedback for the Assessment Report and contributions for the Improvement Plan. Their input provided the useful responses and comments that will help with future incident responses.

COUNTY PROFILE

Monterey County lies just south of Monterey Bay along the central California coast. It is bordered by Santa Cruz County to the north and San Luis Obispo County to the South. To the east it borders San Benito, Merced, and Kings Counties, and to the west is the Pacific Ocean. The total land area is 3,281 square miles.

The majority of the county's population lies along CA Highway 1 on the western portion. California Department of Finance lists the County's 2020 population as 441,143.[2]

Major communities include these cities and towns:

- Carmel-by-the-Sea
- Del Rey Oaks
- Gonzales
- Greenfield
- King City
- Marina
- Monterey
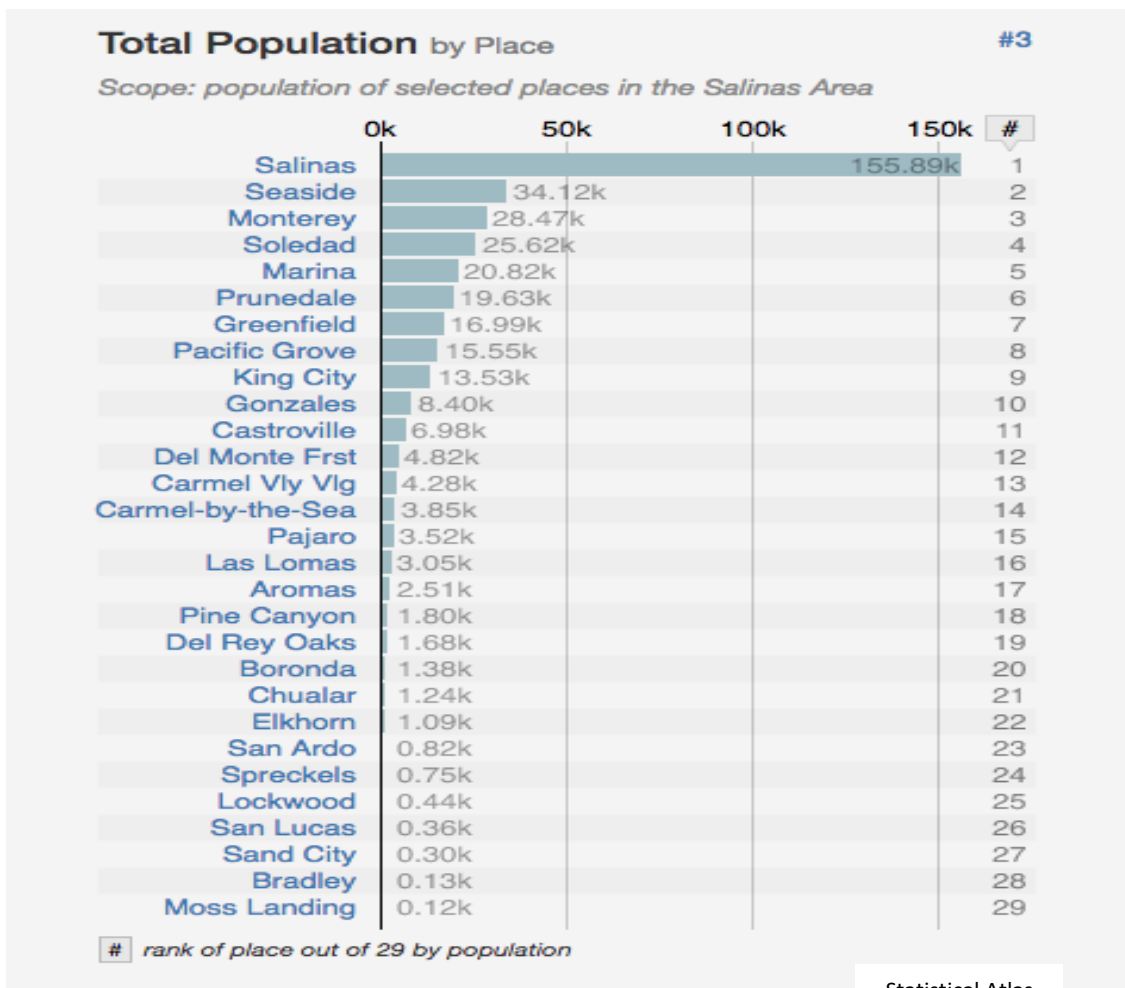- Pacific Grove
- Salinas
- Sand City
- Seaside
- Soledad

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[1] CA Fire 2020 Incidents
[2] CA Dept of Finance - Population

There are also a number of notable communities and neighborhoods scattered throughout the county.

|		
Ambler Park	Gorda	Post
Aromas	Jamesburg	Prunedale
Big Sur Village	Jolon	Robles del Rio
Boronda	Las Lomas	San Ardo
Bradley	Lockwood	San Benancio
Bryson	Moss Landing	Slates Hot Springs
Carmel Highlands	Notley Landing	Springtown
Carmel Valley Village	Pacific Grove Acres	San Lucas
Castroville	Parkfield	Spreckles
Chualar	Pajaro	Sycamore Flat
Corral de Tierra	Pebble Beach	Tassajara Hot Springs
Del Monte Forest	Pine Canyon	White Rock
Elkhorn	Plaskett	

Total Population by Place #3

Scope: population of selected places in the Salinas Area

Place	Population	# (rank)
Salinas	155.89k	1
Seaside	34.12k	2
Monterey	28.47k	3
Soledad	25.62k	4
Marina	20.82k	5
Prunedale	19.63k	6
Greenfield	16.99k	7
Pacific Grove	15.55k	8
King City	13.53k	9
Gonzales	8.40k	10
Castroville	6.98k	11
Del Monte Frst	4.82k	12
Carmel Vly Vlg	4.28k	13
Carmel-by-the-Sea	3.85k	14
Pajaro	3.52k	15
Las Lomas	3.05k	16
Aromas	2.51k	17
Pine Canyon	1.80k	18
Del Rey Oaks	1.68k	19
Boronda	1.38k	20
Chualar	1.24k	21
Elkhorn	1.09k	22
San Ardo	0.82k	23
Spreckels	0.75k	24
Lockwood	0.44k	25
San Lucas	0.36k	26
Sand City	0.30k	27
Bradley	0.13k	28
Moss Landing	0.12k	29

rank of place out of 29 by population

Statistical Atlas

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The county enjoys a Mediterranean climate along the coast with higher temperatures inland and has a mixture of geography and environments from inland areas to seashore to suburban cities and towns.

