GIS Earthquake Response – Getting Started, Keeping it going, Living with it

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FIG Working Week 2016

CHRISTCHURCH, NEW ZEALAND 2-6 MAY 2016

Recovery

from disaster

Organised by





Platinum Partners





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Land Information



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Overview

- Staffing & Roster
- Personnel structure
- Position Descriptions
- Workload management
- Resources
- Data Management
- File Structure
- Data Availability and Sharing
- What we would do differently
- Grab Bag













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Getting Started - Roster

10 weeks of response, staff required 7am - 11pm, 7 days a week

Design shifts around

- Supporting situation reports and regular requests
- Overlap shifts so there is time for handover
- Skeleton overnight crew
- Prepare a sample roster/shift structure now
- Ensure all contact numbers are recorded and everyone has a copy















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Planning and Intelligence Manager

from disaster

Work Coordinator

Getting Started - Personnel structure

From This

Data Manager / Team Leader

GIS Staff

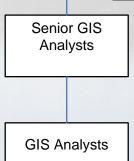
To This

Data Manager

GIS Team Leader

Work with your Civil Defence team to ensure they know what you do!

Ensure everyone understands these roles and has appropriate training







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Getting Started - Data Availability, Sharing, Printing

- If you have access to your normal corporate systems, then you're VERY lucky!
- Lots of time is sucked up converting data between formats
- Large Scale printing might be a luxury...

- Host data online (Cloud, Koordinates.com, DropBox)
- Offline copies of core datasets Harddrives
- WFS, WFS-t















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Keeping it going - Workload Management

- **Work Coordinator**
- Unique numbering for jobs
- Job tracking system Google docs
- Analysts need to be free to work on their requests and not have to deal with admin tasks
- Set up a job recording system and train users
- Dedicated admin resource













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Keeping it going - Workload Management

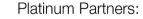
- Encourage customers to use 'standard' maps
- Put products on display, map book



- Hard Copy maps for field capture
- WebMap solutions for information













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Keeping it going - Resources

- Virtual team, WFS
- Extra resources flown in
- Challenge of effectively using the help offered
- Limitations due to skill sets

- Agreement with other organisations, swap structures and planning
- Cheat sheet for any person new to your system













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Keeping it going - Data Management

from disaster

- Many new datasets
 - 40+ in a large event
- Maintain single source of truth



- Central record of data processes as they develop
- Metadata
- Do not neglect this documentation!













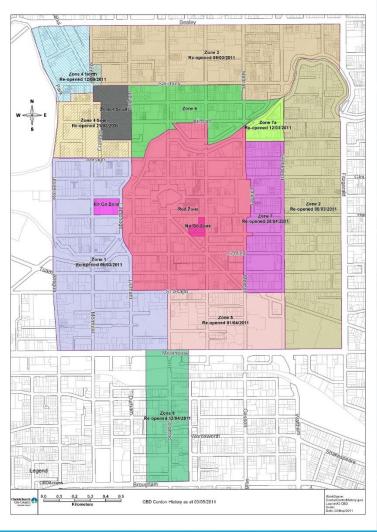
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Event Data (Public) CCC **ECan** Data (Restricted) Maps (Public) Portaloos Power Water network Welfare Maps (Secure) Building

Keeping it going - File Structure

- Many users = hard to manage folders
- Implement a template within your normal systems ready to be used
- Implement the same template online Dropbox/ SharePoint/ etc





Evacuations







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Living with it - What we would do differently

- Firmer in asking for help & clearer about exactly what help is needed
- Call in additional resources on site earlier
- Enable data collection processes using existing devices (Handhelds, i-phones, blackberries) – But be careful...











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Geospatial Grab Bag

- Defined roles and role descriptions & Training
- Cheat sheet summary of basic systems setup, where to find data, naming conventions, map templates, etc
- Copies of core data off-line and off-site
- Default file structure template
- Job tracking system with numbering convention











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Geospatial Grab Bag

- Common map templates, workspaces, projects, analysis set up ready to go
- Predefined blank datasets to capture likely themes: road closures, water out, areas affected by flooding/liquefaction/silt/fire
- Roster
- Contact list of addresses and phone numbers for all your staff and others in the region











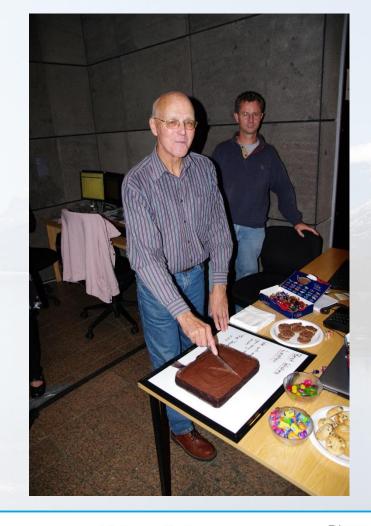


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Celebrate and fit in some fun











