CITY OF CAPE CORAL RELIES ON AUTOMATED LIGHTNING AND SEVERE WEATHER ALERTING SYSTEM TO HELP KEEP CITIZENS AND VISITORS SAFE

The city of Cape Coral, FL is a thriving waterfront community where locals and visitors enjoy the endless glistening beach views and spending plenty of time outdoors. Cape Coral is one of the top lighnting cities in the US with the 2nd highest number of lightning strikes in 2015. With an area of 120 square miles and a population of over 180,000 people, protecting fulltime and seasonal residents from severe weather is a challenge. Because frequent lightning is a danger to the public, the city of Cape Coral wanted to find an automated solution that could help them mitigate their risk and keep people safe outdoors.

AUTOMATE LIGHTNING DETECTION TO ENHANCE SAFETY

The increasing rate of lightning activity meant that Cape Coral officials needed a more robust method of alerting the public about impending lightning danger in order to safely clear outdoor public areas when severe weather approaches and prevent injuries. Relying on park supervisors to manually alert visitors and communicate with one another via handheld devices was time-consuming and required a large staff, which is why Cape Coral looked for a reliable, automated lightning detection system with large-scale alerting capabilities.

TURNKEY PUBLIC-SAFETY SOLUTION FOR PARKS AND OUTDOOR VENUES

The city of Cape Coral worked with Earth Networks to install a comprehensive severe weather detection solution that included Outdoor Alerting Systems across 17 public parks around the city and a web-based real-time weather visualization application. This solution gave officials the ability to customize alert settings based on the hours of park operation, lightning-strike distance, alert duration and, in addition, the system deploys automated email and text alerts to recipients.

The Outdoor Alerting System, weather visualization application and mobile alerts are all powered by Earth Networks Total Lightning Network®(ENTLN), which is the largest and most advanced lightning detection network for severe weather detection and warning. Importantly, the network detects both in-cloud (IC) and cloud-to-ground (CG) lightning. When lightning rates exceed a "severe" threshold there is an increased threat of dangerous weather conditions. As a result, automated warnings such as Earth Networks Dangerous Thunderstorm Alerts and National Weather Service notices, are delivered to users via messages to mobile phones.

OPTIMIZE OUTDOOR SAFETY AND SEVERE WEATHER PREPAREDNESS

OVERVIEW

A thriving waterfront community with the 2nd highest rate of lightning activity in 2015 among all other cities in the U.S. sought a severe weather detection solution that was automated and scalable.

CHALLENGES

Cape Coral officials needed a more robust method of alerting the public about impending danger in order to mitigating the increasing risk of lightning and keep people safe outdoors because their manual alerting process was no longer sustainable.

SOLUTION

Cape Coral deployed Outdoor Alerting Systems across 17 public parks around the city and utilized a web-based real-time weather visualization application to keep their eyes on the sky and optimize outdoor safety.

RESULTS

An effective solution for mitigating weather risk and enhancing outdoor safety that provided superior detection capabilities, simple implementation and streamlined large-scale alerting along with real-time weather visualization so officials and the public could keep their eyes on the weather.

WHY IT MATTERS

Soon after installing Earth Networks severe weather monitoring and detection technologies, Cape Coral officials knew they implemented an effective solution for mitigating risk and enhancing outdoor safety that provides:

- **Superior detection capabilities:** Differentiating cloud-to-ground from in-cloud lightning is critical for assessing storm development and the potential for severe weather. ENTLN is the first lightning detection network capable of detecting both in-cloud (IC) and cloud-to-ground (CG) lightning, increasing overall lightning detection by up to 250% and subsequently reducing the risk of nearby audiences being struck by lightning.

- **Simple implementation & streamlined large-scale alerting:** The OAS is a compact, fully automated lightning alerting system with no moving parts and is easily interfaced with modular connectors. This enables easy installation, better reliability, a smaller operational footprint, and low maintenance. It comes equipped with a high-decibel attention getting signal that is designed sound off when lightning approaches within a predefined radius so people know that it's time to seek shelter.

- **Real-time dashboard:** The OAS includes a real-time dashboard that displays the current alert status information including connection, active alerts, last stroke time and distance and a countdown timer with the estimated time to the All Clear. This allows the City of Cape Coral to track the lightning threat and keep their users informed of the situation.

The city rolled out a public education and awareness effort with posters explaining the system and issued tests to help people get accustomed to the new safety procedures. Today, the Cape Coral community enjoys peace of mind knowing they are protected from prevalent lightning and dangerous storms by the world's most advanced lightning detection and alerting system.

For Cape Coral residents and Floridians in general, lightning and severe weather is always a threat, which means that we need to go above and beyond to help protect residents by leveraging the most proven, advanced lightning detection and alerting technology available. With OAS installed at many of our public parks, we can ensure that public safety remains our top priority."

Art Avellino, Athletic and Revenue Superintendent, City of Cape Coral