Monterey County has two main north-south transportation arteries -- U.S. 101 and CA Hwy 1. There are a few east-west corridors in the northern part of the county; however, because of coastal range mountains and preserves, there are limited east-west roadways in the middle and southern portions of the county.
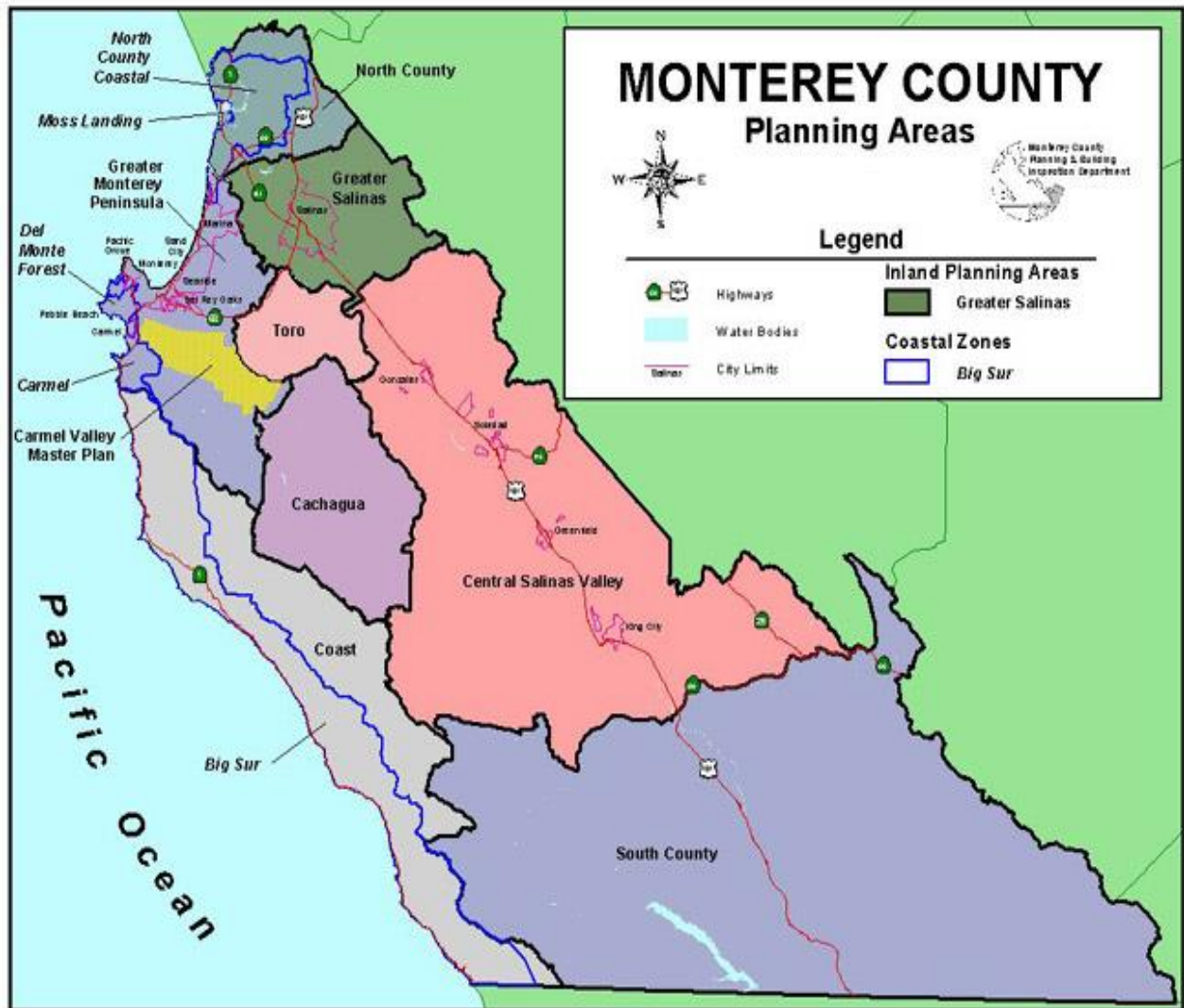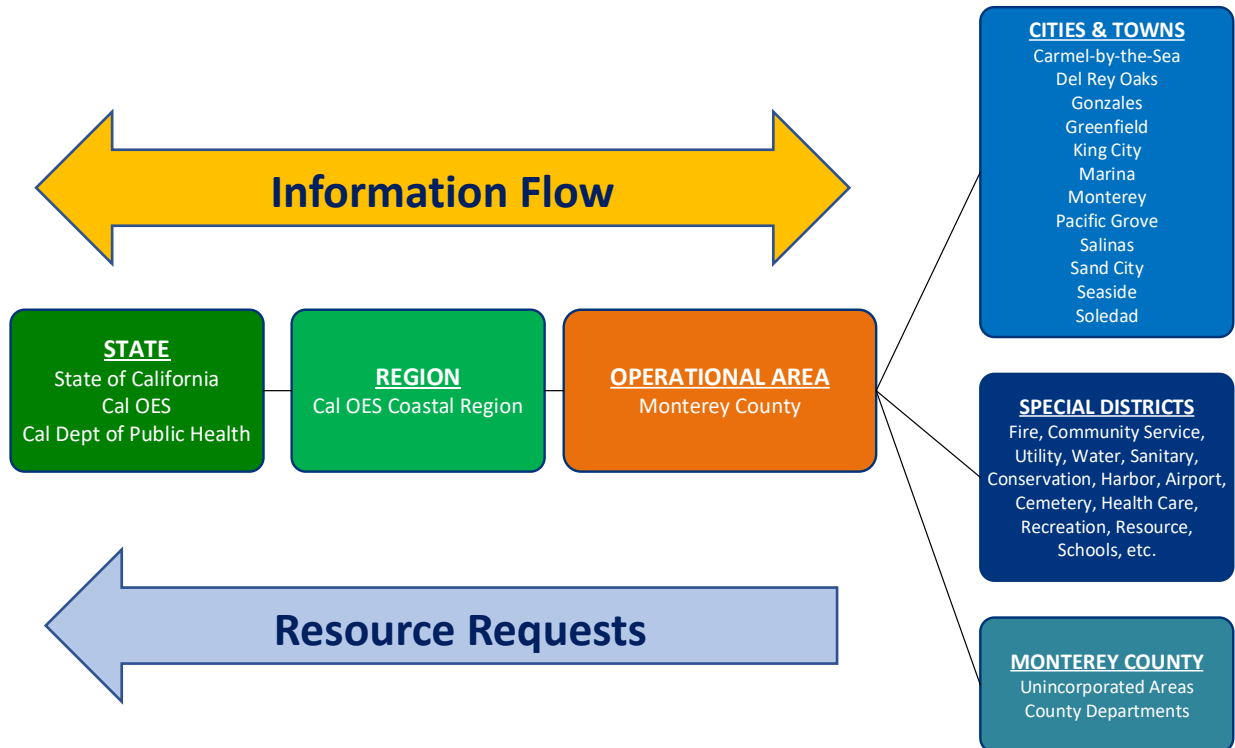
COUNTY SERVICES

