

New app sharpens earthquake response

GIS IS USEFUL TOOL

By: SIMON EDWARDS

COLOURED dots on a digital map and a techie working overtime in Poland meant Federated Farmers could make full use of technology as it responded to the Kaikoura earthquake and after-shocks.

The national farming organisation has been using a desktop computer-based GIS system for several years to help members with Resource Management Act (RMA) issues. The Feds pulled out all the stops after the 7.8 magnitude shake on November 14 to get a mobile phone app version under way for use by its response teams on the ground in North Canterbury and Marlborough.

A geographic information system (GIS) is a way of capturing, storing, checking and displaying data related to positions on the Earth's surface. GIS can show all sorts of data on one map, making it easier to analyse and understand patterns and what's going on.

We were able to map information from our 0800 FARMING line within the first few days after the big job, with the new app coming into operation soon after, making it extremely handy for matching calls for help with offers of assistance.

When it became clear there were significant geographical aspects in communications, responders were able to make contact with farmers cut off in remote areas.

"A week after the earthquake, we were the first person to call in on them, using that GIS data." The Federated Farmers' desktop system has been a great tool identifying what farms, or parts of farms, are affected when a local authority notifies a change or proposal under the RMA, such as new rules on waterways, declaration of an Area of Outstanding Natural Resource, or similar.

"The GIS information helps identify which of our farmer members we need to go into bat for," Katie says. "If an issue goes to mediation, we can negotiate with councils for the best deal for Federated Farmers members. We might also contact the farmers and urge them to put in a submission on an issue themselves, to add strength to ours."

"It's incredibly kind of them. If we have any further events, we can jump on and get it going." Feds' staff out in remote areas can take a photo of a farm with their mobile phone, type in details such as "needs water, help with fencing" and upload it so that it appears instantly on a GIS map. The Feds' 0800 line fielded more than 300 offers of help before Christmas, and help could be effectively deployed.

Federated Farmers' staff were even using the system, within the licence conditions, to supply information to Civil Defence staff out in the field.

William Rolleston says Federated Farmers is now negotiating an ongoing package with Hexagon so that the GIS app is good to go for any future adverse event, be it quake, flood or storm.

Territory managers and other key Feds staff will get training on how to use it.



DAMAGE: Federated Farmers president William Rolleston (left) and visiting World Farmers' Organisation secretary-general Marco Marzano de Marinis by a Marlborough farmhouse wrecked by the earthquake.



AFFECTED AREA: A map generated by the Federated Farmers GIS system, showing the location of calls for help from those affected by the Kaikoura earthquake and the source of assistance offers.

The GIS information helps identify which of our farmer members we need to go into bat for.

— KATIE MILNE

members "soon made it clear there were farmers we were not hearing from". Feds policy administrator Louise Gibson was able to produce maps of where the major rural zones were in relation to road closures and known damage, and what farms hadn't been in contact.

"It was especially good around other farms willing to take on stock and dairy cows. We wanted to see where they were, North or South Canterbury, North or South Otago, Southland and so

What's more, Hexagon provided Feds with a free licence and server to access the app during the earthquake response period, and for the rest of summer.

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