



## **MME Looks Back on the One Year Anniversary of the Paradise, CA Camp Fire Recovery Efforts**

In November of 2018, MME received a call to action from the Structural Engineers Association of Northern California (SEAONC) and the California Governor's Office of Emergency Services (Cal OES) to inspect and assess the safety of structures in Paradise, CA affected by Camp Fire in Butte County, the most destructive fire in California history.

One of our principals, Dale Hendsbee responded and volunteered his service, along with a group of other Safety Assessment Program (SAP) personnel and engineering professionals in an effort to help the residents and property owners affected.

The Town of Paradise needed Safety Assessment Program (SAP) personnel to inspect every parcel of the town and collect and record accurate data required in order to apply for Federal recovery assistance.

Government agencies, such as FEMA require that the data collected be by SAP personnel because they are trained to inspect structures after any natural disaster, such as earthquake, flood and fire. The data collected is then used to determine how soon an area can be re-opened to the residents. The more quickly the data is collected, then the sooner the area can be deemed safe for residents to return.

Dale arrived on November 15, the eighth day after the fire started on November 8. While briefed on his first day, Dale was informed that approximately 4100 structures were destroyed, 200 were partially damaged, and 570 remained whole.

The SAP teams were assigned mapped Zones of the Town, and inspected every parcel within their assigned Zones. The SAP personnel then categorized each structure as either green, yellow or red. Green indicates the structure is safe to enter and reside in. Yellow indicated the structure is safe to enter temporarily, for example to gather belongings then exit. Red indicates that the structure is unsafe to enter.

While he evaluated structures in Paradise, Dale noticed that the destruction from the fire appeared to be random; some houses that were fine (and categorized as green) were surrounded by structures that were completely destroyed (and categorized as red).

Some of the homes that were destroyed had been built to meet the woodland fire standards for new construction, yet did not survive the fire; while other, older structures did.

A theory for the random destruction observed in Paradise is that this fire was a "firestorm", which moves more quickly and more erratically than a typical fire.

By 11/20/2018 the Town was officially evacuated; which means that once someone left, they could not return until the area was deemed safe by officials. During the evacuation period, only secured, authorized personnel, such as the SAP inspectors were permitted to enter through the Town's checkpoints.



These photos show a street view from 2012 Google Maps years before the fire, compared to a photo taken by Dale in 2018 of the same street. This is an example how the fire skipped a house on a street where many other houses were completely destroyed.





Mr. Hendsbee and MME are grateful they had the time and resources to volunteer for the community of Paradise, CA. We hoped for a quick recovery for the Town of Paradise.

Looking back a year, we have learned that according to an article by NPR dated November 9, 2019, nearly 19,000 structures burned. There were a total of 11,000 homes destroyed in the fire; and a year later only 11 homes have been rebuilt. The population of Paradise has dropped from approximately 26,000 to about 3,000. Even though that seems dire; the town has made some impressive progress. The amount of debris removed was twice the amount that was left from the twin towers in New York, after September 11, 2001. The burnt cars have been removed and a demolished shopping center has been cleared. All hazardous materials were removed at a cost of \$2 billion. And, according the mayor of Paradise, Jody Jones, the remaining residents have a sense of purpose to rebuild. As quoted in the NPR article, she said, "We never were victims, we're no longer survivors, we're pioneers. We're building a whole town from scratch, we're really proud of that."

According the Town of Paradise's website for official recovery information, [ButteCountyRecovers.org](https://www.townofparadise.com/); the town has allowed residents to live in temporary dwellings such as RVs and trailers after a parcel is certified as clean; as well as providing free and temporary space at a local campground.

For more information about the fire recovery efforts, visit <https://www.townofparadise.com/> and <https://buttecountyrecovers.org/>.

The following pages show additional photos taken by Dale Hendsbee during his November 2018 volunteer inspection service of the streets of Paradise, CA.