Emergency Management

Monterey County has adopted and utilizes the National Incident Management System (NIMS), Incident Command System (ICS) and Standardized Emergency Management Systems (SEMS). As a SEMS participant, the County acts as Operational Area that includes all local governments, both municipal and special districts. The Office of Emergency Services (OES) manages Operational Area activities and oversees unincorporated efforts.

Information Flow

STATE
State of California
Cal OES
Cal Dept of Public Health

REGION
Cal OES Coastal Region

OPERATIONAL AREA
Monterey County

Resource Requests

CITIES & TOWNS
Carmel-by-the-Sea
Del Rey Oaks
Gonzales
Greenfield
King City
Marina
Monterey
Pacific Grove
Salinas
Sand City
Seaside
Soledad

SPECIAL DISTRICTS
Fire, Community Service, Utility, Water, Sanitary, Conservation, Harbor, Airport, Cemetery, Health Care, Recreation, Resource, Schools, etc.

MONTEREY COUNTY
Unincorporated Areas
County Departments

NIMS serves as standardized approach for incident management that was established following 9/11 by the Department of Homeland Security from Homeland Security Presidential Directive 5.[3] NIMS defines operational systems that guide how personnel work together during incidents. It provides common vocabulary and a coordination for the all levels of government, non-government organizations and the private sector to work together to prevent, protect against, mitigate, respond to, and recover from incidents.

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[3] Homeland Security Presidential Directive 5

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Fire Service

Monterey County encompasses various fire response areas. Fire service throughout the county is provided by agencies – municipal, special district, and state agencies - with most stations in the most populated areas. Fire response mutual aid exists within the county and statewide as part of the California Fire Service and Rescue Emergency Mutual Aid System Mutual Aid Plan (2019).[4]

Health Services

Health services throughout the county are overseen and managed at the County level through the Department of Health. The Department has more than 500 employees serving various programs at multiple locations and is divided into seven bureaus:

- Administration
- Behavioral Health
- Clinic Services
- Emergency Medical Services (EMS) Agency
- Environmental Health
- Public Health
- Public Administration / Public Guardian

Public Health encompasses a wide aspects of health care including:

- Children's Medical Services
- Communicable Disease Prevention and Control
- Public Health Library
- Women's, Infants, and Children's Program
- Nutrition Services
- Regional Health Teams

PROJECT

Background

Monterey County activated its EOC February 27, 2020, to manage the growing pandemic (COVID-19) crisis. The number of cases continued to increase during 2020. With the introduction of vaccines in 2021, the number of cases has declined.[5] A significant number of Monterey County and cities and town staff members have been involved managing, supporting, or assisting the various responses.

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[4] CA Fire Mutual Aid System
[5] Monterey County COVID Demographics

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In addition to the pandemic situation and response, the County was further challenged by the number of wildfires in the eastern part of the county.[6]

Fire	Acres Burned	Date Started	Percent Contained
River	48,088	August 16, 2020	100%
Dolan	124,924	August 18, 2020	98%
Coleman	574	October 18, 2020	98%

Unseasonable temperatures occurred in late summer. The increased temperatures coupled with high wind warnings prompted Pacific Gas and Electric (PG&E) to issue several PSPS throughout much of Northern California.

In January 2021, the EOC was further stretched to manage an Atmospheric River situation. Atmospheric rivers, also known as tropical plumes or water vapor surge and sometimes associated with the term Pineapple Express, contain a significant amount of concentrated water vapor and can deliver a substantial amount of rain in a short time period. These storms can cause noteworthy flooding and other issues and can contribute to landslides especially in recent wildfire areas.

