

# Outdoor Wide Area Alerting California Fires - Hazard Mitigation

Recent events indicate the need to provide citizens with timely notifications of pending or immediate disaster. Outdoor alerting systems are one part of a multi-faceted solution, used to alert citizens. Events such as fast-moving wildfires occur with little to no notification. Informing your citizens quickly and efficiently is critical to directing people to safe areas. Using an effective outdoor alerting systems can save valuable time and effort for municipal, county or state employees.

Parks, large open areas, and remote facilities without cell-phone coverage can leave citizens without an early warning system. Recent wildfires indicate the need to pro-actively warn citizens of pending disasters. Instead of using local police to alert citizens with door-to-door announcements, outdoor warning systems with effective long range communications can be used.

Our system can offer the following features and benefits:

- Our systems can be independent from the power grid by utilizing solar and/or wind based power.
- Communications can be provided using digital secure radio communications to the alerting devices.
- Indoor communications to public buildings, schools, and business can be easily incorporated into an alerting system.
- Activations can be performed from mobile devices or with remote desktop applications.
- A cloud based control platform can be used to extend the reach and activation of local municipal systems to county or state authorities. Local emergency managers have many tasks to perform, effective use of local and remote resources can be an efficient method of alerting local communities.
- Outdoor mechanical sirens can offer a combination of voice and tone based alerts to provide enhanced communications.

## Fully Integrated Federal Signal Solution

We offer many products that can be integrated to provide one complete solution to meet your community's needs.

### INFORMER 100 Voice Announcer

#### FEATURES

- 100W High Powered Outdoor Speaker
- IP Connected
- Ideal for High Density Metropolitan Areas, Stadiums, Parks



### CommanderOne

#### FEATURES

- Cloud based control system
- Desktop Freedom
- Mobile Application
- Polygon Enabled
- Ideal for City/County/State Control



### MOD3012 Voice Announcer

#### FEATURES

- 1200W High Powered Outdoor Speaker
- Radio or IP connected
- Ideal for Large Metropolitan Areas, Campus Environment and Neighborhoods



### 2001-130 Tone Alert

#### FEATURES

- 130 dB Mechanical Siren
- Radio Connected
- Ideal for Broad Coverage and Rural Neighborhoods



## Case Study:

# Increasing Safety at one of the Top Vacations Destinations in the United States

## Situation:

The 2016 Great Smokey Mountains wildfires in Tennessee started on Nov. 23rd and became an inferno by Nov. 28th. Gatlinburg evacuated 14,000 people from the affected areas. The fires spread quickly through drought-affected areas because of high winds. Sevier County TN., including Gatlinburg and Pigeon Forge, were affected along with the National Parks. 2,400 structures were damaged or destroyed, 17,000 acres burned, 191 people were treated for injuries and 14 fatalities occurred. Damages were estimated at \$500,000,000. Gatlinburg lost 5 outdoor warning sirens in the fire that protected the downtown area from fires, flooding and weather events. In Jan. 2017, Gatlinburg's Fire Chief Greg Miller initiated a project to replace the 5 damaged sirens and add additional sirens and technology to increase/improve mass notification throughout the City of Gatlinburg, surrounding residential areas in the mountains, and the National Park areas.

## Solution:



Federal Signal presented a **Phase 1** solution that included five (5) Modulator® Sirens (model MOD5020) mounted on concrete poles, using dual redundant Kenwood NEXEDGE radios and a KNOX-BOX key over ride switch at each pole. This was requested due to the fires knocking out the radio system on one of the mountains and burning the wood poles that held to old sirens. Gatlinburg runs 2 radio repeaters on 2 separate mountains. If one system goes down – they will have the second system as a backup. Phase 1 (5 sirens and 1 control point) was installed in the 3rd /4th week of April 2017. The Chief wanted the 5 sirens up and ready for river flooding season near the downtown area.

**Phase 2** was ordered in March of 2017, the bill of materials included five (5) Modulator Sirens in different sizes and four (4) 2001 sirens that would be used in the mountainous areas surrounding Gatlinburg. These are mounted on steel poles. One of the Modulator Sirens is installed in the National Park by the welcome center. Phase 2 included a second control point, a mobile activation case (model MAC-01), CommanderOne® mass notification software and IPAWS integration. One of our partners is supplying a AM radio station for emergency notification.

Phase 2 became a collaborative initiative and shared cost between Sevier County and the National Parks Service, and implementation began in January 2018.



## Outcome:

Federal Signal was able to provide a fully integrated and improved solution in a timely manner. They are currently working with other Sevier County entities, such as Pigeon Forge, Sevierville and Dollywood, to provide a similar solution. Integrating compatible solutions to each entity will allow Sevier County EMA to efficiently and effectively control all sirens on the system.