

Queensland investigates contemporary review methods

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In September 2019, parts of south-east Queensland were subjected to severe to catastrophic bushfire activity, similar to activity experienced the year before.

On 26 September 2019, the Queensland Minister for Fire and Emergency Services requested the Office of the Inspector-General Emergency Management (IGEM) conduct a review into the response to selected Queensland fires in Sarabah, Stanthorpe and Peregian Springs. The purpose of the review was to provide observations and insights regarding the bushfire events in Queensland, and to consolidate recommendations in the 2018 Queensland Bushfires Review.

The methodology and approach undertaken for the review was different to previous reviews. There was a recognition by IGEM that the 2019 review would be commencing 3 months after the 2018 bushfire review was publicly released.

The focus, therefore, was on fostering a positive lessons culture through highlighting good practice and opportunities for improvement. IGEM focused on identifying Observations, Insights, Lessons Identified and Lessons Learnt using the OILL process.

Observations were gathered through interviews with first responders, telephone surveys with residents, a call for public submission and a review of relevant documents. Through this method, 12 insights were captured, with 3 relating to community warnings. Specifically, that community messaging was not always clearly understood, could benefit from including fire location and direction maps and could be enhanced if officers on the fire front could issue these warnings directly to the local area.

A lesson for IGEM following the 2019 review was to investigate contemporary alternatives to a traditional data-collection method, the use of telephone surveys with residents. In the past, IGEM has been reliant on market research companies to provide qualitative research to help inform its reviews and assurance activities. This has proved costly and provided static data from a limited number of residents.

An initial option examined by IGEM included using freely available and de-identified big data analytics from social media via a pilot project with Griffith University's Professor Bela Stantic and the Big Data Lab. The accuracy of the predictive analysis has received significant media attention, using big data to analyse social media sentiment to predict the outcomes of recent events such as Brexit, and the 2019 election of the Australian Government. These accurate predictions have achieved what traditional methods of telephone polling have failed to do.

Big data analysis could be used in the lead-up to, during and following disaster events to analyse community sentiment, to understand the level of community comprehension of warnings and actions and to myth-bust or address issues relating to reluctance or complacency to evacuate. The real-time availability of social media data allows for the capture of opinions of the community in a ubiquitous manner and enables timely interventions by government. IGEM will continue to evaluate contemporary data-collection options in future review activities.