Context

The County engaged Tetra Tech, Inc. (Tetra Tech) to deliver an operational assessment related to the EOC activation for COVID-19, county wildfires, and other incidents and develop an improvement plan with an intent of planning for future incidents.

Scope

The scope of the project was to assess the EOC activation and response during the COVID-19 pandemic crisis, various wildfires, and other incidents looking at the specific focus areas listed below during the time period of mid-July to September 1, 2020 and draft an assessment report and develop an improvement plan.

1. Operational Coordination
2. PIO Operations and Public Warnings
3. Emergency Operations Center functions
4. Management Operations (County and EOC)

Assessment

Assessment is an important industry practice to review, evaluate, and improve capabilities. The assessment plan was to review data and documents related to the EOC activation, solicit feedback from participants, and evaluate the information. A primary objective of this process is improvement – "how can we do better". The purpose was not to point fingers, single out individuals, or criticize but rather explore ways to improve.

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[6] Monterey County 2020 Wildfires

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A prime focus in the assessment was looking at two question:

- Are we doing things right?
- Are we doing the right things?

OES staff identified 37 participants who were, at some level, involved with the activation. The participants were grouped into seven areas:

1. EOC Staff
2. Health
3. EMS
4. Social Services
5. PIO
6. Leadership
7. Other

Interactive assessment included a survey and interview process. The objective was to capture feedback in multiple ways – the survey asked specific questions with numbered options for answers. The questions were designed to encompass the four focus areas. In contrast, interviews were designed to be more casual and interactive with the participant. This dynamic permitted a conversation between interviewer and participant rather than just answering a list of question with numbered answers. The intention was to gain a different perspective on the EOC activation.

Survey – Tetra Tech developed a draft survey based upon the five focus areas to solicit feedback from the identified list of participants. The survey was reviewed and edited by County OES staff. Once finalized and approved by County OES, the survey was sent to the list of participants. The questions were written to capture a comprehensive picture form various angles in an attempt to solicit feedback surrounding the four focus areas. Survey questions were more direct offering specific reply options in contrast to the interview process which was more casual allowing participants to converse freely. Below are sample survey questions.

While names were collected from surveys in order to track who responded, no answer or response has been associated with any participant'

Questions from the survey included (from Operational Coordination):

1. How would you rate the inter-department and inter-agency coordination (Operational Coordination) that has taken place so far between the agencies in the EOC?
   a. Excellent
   b. Above average
   c. Average – similar to past responses
   d. Below average
   e. Poor
   f. Other (please explain)
2. How would you rate the coordination between the EOC and field units?
   a. Excellent

b. Above average
c. Average – similar to past responses
d. Below average
e. Poor
f. Other (please explain)

3. What would improve coordination between agencies involved in the response? (check all that apply)
   a. Clearer directions and understanding shared between EOC and Management Section
   b. Implementation of a Policy Group comprised of leadership from the involved departments
   c. Improved intelligence/information from the field
   d. Clearer communication between the EOC Section Coordinator and Section Staff
   e. Increased interaction among EOC Sections
   f. More EOC Section Coordinator meetings
   g. Fewer EOC Section Coordinator meetings and/or updates
   h. Development of clearer operational goals and objectives
   i. Development of a written Public Health Emergency Action Plan (EAP) that coordinates with the EOC EAP
   j. Clear communication and direction between the EOC and Health DOC field activities

Questions from the survey included (from EOC Functionality):

1. Overall, the county's response to the COVID-19 crisis has been?
   a. Excellent
   b. Above average
   c. Average – similar to past responses
   d. Below average
   e. Poor
   f. Other (please explain)

2. Thinking about best practices and things that went well the EOC as a whole, please check all that apply.
   a. Administration and management clearly communicated operational goals and objectives to the EOC staff
   b. EOC staff clearly communicated status and unmet need between Sections
   c. EOC staff understood their roles and responsibilities and were able to effectively implement tasks
   d. EOC staff had the necessary training and authorities to carry out their roles and responsibilities
   e. There was sufficient staffing available to accomplish tasks assigned by EOC management
   f. Staff was supplied with necessary tools, equipment, and supplies necessary to carry out their roles and responsibilities
   g. Coordination with the State was frequent, and information was shared in a manner that was actionable and clear

3. Thinking about potential improvements for the EOC operations, please check all that apply.
   a. Clearer communication of expectations from Administration would make it easier for EOC staff to carry out assigned tasks
   b. Clearer communication between EOC staff members would streamline operations
   c. Updated technology or access to additional technology would increase productivity
   d. Decreasing the number of staff in the EOC would increase productivity

4. Thinking about layout, conditions, and staffing of the EOC please check all that apply.
   a. The EOC layout provided adequate space for all staff members to operate

b. The EOC space was cramped and did not provide adequate space for staff members to operate
c. The EOC was close to necessary facilities for self-care and hygiene
d. The EOC was too far from necessary facilities for self-care and hygiene
e. The food and beverage options provided were healthy and met the needs and requirements of EOC staff
f. The food and beverage options were not adequate for the needs and requirements of the EOC staff
g. EOC staff were encourages to take breaks and provided opportunities for self-care
h. EOC staff were not provided adequate time to take breaks or opportunities for self-care
i. EOC staff felt supported, encouraged, appreciated and/or validated by EOC management and section leads
j. EOC staff did not feel supported, encouraged, appreciated, and/or validated by EOC management and section leads

Interviews – Participants were contacted by the Tetra Tech project team members and asked to participate in an interview. In order to allow participants a less structured setting than the survey, interviews were more casual and comfortable allowing the participant to dialogue with the Tetra Tech project team member. This dialogue format permitted the participant to talk more openly and feely and provide feedback and information, including information that the survey may not have addressed. Participants were able to be more specific versus the limited opportunity for details in a survey. This format allowed for follow-up questions or soliciting additional information whereas a survey had limited answers.

