# Upland Goes Live

Contact: K. Ray

The city of Upland's Emergency Management Program went live to the community in August 2019. The first event the program participated in was the B.O.S.S. network classes. Local community startup businesses participated in free training once a week for 4 weeks. We partnered with B.O.S.S. to speak with business owners about emergency planning for businesses. We also participated in community events such as Station 164 open house, Dogtoberfest and hosted its Emergency Operations Center (EOC) Open House during Shakeout. Members of the community and city employees received information regarding the EOC, emergency preparedness, Shakeout and CERT.

The first module of EOC responders training was conduct after Shakeout. City employees received an introduction to the EOC covering the following topics: EOC setup, how to activate the EOC, EOC activation levels and EOC activation guidelines.

WebEOC Module 2 will be conducted Monday October 28, EOC Section Specific training will be conducted mid-November and City Council EOC training will be conducted November 1.

*EOC launch*

As Upland's Emergency Management Program continues to grow look forward to seeing additional employee training and programs introduced as well as the many preparedness outreach opportunities in the community.

# Grants Update

Contact: Grants Unit

**FY2017 Homeland Security Grant Program**

The subrecipient deadline for all purchases is March 31, 2020. Modification Request No. 5 has been submitted to CalOES and Grants Admin staff will notify subrecipients as soon as their request is approved. All projects should be in the procurement phase. Future modifications should be simple modifications to true-up costs and quantities.

**Deadlines:**

11/5/19 – Next Modification Request Due
1/15/20 – Next Status Report Due

**FY2018 Homeland Security Grant Program**

County OES has notified the subrecipients of their approved projects, which may have varied from the proposed projects submitted. If your project has a hold trigger such as an EHP or Aviation Request, please submit as soon as possible and do not begin spending. Modification Request No. 1 has been submitted and is pending CalOES approval.

**Deadlines:**

11/6/19 – Next Modification Request Due
1/15/20 – Status Report Due

**FY2019 Homeland Security Grant Program**

The grant is in the application phase. All proposed projects have been sent to CalOES and FEMA.

**FY2020 Homeland Security Grant Program**

County OES will be sending out the Call for Projects in November. Proposed projects should be considered now in anticipation of a short deadline.

**Changes:**

- EOC projects no longer require the EOC form.
- Beginning with FY19 HSGP Funds, all subrecipients will be required to submit a Nationwide Cybersecurity Review Assessment. The deadline is 12/5/19.
- Beginning with FY19 HSGP funds, certification Regarding Lobbying Form must be submitted.

**FY2019 Emergency Management Performance Grant**

County OES sent out the Call for Projects and Application Documents on October 7, 2019. The deadline to submit is Wednesday November 6, 2019, by 5:00 pm.

**Changes:**

- The Period of Performance will be 24 months; July 1, 2018 – June 30, 2021, with a new grant being issued every 12 months.
- All EMPG Program-funded personnel, INCLUDING any staff being used for a match, must complete National Incident Management (NIMS) Training and the FEMA Professional Development Series and also must participate in no less than three exercises in the 24-month Period of Performance. Any level of participation is acceptable. Each set of Period of Performance exercises must be unique.
- Fringe Benefits, including the cost of leave (vacation, family-related, sick, or military), holiday, employee insurance, pensions, and unemployment benefit plans are covered and allowable under EMPG.
- Beginning with FY19 EMPG funds, certification Regarding Lobbying Form must be submitted.



# OES Quarterly Report

San Bernardino County Fire, Office of Emergency Services

# Trona Post-Earthquake Geologic Fault Investigation

Contact: M. Wagner

San Bernardino County Fire, Office of Emergency Services (OES) staff, in partnership with Land Use Services, is conducting continuing surveys and monitoring of fault displacement and lateral displacement caused by the July Earthquake Sequence in the Searles Valley – Indian Wells Valley area.

Miles Wagner, Emergency Services Officer, and Frank Jordan, County Geologist, recognized the need for detailed mapping of the Trona area fault ruptures. Creeping motions and widely distributed fracture zones were observed throughout the northern Searles Valley area in addition to sand boils and lateral ground spreading occurring from ground liquefaction. These patterns were roughly aligned with damaged and destroyed properties, damaged road surfaces, and broken underground utilities.