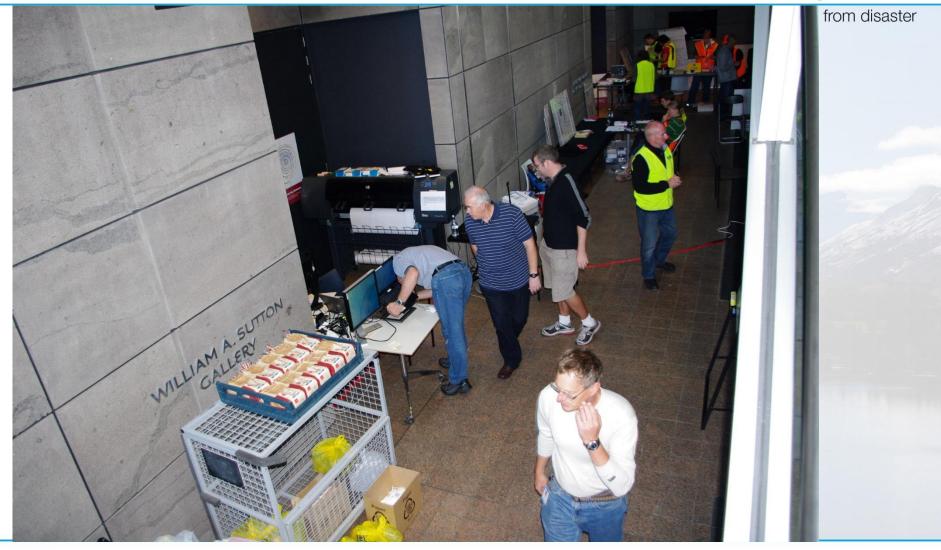






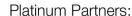
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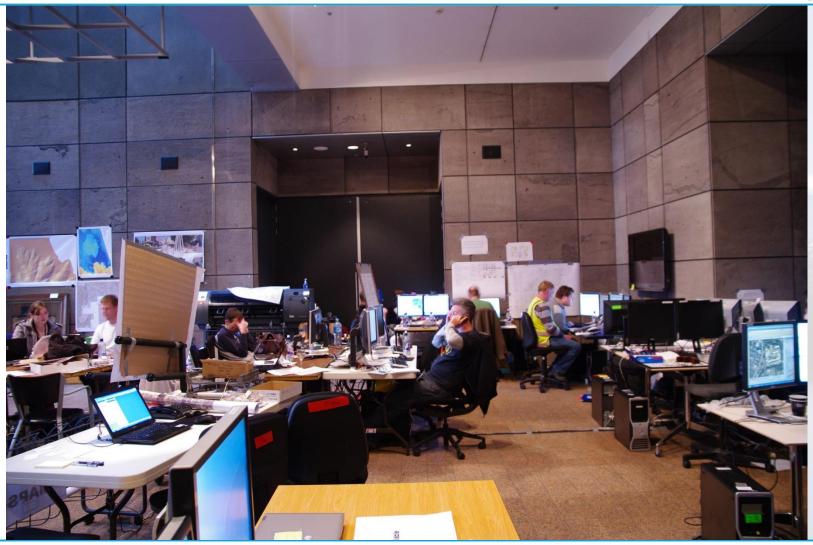






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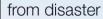


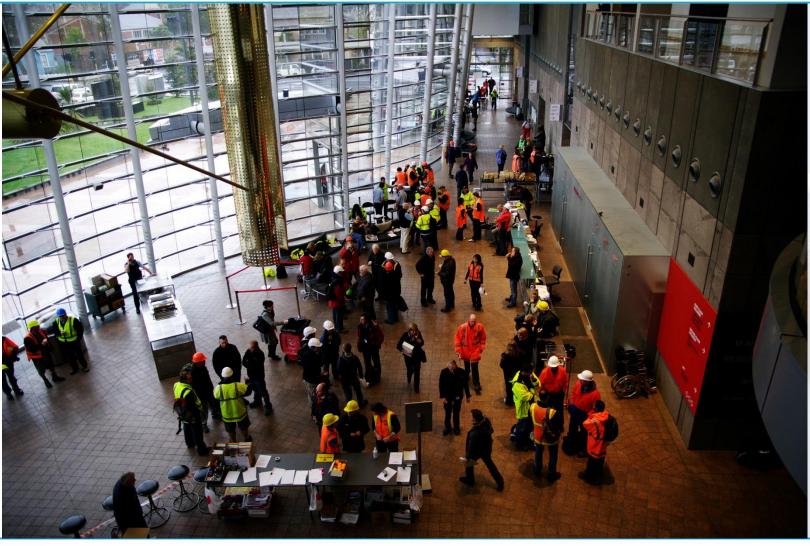




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Detailed paper with our learnings and recommendations is available on DropBox

Email us at InformationServices@ccc.govt.nz