Interviewers asked some questions that prompted conversation and comments based upon a participant's role. Examples of standard questions included:

- "Before we get to the questions, is there anything you want to say /talk about first?"
    - Many participants took this opportunity to open up and share comments, observations, and feedback before even being asked the first question.

Followed by

- "What went right?"
- "What did we do right?"
- "What should we emphasize, repeat, or build on for next time?"
- "What didn't go right?"
- "What should we not repeat or not do next time?"

Depending on the flow of the conversation, the interviewer may have picked-up on an answer and said, "would you like to expand on that comment or tell me more about that" or "I'm not sure I understand, could you explain." Often there were follow-up questions, such as: "could you be more specific about that situation", "when you say it wasn't working, what do you mean", "what would see as a fix to that problem", "what would have worked better", "why was that a problem for you", "what did you do to try and remedy the issue", "did you said anything to anybody about it", and "that was a good idea or suggestion, did you mention it to someone". Moreover, based on the participant's role or

position (e.g. EOC staff member (logistics, operations, finance, planning, overhead) or county cooperative), additional related or specific questions may have been asked. Interview times ranged from 10 to 45 minutes depending on what the participant wanted to say.

In order to solicit honest and frank feedback, both the survey and interview were conducted with anonymity. Names have not been associated with any comments or answers.

The number of participants provided was 37; 28 people took the survey and 37 responded request for telephone interviews.
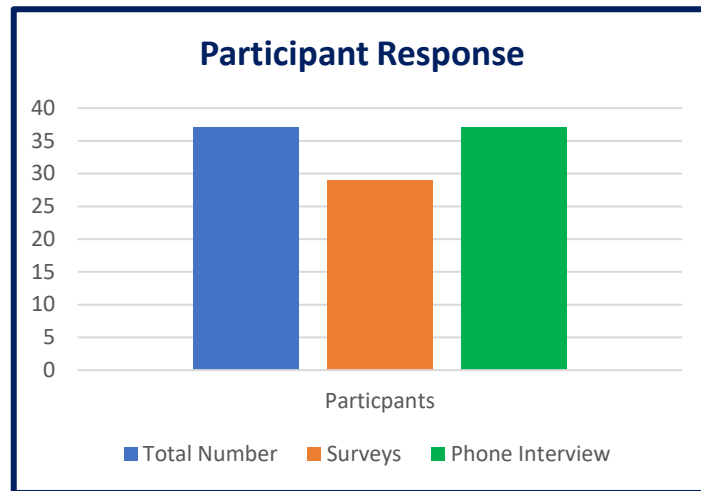
Below is a chart that lists feedback based upon OES's grouping of participants:
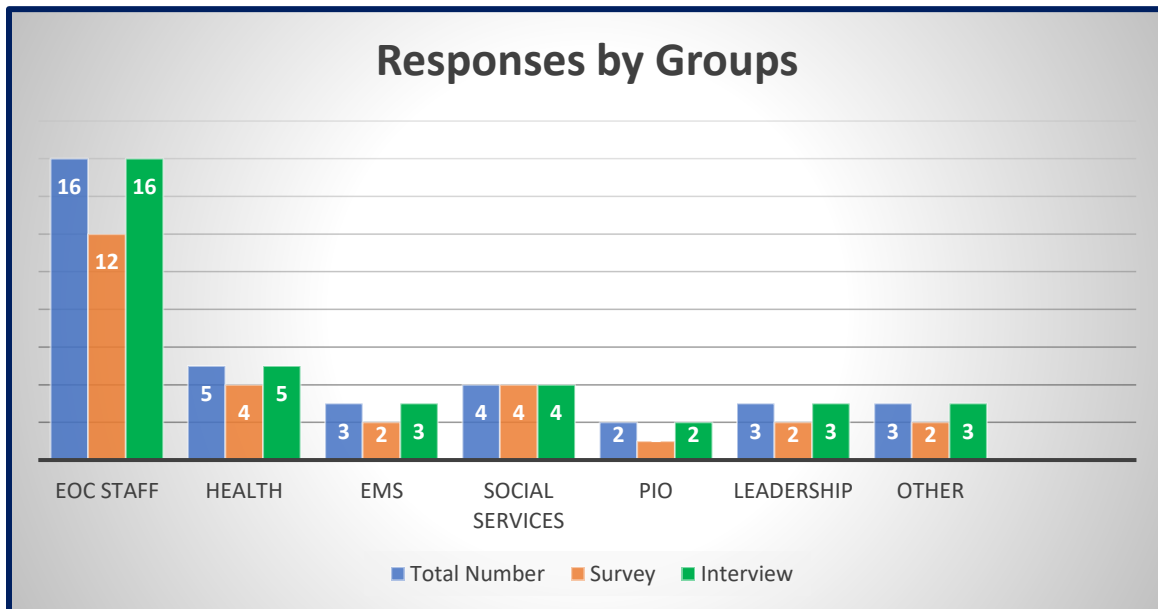
SUMMARY

Emergency managers, including those in Monterey County, draft plans, procedures, and policies, prepare for and conducted trainings and exercises based on the most likely scenarios. Common scenarios include ones such as earthquakes, floods, slides, winter storms, excessive heat, power shutdowns, and wildfire. Monterey County has experiences some of these in the past several years.

While the United States has experienced pandemics in the past, few people, if any, would have predicted the current one and for it to be as widespread and long lasting – even continuing to the present.