Using a combination of known fault lines, inferred possible fault locations, information provided by aerial and satellite reconnaissance, and field reports an area survey was conducted. Locations for the first survey were chosen after studying available data.

The first faulting observed was on Trona Road in the West End area on the Saturday after the 7.1 event. A noticeable vertical tenting raised the road several inches, creating a definite traffic hazard. This fault is directly north of the County Public Works Yard with mapping showing the fault displacement continues under the Yards parking lot. This fault was not shown on any USGS or CGS preliminary map.

August 3, 2019 Survey

The first survey was in the western Searles Valley east of Trona Road on August 3, 2019. Shortly after starting east on Pinnacle Road the first fracture zone was discovered. This zone was several miles west of any expected ground motion. After mapping this area was tentatively named Searles Valley Fracture Zone 1. The zone is approximately 250 feet wide, 500 feet long, trends N 20 E, and has vertical displacement up to 3cm.

Continuing east two additional unknown, unexpected fracture zones were discovered.

*Large fissure and uplift in the desert*
*TOP: Citizens attempting to clear a rock slide*

These zones were names Searles Valley Fracture Zones 2 and 3, respectively. Similar fault displacement was observed in these zones. The two zones were also mapped and photographed. The

**CONTINUED ON P2**

# EQ Survey

**CONTINUED FROM P1**

zone is approximately 250 feet wide, 600 feet long, trends N 20 E, and has vertical displacement up to 3cm.

East of the Randsburg Wash Road, still on Pinnacle Road, the survey located the southern end of the Paxton Ranch Fault Zone (resulting from the 7.1 M EQ) crossing the road. Field surveys of this area revealed three areas of faulting not previously mapped or walked. The Survey Team also walked the known fracture zones of the Paxton Ranch Fault Zone. We mapped and photographed observed faulting movement in this zone. The zone is approximately 300 feet wide, 3,500 feet long, trends N 20 E, and has vertical displacement up to 3cm.

North of Pinnacle Point on the southern reaches of Searles Lake a fifth zone of faulting and possible lateral movement (low angle landslide) was found. This feature was mapped and photographed. The day's survey was over with only 1/3 of the planned mapping being completed. The zone is approximately 700 feet wide, 1,200 feet long, trends N 50 E, and has vertical displacement up to 15 cm.

August 30, 2019 Survey

Another survey of the western Searles Valley was conducted on August 30. Searles Valley Fracture Zones 1, 2, and 3 were re-checked with additional fractures/faulting found on the north and south ends of Fracture Zone 1 and 2. No additional fracturing was found at Fracture Zone 3. The zone areas checked were greatly expanded from the August 3 survey. An older fault scarp, probably connected to the Garlock Fault, was located and mapped along the south end of SVFZ 1. Fracture Zone 1 was extended on both ends. The zone is now mapped to approximately 300 feet wide, 4,000 feet long, trends N 20 E, and has vertical displacement up to 3cm.

The Paxton Ranch Fault Zone had three areas of extensive new fracturing not observed during the August 3 survey. Two of the trends were generally parallel to the original observations of August 3 but were in different locations. The third zone of fracturing was on an existing zone but had opened up considerably. The new and additional fractures/fault displacement were extensively mapped and photographed. The zone is now approximately 1,500 feet wide, 5,000 feet long, and has vertical displacement up to 10 cm.

The final stop of the day was at the "Miles From Anywhere Fault" crossing Trona Road at West End, first measured on July 6, 2019. County Roads had removed the tented pavement, regraded the roadway and repaved the road during the week of July 8-12, 2019. The road was smooth upon completion. On August 30 a notable tenting of the pavement

*Road displacement*

was noted although the asphalt road surface had not yet cracked. A survey of the area on east side of the known fracture zone showed additional cracking on, with the displacement trending N45W. On the west side of Trona Rd, the fault line trends N85W to the west edge of the borrow pit. Additional movement


*Soil displacement at the cemetery*

was not found west of the area and the survey was called off due to failing light. The zone is approximately 150 feet wide, 1,200 feet long, trends N 50 W, and has vertical displacement up to 3cm.

October 5, 2019 Survey

A third survey was conducted on October 3, 2019. This survey covered some areas south of the Garlock Fault northeast of Red Mountain, the area north of Searles Valley on Trona Rd to SR 178, the SR 178 area where both the Salt Wells Valley Fault and the Paxton Ranch Fault cross, and the Pioneer Point area of Trona.

