

## **Radio Ready Program:**

### **Low Wattage AM Radio Stations for Emergency & Disaster Public Information**

#### **Overview**

The Santa Barbara County Office of Emergency Management (SBCOEM) is enhancing the County's "Radio Ready" program by implementing low wattage AM radio station networks to broadcast "blue skies" emergency preparedness messages and real-time emergency and disaster public information 24/7 in English and Spanish.

#### **Challenge**

During emergencies and disasters, traditional communication pathways such as cell phones, internet, and television can be easily overwhelmed or become non-operational due to network congestion and power outages. Severe weather, flooding and debris flows, wildfires, and other hazards can damage or destroy critical communication infrastructure, significantly impeding the ability of public safety agencies to communicate time-sensitive, life-saving information to the public.

#### **Solution**

Due to the Santa Ynez Mountain Range geographically bisecting the county, SBCOEM is working to establish two radio station networks broadcasting from AM 1610 along the county's south coast and AM 530 in the northern parts. These radio stations are capable of broadcasting year-round preparedness messages and real-time emergency information 24/7 to surrounding communities. Given the county's sizable Spanish-speaking population, pre-scripting "blue skies" and emergency messages is critical to ensure equitable access to emergency readiness information and reduce delays in disseminating information. These stations can also be a lifeline during emergencies for the county's Mixteco-speaking community and other speakers of indigenous Mexican languages that already rely heavily on radio for vital local information. Transmitters are strategically housed within critical infrastructure facilities – including fire stations and a county jail site – to mitigate network security risks and support continuity through existing uninterruptable power sources and generators. Transmitter locations were also selected to cover rural, isolated and vulnerable communities that perennially experience poor cell phone reception. Residents can tune in to one of the low wattage radio stations via hand-crank, battery-powered and car radios to receive current emergency and disaster information, including protective action instructions such as evacuations and sheltering in place.

#### **Innovation**

Broadcast messages are recorded and uploaded through an internet-based digital audio management system and integrated into a looping playlist. Messages can broadcast from a specific radio station in the

area immediately impacted by a hazard, or from all stations for countywide incidents. Since messages are recorded and saved in a standard .wav file format that is compatible with many radio management systems, audio files can be easily shared with neighboring partner radio stations to support consistent incident messaging and increase reach to as many residents as possible. Additionally, all stations are controlled remotely, which means emergency managers and other support staff do not have to physically be at the radio station site to manage or update broadcast messages.

## **Results**

Though in its infancy, the low wattage radio station networks are an enhancement to the County's established "Radio Ready" program that is well recognized in Santa Barbara County communities that have faced wildfires, debris flows and other emergencies in recent years. In the south county, this enhancement leverages existing partner radio stations already transmitting both regular programming and real-time emergency information from the AM 1610 frequency, further aiding in community familiarity and utilization.

## **Replicability**

Digitally-based radio management system technology is well established and currently used by both public and private agencies nationwide, thus providing a foundation for other California cities and counties to incorporate this technology into existing radio communication infrastructure or establish new networks within facilities already hardened and resilient against the effects of hazards. SBCOEM's efforts can serve as a replication framework for other jurisdictions interested in enhancing their emergency public information toolbox.

**Project Contact:** Kelly Hubbard | Director, Santa Barbara County Office of Emergency Management | [khubbard@countyofsb.org](mailto:khubbard@countyofsb.org) | 805-681-5532