In the early days of the crisis, understanding the disease, its cause and transmission, prevention, and appropriate treatments were occurring simultaneously. With no recent history or experience for pandemics of this magnitude, officials rapidly formulated plans to protect responders, assist infected residents and set up care and testing sites. The EOC was activated and coupled with Public Health staff to collaborate efforts with efficiency and effectiveness

Management, coordination, and response efforts were challenged, sometimes daily, because of new information, findings, procedures, and protocols. Directions from the state or federal government would occasionally require operational modifications. San Francisco Bay Area Health Officers worked together on efforts to be consistent in their approaches and directives throughout the region.

Early in the crisis, public anxiety caused depletion of certain products, cleaning items, and medical related supplies, such as masks and hand sanitizer. In some cases, these depletions or absence of stock resulted in the lack of availability for health care facilities and responders. Since the pandemic has been mainly viral in its transmission, first responders and health care workers faced a greater risk of possible exposure.

Initially the EOC was staffed to address the COVID crisis. However, by late March it became apparent that the close proximity of staff made for less than optimal working conditions. The decision was made to transition to a virtual EOC; a small number of staff continued to be present in the EOC.

While work continued on the pandemic situation, additional incidents erupted – wildfires in more eastern parts of the county. The addition of these incident expanded the EOC's coordination and support role.

 Although the high temperatures and PSPS possibilities added to the work assignments, this Assessment focused mostly on the impact of the COVID crisis and wildland fire responses – multiple simultaneous incidents -- and their bearing on the County EOC and the County's Operational Area role.

FINDINGS FROM INTERVIEWS AND SURVEY

The findings have been derived from survey and interview feedback provided to Tetra Tech project team. There was definite acknowledgement that in addition to the response; planning, preparing for, course correcting, adapting, and more were all occurring simultaneously. All interviews were conducted with anonymity; names have not been assigned to any comments or feedback.

While the survey was structured in its questions and allowed for optional answers, interviews were much more open-ended permitting the individual freedom to express his/her thoughts and feedback. Questions by the project team may have followed-up on a comment made or asking the interviewee to expand on a thought or comment. There were also the general questions – "what went well" and "what didn't go well". Because numerous people provided feedback, perceptions varied. Depending on their role -- County staff, EOC role, city or town staff, volunteer, or field worker – perspectives and perceptions differed. As with comparable evaluations, assessments, or feedback forms people often focus on what did not go well versus what did. The majority of the responses for "Rating the Overall Response" to the situation was "*Above Average"*.

The Tetra Tech Project Team reviewed the surveys and interviews in preparation for this assessment report. A summary of the feedback is provided below.

Perceived Gaps

After reviewing various feedback, comments, and suggestions it seemed that there were some significant apparent gaps:

- Additional and recurring EOC and ICS training and exercise are essential in preparedness for future incidents. Most participants thought additional training would improve their skills and knowledge – especially staff from public health.
- Not all staff who worked in the EOC had received consistent and similar training; additionally, there were people who hadn't received specific training for the position to which they were assigned. Some participants asked the Tetra Tech staff if there is a minimum training requirements to work in the EOC. (we suggested they direct that question to the OES staff).
- Not everybody who was working in the EOC had a clear understanding of the current direction; "first timers" didn't always know what was expected of them. Non-seasoned staff were not familiar with inconsistent workflow during an activation – meaning that sometimes it's [EOC] busy and sometimes it [EOC] isn't.
- Many DSWs reporting to work in the EOC had limited understanding of ICS or of the chain of command.

- There seemed to inconsistent application and implementation of DSW protocols and procedures. The perception was that some DSWs were working lots of hours and others were absent.
- Many DSWs in the County do not understand their responsibility to respond to the EOC or were prevented from responding by their supervisors, managers, or Department Heads.

Using the idea of "how can we do better", these gaps can be remedied by:

1. Ensuring complete and comprehensive training for EOC positions and ensuring that the appropriate person(s) is selected for specific EOC positions
2. Clearly communicating the roles and responsibilities and expectations for EOC staff members and explaining the nature of EOC work patterns
3. Practicing through various types of exercises whether they are for the entire EOC staff of just a section specific one
4. Establishing, educating, and implementing consistent DSW protocols explaining the expectations for all County staff members during major emergencies and disasters; make DSW awareness part of new employee orientation

Positive

Overall participants thought the response went well; "Above Average" was an overall consistent answer to this question in the survey. Given the circumstances, changing conditions, multiple incidents, and more, most people gave OES positive feedback for managing the situation.

Listed below are significant or meaningful comments or feedback.

1. Operational Coordination
2. PIO Operations and Public Warnings
3. Emergency Operations Center functions
4. Management Operations (County and EOC)

Operation Coordination

- Several people said there was minimal impact regarding the addition of additional incidents during the activation
- Good collaboration between Logistics Section and Human Resources

PIO Operations and Public Warning

- While the responses varied regarding who should be the primary voice for emergencies, the most consistent answer was emergency management.
- Additional feedback was that communication should be consistent with past messaging or call out a change or correction from previous messages.

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EOC Functions

- Many people expressed appreciation for having seasoned EOC staff present throughout the activation; their presence was beneficial and reassuring
- The transition from actual EOC staffing to virtual relieved some anxiety among staff members
- Repeated response from the survey – "The food and beverage options provided were healthy and met the needs and requirements of the EOC staff"
- Observation from some is that as the situation progressed, the processes seem to improve (i.e. the flow of the operation seemed to get better)
- Repeated answer from the survey "EOC layout provided adequate space for all staff members to operate".
- While some people mentioned that using Zoom call-in was challenging, many said it was beneficial in order to stay connected.

Management Operations (County and EOC)

- CAO was involved and seemed to have a consistent presence
- OES Director/Manager was present, visible, and accessible.
- Attempts were made to maintain positive moral.

Additional Positive Comments

- Some participant observed the ability of staff to adapt to changing circumstances.
- A few people commented on the resiliency of staff, but also commented that OES Staff was limited and it seemed to be the same people doing most of the work
- Several participants expressed their appreciation to County OES for conducting an assessment report and the opportunity to provide feedback. Even those who made critical comments still said them with the hope of promoting improvement.