Active faulting was found in the Pioneer Point Area and in the Salt Wells Valley fault zone and the Paxton Ranch Fault Zone where the faults cross SR 187. The Salt Valley Fault Zone rupture was indicated on the CGS maps as detected by instruments but no field trothing was conducted immediately after the earthquake. Our field investigation showed a fairly extensive rupture zone about one mile east of the observed faulting that crosses both SR 178 and Trona Rd. The fault trend roughly parallels the observed fault.

Field work in the Pioneer Point area found three areas of fracturing. The first area was located south of Pioneer Point that crossed



# Partners in Preparedness

Contact: Z. Mullennix

In late May 2019, the VA (Veterans Administration) Loma Linda Medical Center contacted County OES to inquire if we would be interested in a mass care and shelter supply cache of 155 pallets. The cache will support hospitals, clinics, disaster medical operations and sheltering. County OES accepted the supplies and took delivery in early June. Staff put in over 250 hours breaking down and sorting the supplies for distribution. By the end of June, we had conducted the initial release of supplies to several hospitals, American Red Cross, Sheriff's SAR (Search and Rescue), MRC (Medical Reserve Corps) and Coroner. Then when the Trona earthquake hit, we were able to move pallets of hygiene kits, blankets and other miscellaneous supplies to support the response.

Through the end of summer, additional supplies were deployed to county departments including Human Services, Behavioral Health and Public Health. The cache gave us the ability to provide mini supply packages to 16 CERT teams within the county. Four of our cities took supplies to support their homeless outreach programs.

Cache supplies included the following:

- Blankets, pillows and linen kits
- Hygiene kits and disposable towels
- Patient gowns, scrubs and lab coats
- Biohazard bags and Sharps containers
- Portable privacy curtains
- Nitrile gloves, N95 masks and PPE kits
- Patient lifters
- Post Mortem kits


# The County Board is On-Board

Contact: M. A. Ramirez

The San Bernardino County Fire, Office of Emergency Services recently conducted a series of Tabletop Exercises (TTX) for members of the County Board of Supervisors and their staff. The one-hour exercises are a part of the "quick-strike" training provided to County Elected Officials and County Executive Staff. The exercise utilized video clips and realistic social media posts to drive discussions regarding information vs. intelligence, donations management and cost recovery. Participants entered into lively discussions about these topics and explored the important role elected officials have in disaster situations.

# EPA Calif. Water and Power Black Sky Event Workshop

Contact: M. Wagner

Miles Wagner, Emergency Services Officer, attended a one day workshop hosted by the U.S. Environmental Protection Agency (EPA) titled "Water and Power Black Sky Workshop" in Glendora, CA on August 8, 2019. The objectives of the event were to increase coordination and communication between water utilities, electric utilities, and the emergency services sector and to discuss and advance water utility preparedness for a widespread power outage. The event included presentations on topics such as fuel supply planning, generators, and the Public Safety Power Shutoff and a short table-top exercise. The target audience was drinking water and wastewater utilities, electric utilities, and local, state, and federal government agencies.

Water agencies were encouraged to develop appropriate plans, determine what equipment needed to be obtained (by purchase or leasing) to enable continued production and delivery of potable water during and after a black-sky event. Funding sources such as hazard mitigation grants, local grants, and private donations were discussed.

A Black Sky event is defined as an extraordinary, hazardous event producing power outages of a large, regional scale that last significantly longer than typical weather or operational outages. Such a scenario could impact electricity, natural gas, water, wastewater treatment, telecommunications and transportation service. It could be caused by a cybersecurity attack on the electric grid, severe weather or even the detonation of a nuclear or high-energy explosive device.

Also discussed was the Public Safety Power Shutoff (PSPS) Southern California Edison and other electric utilities have instituted as a result of the massive wildfires over the last several years. SCE Public Affairs gave a presentation on their strategy for determining when a PSPS would be instituted.

# "Signal for Safety" Hits 500

Contact: D. Davis

The Signal for Safety program provides K-12 schools and those with Pre-K and other Pre-K, TK schools with triage flags and triage training that equips the schools to signal the status of those on campus after an emergency or disaster. In the event of an emergency, schools can fly a color-coded flag which describes the state and health that the students and staff are in and have an instant assessment by emergency vehicles doing a "dashboard assessment".

