

3D Aquifer Mapping Project

He wairua tō te wai

We're taking to the sky to understand our aquifers better.

For the first time, we're using the latest airborne electromagnetic survey technology (SkyTEM), which is a big step forward for the Hawke's Bay community in getting better understanding of our water resource.

You may see a low-flying helicopter towing a large hoop hanging from a cable starting around 20 January 2020 until the beginning of March. It will fly over the coloured areas on the map on the right and 'scan' them.

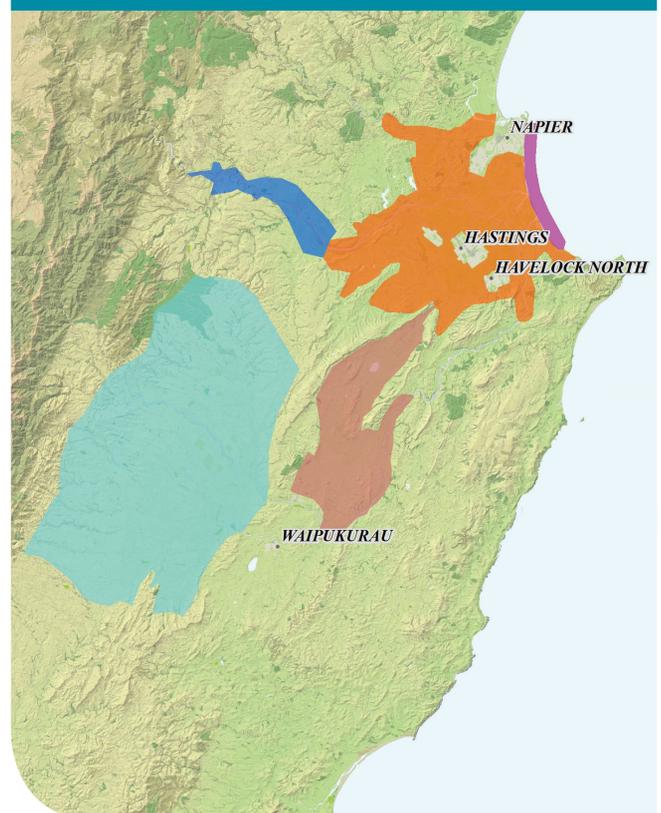
The areas being scanned are:

- Heretaunga plains and offshore
- Ngaruoro River Valley
- Poukawa and Otane basins
- Ruataniwha plains

We won't be flying over built up urban areas like Napier, Hastings and Havelock as the steel in buildings and infrastructure disturbs the electromagnetic response of the SkyTEM technology.

The results from the 3D aquifer mapping will be a big asset and freely shared and available to tangata whenua, other councils and community groups.

3D Aquifer Mapping Flyover Area



KEY:

- Heretaunga 
- Heretaunga Offshore 
- Ngaruoro River Valley 
- Poukawa / Otane 
- Ruataniwha 

Flight details

The helicopter will fly at 80-100 km/hr in parallel lines 200m apart and at a height of approximately 100m. The measurement instruments are suspended under the helicopter and will be about 35m above the ground. The noise from the helicopter has been described as the equivalent to a truck going past on a motorway, and lasts for around two to four minutes. The helicopter flies up and down in gridlines, so it will then return approximately 30 minutes later but be 200m away.

• What will the information be used for?

The Regional Council is responsible for making decisions about our water and how we use it. This information will help us better understand our aquifers and our groundwater, to protect and manage this resource for future generations.

These flights are not in any way used for compliance monitoring.

• Is it safe?

There's limited exposure to the magnetic field generated from airborne *SkyTEM* equipment as the system is being flown at high speed. It's comparable to standing 0.2 metres in front of your house, and safer than watching a LCD or plasma TV or blow-drying your hair!

• How much does it cost?

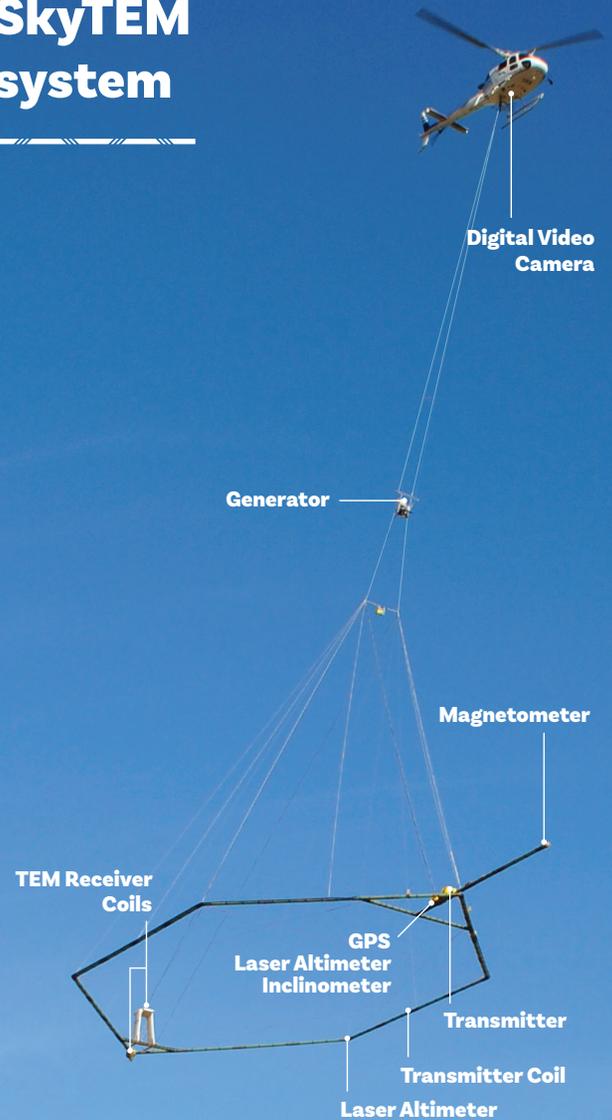
The total cost for the project is \$4.3 million dollars. It's a joint effort with the Provincial Growth Fund (PGF) contributing \$2.15 million, the Regional Council \$1.85 million and GNS Science giving \$300,000.

Check out where we are flying

Helicopter flights start around 20th January and continue until the beginning of March. We will be updating our website and facebook page with more information.

Watch this space!

SkyTEM system



Questions ~

Please contact us if you have any concerns about the effect helicopter flights might have on you or your stock (particularly horses).

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More information ~

Go to hbrc.govt.nz search #3Dwater