

# New Zealand Geographic Information Systems for Emergency Management



## Background

The NZGIS4EM Committee was formed as a result of the following:

- A series of major events in New Zealand during 2016 and 2017 where GIS proved critical to intelligence but was poorly coordinated across the country
- A series of Eagle Technology facilitated NZGIS4EM workshops held around the country (Wellington, Auckland, Christchurch, Palmerston North) in 2017
- Formation of a general NZGIS4EM user community in 2017
- Recognition that:
  - There is no formal group in New Zealand that addresses how GIS is best used in Emergency Management.
  - GIS is rarely considered in New Zealand emergency management planning, documentation or protocols.
  - The approach to GIS in Emergency Management has always been ad hoc and/or unplanned.

# Vision

GIS and its practitioners are integral to emergency management in New Zealand.

# Purpose

**The Committee is a shared and coordinated voice for the use of Geographic Information Systems (GIS) in Emergency Management in New Zealand. The Committee advocates, educates, advises and provides support, guidance, recommendations and best practice for GIS and Emergency Management practitioners while ensuring alignment to the principles and purpose of the Coordinated Incident Management System (CIMS).**

# Functions

- Representing the NZGIS4EM Community regardless of software platform or sector
- Building and maintaining a well-connected Community
- Raising awareness of GIS for emergency management
- Liaising with, lobbying, engaging and partnering stakeholders on behalf of the NZGIS4EM community
- Developing and providing advice, guidance and best practice on GIS for emergency management
- Facilitating and improving the sharing of emergency management spatial information, resources and knowledge
- Facilitating an annual work plan and work streams to address nationally significant NZGIS4EM issues
- On behalf of the NZGIS4EM community, provide recommendations for information or decisions to be made by the NZGIS4EM Governance Group
- GIS for emergency management aligns with the CIMS purpose and principles.



# ESRI ArcGIS Online will be the preferred geospatial platform

## NZ GIS for Emergency Management

- ▶ 1 Introduction
- ▶ 2 Workshop Participants
- ▶ 3 CDEM Initial Operating Capability
 

Based on recent events and the Emergency Management Solutions for ArcGIS, this is a diagram that outlines an initial operating capability for a Regional Council CDEM. For more information see the NZ CDEM Geospatial IOC Document.

The following Tutorials are meant to expose the GIS and CDEM Team to how these apps are setup and configured.

In Practice, the best place to start launching these maps and apps is using the ArcGIS Solutions Deployment Tool.
- ▶ 4 Prerequisites
- ▶ 5 Create a Web Map
- ▶ 6 Create a Feature Layer
- ▶ 7 Create a Situational Awareness Viewer



Registration is now open for the inaugural NZGIS4EM AGM and Special Interest Group (SIG) on 20 August. Follow the link for more info and to register:

<https://www.eventbrite.co.nz/e/nzgis4em-special-interest-group-agm-at-nzeuc-2018-tickets-47200614308>

Please note the AGM and SIG is open to all although you do need to be an NZGIS4EM Community member to vote on nominations for the NZGIS4EM Committee at the AGM. Feel free to distribute this email to applicable colleagues. Contact myself or [kate.waterhouse@boprc.govt.nz](mailto:kate.waterhouse@boprc.govt.nz) to sign up to the NZGIS4EM Community if you have not already.

## How does the Distributed Infrastructure and Lifelines research community fit in?

- Information we can provide on hazards and potential disaster impacts to the wider built environment is always welcome by regional Civil Defence & Emergency Management groups and utilities providers;
- Research to understand interdependencies between infrastructure systems helps prompt CDEM groups to plan for appropriate post-event reconnaissance and data collection.
- As consistency in data formats and collection is achieved, and post-event datasets proliferate, this platform will provide valuable data sources for conducting research. Research input into data schemas will make these data more valuable

For more information: [matthew.hughes@canterbury.ac.nz](mailto:matthew.hughes@canterbury.ac.nz)