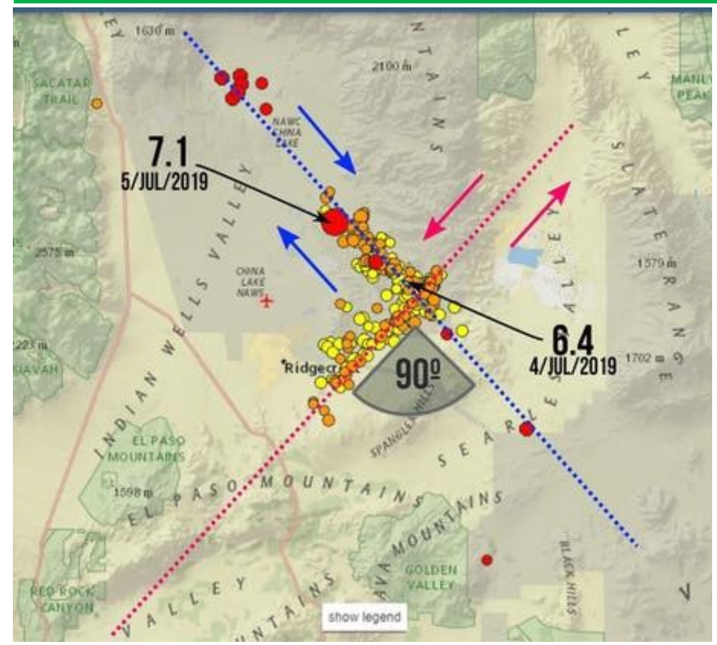
The so called "dashboard assessment" refers to a fire engine or any other emergency vehicle patrolling after an emergency to assess damage and potential responses needed. First responders in the vehicle can see by way of the color of the flag flying under the California State flag what the levels of injury or injuries at a specific site may be. A major benefit of this program is that it can indicate to first responders that there are no injuries at a particular school so that they can move on to the next school site, thus saving valuable time.

GREEN=GOOD

RED=BAD

- **Green** colored flag: School or site is alright and does not require assistance at this time.
- **Red** colored flag: There is an emergency at the scene and aid is required. (Moderate to Immediate injuries present) **STOP! And the unit will give assistance and render aid.**






*Earthquake clusters and direction of slip*

Trona Road and was observed trending N 45 E for about 0.25 miles. An extensive area of faulting was found on both sides of the roadway. There were no structures in this zone. This area was tentatively named the Cemetery Fault as its southern terminus is north of Trona Cemetery. The fault may extend into portions of Trona and the business district to the south.

A second zone of fracturing was found just south of the Cemetery Fault, trending N30E. Damage to portions of the sewer lateral from Pioneer Point to the septic system may have been caused by movement of this fracture zone. This zone was named the School Fracture Zone as the south end is trending toward Trona High School. This zone needs further investigation as it may be faulting, lateral spreading/low angle landslide or a combination of the two types of movement.

The third and most extensive area of faulting begins at the Pile of Rocks area of Pioneer Point and extends west southwest at the base of the Argus Mountains. This zone was walked for about ¾ mile by two teams. This series of faults has many echelon fractures, all with about 1 to 5 mm of vertical offset and an unmeasured amount of horizontal offset.

October 19, 2019

This survey focused on three areas. The team surveyed the West End area to determine the extent of the Miles Fault, the Trona area west of Point of Rocks – Pioneer Point, and the Argus area.

The Miles Fault survey shows both low angle landslide (Lateral Spread) and faulting. The area surveyed now extends from the lake west 3/4 mile up canyon to the end of traversable terrain. Areas of lurch shattering was found along with faulting. Up canyon large boulders had rolled down into the canyon, bouncing while moving down. Some impressive craters were left by these boulders. The segment crossing Trona Road continues to develop an upward tenting feature typical of vertical uplift. To the east of Trona Road within the housing tract, areas of low angle land sliding was observed. This land slide also affects the County Public Works Yard for Trona.

The Argus area survey was inconclusive as much of the observable faulting has been eliminated through reconstruction and grading. Additional field work needs to be done.