Challenges / Constructive Criticism

With all the feedback, including those coupled with frustration and exasperation, people still expressed a wiliness and desire for improvement. As with other situations, this was another opportunity to explore ways to do things better. Additional comments included the sense that the pandemic had intensified everyone's anxiety levels. Because interviews were conducted sometime after the initial escalation of the initial incident and EOC activation, many people commented that their initial anxiety and apprehension levels had started to come back down even though they were still working on COVID-19 issues.

Operation Coordination

- There were multiple expressions of concern for managing a public health crisis when public health officials were absent as involved in the overall management as they should have been.
- Some people, including health officials, talked about the challenges in managing changing directives coming from the federal and state government. Sometimes these directives changed daily.
- Health Dept officials felt there was not enough qualified staff to assign staff to the DOC and EOC.
- Because the incident continued to evolve and change, sometimes daily or even hourly, some people said it was difficult to keep up with the changing efforts and initiatives.
- Numerous comments about making sure participants were staying informed with the most up-to-date information about situations and operational coordination.

EOC Function

- Many people commented that having additional OES staff would have been a significant plus. These [OES] staff members are trained to manage these kind of situations; their experience and knowledge would help "those of us who don't do this very often".
- Having designated EOC Section deputy chiefs would benefit the various section management and coordination – designating what role the chief plays and the responsibilities of the deputy chief.
- Because there was little or no history of integrating public health into the Operations Section, there were questions – "does it belong to the Medical Branch or is its own Branch?" This caused confusion.
- There were multiple comments on the intensity in the EOC compared to past activations – many said it was more tense; some expressed the thought that because of the unknown of COVID-19 there was added stress among staff members.
- Some seasoned EOC staff expressed confusion on whether the public health staff was supporting or directing field operations from the EOC, which linked with the observation by many of the cultural and operations style differences between EOC staff and how Health conducts business.
- Some people thought that health field operations would have been better coordinated/directed from the Health DOC.
- Because of the mix of departments in the EOC, there were various comments about the use of unfamiliar abbreviations and vocabulary.
- Multiple people commented that there were people staffing positions in the EOC who had minimal or no ICS / EOC training; this included public health staff members. Additional concern was expressed because of this lack of training and understanding the need to comply with certain FEMA regulations that might be necessary for reimbursement.

- Multiple people commented that remote (virtual) work brought challenges – internet access, availability, reliability of video conferencing (e.g. Zoom calling), lack of access to resources (usually kept at work), lack of adequate work at home space, and distractions of home life.
- Lots of comments – there was an inconsistency regarding the use of and expectations of DSWs. Comments included – "it seems that the same people keep 'volunteering' and other aren't even here." Expressed perception was that management needs to apply the rules evenly.
- Some mentioned the communication overlap/mishap between Operations and Logistics – "who's in charge of what?"

PIO Operations and Public Warning

- In talking with some of the people interacting with residents and the public thought a centralized distribution / dissemination point of information would have been helpful.
- The lack of a Joint Information Center (JIC) was disadvantageous to disseminating centralized information
- Would implementing a Joint Information Center / Joint Information System provide a more centralized means of disseminating information? This was asked by a few.
- Those involved wanted to ensure that people received information, warnings, etc. in both English and Spanish
- Several expressed concern, about the release of information to the public such that the "release" had to go through multiple layers of Public Health approval before it was able to be released to the public
- Communication tends to be challenge in many situations. Information for responders, staff members, and residents is a necessity.
- A few field staff and those interacting with the public said communication with the community could have been better – the county responded as the county instead of "helping" the community. For example – food but food wasn't always culturally appropriate. This coordination/collaboration could have been better if viewed differently. "If you are looking to help the community, you need to have the community involved in the decisions."

Management Operations (County and EOC)

- Develop roles and responsibilities for Board of Supervisors during emergency situations. Some people respected their support in the EOC while others thought it was a distraction because it took the OES Director away from focusing on his role.
- For larger or sustained operation adding an EOC Deputy Director could augment and support management responsibilities.

Additional Comments by Participants

- Some staff members noted that it was, at times, challenging trying to do EOC work and simultaneously keep up with their regular job responsibilities; this was combined with the ebb and flow of EOC work – some staff were unclear why they needed to be in the EOC when there wasn't work for them to do. A few comments included "can't we go back to our desk and do work and come back to the EOC if they need us."
- Some people commented that there was a perceived lack of cooperation of Human Resources in getting additional staff members to support the situation
- Additional training was needed to provide department staff with an understanding of their roles and responsibilities including multiple simultaneous scenarios
- A few participants expressed concern that the EOC didn't always understand the challenges that field workers faced and felt some lack of appreciation for their work

Recurring Observations from Participants' Feedback

- The unfamiliarity of Public Health staff with EOC operations, ICS awareness, and the need for following certain guidelines
- The lack of Health staff participating in the EOC seemed apparent to many
- Better planning efforts rather than reactionary planning
- More trainings and different type of exercises – more trained EOC staff and more OES staff are needed
- Communication
  - The need for consistent communication EOC for status updates and changes; some people said they were well informed while others said they were not
  - Common survey answer – "clearer communication and directions and understanding between administration and EOC staff"
- Inconsistencies in the application and knowledge of DSW protocols and procedures

EMERGENCY MANAGEMENT INDUSTRY TRENDS

The pandemic incident has had a noticeable impact on the emergency management industry and the way operations have been / are being conducted. Listed below are some apparent findings:

- EOCs were activated in early 2020 with some still being activated. In many cases, this has created unprecedented, sustained operations not previously experienced
- Staffing EOCs has revealed training insufficiencies, especially public health staff in regard to EOC operations and integration into emergency management procedures and FEMA reimbursement requirements

