Disaster Apps for Wildfires, Natural Hazards, or Emergency Situations

Louisa Verma*
Portland Cement Association Library, United States
Corresponding author: lverma@cement.org

Abstract
We live in a highly complex world where finding information during natural disasters, such as wildfires, can be multifaceted due to variables that are unique to each incident. Diligent as you may be in preparing and signing up for your city or county emergency alerting system (or both), unexpected issues arise, mistakes are sometimes made, and technology glitches can occur. Evacuation warnings sometimes only alert those further away from the disaster area and sometimes come harrowingly late for those who would have benefited from an earlier notification. It can also be difficult for the public to know under which government jurisdiction a particular incident falls and where to look to for up-to-the-minute information.

Keywords
Disaster Apps, Genasys Protect, Web Browser Access

Genasys Protect and Watch Duty are two apps that can work in conjunction with city or county alerting systems to provide additional information to help decide whether evacuating before an "official order" has been sent out might be better for you or your loved ones. No alerting system is perfect, but having several to turn to for different types of information can aid in on-the-fly decision making in the face of sparse, or seemingly conflicting, information[1].

Genasys Protect App and Web Browser Access

Genasys Protect (GP) is both a website and an app. Both function as a mass-alerting system for various natural hazards and other emergencies[2,3]. The essential purpose of GP is to find evacuation or other emergency information based on street address. Through the website/app you can type in a street address (or share your location) and be provided with the zone code, zone status, and other important information pertaining to a particular zone, such as the zone boundaries or road closures. It also provides a direct link to the website for your county or other jurisdiction that sends out alerts/emergency notifications. In the GP Help Center, it states, "Genasys works in conjunction with already existing emergency alert notification systems for each county."

If your county employs the Genasys platform (not all do), then the GP site/app provides additional confirmation of evacuation warnings/orders sent through the county or city and gives further insight about what is happening in your and nearby zones[4,5]. In addition to evacuation status, the website/app also provides hazard information such as, in the case of wildfires, fire name, % containment, date started, acreage, and counties affected. The Genasys company website (genasys.com/company) states that GP coverage is for all 50 states and is used in more than 100 countries worldwide[6].

There are a few differences between the

website and the mobile app. A comparison of web vs. app features, as well as a link to download the app, is available at genasys.com/genasys-protect-citizen-site-and-app. One of the most notable differences is that the app allows saving multiple addresses (up to five). This lets you to quickly check your current location as well as your work or family/friends' locations and keep apprised of what is happening in multiple zones, without having to remember or search for addresses again. Both the app and the website allow you to share your location and, if shared, will provide status alerts as you change zones. A caveat: If you are in a location that currently does not use GP, then you will not receive alerts.

GP outlines its privacy policy on the website (genasys.com/privacy-policy) and on the app (tap Home). Both the app and the website provide links to the county official website for emergency information and location-specific alert registration pages to sign up for county and/or city alerts via text and email.

Summary of Genasys Protect Citizen App

Genasys is useful for knowing what zone you are in, confirming/monitoring evacuation warnings or orders, understanding what is happening on a larger scale, finding information about road closures, and linking to your local government emergency preparedness and notification website. It is relevant to all kinds of emergency situations, not just fires, but your county must be partnering with Genasys for it to be useful for you.

Watch Duty App and Web Browser Access

While GP is a licensed platform for county/city emergency notifications of all kinds, the Watch Duty (WD) app is "a non-profit, non-partisan and non-government organization" that provides an alerting service for fires, both wildfires and prescribed burns. According to the WD About Us page, it is "powered by real people—active and retired firefighters, dispatchers, and first responders (not crowdsourced)—who diligently monitor radio scanners and collaborate around the clock to bring you up-to-the-minute lifesaving information."

WD has a basic free version that allows for many of its wildfire alerting features. There are also tiered paid versions—Membership ($25/yr.), Pro ($100/yr.), and Team (coming soon)—that allow for more extensive features. To see what is included in the free vs. paid versions, visit watchduty.org/join. WD currently monitors fires in 22 U.S. states in the Midwest/West and Hawaii.

Upon opening the app or website, you can search for an address, incident, or place. The browser interface also provides a list of any current incident updates, which includes prescribed burns as well as active wildfires.

Click on the incident icon or entry on the right-hand panel to see additional information about the fire and updates submitted by reporters working with the app.

An interesting feature of WD is the Layers feature, which allows you to toggle between different map views, view active as well as historical wildfires (last 5 years, size 50-plus acres), and see wind patterns and air quality data.

Also under Layers, you can toggle on the Live Wildfire Cameras to see variously stationed camera views. Camera views can be replayed within 15-minute to up to 6-hour intervals to see time-lapsed changes. Cameras are integrated from the ALERTWest and ALERTCalifornia

camera systems. To learn more about the cameras, visit watchduty.org/blog/alertwest-alertcalifornia-wildfire-camera-integration. To learn more about WD's privacy policy, visit watchduty.org/legal/privacy-policy.

Conclusion

WD is useful for understanding wildfire incidents throughout the western U.S., monitoring evacuation orders (although you'll need the zone code from Genasys), receiving up-to-the-minute alerts on a fire's spread and containment, understanding the direction the fire may be heading (from wind patterns), viewing a wildfire via the camera integration, and knowing the air quality during and after a wildfire. It also links to other information sources that can be important before, during, or after a wildfire (such as water contamination, FEMA, and shelters).

A natural disaster or other emergency can be an unexpected and confusing event. These two apps can work in conjunction to assist citizens in monitoring what is happening and staying abreast of preparedness information and evacuation notifications.

Funding: This research received no external funding.

Acknowledgments: The authors would like to show sincere thanks to those technicians who have contributed to this research.

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Louisa Verma is a solo librarian at the Portland Cement Association library and creator of the Librarians' Electronic Resource Reviews Network, a citation database of electronic resource evaluation content.