The Pioneer Point Fault System along the toe of the Argus Mountains now extends about 1.5 miles to the west southwest of Pile of Rocks at Trona Road. Most of the observed movement along this fault system is vertical and occurs over several parallel faults within the fault zone. The zone is about 250 to 400 feet in width for most of the observed fault. Near the west end of the system a branch veers off trending to the south southwest towards the Searles Valley Minerals coal pile.

*Railroad track disfigurement*

Additional field studies need to be completed in order to accurately develop a mitigation strategy for the Trona area. This may include development of Alquist-Priolo Fault zones; designating areas as liquefaction zones; or areas in need of a geotechnical report prior to issuance of a building permit. Current building codes need to be reviewed to determine if any modifications or changes to the codes are warranted.

# Trona Cost Recovery

Contact: M. A. Ramirez


*Attendees learn about cost recovery*

On Tuesday, August 20 the San Bernardino County Fire, Office of Emergency Services hosted a packed house of representatives from county departments and partner jurisdictions that were affected by the July 4-5 earthquake that struck the Trona area. The Cal OES Applicants' Briefing was an opportunity for potential applicants to hear from the Cal OES Recovery Branch about potential cost recovery that could be made available. California Disaster Assistance Act funds were made available through a Gubernatorial Proclamation issued on July 5 and were intended to assist local jurisdiction recover extraordinary costs expended in their response to the earthquake as well as costs incurred due to damaged infrastructure. When large incidents like this occur it is important that all jurisdictions complete and submit Initial Damage Estimates (IDEs) to the Operational Area Emergency Operations Center (EOC) as soon as possible. This assists the EOC in painting an accurate picture of the needs of all affected jurisdictions in the Operational Area.

# Assistance Center Planning Project

Contact: K. Ray


*Local Assistance Center at Trona High School following July 2019 earthquake*

County OES is currently working on an Assistance Center Standard Operating Guidelines (SOG) to provide guidance and procedures to initiate pre-disaster planning, preparation, coordination and guidance for operating the different types of Assistance Centers. This two-part document includes the basic plan which is the core operating guidelines and everything that is common in each assistance center type and annexes for each Assistance Center type: Local Assistance Center (LAC), Family Assistance Center (FAC), Shelter Operations Compound (SHOC) & Emergency Repatriation Center (ERC).

We currently initiated a planning project on behalf of Captain Kevin Lacy with the San Bernardino County Sheriff-Coroner's Office to develop a "Family Assistance Center Annex" to the "Assistance Center SOG" document with all city emergency managers and city police departments.

Each city emergency manager was sent a FAC site assessment form for pre-identification of appropriate locations for a FAC within their cities. The police departments were also briefed on their role in the FAC and how they would assist the Corner's Office in a Family Assistance Center.

The next step in the planning process will be to meet with transportation agencies: Ontario Airport, Omnitrans, Metrolink and Amtrak.

Our goal is to have the first draft of the basic plan complete by December 2019.



# County Fire CERT Teams Keep it Cool!

Contact: J. Ferdon


San Bernardino County Fire, Office of Emergency Services (OES) CERT Program volunteers have been kept very busy this year. In addition to responding to support various natural disasters, specially trained members have been ensuring that County Fire and Sheriff personnel are well taken care of while conducting operations in high heat environments.

Firefighter Rehab is one of eight specialty CERT Supplemental Trainings offered by FEMA. CERT personnel are specifically trained in the non-medical portion of Firefighter Rehab to support firefighters on major incidents per NFPA 1584 guidance. Training is normally coordinated by County Fire OES and delivered by a firefighter to the volunteers.

In June of this year, County Fire CERT was deployed to support live fire training for Tower X at the Richard Sewell Training Center. CERT members supported both day and night training operations on-site with the medical portion of Firefighter Rehab being provided by County Fire's EMS Training Division.

Taking note of County Fire CERT's capabilities, the Sheriff's Department requested CERT be deployed to support their operations at the Victorville Landfill in June. Quickly realizing the benefits of having rehab services available, CERT was deployed for a week to keep Deputies and Detectives safe from the high heat as they carried out their investigations. The professionalism and dedication of the CERT volunteers earned the gratitude and respect of Sheriff personnel and saw CERT once again deployed to support Search and Rescue operations in the Kelbaker area in August.