- Emergency management staff members have been assigned additional responsibilities, such as staffing vaccination centers and health care screening centers
- The lack of comprehensive and recurring training and exercises was reflected in EOC operations and functionality
- Having sustained operations showed an insufficient number of staff members trained in EOC operations
- Specifically related to the EOC Planning Section:
  - lack of knowledge or experience in compiling an adequate and complete Emergency Action Plan (EAP)
  - insufficient planning ability to do medium and long-term planning, that is comprehensive and collective, rather than doing reactionary planning

As a results of reviews, some of the improvements that have occurred in the past several months in jurisdictions similar in size and scope to Monterey County have included:

- Increase training and exercises for EOC participants
- Increasing trained EOC staff personnel and moving toward EOC team concept (e.g. red team, white team, blue team)
- Increase in emergency management staffing
- Increase in emergency management funding
- Relocating / redesigning / improving EOC functionality
- Upgrading technology
- Exploring alternative options for EOC operations including remote work
- Reworking the ability to manage sustained operations and/or multiple simultaneous incidents
- Renaming "Office of Emergency Services" to either "Office of Emergency Management" or "Department of Emergency Management"
- Repositioning emergency management on the jurisdiction's organizational chart and move it to a department level, similar to county health or public works or closer to the jurisdiction's executive (e.g. CAO, CEO, county manager, city manager)

Nationwide trends have shown an increased prominence and importance of emergency management roles and responsibilities.

SUGGESTIONS

Tetra Tech's Project Team members have worked both as emergency management practitioners as well as consultants. Building on the concept, "how can we do better", in addition to the recommendations listed in the Improvement Plan, the following suggestions have been developed by the team, are based their experience, and derived from the findings. The following suggested recommendations are offered for your consideration:

- Ensure that information presented at briefings, Section Chief meetings, updates, etc. is communicated to all EOC staff
- Having "to go" bags with useful information and resources for people working from home who are assigned to EOC might prove useful
- Make sure staff members are rotated allowing for breaks and time off – that the same person does not continuously staff the same position for a sustained duration (i.e. EOC positions should have more than one or two people who can staff them)
- Consider creating EOC teams – red, white, blue, or 1, 2, 3 – to ensure coverage; this can prove useful especially during sustained operations
- When delivering media or public briefings, consider having a seasoned PIO in a JIC be the primary voice and utilize subject matter experts from various disciplines within the JIC
- Identify critical /essential EOC position and consider having "3 deep" staffing; ensure that they are trained for those positions – such as PIO, Section Chiefs, Documentation Unit Leader
- Consider developing / updating a progressive multi-year training and exercise plan (MYTEP) that County staff are required to participate in.
- Consider developing a Policy Group - composition could be one of the following or for a sustained countywide issue a mixture of the following:
    - elected officials
    - Department Heads
    - CAO
    - EOC Director
- Facilitate assessment to determine effectiveness of EOC Operations to include
    - EOC efficiency in layout, operations, technology
    - EOC staffing needs
    - OES staffing needs
    - OES funding
    - Operations as an OA EOC and its interactions with municipalities and special districts
- For future health or medical related incidents have more of a presence of related staff in the EOC
- Review and consider implementing items from the recent trends in emergency management for similar size jurisdictions that include but are not limited to:
    - Increasing emergency management staff
    - Increasing emergency management funding
    - Ensuring minimum staff training requirements
    - Assessing capabilities of EOC and looking ahead to future needs
    - Elevate OES or OEM to Department level status
    - Adding grant staff to emergency management staff

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CONCLUSION

Understanding that the COVID-19 flared up in March and responders reacted in a timely manner and that the situation continues through today, participants involved with providing feedback seemed willing and anxious to look for ways to improve the capabilities for responding to future incidents.

While there were multiple incidents and other activities occurring, the EOC seemed capable of managing them. Even though there was little or no experience from which to capture on managing a pandemic of such magnitude, the knowledge and practice of managing past incidents coupled with a seasoned emergency management and seasoned EOC staff proved valuable.

Because the pandemic situation was frequently changing, challenges arose. Trying to plan and prepare for, respond to, manage, course correct, adapt, provide treatment – these all illustrated the difficulties at times.

Monterey County encompasses more than 3,281 square miles with a population of 441,143 people. This can be a challenge with such an expansive area and population spread especially during countywide incidents.

Each EOC activation comes with its positives and challenges. Assessments of activities, processes, procedures, interactions, and more provide learned lessons for improvement.

Overall feedback was that the response was good and consistent was past incidents.

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GLOSSARY

AFN	Access and Functional Needs
Cal OES	California Governor's Office of Emergency Services
CAO	County Administrator Office / County Administrative Officer
CDC	Center for Disease Control and Prevention
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
COOP	Continuity of Operation Plan
DOC	Department Operation Center
DPW	Department of Public Works
DSW	Disaster Service Worker
EAP	Emergency Action Plan (usually in the EOC)
EMS	Emergency Medical Services
EMSA	Emergency Medical Services Authority (CA Health and Human Services Agency)
EOC	Emergency Operation Center
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
HR	Human Resources
IAP	Incident Action Plan (usually in the field)
ICS	Incident Command System
IT	Information Technology
JIC	Joint Information Center
JIS	Joint Information System
MCHD	Monterey County Health Department
MHOAC	Medical Health Operational Area Coordinator
MYTEP	Multiyear Training and Exercise Plan
NIMS	National Incident Management System
OA	Operational Area
OES	Office of Emergency Services
PG&E	Pacific Gas and Electric
PHO	Public Health Officer
PIO	Public Information Officer
POC	Point of Contact
PSPS	Public Safety Power Shutdown
SEMS	Standardize Emergency Management System
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound (goals)
SME	Subject Matter Expert